Activity theoretical perspectives on international Chinese students' (ICSs') issues with their learning in Australia: The adapted Change Laboratory Approach (CLA)

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

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Abstract

Extensive research conducted on issues International Chinese students (ICSs) experience with their learning in Australia strongly points to the importance of previous experience in a successful adjustment. However, an analysis from an historical/cultural vantage point has rarely been undertaken in exploring the transition to study in a new country. This qualitative study reports on the findings of interviews with six ICSs, two of whom completed high school in China (two completed their undergraduate study, and two had working experiences after their undergraduate study in China) and all of whom relocated to Australia in their twenties and early thirties to undertake tertiary studies. The aim of this thesis was to explore the ways in which their past institutional, peer, family and/or work networks framed their learning, and how this in turn influenced their experience of and approach to issues with their learning in Australia.

Activity Theory (Engeström, 1987, 1991, 2000, 2001, 2004) informed the methodological approach taken in this thesis, in which the Change Laboratory Approach (CLA) was used to highlight the historicity, complexity and dynamism of these ICSs’ processes of adjustment. Modelling these processes through the adapted CLA points to the critical role non-institutional settings in China played in their approach to issues with their study in Australia. Participants drew on past experiences and understandings derived from their peer, family and work networks, as well as their previous experience in educational settings in China. Analysis revealed that non-resolution of issues was found to be primarily due to particular root causes, mainly the continuing application of implicit rules derived from their experiences of learning in China. This analysis enhances understanding of the reasons underlying non-resolution and also suggests possible transformative solutions. The study also found that successful resolution rested on boundary-crossing between past and present institutional, peer, family and work networks. This consideration of historicity was important in understanding the ways in which ICSs’ experiences of learning in China successfully influenced their approach to issues in Australia. It clearly demonstrates the losses to the literature and the field when ICSs’ heritage is viewed only as an inadequate preparation for what faces them in Australia. In its consideration of historicity and its use of an adapted Change Laboratory Approach as an analytic tool to explore successful resolutions and non-resolutions, this study contributes to and extends the literature on the experiences of ICSs when undertaking tertiary study in Australia.
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Chapter 1 Framing the research

While acceptance of differences calls for changes in the legal arrangements of society, respect for them requires changes in its attitudes and ways of thought as well. (Parekh, 2006, p. 2)

Preamble

In April 2006, I arrived in Melbourne, Australia to start the process of obtaining an overseas qualification. At that moment, I was so proud of myself and I also strongly believed I was distinctive. I used to think having the opportunity to study for a Master’s degree was a noble thing to do because it entailed respect, admiration and also a belief in the future.

In my learning, I did what was familiar: I invested a lot of effort, seriously respected teacher knowledge and wholeheartedly accepted lecturer instructions (reading most of the reference books they suggested) to achieve the goal of obtaining the highest possible marks. Having a strong desire to achieve the best possible scores, I also prepared my assignments very carefully. This careful preparation coupled with obtaining constructive feedback from lecturers before the submission due date did turn out to be successful in achieving my goal.

I did not seem to have experienced huge challenges in the process of obtaining my Master’s degree. However, the belief that academic success should incorporate more than merely the degree itself had started to ring true for me. I was also increasingly concerned about my frequent experience of conflicts: my mind (cognition) was on one terrain, whilst my actions were often charting another. This conflict continued for two years after my graduation. The deterioration of my situation was reflected by a return to my comfort zone and what was familiar by adhering more closely to the implicit rules of my home culture. This was demonstrated by my frequently choosing to submit to my partner’s authority and relying on him to initiate choices and to make decisions for my life.
One winter morning, it was drizzling outside. I walked in the rain. I could not stop questioning why I was doing this. The conflict between my thinking and my actions started to brew a thunderstorm inside me: I had invested more than 20 years of hard effort in studying, aiming to obtain a good job. Why had I ended up digging Australian dirt, not that there is anything wrong with being a farmer? What was worse, the dirt was so hard to dig. I could have stayed at home in China and dug soft and fertile soil instead, without investing two decades of effort working hard towards very different objectives. This further perplexed me. From that moment on, I started to wonder more and more about why there was something so powerful and so invisible that made me do things that most times I was not consciously aware of. What helped me to be so successful in getting my degree? What was it that hindered me in achieving personal breakthroughs?

On the verge of giving up, I saw a glimpse of sunlight when my partner told me: “If you want to do something different with your life, YOU need to make changes”. Those words started to influence my thinking, which also began to impact my actions. This was marked by my taking a new route – relying on myself to change my life.

Although the conflict between my thoughts and actions was alleviated by my partner’s intervention, there were many more conflicts than I had realized. One emerged when I started to apply for jobs. This was the conflict between my belief about education as a means to an end and the reality of no end actually eventuating for me. I began asking questions: in what areas do I experience these conflicts? What types of conflicts were involved? What had contributed to the existence of these conflicts? And, further, how could I ever resolve them?

These unresolved personal puzzles as outcomes of my learning experiences acted as the initial motivational spark that pushed me to embark on a journey in search of solutions. This search started with an examination of other international students’ issues with their learning
in Australia in order to understand what had been involved in their processes of learning here. Through understanding their cases, I thought I might be able to understand my own.

1.1 The research rationale

A considerable amount of research has attended to the challenges/difficulties international students experience with study at university. The English language, approaches to learning and their cultural and educational heritage were found to be the areas that these students experience challenges and/or have to make negotiations.

Taking into consideration ISs’ (international Asian students in particular) English language-related issues, poor command of English was found to lead to undesirable outcomes (Burns, 1991; Kennedy, 1995). Language proficiency was emphasized as a significant problem that ISs, especially international Asian students, needed to overcome (Ballard, 1989; Ballard & Clanchy, 1984; Ballard & Clanchy, 1997; Hubbard, 1994; Mullins et al., 1995; Samuelowicz, 1987). International Asian students’ study methods and their cultural and educational heritage were viewed as “inadequate” for what faces them in Australia (see Ballard, 1987; Burns, 1991).

These studies have subsequently been challenged as either treating ISs as a homogeneous group or “focusing on deficiencies in international students’ academic skills” (Mullins et al., 1995, p. 203). Subsequent studies shifted their focus to the adaptations ISs needed to make to learning overseas, with a strong focus on students from the Asia-Pacific region. Asian countries, especially China, are an important source of ISs for institutions in Australia (Ryan & Louie, 2007). International Chinese students (ICSs), therefore, have been under frequent scrutiny (Hue, 2007; Li, 2003; Tweed & Lehman, 2002; Yang, Zheng, & Li, 2006).

Relating to issues that ICSs experienced with the English language, factors that contributed to their experiences of challenge were seen as complex: linguistic, cultural, individual and
contextual factors (Fontanini & Tomitch, 2009; Marlina, 2009; Mulligan & Kirkpatrick, 2000; Yates & Wahid, 2013; Mohamad & Wu, 2013). These studies show visible evidence to challenge the negative lens that pictured these students as passive or lacking skills such as analytical thinking that were perceived to be essential to ensuring academic success in Australia (see Arkoudis and Tran, 2007; Liu, 2006). These studies also show that ICSs took active roles to successfully resolve challenges they experienced. This contradicted the view that ICSs needed to rely on assistance to resolve problems (see Ballard, 1987), and initiated a line of research that emphasized the resources and processes involved in ICSs’ resolution of challenges.

Concerning approaches to learning, Biggs (1998) countered the negative view that ICSs were surface rote learners arguing that their use of rote learning could be a “part of a deep approach” (p. 726). Another stream of research emphasised the active roles ICSs took in readjusting their learning approaches to make their learning in Australia a transformative experience (Wang et al., 2012; Gu, 2009; Fotovatian & Miller, 2014; Schweisfurth & Gu, 2009). This has highlighted the processes and the resources that ICSs respectively take and use in their resolution of issues in the Australian learning context.

Contemporary research has seen ICSs’ heritage as a way of enhancing understanding so that a more successful transition can be promoted (Chan, 1999; Hue, 2007; Li, 2001; Liu, 2002; Mak, 2011; Wang, 2012). Strenuous effort has been made to make known learners’ existing experiences in relation to factors that have influenced/framed their learning. Confucianism was often resorted to as the singular reference point for understanding students of that tradition (see Tavakol & Dennick, 2010). This approach has been criticized for ignoring influences of additional foci (Ryan, 2010), such as the examination heritage (Li, 2009, Wang, 2013). The examination culture was seen to be strong in influencing present day learners of its tradition (Li, 2009).
Resorting to single reference points for understanding ICSs’ existing experiences was criticised for taking an exclusive national culture stance (Ryan & Louie, 2007). This stance was argued to mask contextual influences (see Chen, Li, Chen, & Chen, 2011; Chi & Rao, 2003; Li, 2002) and devalues individuality (see Arkoudis & Tran, 2007 and Liu, 2002). Clark and Gieve’s (2006) promotion of a “small culture” stance is an advancement in the areas of conceptual frameworks/stances that researchers or university practitioners need to take in understanding ICSs’ existing experiences (see Clark & Gieve, 2006, Ryan & Louie, 2007, Shi, 2006).

One significant contribution that the small culture stance made was the recognition of the benefits that Chinese learners’ existing experiences bring to their learning in a new country (see Dawson & Conti-Bekkers 2002). However, there is a gap between what researchers promote and what is practiced in the multicultural classroom (Strauss, 2011). In particular, the ways in which ICSs’ existing experiences benefit their negotiation of new learning overseas has not often been documented. This indicated a possible avenue for future research in emphasizing the dynamic processes in ICSs’ resolution of challenges accompanied by a consideration of historicity. That was the direction taken in this study.

1.2 Research questions

The following research question is thus raised as the main focus of this study:

How do ICSs’ prior experiences impact their experience of and approach to challenges with learning in Australia?

This research question is divided into the following two sub-questions:

How is ICSs’ learning in China influenced by various contexts?
How do these prior experiences influence how they experience of and approach to challenges with learning in Australia?

1.3 Theoretical perspective: Activity theory

Research studies of ICSs have by and large reached a consensus that the influences of their cultural and educational heritage and various non-institutional contexts in China impact their experience of and approach to challenges with their learning in Australia. The examination of the dynamic processes involved in their experience of and approach to challenges including a consideration of historicity, however, is not documented in the literature. This is the background to this study and it informed the formation of the research questions.

The research questions of this study coupled with a consideration of the findings from previous studies resulted in the need to choose a theoretical perspective that would assist in both understanding the issues under inquiry and selecting a research methodology that would help to collect the most suitable data for addressing these inquiries. Activity theory was identified as the most appropriate theoretical perspective to guide this study because it is particularly useful in analysis of issues from the broad perspective of cultural and historical influences (Engeström, 2001). It also focuses on orchestrating complexities as well as capturing dynamics (Engeström, 2001).

Although various theorists have contributed to both the formation and the development of activity theory as we know it today (Leont'ev, 1978; Vgostky, 1930), this study took the third generation of activity theory as its theoretical guide as it continues to undergo an active process of development and maturation. The main and most active contributor to the formation of the third generation of activity theory is Engeström (1999, 2001, 2004). His approach to activity theory was encapsulated in five principles along with an expansion of the classic triangle into an activity system (Engeström, 2001). These five principles are: “a
collective, artefact-mediated and object-orientated activity system, seen in its network relationships to other activity systems, is taken as the prime unit of analysis; multi-voicedness of activity systems; historicity; contradictions as sources of change and development; and possibility of expansive transformations in activity systems” (Engeström, 2001, pp. 136-137). His model of an activity system with an expanded classic triangle is shown in Figure 1.1.

![Diagram of Engeström's expanded model of a complex activity system](image)

**Figure 1.1** Engeström’s expanded model of a complex activity system

As Engeström (2001) argues, the introduction of community into the classic triangle acknowledges the larger societal contextual influences on human experiences and, therefore, overcame the limitations of the classic triangle, which did not represent or explicate the societal and collaborative nature of the subject’s actions. In Engeström’s model, the ‘subject’ represents an individual or a group engaged in an activity (Jonassen & Rohrer-Murphy, 1999). The object is “the ‘raw material’ or ‘problem space’ at which the activity is directed and which is molded or transformed into outcomes with the help of physical and symbolic, external and internal tools (mediating instruments and signs)” (Engeström, 1993, p. 67).

Mediating artefacts are physical artefacts that mediate external activities, including conventional technical tools (for instance, a hammer, the function of which is to help people affect things) as well as psychological tools (for instance, maps or blueprints, which are signs intended to help people affect others or themselves) (Kaptelinin & Nardi, 2006). Such tools
mediate the interactions between the subject and the object (Kaptelinin & Nardi, 2006).

Individuals or subgroups who share the same ‘object’ are regarded as the community, and the relationship between the two nodes of subject and community is mediated by rules, which are defined by Engeström (1993) as “the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system” (p. 67). Finally, division of labour is defined as “both the horizontal division of tasks between the members of the community and the vertical division of power and status”, which mediates the interactions between community and the object (Engeström, 1993, p. 67).

Instead of taking actions as units of analysis, Engeström’s expansion takes the whole activity system as the basic unit of analysis. This highlights contradictions between nodes of the activity system (between mediating artefacts and objects, for instance) as well as their source(s). This attention to contradictions and their sources, coupled with the five principles, offers a strong theoretical guide for this study.

1.3.1 Activity theory informed research design: The adapted Change Laboratory Approach (CLA)

1.3.1.1 The CLA

Engeström, working with several other researchers, extended activity theory further through the development of the Change Laboratory Approach (CLA) (Engeström, 1987, 1991, 2000, 2001, 2004; Engeström, Engeström, & Kärkkäinen, 1995; Engeström & Sannino, 2010, 2011, 2012). Yrjö Engeström developed the CLA in the late 1990s (Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996). Since its development, it has been used by a wide range of interventional studies (Anagnostopoulos, Smith, & Nystrand, 2008; Teräs & Lasonen, 2013; Virkkunen & Ahonen, 2011). This vigorous application demonstrated the approach’s adaptive strength and also illustrated its analytical strength and its capacity to address issues from a cultural and historical perspective, to highlight complexities involved in interactions
amongst various networks, and to capture dynamics in processes of resolution of challenges.

The CLA adopted in this study was also based on these strengths.

The visual representation of the CLA is 3x3 surfaces (see Figure 1.2 for details).

**Figure 1.2** Prototypical layout of the Change Laboratory (Engeström, 2005, p. 293).

Engeström (2005) used the horizontal surfaces to represent “different levels of abstraction and theoretical generalization” (p. 292). The main function of the model surface is to use theoretical tools, such as the activity triangle, to analyse the roots of recurring problems and to conceptualize these as structural contradictions (Engeström, 2005). In interventionist studies, the activity triangle and the expansive cycle are typically used as theoretical tools in this surface (Engeström, 2005). Whilst the activity triangle is mainly used to examine and analyse structural contradictions, the expansive cycle is typically used to analyse “the current and projected next stage of the evolution of their activity” (Engeström, 2005, p. 293).

The middle surface is kept especially for ideas and tools (Engeström, 2005). It captures “potential capabilities and emerging formations … it is a third space, reserved for new ideas and tools for reorganizing the activity” (Engeström, 2005, p. 298). When analysing experiences against the theoretical tools in the model’s surface, Engeström (2005) believes “intermediate cognitive tools” are often needed (p. 294). Intermediate cognitive tools and partial solutions are also included in this surface (Engeström, 2005).

Experiences, particularly problem situations or recurring issues, are both represented and examined in the mirror surface. Experiences that are presented and analysed through this
surface are generally gathered through methods that resemble an ethnographic approach (for instance, fieldwork, interviews, stories, etc.). Therefore, the data collected is often referred to as “mirror data” (Ellis, 2008; Engeström, Sannino, & Virkkunen, 2014; Teräs & Lasonen, 2013). The purpose of this is to put together “a picture of work” to be used for examination of contradictions (Teräs & Lasonen, 2013, p. 112). That is, data collected needs to closely reflect experiences.

The vertical dimension of the surfaces in the CLA model represents movement of time (an expansive cycle), which typically starts from current problems of the mirror surface, and then moves to examine the root of the current problem through mirroring past experiences and the past activity system (Engeström, 2005). This is then followed by modelling the current activity system and its contradictions, which enables the team assisted by the interventionists to “focus their transformation efforts on essential sources of trouble” (Engeström, 2005, p. 294). The work then proceeds to “envision a future model of the activity, including its concretisation by means of identifying ‘next-step’ partial solutions and tools” (Engeström, 2005, pp. 294-295). This is then followed by a subsequent implementation and consolidation of the new model (Engeström, 2005). The dynamics involved in the vertical dimension of the surfaces reflected Engeström’s implementation of an expansive cycle in the CLA.

1.3.1.2 Its adaptation

The CLA has been primarily used as an interventionist approach in organisational settings (Engeström, 2005). As this study focuses on exploration instead of intervention, the “specific methodological steps” used in the CLA were not rigidly applied (Engeström et al., 2014, p. 123). Rather the steps were both carefully adapted to the local circumstances and boldly experimented with in this study to examine ICSs’ experiences using a cultural and historical lens without impeding the analytical and interpretative strength of the CLA.
In particular, the theoretical tools used in the model surface were adapted for conceptual analysis in this study. This is because this study is explorative and analytical rather than interventionist. Instead of relying on collaborative efforts to promote transformation, this study used theoretical tools to conceptually analyse ICSs’ experiences with a consideration of historicity. This study not only examines the root causes of recurring problems but also analyses dynamics occurring amongst various activity systems. The expansive cycle is used for projecting “the next stage of the evolution of [an] activity” (Engeström, 2005, p. 293). It is interventional and concerned with transforming the current situation. Theoretical tools typically used in this surface, especially the expansive cycle, are neither adequate nor appropriate for this study’s analytical purposes. Thus it is necessary to adapt these theoretical tools. The adaptations include replacement of the expansive cycle with new key theoretical tools of mediation, structural contradictions, polycontextuality and boundary crossing. These coupled with the activity triangle functioned as critical theoretical tools for the conceptual analysis undertaken in this study.

The methods section of this study consists of three developmental phases: the preparation phase (collecting mirror data), the analytic phase (analysing mirror data) and the interpretive phase (through the lens of the adapted CLA).

The preparatory phase focused on strategies or methods to gather data. This preparatory phase consisted of collecting and analysing questionnaire survey data in preparation for the main data collection by means of interviews.

After the audio-recorded interviews were transcribed, data were ready to be analysed. The CLA, especially the theoretical tools in the model surface, were used to analyse how ICSs’ learning was framed by their experiences of learning in China, and to analyse how this frame influenced their experience of issues in Australia. However, it seemed inadequate as a coding
device for learning, detecting and labelling what the data was about. This approach, therefore, needed support from methods that provide clear guidance on the process of coding, so coding techniques from grounded theory (Sharmaz, 2008) were used to explore how data revealed meaning. Consequently, the introduction of coding techniques was another main change that this study made to the CLA.

After this initial stage, data were analysed again through “historical-genetic analysis” to “discover causes or exploratory mechanisms through tracing its origins and evolution” (Engeström et al., 2014, p. 123) and then through “actual-empirical analysis” to interpret findings through giving it meaning in broad CLA language (Engeström et al., 2014, p. 123).

In the interpretative phase, this study used the adapted CLA approach as a framework of reference to interpret ICSs’ experiences of learning. As previously mentioned, this study adapted the theoretical tools used in the model surface for conceptual analysis. These adapted tools were used primarily to interpret the meaning that ICSs assigned to their experiences. This analysis is presented in chapter 5.

1.3.1.3 Research questions redefined

Within the general framework of activity theory and accompanied by particular changes to the CLA, the main research questions were further redefined into four sub-questions:

1. What issues do ICSs experience as challenging with their learning in Australia?
2. How is their learning framed/influenced in China?
   2a. How do various contexts of family, school learning, school peers, and/or university learning, university peers, and/or work determine their learning?
   What mediating artefacts do various agents such as teachers and parents use for intentional intervention?
What rules (especially implicit rules) restrain various agents’ such as teachers and parents use of mediating artefacts for intentional intervention?

What contradictions lead to their experience of recurring issues?

2b. How do they approach these contradictions?

What dynamic processes are involved in their resolution of structural contradictions?

What resources do they use for this resolution?

What prevents them from resolving structural contradictions?

What outcomes do they achieve through non-resolution?

3. How does learning in China influence ICSs’ experience of challenges with their learning in Australia?

3a. What contradictions lead to these challenges?

4. How do ICSs approach the challenges they experience with their learning in Australia?

4a. What dynamic processes are involved in their resolution of structural contradictions?

4b. What resources do they use for this resolution?

4c. What prevents them from resolving structural contradictions?

1.3.1.3 Participants

Ballard (1989) argued that the adaptation processes of international students begins when they embark on their academic courses and the discipline area is an influencing factor in the level of adjustment they need to make. According to Ballard (1989) disciplines like science and technology might require international students to make fewer initial changes compared to social science disciplines like education. Adapting to social science disciplines like education requires them, especially Asian students to make shifts of previously accustomed
learning habits as soon as they start their courses (Ballard, 1989). Ballard (1989) also claimed that the level of the degree in which they enrol is another factor that could influence the level of adjustments international students need to make: “Postgraduates have more serous adjustment problems than undergraduates” (Ballard, 1989 p. 96). Therefore, unlike science, Chinese students in Education postgraduate programs need to respond to more immediate and challenging conflicts, which generates more data for the researcher interested in this field. For this reason, participants from the discipline area of Education were recruited.

The participants in this study were 27 ICSs mainly enrolled in Master’s and Graduate Diploma in Early Childhood Education coursework programs from five universities. From this population, a sub-sample of seven for interviewing was selected. In addition, because the rate of volunteering for interviews from the survey respondents was disappointing, a snowball sampling strategy (Collins & Onwuegbuzie, 2007) was applied to recruit more participants. This resulted in nine participants in the interviews.

1.4 Outline of thesis

This thesis is organized into six chapters, comprising the introduction, literature review, methodology, findings, discussion and conclusion.

Chapter 1 introduces the study. It begins with an account of the researcher’s personal struggle, which provided the original impetus for the research. It then refines that focus by presenting a concise summary of some relevant literature. The research questions, the theoretical perspective of activity theory, and the adaptations this study made to the CLA are subsequently outlined. This chapter concludes by providing an outline of the thesis.

Chapter 2 offers a review of relevant literature. It starts with a brief explanation of the broad description of the issues that international students experience with their learning. This is followed by a review of challenges that international students experienced with learning in
Australia from an historical perspective. A contemporary perspective that concern one international student group only, international Chinese students, are then discussed in detail. The importance of ICSs’ learning in China in understanding issues that they experienced in Australia is then argued. It concludes with a brief discussion of the scope of the study.

Chapter 3 discusses the theoretical perspective and the research design. It starts with a discussion about the historical development of activity theory. Critiques of this theory are then discussed. The chapter then looks at the activity theory informed research design: the CLA in depth. Adaptations made to this approach are subsequently argued. This is followed by an elaboration of the preparatory, analytic and interpretive phases of the study. This chapter concludes with a discussion on trustworthiness and ethical issues.

Chapter 4 presents findings of this study in two parts. Part 1 reports on demographic data and then on the findings collected from the questionnaire survey. These findings offer a snapshot of ICSs’ perspectives on the issues that they experienced with their learning in China and in Australia. Part 2 reports findings based on an analysis of the in-depth interview data. It presents individual cases in-depth through narratives (an additional three narratives are included in the appendix). The presentation of narratives is intended to mirror ICSs’ experiences in-depth.

Chapter 5 interprets the findings on a theoretical level through the lens of the adapted CLA. Specifically, mediation, contradictions, the collective activity system model and polycontextuality and boundary crossing of the model surface of the CLA were used as theoretical tools to analyse the findings. This chapter consists of three main sections: a), Analysis of the cultural and educational heritage frame of ICSs’ learning, b), Identification and Explication of root causes or contradictions that led to their experience of pressing issues in Australia, and c), Analysis of how various contexts interacted to impact their attempts to
resolve pressing issues. These sections address the main research questions raised in this study.

Chapter 6 discusses the findings of this study in comparison to the literature. The contributions that this study makes regarding issues that are central to ICSs’ experiences are discussed. The relevance of ICSs’ experiences of learning in China to their learning in Australia is then presented. This is followed by the identification of the root causes of recurring challenges that they experienced but had not resolved. The processes and the resources that they respectively took and used to resolve challenges are also discussed. Strengths and limitations of this study are subsequently elaborated upon. The implications that this study made are also discussed.
Chapter 2 Review of the literature: Discussion on issues that international Chinese students experience with their learning

This literature review is composed of four main sections: the first section introduces the vantage point for this study: issues that international students (ISs) experience with studying at university. The second details investigations of issues that ISs experienced from a historical perspective. The third emphasizes a contemporary perspective on issues that international Chinese students (ICSs) experienced, and the last highlights the importance of the influences of these students’ existing experiences on their learning in Australia. Building on the findings of and the implications made by these research studies, the scope of the current study is also defined.

2.1 The vantage point: Challenges that ISs experience with studying at university

Since late last century, research studies on ISs have proliferated, especially in the major education exporting countries of the USA, the UK, Australia, Canada and New Zealand. These studies have tended to focus on these students’ adaptation processes (Bodycott, 2012; Gullekson & Vancouver, 2010; Lee & Ciftci, 2014; Leung, 2001; Tran, 2011; Wang, 2012; Yu & Shen, 2012; Zhou, Jindal-Snape, Topping, & Todman, 2008) and enculturation processes (Berry, 2005; Cleveland, Laroche, Pons, & Kastoun, 2009; Guillen & Ji, 2011; He, Lopez, & Leigh, 2012; Jang & Kim, 2010; Yeh & Inose, 2003) to their host cultural contexts. Many of these studies emphasized ISs’ social, cultural, or psychological adaptations. However, many of the problems these students experienced were “associated with the general process of studying at university” (Mullins et al., 1995, p. 229). Their challenges relating to academic study were considered to be primary and pervasive (Burns, 1991; Mullins et al., 1995). Such students had “significantly greater difficulties adjusting to academic requirements” (Burns, 1991, p. 61), and these problems were difficult to manage in that they
were persistent (Mullins et al., 1995). Issues that ISs experience while studying at university are important, challenging, persistent and difficult to manage. Persistent difficulties that ISs experience with studying at university make research into this area both necessary and important, the outcomes of which could inform and enact educational practices that might bring successful and fulfilling outcomes for both educators and these students themselves. This study thus took issues that ISs experienced with studying at university as its initial focus.

A significant proportion of research has paid attention to the challenges/difficulties international students experience with study at university. Specific areas that these students experience challenges and/or have to make negotiations with include the English language, approaches to learning and their cultural and educational heritage. The following section discusses through an historical perspective how the literature portrays these students’ experience of these challenges.

2.2 An historical consideration of issues that international students (ISs) experience with studying at university

As one of the major countries exporting education, Australia has witnessed a proliferation of research studies focusing on ISs since the late 20th century. The review of the literature from this period is necessary to provide historical background to this area of inquiry and to show the changes that have been made in the last 20 years. Research carried out during this period of time argued that causes of recurrent problems faced by ISs were deficiencies in their English language, their approaches to learning and/or their cultural and educational heritage (Ballard, 1987; Bradley & Bradley, 1984; Burns, 1991; Samuelowicz, 1987). ISs’ experience of challenges in these areas is detailed in the following.

Studies on issues that international students face strongly supported the view that proficiency in English was a significant problem (Ballard, 1989; Ballard & Clanchy, 1984,
1997; Hubbard, 1994; Mullins et al., 1995; Samuelowicz, 1987). For instance, in Samuelowicz’s (1987) study, both academic staff and overseas students reported proficiency in the English language as a significant problem. Burns’ (1991) survey of first-year ISs’ English proficiency difficulties also revealed that more than half ISs perceived their competencies in reading, listening, writing, and speaking areas as being “poor” or “very poor” (p. 65).

Opposing views exist regarding whether command of the English language has a positive correlation with academic performance (Burns, 1991; Kennedy, 1995; Li & Kaye, 1998). Burns (1991) argues that English language proficiency is critical in ensuring academic success because “inadequacies can lead not only to academic difficulty but equally to stress and emotional impediments to study” (p. 66). On the other hand, Kennedy (1995) contends that “there [does] not appear to be significant predictive validity in English proficiency levels in relation to academic success” (p. 43).

Ballard (1987), who is probably one of the earliest researchers looking into issues that ISs face, believed that the language problem was “sequential” (p. 115), in that listening and speaking were the initial difficulties these students experienced because they needed to understand and be understood by others. This was followed by reading difficulties and writing problems, with the latter as the last and most continuous problem these students experienced because it “never really goes away” (Ballard, 1987, p. 115).

Ballard (1987) identified specific obstacles ISs face in respect to listening, speaking, reading and writing. For example, she argued that the Australian accent and colloquial speech impacted international students’ comprehension (Ballard, 1987). In addition, issues with reading were significant, including the amount of reading material they needed to handle, not knowing how to read critically and not knowing how to take notes. These comprised
obstacles that prevented these students from the comprehension and application of reading materials (Ballard, 1987). Although Ballard (1987) said these students might continue to experience problems with writing and speaking during class presentations or participating in class discussions, she did not clearly identify the nature of these problems.

Although Ballard (1987) seems to have assumed that the listening and speaking issues international students face were only limited to the conversational level, she made an important contribution in recognising that these students’ command of the English language was “intimately related to the demands of the discipline being taught” (p. 115). Indeed, interventions in assisting ISs in improving their language proficiency increased. These interventions incorporated the idea of collaboration between a language specialist and a disciplinary academic (Beasley & Pearson, 1999; Cargill, 1996; Hubbard, 1994).

Kennedy (1995) agreed with Ballard (1987) that although issues relating to language “may represent problems of genre with a particular discipline or problems related to technical language” (p. 43), he argued that they are also “embedded in more subtle and complex issues” (p. 43) such as cultural factors. Subsequent studies also argued that language issues were related to culture (Beasley & Pearson, 1999; Hubbard, 1994). Cultural issues were thus added to a view of language as a purely technical issue in the literature.

In considering writing, Beasley and Pearson (1999) argue that “cultural variation in writing and thinking styles” poses problems for ISs. They contend that different cultures have differing ways of using language; for instance, that the order and structure of information as well as writer and reader responsibilities regarding the written discourse vary across cultures (Beasley & Pearson, 1999).

With regard to speaking, Hubbard’s (1994) study showed that ISs were unwilling to speak in class. Hubbard (1994), therefore, viewed speaking as “the most important behavioural
issue” (p. 139). She looked at ISs’ unwillingness to speak in two areas: when asking and answering questions, and when expressing their own ideas and feelings. In both situations she found that their unwillingness to speak in class was influenced by cultural factors.

Although Hubbard (1994) did not identify factors underlying students’ unwillingness to ask questions, she found that these students did not answer teachers’ questions due to two factors: the anticipation of being punished by the teacher and that of being ridiculed by their peers if they provided an incorrect answer. Unless students were absolutely sure that they knew the correct answer to teachers’ questions, they did not answer because they believed they risked being ridiculed and/or punished (ibid.).

In considering expressing ideas and feelings, Hubbard (1994) found that ISs had much difficulty doing so. Hubbard (1994) argued their difficulties were not caused by deficiencies in knowledge or English, but by being asked to express their own ideas. However, factors operating as obstacles were not speculated on by Hubbard. Beasley and Pearson (1999), found that the cultural factor of “preservation of face” (p. 306) often led to ISs not expressing their ideas or opinions in class because they were ultimately concerned about “being humiliated by being proved wrong or inept in front of one’s teacher or peers (especially with the handicap of a second or foreign language)” (p. 306). Thus fear of humiliation was believed to prohibit ISs from speaking willingly in class.

In summary, although language proficiency does not necessarily predict academic performance, poor command of language does lead to undesirable outcomes. These earlier studies on ISs’ language issues argued that a further significant problem for these students is that language issues are compounded by cultural factors.

As well as viewing English language difficulties as a significant contributor to issues that ISs experienced with studying at university, earlier research highlighted their “inadequate
study methods” (Burns, 1991, p. 62). ISs’ (especially international Asian students’) approaches to learning or study skills were often perceived as being insufficiently adequate for them to be able to meet academic demands (Burns, 1991; Samuelowicz, 1987). For instance, academic staff in Samuelowicz’s (1987) research claimed that overseas students tended to adopt a “reproducing orientation” or a “surface approach” for studying (p. 123). This approach was characterized “by the intention, on the part of the learner, to memorize material to satisfy external demands, by excessive attention to isolated facts, details, components of argument” (Samuelowicz, 1987, p. 123). Students adopting the surface approach to study were viewed as lacking or having little appreciation of “analytical, integrating, problem-solving skills” (Samuelowicz, 1987, p. 124), which were argued to be the skills needed for succeeding in university study. Therefore, ISs (especially international Asian students) were believed to need training in, for instance, “critical and analytical approaches to learning … study skills … participating in discussion groups, presenting papers” (Samuelowicz, 1987, p. 127) in order to meet the academic demands of the university.

Earlier researchers (for instance, Burns, (1991)) argued that the learning problems experienced by ISs, international Asian students in particular, were also due to their cultural and educational heritage that was “seldom an adequate preparation for what faces them here [in Australia]” (Ballard, 1987, p. 114). ISs’ cultural and educational heritage has been particularly perceived as a factor that contributes to the various problems these students experienced in their adjustment to the Australian system (Bradley & Bradley, 1984; Burns, 1991; Mullins et al., 1995; Samuelowicz, 1987).

For example, teachers in Asian countries have been portrayed as authoritarian and presenting fixed knowledge through “lecturing and dictation”, which are not open to “challenge and extension” (Ballard, 1987, p. 114). Only one authority, voice or view is
highlighted in Asian culture, especially in cultures of the Confucian heritage (Burns, 1991). Students from this educational background were viewed as having “excessive regard for authority” (Samelowicz, 1987, p. 125), which limited them to being passive recipients of authority in that they “rarely challenge the teacher” (Burns, 1991, p. 62) or material (Samelowicz, 1987). Their cultural and educational heritage was also seen as training them to “memorize and imitate” (Beasley & Pearson, 1999, p. 306). Thus they experience deficiencies in “intellectual skills of comparing, evaluating different points of view, arguing and presenting one’s own point of view” (Samelowicz, 1987, p. 124), which contribute to difficulties in participating in group discussions in the Australian classroom (Samelowicz, 1987).

ISs’ cultural and educational heritage, often perceived as inappropriate or inadequate, resulted in them experiencing a series of problems such as “culture shock” (Burns, 1991, p. 71) and “study shock” (referring to the “incongruity between reproductive learning and analytic understanding”) (Burns, 1991, p. 71). Operating under this assumption, researchers such as Samelowicz (1987), Ballard (1987) and Burns (1991) perceived these students as being “a potentially ‘at risk’ group” (Burns, 1991, p. 73). In order to meet academic demands in Australia, these students needed training in “critical and analytical approaches to learning, study skills, [and] participating in discussion groups” (Samelowicz, 1987, p. 127). They also needed to undergo an “intellectual revolution” (Burns, 1991, p. 74) in which they would have to “assume a different role, that of an active participant, develop critical attitudes to the subject matter studied, and formulate complex ideas in a foreign language” (Samelowicz, 1987, p. 125). ISs, especially international Asian students, were seen as lacking these skills that were required to meet academic demands in Australia.
2.3 A contemporary perspective towards issues that international Chinese students (ICSs) experience with studying at university

These studies were subsequently challenged as either “focusing on deficiencies in international students’ academic skills” (Mullins et al., 1995, p. 203) or for treating them as a homogeneous group (Mullins et al., 1995). Subsequent studies shifted their focus to look into the adaptations that ISs made and to concentrate on students of one ethnic group.

As students from China are the largest cohort in the international student population in the USA (Institute of International Education, 2011), the UK (UK Council for International Student Affairs, 2014), Australia (Department of Education Employment and Workplace Relations, 2011), Canada (Canadian Bureau for International Education, 2014) and New Zealand (Education counts, 2014), a major proportion of more recent studies focus on students from this country.

These studies also focus on this particular group of students because of the uniqueness or considerable level of difficulties international Chinese students (ICSs) experience in their adjustment processes to study in Australia (Wang et al., 2012). For instance, ICSs’ experiences in relation to their academic learning are “pervasive” (Mullins et al., 1995, p. 229). These considerable and pervasive difficulties also comprise three broad areas: the English language, approaches to learning, and cultural and educational heritage. Details of each of these areas are discussed in the following sections.

2.3.1 English language

There are continuing opposing views on whether English language proficiency is predictive of academic performance. For instance, Lee, Farruggia and Brown (2013) found that English language proficiency was positively correlated to academic performance, whereas Oliver, Vanderford and Grote’s (2012) long-term large-scale quantitative study did not support this.
Although these contradictory views point to the need for a more extensive consideration of complexities involved in the learning of ICSs, such as variations in approaches to learning, individual constructs, previous experiences, and English language, they do not devalue the need to understand issues relating to the English language.

Studies of issues that ICSs experienced with the English language found that English language competence was a “substantial problem” (Leder & Forgasz, 2004, p. 193) and was “at the heart of difficulties” (Robertson, Line, Jones, & Thomas, 2000, p. 100). Research on issues relating to the English language looked into writing (Arkoudis & Tran, 2007; Tran, 2008, 2009), speaking (Yates & Wahid, 2013), listening (Mulligan & Kirkpatrick, 2000) and reading (Lee et al., 2013; Scheyvens, Wild, & Overton, 2003) in depth. The following four sections expand on the research in these four areas.

2.3.1.1 Writing

In the area of writing, essay composition has been perceived as the most difficult academic task ICSs needed to manage (Lee et al., 2013). Particular obstacles are found with understanding assignment requirements (Lee et al., 2013), formulating well-developed arguments (Felix & Lawson, 1994), avoiding plagiarising (Gu & Brooks, 2008) and converting ideas from the mother tongue into English (Scheyvens et al., 2003). These areas are sometimes inter-connected. For example, Felix and Lawson (1994) argue international students might be able to think clearly in their mother tongue, but this clarity of thinking may not be shown when they transfer these ideas into English if they have an inadequate command of English. Participants in Scheyvens and colleagues’ (2003) study provided evidence of this; they reported that converting ideas formulated in their mother tongue into English was time-consuming and lacked accuracy.
Variations in “linguistic forms of writing” (Arkoudis & Tran, 2007, p. 158) or the ‘surface features’ between the Chinese and the English language can pose challenges to ICSs’ essay composition. Some ‘surface feature’ challenges ICSs face can be caused by differences in the areas of grammar, vocabulary and sentence structure (Beamer, 1994; Tang, 2012). However, challenges ICSs experience with writing go far beyond surface features of the language (Arkoudis & Tran, 2007; Hyland, 2011; Lea, 2006). Writing is seen as intricately linked to particular disciplines and thus operates within disciplinary contexts (Hyland, 2011; Lea, 2006). It is also seen as “interactional and social, expressing a culturally recognised purpose, reflecting a particular kind of relationship and acknowledging an engagement in a given community” (Hyland, 2011, p. 31). Hyland (2011) thus argues learning to write involves acquiring and mastering five areas of knowledge; i.e. content, system, process, genre and context knowledge.

Beamer (1994) states that the structures of languages represent structures of thinking, which are “culturally defined” (p. 13). Problems with grammar or sentence structure often resulted from cultural differences (Beamer, 1994). Some literature points clearly to the view that the challenges ICSs encounter regarding their essay composition are exacerbated by cultural influences (Arkoudis & Tran, 2007; Chang & Strauss, 2010; Connor, 1996; Tang, 2012). Explicit versus implicit messages, logic, direct versus indirect writing, and structures of thinking are regarded as strongly regulated by culture (Beamer, 1994). Interpretations of approaches to knowledge and writing are culturally situated (Arkoudis & Tran, 2007). This points to the possibility that ICSs might bring with them different expectations, interpretations or approaches to constructing an argument (Tran, 2009). ICSs’ interpretations of assignment requirements, approaches to their writing assignments, and exercise of agencies to improve the ways that they approach their writing are affected by their cultural traditions.
Conventions of the written discourses between ICSs’ cultural tradition and those of their host culture vary. This variation might pose challenges regarding whether their interpretations and approaches to their writing meet their hosts’ disciplinary expectations. If not, negotiating and managing a “shift in mindset” (Tang, 2012, p. 6) or “identity” (Gu & Brooks, 2008) might further challenge these students. Therefore, ICSs face problems that might also result from “complex internal negotiations” (Tang, 2012, p. 6). One participant in Tran’s (2009) research, for instance, although he/she preferred an indirect way of writing, had to conform to the linear way of writing.

Although cultural traditions have been shown to influence students’ expectations, interpretations and approaches to writing, this influence is not seen as being entirely “deterministic” (Gu & Maley, 2008, p. 226). Therefore, it is recommended that both cultural and individual factors such as previous experiences or personal backgrounds are taken into account. The degree of challenges was less for those students who had previous exposure to “Western linear approach to writing [as] students’ cultural norms may be exercised and reproduced in diverse ways” (Arkoudis & Tran, 2007, p. 164). Arkoudis and Tran (2007) studied two ICSs’ experience of the disciplinary requirements of academic writing. Their findings demonstrated variations between these two ICSs in terms of interpreting the disciplinary requirements, and in strategies to improve ways to approach their writing. In their study, one student claimed the models of writing provided by lecturers helped her most in improving her understandings of “disciplinary writing” (Arkoudis & Tran, 2007, p. 167), whilst the other said attending short courses helped her most.

The dominant discourse on ICSs’ issues relating to writing, as stated by Tang (2012) “has tended to be located within a deficit model” (p. 10). She further claims that “it is the problematic nature of the non-native-English-speaker’s participation in the disciplinary community that has taken up much of the disciplinary spotlight” (Tang, 2012, p. 10). An
example of this is provided by Lee, Farruggia and Brown (2013), who, although implying that the challenges ICSs encounter regarding essay composition might be affected by other factors that are not related purely to linguistic aspects, made a sweeping generalization that tended to problematize those students as being incapable of arguing or thinking logically. They claimed (and disagreed with Tran (2008)) that ICSs tended to believe that the obstacles that they experienced regarding essay composition were affected by their poor command of English (for instance, limited grammar or vocabulary), rather than their “inability to think logically and argue” (Lee et al., 2013, p. 924). Tran’s (2008) study, in contrast, found that ICSs were able to argue and think logically. This was shown by her participants’ achievement of “good results for their writing and becoming successful in their academic life” (Tran, 2008, p. 225). ICSs in Gu and Brook’s (2008) research also offered evidence to overturn the negative image that has been held about this group of students. The ICSs in their study demonstrated that they were active, competent, and also capable of overcoming their challenges. ICSs in Tran’s (2008) and in Gu and Brook’s (2008) research, therefore, provided evidence to challenge the assumption that they were not able to argue nor to think logically.

Such research also offered evidence that ICSs draw on resources to manage/handle challenges. ICSs in Tran’s (2008) research, for instance, took active roles in “drawing on various strategies and problem-solving skills” (p. 245) in order to understand conventions about writing argumentative essays in their respective disciplines. Similarly, Hu and Lam (2010) studied ICSs’ use of peer review as a strategy that these students used to improve their writing, finding that although they preferred to receive feedback from teachers rather than from peers, peer feedback did help them improve their writing significantly regarding both in “overall quality [and]…individual components” (p. 387). Hu and Lam (2010) also argued that ICSs had the ability to “provide many valid suggestions about each other’s writing, respond critically to peer feedback, and incorporate high proportions of valid peer suggestions in their
revisions” (p. 390). They termed these activities as “critical thinking processes [which they affirm] can not only improve the quality of students’ writing but also facilitate their acquisition of autonomous writing skills and development into independent writers” (Hu & Lam, 2010, p. 390). These insights from both Tran’s (2008) and Hu and Lam’s (2010) research offer evidence that challenged the image that ICSs were passive learners who were incapable of arguing, thinking critically or solving problems. These insights also point research into ICSs’ issues regarding writing to a new dimension: the ways that ICSs resolve their challenges and the resources they use for resolution.

2.3.1.2 Speaking

Compared to writing, reading, and listening skills, speaking communication skills have received the least attention in language courses such as English for academic purposes or academic programs (Yates & Wahid, 2013). Despite this, proficiency in spoken English is regarded as “vital to the well-being of students and a pre-requisite for success in both academic and social life” (Yates & Wahid, 2013, p. 1038). The value of speaking to learning has been recognized by growing research interest in this area (Biktimirov & Feng, 2006; Chang & Strauss, 2010; Gallagher, 2013; Halenko & Jones, 2011; Mak, 2011; Mohamad & Wu, 2013; Tang, 2012), and also by ICSs themselves (Yates & Wahid, 2013; Zhang & Mi, 2010).

Proficiency in speaking is highly valued by some ICSs. Some ICSs in Yates and Wahid’s (2013) study viewed gaining proficiency in speaking as even more important than obtaining the academic degree itself. Despite their high motivation, their opportunities for improvement were very limited (Yates & Wahid, 2013). Yates and Wahid (2013) argued that both contextual and individual factors contributed to this limited experience. They found little emphasis was placed on practicing oral English by programs such as English for academic purposes and other programs. The context provided by the program, campus and the
community represented ICSs’ first language well, which “posed a serious threat to their already fragile efforts to interact with English-speaking locals” (Yates & Wahid, 2013, p. 1047). They also found that ICSs’ efforts to improve oral English by, for instance, pursuing employment, attending social activities including sports or clubs or homestay also “met with only limited success and were often thwarted by time constraints imposed by their academic lives or their financial situation as students” (Yates & Wahid, 2013, p. 1047). Therefore, some ICSs did not benefit as much as they wanted from the English-speaking context in which they lived, worked or socialised. This indicates that exposure to the target language context does not necessarily guarantee achievement in speaking competence. Halenko and Jones (2011) argue for the need to intervene (in the form of explicit instruction) in ICSs’ use of spoken language, such as instructions on how to make requests. Their intervention study did show that these “explicitly instructed students tend to fare better” (Halenko & Jones, p. 241). In the same vein, Wang’s (2012) research shows that intervention work in the form of a supportive program also assists international students’ processes of adjustment with studying at university in Australia.

Growing research into ICSs’ use of English in class recognizes the increasing value of proficient spoken English in their study at university (Liu, 2006; Mak, 2011; Yates & Wahid, 2013). ICSs were found to have limited experiences in practicing “speaking in class” (Mak, 2011, p. 203). These limited experiences were contributed to by linguistic, cultural, contextual and personal factors (Liu, 2002; Marlina, 2009; Wang, 2012).

Gallagher (2013) and Liu (2006) found that proficiency in English affected ICSs’ successful participation in speaking in class. Proficiency in oral English was regarded as vital in “successfully interfacing with the host culture” (Gallagher, 2013, p. 54), and also in affecting ICSs’ confidence levels regarding participation in in-class activities (Zhou, Knoke, & Sakamoto, 2005).
Although proficient spoken English is argued to be vital for ICSs’ successful adaptation to their host academic community, their limited experiences in participating in in-class activities is compounded by cultural factors (Gallagher, 2013; Liu, 2002, 2006; Mak, 2011; Wang, 2012). The cultural factor of ‘protection of face’ was found to be the most prominent one that contributed to ICSs not speaking in class (Liu, 2002; Mak, 2011; Skyrme, 2010; Wang, 2012).

Concerning the important role that “Face” plays in ICSs not speaking in class, this concept warrants a deeper exploration of the context. Hofstede’s (1984) cultural dimensions of individualism versus collectivism were used to understand how these dimensions influence the concept of “Face”. In a more individualistic context, the social framework is knitted loosely whereas in a more collectivist context, a preference is put for a close-knit social framework (Hofstede, 1984). This dimension is fundamentally concerned with “a degree of interdependence a society maintains among individuals” (Hofstede, 1984, p. 83). It is about people’s concept of self (Hofstede, 1984). In collectivist societies, individuals depend much on other members of the group for self-definition, whereas in individualist societies, this dependence is weak. From a collectivist dimension, the concept of “Face” would have considerably more dependence on other individuals of the group for relevance and meaning. It relates to “how an individual thinks his or her character or behaviour is being judged or perceived by the people around him or her in that community” (Liu, 2002, p. 41).

Markus and Kitayama (1991) did a comparative study of Western and Eastern cultures and conceptualized the concept of self, which has evolved to the concept of ‘self construal’. Self construal has been demonstrated to influence individual learning in the areas of cognition, emotion, motivation and behaviours (see Lee, Aaker & Gardner, 2000). In Markus and Kitayama’s (1991) study, they recognized that Western cultures tend to emphasize an independent-self construal, which contributes to personal attributes of being autonomous and
independent from their social context, yet responding to their social cultural context in a way that best displays their uniqueness. In contrast, Eastern cultures, for example, the Chinese culture tend to emphasize an interdependent-self construal, which contributes to personal attributes of obeying prevailing conventions, maintaining harmony and being less inclined to challenge social culturally established norms (Goncalo & Staw, 2006). When individuals adopt an interdependent-self construal, they tend to form their self-identities based on their abilities of maintaining their interrelationships with the social context. Those with an interdependent-self construal are “required to be very sensitive to others’ feelings and thinking” (Yamazaki, 2005, p. 529). This sensitivity relates to two areas of concern: their own “Face” and their peers’ “Face”. The concern about their own “Face”, which can involve concern about being evaluated negatively, often leads to a choice to avoid “subjecting [oneself] to public evaluation” (Skyiem, 2010, p. 212). The care about others’ ‘Face’, which can involve concern about being viewed as aggressive, often leads to a choice to avoid questioning other group members’ ideas so as to maintain good relationships (Wang, 2012). The concern of losing others’ and one’s own ‘Face’ thus can prohibit ICSs submitting to public evaluation, consequently impacting their willingness to speak in public.

‘Face’ is regarded as “particularly salient in the Chinese social psychology and culture” (Wang, 2012, p. 528). It regulates “human relationships and social communications, [and also]… communication strategies to avoid conflict situations” (Wang, 2012, p. 528). In the case of Chinese learners transiting to an independent-self construal culture, for example in Australia, they are likely to experience a sense of lack of fit and incongruence, which emerges as the environment presents opportunities for individuals to seek independence instead of presenting opportunities for them to maintain close relationships. Their interdependent-self construal also contributes to their need to maintain harmony and comply with convention. Consequently they might be less inclined to engage in activities that will
cause embarrassment and are inclined to behave obligingly rather than assertively (Goncalo & Staw, 2006).

Wang (2012) argued cultural factors of ‘appeasing’, maintaining ‘group harmony’, and ‘low power self-positioning’ were also behind ICSs’ initial choice to remain silent. ‘Appeasing’ refers to behaviours that are aimed at avoiding being disliked (Wang, 2012). Wang’s (2012) participants, for instance, avoided participation as it was viewed as showing off, and they avoided “being personally assertive and self-congratulatory” (p. 527) because they thought this would lead to unfavourable impressions. Maintaining ‘group harmony’ was reflected in an indirect communication style or implicit expressions ICSs used to avoid confrontation (Wang, 2012). Wang (2012) also suggested ICSs showed a tendency to regard themselves as inferior in terms of language and knowledge, and thus positioned themselves in a “weak power situation” (p. 528). Those who represent “authority, experience, knowledge and expertise [often had the] spoken ‘voice’” (Wang, 2012, p. 528). Therefore, ICSs tended to be silent because they viewed it as a learning experience and “often wanted to get inspiration from others’ opinions and wisdom” (Wang, 2012, p. 528). This coupled with keeping away from being disliked and confronting others were other cultural factors that were behind ICSs’ choice to remain silent.

Researchers such as Marlina (2009), Yates and Wahid (2013) and Wang (2012) contend that contextual factors also play critical roles in shaping ICSs’ participation in in-class activities. ICSs in Wang’s (2012) research said group members who were open, friendly and encouraging were conducive to their participation. Data from Marlina’s (2009) study implied that “the personality, teaching styles, and attitudes of some tutors which the participants interpret as disrespectful and condescending resulted in a decision to withdraw from participation” (p. 242). ICSs’ participation in in-class activities is thus also seen as being greatly shaped by contextual factors, such as, other members of the group.
Differences among individuals need to be acknowledged. Some ICSs in Liu’s (2002) study preferred to articulate in class, while others did not. Although culture has been identified as one important factor shaping ICSs’ participation in speaking in class, it is problematic to see “culture as the dominant force affecting students’ reluctance to speak in tutorials [as this] overlooks the diversity in any country and/or individual differences” (Marlina, 2009, p. 237). Although ICSs share the same cultural heritage, research demonstrates huge differences amongst them. Therefore, acknowledging differences among individuals is vital in any research into understanding ICSs’ issues relating to speaking.

Anxiety about speaking in class

Another strand in the research into ICSs’ practices of using English in class considers psychological aspects that might prohibit them from speaking in class. Anxiety has been identified as a major factor that prevents ICSs from speaking in class (Gallagher, 2013; Liu, 2002; Liu, 2006; Mak, 2011). This anxiety can be “profound” (Gallagher, 2013, p. 60). This was supported by Liu’s (2006) study of anxiety experienced by Chinese students in oral English classrooms in one university in China.

Cultural factors contribute to ICSs’ anxiety about speaking in class. Fear of being viewed negatively is one common factor that increases ICSs’ anxiety level (Mak, 2011, Liu, 2006). Participants in Liu’s (2006) research said they were most anxious when being singled out to answer teachers’ questions, or to do a presentation when unprepared, because they feared making mistakes or being judged by the whole class. Thus, whenever the teacher asked a question, most students were observed to “look down at their desks, reading or thinking about what to say or how to say it” (Liu, 2006, p. 312) to avoid subjecting themselves to “public evaluation” (Skyrme, 2010, p. 212). Fear of being judged negatively was, therefore, highlighted as one important cultural factor that contributing to their anxiety level, especially in situations of being singled out to answer questions, or being asked to do a presentation.
without any prior preparation. These situations were regarded as increasing their chances of being negatively judged by the public (the teacher and/or peers).

Anxiety about speaking in class was also influenced by contextual factors such as other members of the group. Participants in Liu’s (2006) study said they did not experience any anxiety in pair work or group work if they were paired with peers who exhibited a similar proficiency level in English. However, whenever they were in situations where their peers’ proficiency level in English was perceived to be higher than theirs, their anxiety was much higher (Liu, 2006). Possibly ICSs experience high anxiety when paired with local peers who are perceived to be more capable of speaking English because their oral English is almost always poorer when compared to their local peers. In fact, Wright and Lander (2003) found that “South East Asian students (including Chinese students) were inhibited in terms of their verbal participation when with Australian students” (p. 237). Consequently ICSs experience anxiety when they are paired with local peers, regardless of the form of work (pair work, or group work, or group discussion).

Various factors and anxiety about speaking in class can lead to ICSs’ “silence/reticence” (Zhou et al., 2005, p. 287). Liu (2002) examined ICSs’ silence from a cultural vantage point and concluded that saving face led to the choice of silence, but this did not mean they were passive or had nothing to contribute. Rather they were engaged in an active process of analysing and synthesizing. As one of his participants says,

*First of all, when others ask questions, I can recall, and synthesise my knowledge relevant to the topic to see whether I know the answer or whether I have thought about that before. In this way, if I have an answer to the questions raised in class, then I can compare mine with the teacher’s to check my comprehension or to pose further questions* (Liu, 2002, p. 42).
Although research points strongly to the fact that linguistic, cultural, individual and contextual factors inhibit ICSs from speaking during class activities, there is strong evidence to show they are active agents of change who are capable of overcoming challenges and transforming their identities. Wang’s (2012) study, for instance, demonstrated that ICSs are capable of making adjustments and changes regarding “communication skills, ways of thinking and perceiving” (p. 533) to meet the learning expectations of their host community. Similarly, Liu (2002) found that ICSs were active agents regarding approaches to learning and thinking, were also good at analysing and synthesizing information.

2.3.1.3 Listening

Regarding listening comprehension, areas of challenge that ICSs experience such as the (unfamiliar) Australian accent, fast-paced speech, and use of slang/idioms, have been identified (Lee et al., 2013; Scheyvens et al., 2003). Comprehension of lectures is the area of difficulty that is most frequently experienced (Lee et al., 2013; Mulligan & Kirkpatrick, 2000). Mulligan and Kirkpatrick’s (2000) research provided empirical data to support this. In their study, nearly 25% of the participants reported not being able to understand much at all and only around 9% reported being able to understand “the content … very well” (Mulligan & Kirkpatrick, 2000, p. 311).

Comprehension is influenced by linguistic factors that are related to a set of skills such as “real-time processing and lexico-grammatical knowledge” that involve listening as a foreign language (Flowerdew, 1994, p. 12). The ephemeral nature of a listening text according to Flowerdew (1994) means that it “must be perceived as it is uttered” (p. 12). Listeners are thus required to comprehend at the same time that the text is perceived. This forces listeners to “comprehend in real time, rather than having a text to peruse and review” (Mohamad & Wu, 2013, p. 370). They also need to have phonological knowledge to be able to tell “irregular pausing, false starts, hesitations, stress and intonation patterns” as well as lexico-grammatical
knowledge to process the vocabulary and grammar of the foreign language (Flowerdew, 1994, p. 12). Lacking skills in these areas pose great challenges relating to comprehension. The difficulties that participants experienced in Mulligan and Kirkpatrick’s (2000) study showed the importance that linguistic factors play in influencing comprehension. For instance, in considering conceptual understanding, a significant percentage (81%) of these students were not able to relate lecture content to other course content and 77% could not relate it to their previous education. The majority (76%) also reported not being able to understand key terms/concepts and not being able to identify conceptual relationships within a lecture (79%) (Mulligan & Kirkpatrick, 2000).

Mulligan and Kirkpatrick (2000) identified certain cultural factors that affect international students’ abilities to understand lectures. They base their argument on Flowerdew and Miller’s (1995) “four dimensions of culture – ethnic, local, academic and disciplinary” that could potentially influence comprehension (pp. 356-369). Two cultural factors, ‘ethnic’ and ‘local’, were found to impact greatly on the difficulties ISs experienced in understanding and following lectures (Mulligan & Kirkpatrick, 2000). ‘Ethnic’ culture according to Flowerdew and Miller (1995) is “culturally based, social-psychological features which affect the behaviour of lecturers and students” (p. 345), whilst ‘local’ culture refers to “the local setting with which [lecturers] are familiar and which may be alien to foreign [students]” (p. 345). Around one-quarter of the participants in Mulligan and Kirkpatrick’s (2000) study reported they could not understand “references to material, examples from Western or Australian cultures, relationships between lecture content and own life experiences” at all (p. 326), with the majority reporting that they were only sometimes able to understand these aspects. In addition, the majority of participants said they only sometimes understood jokes or humour used by their lecturers, which is classed as part of ethnic cultural differences (Mulligan & Kirkpatrick, 2000).
Contextual factors such as the rate of speech also impact ICSs’ comprehension (Mohamad & Wu, 2013; Mulligan & Kirkpatrick, 2000). The context of the situation including the physical environment (e.g. noise level) and speakers’ input (for instance, “speech rate, length of passage, syntactic complexity, vocabulary, discourse, noise level, accent, register, propositional density, amount of redundancy” (Mohamad & Wu, 2013, p. 371) impact on listeners’ ability in second language listening comprehension.

Second language (L2) learners’ listening comprehension is also strongly impacted by individual factors such as memory, concentration, background knowledge (Mohamad & Wu, 2013). It is also influenced by metacognitive skills such as an ability to “recognize the topic of conversation from the native speaker’s initial remarks … make predictions about likely developments of the topic to which he [sic] will have to respond … [and to] recognize and signal when he [sic] has not understood enough of the input to make a prediction or a response” (Anderson & Lynch, 2003, p. 42). Linguistic, cultural, contextual and individual factors influence ICSs’ comprehension, particularly in the area of understanding and following lectures.

2.3.1.4 Reading

Research into reading comprehension is concerned with “efforts to improve second language reading instruction” (Grabe, 1991, p. 375). The move from the “psycholinguistic model of reading” (Grabe, 1991, p. 376) to the schema theory processes in second language reading comprehension (Nassaji, 2007) advanced understandings about reading theoretically. Experiments or tests investigating the effects of background knowledge on reading comprehension (Alptekin, 2006; Carrell, 1983; Johnson, 1982; Ketchum, 2006) advanced understandings about reading empirically.
Compared to research on reading comprehension that focused on the pedagogical aspects of English language instruction, research on ICSs’ own reading comprehension issues seems to be somewhat limited. It also seems to have attracted the least attention from researchers into ICSs’ language-related issues. However, successful academic reading is important for ICSs to meet the demands of their learning in Australia. It is proved to be “a vital source of academic success at tertiary level” (Phakiti, 2008, p. 21).

Although students in Scheyvens, Wild and Overton’s (2003) study of international students at the postgraduate level found that reading in English was one of the “biggest impediments to their academic success” (p. 312), later studies indicate that reading is not very challenging. In Lee et al.’s (2013) study of international students at the tertiary level, for instance, only one of 21 interview participants said managing the reading load was difficult. Lee and colleagues (2013) concluded reading “was not an issue or the students did not find reading to be as great a difficulty” (p. 924). Similarly, Zhang and Mi (2010) also found reading was not a problem area for ICSs.

Cultural factors impede students’ comprehension of texts written in English. Both cultural knowledge of the target language and the students’ home cultural heritage have been shown to influence their reading comprehension (Alptekin, 2006; Carrell, 1983, 1987; Gürkan, 2012; Mohamad & Wu, 2013). Students’ knowledge of the target language or cultural schemata has been shown to positively influence their comprehension (Alptekin, 2006; Carrell, 1983, 1987; Gürkan, 2012; Johnson, 1981, 1982; Ketchum, 2006; Li & Lai, 2012; Rokni & Hajilari, 2013). In other words, the more familiar the student is with the target culture, the better comprehension they will achieve with their reading. This is demonstrated by some international students’ experience that “none of the words in reading are difficult to understand, but the interpretation of the meaning is only possible accompanied by an understanding of the cultural setting” (Li et al., 2007, p. 15). Students’ prior cultural heritage
can influence their approach to a written text in a foreign language: for instance, “students who come from cultures where written material represents ‘truth’ might tend not to challenge or reinterpret texts in light of other texts, but will tend to memorize ‘knowledge’” (Grabe, 1991, p. 389).

Linguistic factors affect ICSs’ comprehension of a written text. Insufficient vocabulary can influence comprehension to a large degree (Grabe, 1991). Therefore, vocabulary development is seen as being “a critical component of reading comprehension” (Grabe, 1991, p. 392).

Contextual factors influence comprehension of a reading text. The complexity of the reading text (syntactic, semantic complexity (Johnson, 1981), the mode of text representation (Fontanini & Tomitch, 2009), or rhetorical format (Carrell, 1987) have been found to impact students’ reading comprehension.

Individual factors also influence students’ reading comprehension (Fontanini & Tomitch, 2009; Knell & Chi, 2012; Lau, 2004; Law, 2009; Phakiti, 2008; Wang & Guthrie, 2004). These are factors such as “working memory capacity” (Fontanini & Tomitch, 2009, p. 1), reading skills and strategies (Phakiti, 2008), attribution beliefs (“implicit beliefs about intelligence and ability” (Law, 2009, p. 87)), motivation (Lau, 2004), and “willingness to communicate and perceived competence” (Knell & Chi, 2012, p. 66). In each of these studies, (the interplay of) these various individual factors were all found to impact students’ comprehension of a written text. In Fontanini and Tomitch’s (2009) study, for instance, participants’ working memory capacity and motivation were found to influence their comprehension of a written text. In Lau’s (2004) research, for instance, motivation was found to be positively correlated with reading comprehension.
2.3.1.5 Section summary

To summarise, research into ICSs’ language issues regarding writing, speaking, listening and reading indicate that challenges relating to the English language are more than purely linguistic. Rather, these challenges are compounded by various cultural, contextual and individual factors. This indicates the complexities involved in understanding ICSs’ issues relating to using English. The active roles that ICSs took to resolve the challenges that they experienced, especially with their writing (Arkoudis and Tran, 2007), challenged the assumption that they were passive, or were incapable of skills such as analytical thinking that are perceived to be essential in ensuring academic success in Australia. This recent research counters an earlier perspective that ICSs need assistance, without which they “are likely to make slow, painful progress or even fail” (Ballard, 1987, p. 116). It also indicates the need for future research into the resources and processes ICSs respectively use and take to resolve their challenges with the English language. This review signposts the importance of looking into various factors that might lead to participants’ challenges in regard to the English language. In order to see, to appreciate, and to understand the individual Chinese learner, stereotypical assumptions that might block researchers achieving these, need to be interrogated. It also suggests being aware of the active roles that they took, the complexities in issues that they experience in regard to the English language and also to value individuality.

2.3.2 Approaches to learning

While earlier research claimed that Asian students were passive recipients of authority and material without question (Samuelowicz, 1987) and surface learners who “memorize material to satisfy external demands” (Samuelowicz, 1987, p. 123), later studies produced very different findings. Biggs (1996, 1998) found that ICSs use deep approaches to learning, and several other studies found that ICSs take active roles in readjusting their learning approaches.
to make their learning in Australia a transformative experience (see Wang et al., 2012; Gu, 2009; Fotovatian & Miller, 2014; Schweisfurth & Gu, 2009).

Biggs’s (1996, 1998) finding that ICSs adopt deep approaches to learning overturned the perception that they were surface learners. Watkins and Biggs (2001) were among the earlier researchers who attempted to ‘redress the ‘deficit’ theories with a more positive spin on CHCB [Confucian heritage cultural background] students’ learning behaviour’ (Ryan & Louie, 2007, p. 408). Biggs (1998) claims the view that Chinese learners rote learn is a supportable one, but argues that it is problematic to arrive at the conclusion that they are surface learners. He defined a deep approach as an approach that “is based on the intention to engage the task on optimal terms, which in most academic tasks means to understand and use knowledge appropriately” (Biggs, 1998, p. 726). In Biggs’s (1998) view, ICSs memorize for understanding, so their use of rote learning is “part of a deep approach” (p. 726). Biggs (1998) thus claims Chinese learners are not surface learners.

Regarding approaches to learning, recent studies carried out have shown that Chinese learners adopt approaches that are outside the scope of rote. Wang’s (2012) case study of Chinese learners’ learning English demonstrates their use of a self-directed pedagogy, which as she argues, “signposts an effective way …to improve linguistic, sociolinguistic and pragmatic competence” (p. 339). Her study strongly negates the perception that Chinese learners predominantly rely on rote learning and also opposes any labelling of these students as surface rote learners (see Samuelowicz, 1987).

Studies finding ICSs take active roles in readjusting their learning approaches to make their learning in Australia a transformative experience (see Fotovatian & Miller, 2014; Gu, 2009; Schweisfurth & Gu, 2009; Wang et al., 2012) challenged the perception that they were passive learners. A number of studies have shown that ICSs take active roles through their
“interactions with the realities of their overseas experiences” (Wang et al., 2012, p. 360). These active roles are illustrated by their continuous efforts in readjusting or reforming their learning styles (Gu, 2009), developing strategic agencies (Tran, 2008), and forming new expanded identities (Fotovatian & Miller, 2014; Gu, 2009; Wang et al., 2012). Despite the various stresses they encounter, their overseas experiences have been argued to be “a transformative process contributing to personal growth and development” (Schweisfurth & Gu, 2009, p. 465). Although these students face various stresses in their overseas experiences, a number of studies illustrated that the majority do achieve academic success and do believe their learning experiences in a different context are positive (Russell, Rosenthal, & Thomson, 2010; Scheyvens et al., 2003). This implies the need to look into the processes and resources that ICSs use to achieve these transformations.

Some researchers were concerned about stereotyped, inappropriate assumptions about ICSs (Ryan & Louie, 2007). Ryan and Louie (2007) criticized the characterization of ICSs “as passive, dependent, surface/rote learners prone to plagiarism and lacking critical thinking” (p. 406). These perceptions can negatively affect these learners, who accordingly view themselves as “lacking”, which as Strauss (2011) argues “has a serious and detrimental effect on their self esteem and sense of agency” (p. 320). This negative effect can be further magnified when Western academics operate on stereotyped, inappropriate assumptions about ICSs (Ryan & Louie, 2007). They also warned of the danger in implying that “Chinese students everywhere are competitive” (Ryan & Louie, 2007, p. 408). Stereotypical assumptions have the potential to block knowing the individual Chinese learner, let alone respond to the particular needs that they have with their learning at university. ICSs’ individuality thus needs to be valued (Arkoudis & Tran, 2007; Liu, 2002).
2.3.3 Cultural and educational heritage

ICSs’ successes in their academic studies in Australia prompted some researchers to focus on the processes involved in their adjustment to the Australian education system. The attention of research studies shifted from a perception that their heritage contributes only to problems that they experience with learning overseas to making explicit “the adjustments students must make in order to succeed in the Australian educational system” (Mullins et al., 1995, p. 203). In order to promote a more successful transition, learners’ existing experiences in relation to factors that have influenced/framed their learning have become a subject of study. This has produced considerable debate on possible salient factors, currently and historically.

Confucianism is one such explanatory factor. For example, Tavakol and Dennick, (2010) resorted exclusively to aspects of Confucian beliefs to explain certain Asian students’ attributes (e.g., positive attitude towards education). Although ICSs’ experiences with learning overseas were often explained with “partial understanding of The Analects and selected Chinese proverbs” (Shi, 2006, p. 124), many studies do support the view that Confucianism profoundly influences learners of that heritage (for instance, Li, 2002). However, Confucianism has been “interpreted over the centuries to suit various political, economic, and social agendas” (Ryan, 2010, p. 48). These historical interpretations are “varied and complex, and … are often far removed from the original ideas” (Ryan, 2010, p. 48). Therefore, this study’s perspective on the origins, history and influences of Confucian thought on education in China are briefly outlined here.

2.3.3.1 A central reference point: Confucian thought

Although Confucian thought or Confucianism is often referred to as a “complex phenomenon” (Ng, 2000, p. 315), it is commonly defined as “a system of philosophical, ethical and political thought based on the teachings of Confucius” (Li, 1993, p. 305). The
principal source of Confucianism is Confucius’s own teachings and the *Analects*, which is a record of Confucius’s life and teachings (Zhang & Xiu, 2001).

Confucius was born in the state of Lu, now Qufu city, Shandong province and lived from 551-479BCE, during the decline of the Zhou dynasty (Zhang & Xiu, 2001). The period in which Confucius lived was recorded as one of increasing chaos in social, political and religious spheres. It was in this social and political context of unrest that Confucius set his life’s ambition – to assist the rulers of his time bring about harmony and peace (Zhang & Xiu, 2001). He proposed that society be led by men of deep education and ethical insight, instead of by hereditary rulers (Zhang & Xiu, 2001). However, he was not very successful in persuading any ruler. It is when his hopes failed to materialize that he focused solely on teaching disciples.

In consideration of Confucian influences on education, it is established that Confucius promoted equal access to education, which made education available to the non-aristocratic classes (Ng, 2000; Zhang & Xiu, 2001). Confucius described himself as a lifelong learner and an unwearying teacher and believed a teacher should be an exemplary mentor who keeps abreast of new knowledge (Ng, 2000; Zhang & Xiu, 2001). Although what was taught by Confucius regarding content and curriculum is highly contested, moral education is agreed to be the core (Zhang & Xiu, 2001).

As a teacher, Confucius aimed at producing “educated, moral persons who could contribute to the well-being of their society and state, eventually reaching sagehood” (Law et al., 2009, p. 92). The sage according to Confucius is “an exemplary model of human perfection in accordance with the way of heaven that is also transformed into human nature” (Park, 2010, p. 144). He related learning to the “mastery of significant empirical knowledge of the human past” (Schwartz, cited in Law et al., 2009, p. 92) and thus, referred to himself as
a transmitter (Ng, 2000). He was believed to have taught primarily by example and by questioning, and also used field trips as a pedagogical approach (Ng, 2000). Field trips “take place in engaging and interactive settings” and occur in particular areas or contexts to achieve educational purposes (Morag & Tal, 2012, p. 746). Field trips as a pedagogical approach caters for students’ multiple intelligence (Ng, 2000) and offers hands-on experiences that assist learners’ appropriation of complex and abstract concepts (Morag & Tal, 2012).

Confucius used to take students to mountainside temples to engage in ritual practices (Ng, 2000). Confucius practiced a “contextualized one-on-one” (Ng, 2000, p. 313) teaching mode and promoted learning from peers. Confucius stressed integration of empirical learning and thinking (Law et al., 2009). He also promoted learners to continuously focus on goals and emphasized the importance of both critical thinking and application of knowledge involved in learning (Law et al., 2009).

What follows is an excerpt from Ng’s (2000) list on Confucian approaches. The table below was adjusted to highlight only the Confucian approaches.

Table 2.1

Confucian approaches to teaching and learning (from Ng, 2000, p. 314)

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<th>Confucian approaches to teaching and learning</th>
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<td><strong>Goal</strong></td>
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<td><strong>Epistemological orientation</strong></td>
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<td><strong>Teacher</strong></td>
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<td><strong>Approach</strong></td>
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<td><strong>Instructional strategies</strong></td>
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The Confucian school of thought has undergone frequent adaptations in various historical periods and geographical locations to “fit the demands of various socio-political circumstances” (Ng, 2000, p. 315). Both his teachings and this school of thought are believed to have been ignored for several hundred years after his death, after which they were “interpreted and promulgated by the ‘second sage’ of China, MengZi (Mencius)” (Ng, 2000, p. 315). A further adaptation of Confucianism occurred during the Han Dynasty by the scholar Dong Zhongshu, who “introduced a system of education built upon the teachings of Confucius” (Law et al., 2009, p. 93). It is believed that Dong also developed Confucianism into a “hierarchical, patriarchal system demanding unquestioning obedience from the young, weaker, and female members to the older, stronger, and male members of each duo” (Ng, 2000, p. 315). This worldview that Dong developed challenged the reciprocity that Confucius originally expressed (Ng, 2000). The politicization of Confucianism began when emperor Wu of the Han dynasty “banned all other schools of thoughts [and] paid supreme tribute to Confucianism” (Gu, 2006, p. 172). Under influences of other philosophical and intellectual traditions, such as Taoism and Buddhism, Confucianism was believed to have undergone further adaptations during the Song and Ming dynasties (Law et al., 2009).

Various adaptations made to this school of thought question the practice of resorting only to “partial understanding of The Analects and selected Chinese proverbs” (Shi, 2006, p. 124) to understand ICSs’ experiences with learning overseas. Researchers such as Shi (2006) argues that an exclusive “cultural point of view, especially from the interpretation of Confucianism” (p. 139) need to be interrogated.

2.3.3.2 Another central reference point: The examination heritage

Concerning what to draw on as reference points, a stream of research also points to the examination heritage as one other important one (Li, 2009; Wang, 2013). Li (2009) argues for the dominant influence of the examination system, arguing that it continues to dictate
school learning despite the continuous changes and external pressures that China is subjected to by today’s globalization. A single focus on Confucianism as a means of understanding influences on ICSs’ learning has thus been criticized for ignoring other significant influences such as the examination heritage (Wang, 2013).

The examination heritage has its origins in the Imperial Civil Service Examination system (ICSES) that was established, systematized, and politicized during the Han Dynastic period (McMullen, 2011). The ICSES adopted “classical literature and Confucian teachings [as being] a core component of the examination syllabus” (Law et al., 2009, p. 93), which brought about the wide adoption of the Confucian school of thought, and also another heritage: the examination system (McMullen, 2011).

The influences of the ICSES were wide and pervasive in the Chinese empire (Law et al., 2009; Liu, 2006; McMullen, 2011; Song, 2010). As a recruitment process for the civil administration of the Chinese empire it was meritocratic: it privileged worth over birth. Consequently it recruited (on the basis of test merit) public servants from a broad social base (McMullen, 2011). This made it possible for common people to raise their social status, providing motivation for many member of the population to pursue education (Gu, 2006). It thus acted as the main means for social advancements since the Han dynasty (Law et al., 2009).

Despite interruptions in late imperial Qing (late Qing government abolished the ICSES in 1905) and during the Culture Revolution (1966-1976), the examination culture continued. During the Republic period, examination for selection based on merit was re-established (Liu, 2006), which was inherited in the Mao era and developed further into a national unified college entrance exam in the year of 1952 (Zhao, 2012). In November, 1977, Deng re-instated the college entrance exam which had been interrupted for ten years (Yang, 2011).
This stimulated the learning desires of the Chinese people and the criterion of “all are equal before the scores” was set up (Yang, 2011, p. 322). The influence of this heritage is still strong in influencing present day learners of its tradition (Li, 2009).

2.3.3.3 Resorting to central reference points: Two concerns

Two concerns arise from resorting to single reference points for understanding ICSs’ existing experiences. One relates to the concern over the apparent assumption that Asian values are “discrete, homogenous and unchanging” (Ryan & Louie, 2007, p. 405). This view fails to consider the rapid changes that have occurred in China and the corresponding influences on Chinese learners.

The cultural and educational heritage that influence ICSs’ learning are diverse and include the influence of Confucian thought, the Civil Service Examination system, the rejection of this system along with the Confucian school of thought in the 20th century, and the influence of Western ideas such as communism along with the more recent development of Western education and the rise of professionalism.

Particularly since the late 1970s, China has undergone far-reaching economic, political and socio-cultural changes (Liu, 2011; Peng, 2008; Wei, 2009; Zhao, 2011). Opening to more foreign influence, far-reaching economic growth, the influx of Western culture and ideologies, the explosive impact of information technology, modernization, globalization and the one child policy, have all influenced contemporary Chinese learners’ “ideological concepts, feelings, and value judgements” (Zhao, 2011, p. 78). Under the one child policy for instance, children born during and after the 1980s are mostly from one child families. This contributes to them growing up in an over protected family context, which some scholars see as generating self-centredness and non-resilience (Liu, 2011). Resorting to Confucianism as
one single factor for understanding ICSs’ experience fails to consider the far-reaching changes that have occurred in China and the corresponding influences on learners.

The far-reaching economic and political changes that China has undergone since the late 1970s were shown through the multiplicity of education reforms (Wang, 2003). Taking the higher education sector as an example, this sector was “ordered to simultaneously introduce major academic, economic and political innovations as well as absorb the sudden impact of direct contact with the West” (Pepper, 1990, p. 135). Ironically, everything but improving the “quality of what is taught and learned” was reformed (Pepper, 1990, p. 136). However, despite the far-reaching economic and political changes, the examination culture continued, and this still plays an important role in influencing present day learners (Li, 2009). Bai (2010) claims the examination system remains an integral part of Chinese society. He argues that despite the political changes, “schooling and examination…could never be separated” (Bai, 2010, p. 107).

Another concern in understanding ICSs’ existing experiences relates to possible problems caused by adopting a ‘national culture’ stance (Ryan & Louie, 2007). Taking an exclusively national culture stance masks contextual influences such as family and peers, which have been shown to greatly impact ICSs’ learning (Chen, Li, Chen, & Chen, 2011; Chi & Rao, 2003; Li, 2002). Adopting such a stance also devalues individuality, which is a problem because international Chinese students’ cultural and educational heritage is reflected and practiced differently by each individual (see Arkoudis & Tran, 2007 and Liu, 2002).

Rigorous debate promoted consideration of the pitfalls in a singular concentration on conceptual frameworks/ stances (see Clark & Gieve, 2006, Ryan & Louie, 2007, Shi, 2006). Ryan and Louie’s (2007) timely warning of avoiding the danger of falling into the trap of stereotyping Chinese learners as either being deficit or surplus stimulated an important
discussion. Clark and Gieve’s (2006) promotion of a “small culture” (p. 63) approach resulted in a rejection of a binary logic, of ‘deficit versus surplus’; and a movement away from a “national culture” stance (p. 55). Their conceptual framework of ‘small culture’ contexts — the classroom for instance, seen in its overlap with other small cultures— becomes important in understanding ICSs’ existing experiences. This study therefore takes the ‘small culture’ stance as the conceptual framework.

2.3.3.4 ICSs’ host educational culture: A brief view

From the 1950s, epistemological understandings about learning have largely shifted to a constructivist epistemology in the West (Snowman et al., 2009). Constructivists hold that “‘truth’ and ‘reality’ are social constructs and dependent on context, contingencies and relationships” (Snowman et al., 2009, p. 338). They also hold that through applying a scientific approach, there are various right means to discover “truth” (Snowman et al., 2009). This constructivist view emphasizes multiple ways of discovering “truth”, which marginalizes teacher monologue and values learner perspectives. This view has promoted both researchers’ and practitioners’ interrogation and rethinking about curriculum and pedagogy (Charlton, Hannan, Herrick, Landy, & Mahar, 2005). This coupled with the contextual demands of contemporary society (for example fast advances in information technology) has led to a learner-centred conception of teaching (Ball & Wells, 2006), which is shown to be more successful in achieving learning outcomes compared to those of a “transmission-style teaching” that was practiced in the industrial era (Ball & Wells, 2006, p. 191).

Many universities in Australia focus on a supportive learning environment where a learner-centred approach is encouraged (see RMIT University, 2012; University of Melbourne, 2009). A main insight of this learner-centred approach is that learners attain new knowledge through connecting to prior knowledge (Ball & Wells, 2006; Biggs, 1996). This
prior knowledge and experiences are “essential elements in their process of negotiating new knowledge” (Dawson & Conti-Bekkers, 2002, p. 90). Only through acknowledging and valuing students’ prior knowledge, can optimal efficient outcomes be achieved (Biggs, 1996).

In summary, Australian educational practice sits within an individualist approach, has a strong learner-centred focus, and views the acquisition of knowledge as set of a constructed events which are linked to students’ prior knowledge.

### 2.4 ICSs’ existing knowledge and experiences as being significant in their negotiation of new experiences in Australia

Corresponding to a learner centred approach, ICSs’ existing knowledge and experiences need to be not only acknowledged, but also valued as significant elements in the process of negotiating learning in Australia.

One significant contribution that the small culture stance made was the recognition of the benefits that Chinese learners’ existing experiences bring to the teaching practices (see Singh & Han, 2009) and also to their learning sojourn in a new country (see Dawson & Conti-Bekkers, 2002, Wang & Ocean, 2016). Singh and Han (2009) looked into a Chinese researcher’s integration of knowledge from her heritage, such as Chinese idioms, in her research in Australia and viewed this as being a “valuable and fertile opportunity” (p. 199) for interrogating or (re)shaping teaching practices in the multicultural Australia. Dawson and Conti-Bekkers (2002)’s intervention work although grounded in national culture assumptions that entails “a sense of cultural fixity” (Clark & Gieve, 2006, p. 55), made an attempt to acknowledge and value Chinese learners’ existing experiences in the process of negotiating new experiences. These studies challenged the perception that Chinese learners’ existing experiences was a factor that necessarily and only contributed to problems and recognized the value that their existing experiences could bring to their learning in a new educational context.
While it is promising to recognize that Chinese learners’ existing experiences were of benefit for their learning overseas (see Dawson & Conti-Bekkers, 2002), there is a gap between what researchers promote and what is practiced in the multicultural classroom (Strauss, 2011). In other words, few studies have addressed the practical outcomes. In particular, the ways in which ICSs’ existing experiences benefit their negotiation of new learning overseas has not often been documented. There is a gap in the literature here that this thesis attempts to address.

2.5 Defining the scope of the current study

Building on the literature presented, this study aims to take one step further than focusing solely on the challenges that ICSs experience with learning overseas. This will be done through a consideration of the influences of ICSs’ existing knowledge and experiences. Secondly, the ways in which these influences impact their experience of and approach to issues in Australia will be examined. This will be carried out through analysis of the dynamic processes and the resources they use to approach these issues (attended by a consideration of historicity). Through this, this study aims to move the spotlight from focusing solely on the challenges that ICSs experience to identifying ways that they draw on their prior knowledge to successfully negotiate learning in Australia.

Therefore, this study aims to achieve the following:

- to contribute to the ongoing debate about ICSs from a cultural and historical perspective
- to clarify the ways in which ICSs’ cultural and educational heritage frames their experiences of learning in China
to consider the ways in which various contexts of family, workplace and friends influence their experiences of learning in China, and

to analyse how these influences in turn influence how they experience of and approach to issues with learning in Australia.

2.6 Chapter summary

This chapter reviewed the relevant literature that focused on ICSs’ experiences of learning in Australia. It discussed areas of the English language, approaches to learning, and cultural and educational heritage that were highlighted by the literature. The need to incorporate their prior-arrival experiences in understanding their experiences of learning in Australia was also raised. Based on implications indicated by the literature, the scope of this study was then defined. However, in order to achieve the objectives raised, this study needs an approach to address the issues raised in the most appropriate and concise way. The theoretical perspective that this study adopts and the approach it takes to address these issues are discussed in detail in the next chapter.
Chapter 3 Activity theory informed research design: The adapted Change Laboratory Approach (CLA)

This chapter starts with a brief discussion about the historical development of activity theory. This was carried out through examining three main theorists, Vygotsky, Leontiev, and Engeström. The chapter examines these theorists’ contributions to the development of this theory. Critiques of this theory are then discussed. The chapter then looks at the activity theory-informed research design: the CLA in depth. Adaptations made to this approach are outlined. This is followed by an elaboration on the preparatory, analytic and interpretive phases involved in the methods section. Finally, trustworthiness and potential ethical issues are discussed.

3.1 Theoretical lens: Activity theory as the broad vantage point

The activity theory that this study adopts as its theoretical lens is informed by philosophical traditions from Europe, particularly from Soviet Russian psychology, which is often referred to as “CHAT (cultural historical activity theory)” (Martin & Peim, 2009, p. 131). The purpose of adopting this theory is to use it primarily as an approach for modelling activity systems with the intention of promoting understanding (Bakhurst, 2009). CHAT is different from the theory based on “North American traditions of anthropology, interactionism and pragmatisms of the adaptable self, [referred as] SCAT (socio-cultural activity theory)” (Martin & Peim, 2009, p. 131).

It has been argued that activity theory is philosophically rooted in the work of Karl Marx and specifically within Marxist dialectical materialism (Engeström, 1999). Karl Marx’s main contribution to the philosophical foundation of activity theory is believed to be his speculation that activity is societal (Lektorsky, 1999). Although Marx was influenced by German idealist philosophy, he overcame its subjectivism that human consciousness created the physical world (Lektorsky, 1999). Rather, Marx believed individual human consciousness
originates from collective social activity (Lektorsky, 1999). The collective social activity “presupposes interindividual relationships, interactions, and communication”--- mediated by artefacts--- and in this mediating process, “participate in creating specific human features” (Lektorsky, 1999, p. 76). Karl Marx speculated on use of tools (Lektorsky, 1999). This is illustrated by the identification of tools (both primary and semiotic) as having the function to “mediate all human relations” (Lektorsky, 1999, p. 76) and also by the immense role tools have played in the discipline of psychology in the 20th century (Lektorsky, 1999). This influence is evidently shown by the Russian psychologist Lev Vygotsky, where tool mediation performed as the central idea (Lektorsky, 1999).

3.1.1 Vygotsky as foundation

Vygotsky, who is widely regarded as the central figure in the first generation of cultural historical activity theory, “created the idea of mediation” (Engeström, 2001, p. 133). This concept of mediation is regarded as his main contribution to the theoretical foundations of activity theory (Allen, Karanasios, & Slavova, 2011; Engeström, 2001).

Russian psychologists centred around Vygotsky strongly believe that culture and society determine cognitive development and this determination is shown by their mediation in the area of interactions occurring “between human beings and the world” through culturally developed tools and signs (Kaptelinin & Nardi, 2006, p. 30).

Concerning cultural determination of the mind, internalization meaning “a mode of individual appropriation of forms of collective activity” (Lektorsky, 1999, p. 77) is believed to be “one of the main modes” (Kaptelinin & Nardi, 2006, p. 46). Various experiments observed that subjects who use external mediational artefacts have spontaneously stopped using these artefacts and improved their performance during a process that transitioned an external operation into an internal one (Kaptelinin & Nardi, 2006). This supported the idea
that mental processes are restructured as a result of development in a cultural environment and it follows the stages of “(a) no mediation, (b) external mediation and (c) internal mediation resulting from internalization” (Kaptelinin & Nardi, 2006, p. 45). Internalization, therefore, functions as an important pathway that allows external mediation to affect cognitive development (Kaptelinin & Nardi, 2006). This provides the theoretical ground to address questions concerning what mediating artefacts have been used for external mediation and how ICSs’ learning has been externally mediated.

Vygotsky used two concepts “the law of psychological development and the zone of proximal development” to address the interactions occurring between the individual and the societal (Kaptelinin & Nardi, 2006, p. 47). The application of the former in various tasks to assess and support child development led to the formation of the latter, which was used to assess the potentialities in a child’s development. Through measuring “the differences (the distances) between two performance indicators: (1) an indicator of independent problem-solving and (2) an indicator of problem-solving in a situation in which the individual is provided with support from other people”, how a child can potentially develop is revealed (Kaptelinin & Nardi, 2006, pp. 48-49). This offers a theoretical foundation with which to address questions regarding which mediating artefacts have been used to purposefully intervene ICSs’ learning and what developmental outcomes are aimed at facilitating. Vygotsky’s idea of mediation thus offers a theoretical guide to understand how ICSs’ cultural and historical background has framed their learning. The idea of mediation as one of the theoretical tools used for conceptual analysis is discussed in detail in the model surface section under section 3.2.1: The adapted Change Laboratory Approach.

3.1.2 Leontiev's contribution: The birth of activity theory

Leontiev is believed to be the main contributor to the second generation of activity theory (Adams, Edmond, & Hofstede, 2003; Engeström, 2001; Kaptelinin & Nardi, 2012). His
contribution includes his explications on key concepts of activity as well as its hierarchical structure (Engeström, 1999; Kaptelinin & Nardi, 2012).

In Leontiev’s study of the development of the mind, the concept of activity played a critical role (Kaptelinin & Nardi, 2012). The object of activity is emphasised by Leontiev as being critical in that without it, there will be no activities (Kuutti, 1996). Leontiev then analysed tools, language, and division of labour as “three aspects of culture that have a fundamental impact on the mind” (Kaptelinin & Nardi, 2012, p. 22).

Activity in a broad sense refers to any interaction between subject and object (Kaptelinin & Nardi, 2012). In activity theory, it has a narrower meaning and refers to “a specific level of subject-object interaction, the level at which the object has the status of a motive” (Kaptelinin & Nardi, 2006, p. 59). Activity, according to Kaptelinin and Nardi (2012), “is a unit of subject-object interaction defined by the motive, [which is] an object that meets a certain need of the subject” (p. 25). Therefore, a motive plays “a key role in the conceptual framework of activity theory” (Kaptelinin & Nardi, 2012, p. 25).

An activity does not act as a single whole, rather it is organized into a “three-level hierarchy” (Bernstein & Bodker, 2003, p. 300). This hierarchical structure is presented in the following figure.

![Figure 3.1 The hierarchical structure of activity](image)

*Figure 3.1* The hierarchical structure of activity (Kaptelinin & Nardi, 2012, p. 28). The top layer of the hierarchy is oriented toward a motive, which is the activity itself (Bernstein & Bodker, 2003). The activity is directed at a motive, which not only acts to stimulate and excite the subject, but also “is the object that the subject ultimately needs to
attain” (Kaptelinin & Nardi, 2012, p. 26). Kaptelinin and Nardi (2012) stress “an activity is composed of a sequence of steps” (p. 26). These steps are often referred to as goal-directed actions (Allen et al., 2011; Engeström, 1991). Actions can also be further composed of the lowest level of operations, which are “habituated behaviours provoked by certain conditions” (Bakhurst, 2009, p. 200).

Although subjects may not be aware of their motives, they are argued to be aware of the goals that they wanted to achieve (Allen et al., 2011). And the means to “make motives conscious [involves] a special effort of making sense of ‘indirect evidence’” (Kaptelinin & Nardi, 2012, p. 27). Similar to motives, subjects are also believed not to be aware of operations (Kaptelinin & Nardi, 2012).

The relationship between the three is relative rather than absolute; in other words, activities, actions and operations can change their status (Allen et al., 2011). For example, actions can transform into operations through automatization and operations can transform into actions through “conceptualization in breakdown situations” (Bernstein & Bodker, 2003, p. 300). This transformation can also occur between the top two levels of activities and actions – “a goal subordinated to another, higher-level goal can become a motive, so that a former action acquires the status of an activity” (Kaptelinin & Nardi, 2006, p. 64). The Activity Theory Model’s hierarchical structure describes how external purposeful intervention can be turned into operations through the process of internalization. And it helps to understand how ICSs’ learning was framed. The opposite process also helps us to understand the difficulties involved in the change in certain habituated behaviours.

3.1.3 Engeström’s extension: The third generation

Building on work by Vygotsky, Leontiev and others, as well as his own previous work, Engeström (2001) came to be regarded as the central figure of the third generation of activity
theory. He developed five principles that both extended and strengthened the theoretical foundation of activity theory. These five principles coupled with his “collective system model” (Kaptelinin & Nardi, 2012, p. 33) summarises his approach to contemporary activity theory (Blin, 2005).

**The collective system model**

It has been argued that Leontiev contributed to the theoretical foundation of activity theory through explicating key concepts. However, he “never graphically expanded Vygotsky’s original model into a model of a collective activity system” (Engeström, 2001, p. 134). This shortfall is addressed by Engeström (2001), who modelled such a collective activity system through introducing community. This is shown in the following figure.

![Figure 3.2 Model of a collective activity system (Engeström & Sannino, 2010, p. 6).](image)

In Engeström’s expanded model of a collective activity system, the *subject* represents an individual or a group engaged in the activity (Jonassen & Rohrer-Murphy, 1999). The *object* is “the ‘raw material’ or ‘problem space’ at which the activity is directed and which is moulded or transformed into outcomes with the help of physical and symbolic, external and internal tools (mediating instruments and signs)” (Engeström, 1993, p. 67). *Instruments* or mediating artefacts include both conventional technical tools (for instance, a hammer, the function of which is to help people affect things) and signs (for instance, maps or blueprints, which are signs intended to help people affect others or themselves) (Kaptelinin & Nardi, 2006). Both tools and signs function to mediate the interactions occurring between the subject
and the object (Kaptelinin & Nardi, 2006). While *community* in the collective activity system model refers to individuals or subgroups who share the same object as the subject (Engeström, 1993), *rules* include “explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system” (Engeström, 1993, p. 67).

Finally, *division of labour* incorporates “both the horizontal division of tasks between the members of the community and the vertical division of power and status” (Engeström, 1993, p. 67). The graphic representation of the activity system illustrates that “a subject, driven by a motivation to achieve an object, undertakes an activity. This process is mediated by tools and signs in collaboration with the community” (Allen et al., 2011, p. 781). In activity theory, activity itself is the context (Nardi, 1995). As Nardi (1995) argues “what takes place in an activity system … is the context” (p. 38). The model of an activity system helps us to understand the contexts that ICSs are involved in: the various activities they undertook. It also illustrates contradictions that occur between components of an activity system (e.g. between mediating artefacts and objects) (Engeström, 1987).

**The five principles**

Apart from expanding Vygotsky’s original model into a model of a collective activity system as illustrated above, Engeström’s contribution to the theoretical foundation of activity theory also includes his enunciations of the five principles. These five principles are

1. a collective, artefact-mediated and object-oriented activity system, seen in its network relations to other activity systems, is taken as the prime unit of analysis,
2. multi-voicedness of activity systems,
3. historicity,
4. the central role of contradictions as sources of change and development and
5. the possibility of expansive transformations in activity systems (Engeström, 2001, pp. 136-137).

Among these five principles, number 1 and 4 in particular were employed for conceptual analysis in this study. The collective activity system was used to model various local contexts that ICSs were involved in. It also was used to define and analyse dynamic issues, such as structural contradictions, that occurred within these contexts. Contradictions were used to understand structural tensions within activity systems, and also were used to identify root causes of recursive issues. Detailed discussion is carried out in the model surface section under 3.2.1: The Adapted Change Laboratory Approach.

3.1.4 Critiques of activity theory

Although activity theory has gained solid ground in interventionist studies, and its influence to the field of education is becoming strong, it is also important to acknowledge its limitations. Critiques of activity theory tend to be around the paradigm that this theory is grounded in (criticized as problematic and incongruent (Bakhurst, 2009)) and its unresolved problems (no consistent views on the concept of activity, the idea of contradictions being vague, structural contradictions needing further theorization (Bakhurst, 2009; Roth, 2004)).

The theoretical paradigm in which activity theory is grounded in has been argued to be incongruent and thus problematic (Bakhurst, 2009). There have been various interpretations of the concept of activity within Russian philosophy and psychology (Bakhurst, 2009). Interpretations of Vygotskian concepts have been based on partial understandings (Flint, 2009). In activity theory, the reduction or removal of the dimension of ‘play’ (which was previously a leading activity) so that a “stabilized description of a system” was produced misappropriated Vygotsky’s conception of ‘play’ (Martin & Peim, 2009, p. 137). This over-stabilization has seriously impacted on understandings of the zone of proximal development (ZPD) (Flint, 2009). Various interpretations of central concepts of activity theory and
various interpretations based on partial understandings of Vygotskian concepts all contribute to a problematic paradigm in which activity theory is grounded. Consequently, conceptions of activity theory cannot be regarded as unproblematic (Bakhurst, 2009).

The activity system model also received criticisms (Bakhurst, 2009). It has been argued that it does not work well in every kind of activity (Bakhurst, 2009). In other words, this model works well for some activates only. These were those that activity theorists studied (e.g. some educational contexts) (Bakhurst, 2009). This implies that, as Bakhurst (2009) puts it, “what we have here is a universal, but generally vacuous schema, that turns out to be a useful heuristic in reference to certain kinds of activity” (pp. 206-207). This system is used to study learning activity within the educational context, which has been shown to work very well (e.g. Isssroff & Scanlon, 2002; Jonassen & Rohrer-Murphy, 1999).

Critiques of activity theory were also around problems that it needs to address: no consistent views on the concept of activity, the idea of contradictions being vague, structural contradictions needing further theorization. This points to problems that activity theory needs to address. Apart from the arguments mentioned above, Roth (2004) also raised various other problems that activity theory needs to attend to. They are “the nature and role of transformation in activity systems, the relation of collective and individual activity, the relation of activity theory to other theorises of human conduct, and the relation of the biological and social in existence” (Roth, 2004, p. 7). These unresolved problems all point to a need for “the development of the theory itself” (Daniels, 2004, p. 121).

Despite these critiques, the central idea of mediation, the hierarchical structure of the activity, taking the activity system as the basic unit of analysis, and structural contradictions as root causes of problems or sources of transformation still have undeniable strength to perform as the theoretical guide to understand the pressing issues of this study. Also because
this study uses this theory as only a broad theoretical vantage point, debates over the epistemological ground is not within its scope. In addition, this study applies one of the approaches (CLA) that developed based on activity theory. The development of the theory itself also falls outside of the scope of the current study. The limitations of this theory do not overshadow its strengths in promoting understanding through a broad cultural historical perspective.

Activity theory’s strength in promoting understanding through a broad cultural historical perspective has been widely applied in educational contexts (see Gedera & Williams, 2016). In Gedera’s (2016) research, she applied the activity system model to identity contradictions in a blended university course finding that contradictions between participants (the subject) and the community and within roles (division of labour) affected students’ engagement. In a similar vein, Harness and Yamagata-Lynch (2016) used activity systems to analyse the aspect of conflicts in teacher unions in America. A consideration of curriculum development at school levels was undertaken by Lockley, (2016) where activity theory was used as a theoretical framework, to enrich understandings of “how teachers act professionally to develop local curriculum” (p. 196).

The aim of this study is also to promote understanding through a broad cultural historical perspective, as it applies activity theory to enrich understandings of various local contexts, contradictions and complexities within these contexts.

3.2 Activity theory informed research design: The adapted Change Laboratory Approach (CLA)

Building on others’ research as well as his own extensive experiments in various settings, Engeström extended activity theory much further to more innovative approaches with a wider set of uses (e.g. see Engeström, 1987, 1991, 2000, 2001, 2004; Engeström et al., 1995;
Engeström & Sannino, 2010, 2011, 2012). The CLA was one of these. This approach was applied in this research to inform methods that helped to collect data and to facilitate analysis and interpretation of these data. The following two sections offer an analysis of the CLA.

3.2.1 The adapted Change Laboratory Approach (CLA)

Yrjö Engeström developed the CLA in the late 1990s (Teräs & Lasonen, 2013). It has been known as a formal interventionist approach (Anagnostopoulos et al., 2008; Teräs & Lasonen, 2013; Virkkunen & Ahonen, 2011). “Re-mediation or dual-stimulation” is the central notion that the CLA has based its method on (Engeström, 2005, p. 291). The CLA was based on the theoretical foundation of re-mediation.

Engeström and colleagues (2014) argue that double stimulation is more than “a cognitive technique that can enhance problem-solving and concept formation” (p. 120). They emphasize that this concept’s “starting point is a conflict of motives [and that it is] the foundational mechanism by which volitional action, or will emerges” (Engeström et al., 2014, p. 121). They thus emphasise the importance of recognizing both the will aspect and the conflict of motives for comprehension of Vygotsky’s idea of mediation (Engeström et al., 2014).

Basing on this foundation, Engeström developed the CLA. The method for the CL is 3x3 surfaces (see Figure 3.3 for details).

*Figure 3.3 prototypical layout of the Change Laboratory (Engeström, 2005, p. 293)*
Regarding the central method of the CLA, the 3x3 surfaces, Engeström (2005) used the horizontal surfaces to represent “different levels of abstraction and theoretical generalization” (p. 292).

*The horizontal dimension of the surfaces*

**The mirror surface**

Experiences, particularly problem situations, or recursive issues are both represented and examined in the mirror surface. Experiences that are used in this surface are generally collected through methods that resemble ethnographic approach (for instance, fieldwork, interviews, stories, etc.). Therefore, the data collected are often referred to as “mirror data” (Ellis, 2008; Engeström et al., 2014; Teräs & Lasonen, 2013). The purpose of this is to put together “a picture of work” to be used for examination of contradictions (Teräs & Lasonen, 2013, p. 112). That is, data collected need to closely reflect experiences. So in-depth interviewing was selected as the data collection method because it helps to obtain data that could closely mirror ICSs’ experiences. In this study, interview transcripts are the primary source of data that were used in this surface to be explored for pressing issues that ICSs experienced as of significance.

**The model surface**

The main function of the model surface is to use theoretical tools as a conceptual analysis to examine roots of recursive problems and to conceptualize these as structural contradictions (Engeström, 2005). Engeström’s use of potential useful mediating artefacts represented in the model surface (“auxiliary stimulus” (Engeström et al., 2014, p. 121)) reflects how strongly he was influenced by Vygotsky’s concept of double stimulation. Instead of offering the group of workers with the problems disturbances (first stimulus), he also provided them with theoretical tools (e.g. the activity triangle) for conceptual analysis (Engeström et al., 2014). This provision of a secondary stimulus assisted the group to analyse problem situations.
In typical interventionist studies, theoretical tools used in this surface mainly incorporated the activity triangle and the expansive cycle (Engeström, 2005). Whilst the activity triangle is mainly used to examine and analyse inner structural contradictions (which is used to explore root causes that give rise to these disturbances and troubles), the expansive cycle is typically used to analyse “the current and projected next stage of the evolution of their activity” (Engeström, 2005, p. 293). Instead of being interventionist, this study is explorative and analytical. Instead of being based on collaborative efforts to promote transformation, this study used theoretical tools to analyse how ICSs’ learning was framed by various contexts and analyses how this frame influenced their experiences of pressing issues with a consideration of historicity. It not only examines roots of recurring problems but also looks at dynamics occurring amongst various activity systems. Theoretical tools typically used in this surface are neither adequate nor appropriate. Thus, to achieve explorative and analytical purposes, it is both critical and necessary to adapt these theoretical tools. This adaptation included the replacement of the expansive cycle with key theoretical tools of mediation, structural contradictions, and polycontextuality and boundary crossing. These coupled with the activity triangle functioned as critical theoretical tools (auxiliary stimulus) for conceptual analysis to address issues raised in this study.

Mediation
Mediation is used in the model surface as a theoretical tool to mainly understand how ICSs’ cultural and historical heritage has influenced or determined their learning. This was mainly achieved through examination of mediating artefacts. To explain the concept of mediation, I draw on the work of Kaptelinin and Nardi (2006), who clearly explicated how Vygostky used it to understand cultural and societal determination of human mind.

The concept of mediation is asserted to be Vygotsky’s main contribution to the theoretical foundations of activity theory (Allen et al., 2011; Engeström, 2001). This concept has been
used to understand cultural and societal determination of cognitive development (Kaptelinin & Nardi, 2006). This determination is understood through their mediations of the interactions between the individual and the objective world through culturally developed tools and signs (Kaptelinin & Nardi, 2006). This thus brings the importance of examining mediating artefacts to understand how ICSs’ cultural and societal heritage has determined their learning.

Through the process of internalization, cultural influence on cognitive development is revealed (Kaptelinin & Nardi, 2006). “Double stimuli” was often used to examine how mediation impacted individual performances in different cognitive tasks (Kaptelinin & Nardi, 2006, p. 44). Individuals who used external mediational artefacts were found to have spontaneously stopped using these artefacts and improved their performance during a process that transitioned an external operation into an internal one (Kaptelinin & Nardi, 2006). These empirical data supported the idea that mental processes are restructured as a result of development in a cultural environment and it follows the stages of “(a) no mediation, (b) external mediation and (c) internal mediation resulting from internalization” (Kaptelinin & Nardi, 2006, p. 45). Therefore, through analysing what mediating artefacts were used for external mediation (e.g. practice makes perfect), ICSs’ cultural determination of their learning can be revealed.

Vygotsky used two concepts: “the law of psychological development and the zone of proximal development” to address the interactions occurring between the individual and the societal (Kaptelinin & Nardi, 2006, p. 47). The law of psychological development posits that “new psychological functions first emerge as interpsychological ones and then as intrapsychological ones” (Kaptelinin & Nardi, 2006, p. 48). Applying this law to practical tasks of assessing and supporting child development led to his conceptualization of the zone of proximal development (Kaptelinin & Nardi, 2006).
The conventional way of measuring a child’s development is interested in measuring how much the child has achieved, which does not assess “how a child is going to develop” (Kaptelinin & Nardi, 2006, p. 48). The zone of proximal development was conceptualized as an alternative. It is used to measure the level of development through “the differences (the distances) between two performance indicators: (1) an indicator of independent problem-solving and (2) an indicator of problem-solving in a situation in which the individual is provided with support from other people” (Kaptelinin & Nardi, 2006, pp. 48-49). The involvement of intentional intervention in the developmental process that aimed at facilitating certain developmental outcomes is also regarded as another difference for Vygotsky’s methodology of developmental research (Kaptelinin & Nardi, 2006). Through examining what developmental outcomes were facilitated through intentional intervention, ICSs’ activity systems of school learning, university learning, or family influence on their learning was revealed. This examination is discussed in detail in section 1 of chapter 5.

Internalization, therefore, points to the question: what do individuals internalize? Internalization as the main mode that cultural determination of human mind takes place and the ZPD as the main concept that reveals societal determination of human mind point to the importance in examining mediating artefacts. Examining the mediating artefacts that ICSs’ teachers and parents used for external mediation to facilitate certain developmental outcomes helps to understand how their learning was influenced by their cultural and societal background. The concept of mediation acts as a strong theoretical tool for analyzing how ICSs’ learning has been framed by their background conceptually.
Structural contradictions

Engeström (1993) argues that “an activity is not a stable and harmonious system” (p. 71). In other words, it is both dynamic and incongruous. The concept of contradictions is used to describe this dynamism and incongruity. It is defined as “historically accumulating structural tensions” (Engeström, 2011, p. 609). The main function of contradictions, as argued by Engeström (2011), is that they are “source of change and development” (p. 609). Therefore, examination of structural contradictions could lead to understanding the development and change occurring within the activity (Allen et al., 2011). This is why he urges intervention studies to view analysis of contradictions as an important part of their interventions. Another function of contradictions that received relatively less attention from Engeström (1999) is their role in explaining the root causes of recursive problems. Analysis of contradictions could illuminate what led to the existence of problems in the first place. This is of particular importance for this study because it helps to examine root causes of ICSs’ recursive problems and to illuminate what can be done to help them resolve these. Thus, the concept of contradictions is another theoretical tool the model surface includes for this study.

Engeström (1987) recognized four levels of contradictions: i.e. “primary, secondary, tertiary and quaternary contradictions” (pp. 102-103). “Primary contradictions” pervade all elements of activity systems and reside within each component of the activity triangle (Engeström, 1987, p. 102). The primary contradiction of capitalism, for instance, “resides in every commodity, between its use value and exchange value” (Engeström & Sannino, 2011, p. 371). Primary contradictions generate “secondary contradictions” (Engeström, 1987, p. 102) “specific to the particular conditions of the given activity” (Engeström & Sannino, 2011, p. 371). Secondary contradictions reside between the components of the activity triangle (Engeström, 1987). Third level contradictions, “tertiary contradictions”, happen when a culturally more advanced form of activity is introduced to the central activity; this
contradiction occurs when the object/motive between these two activities are in conflict (Engeström, 1987, p. 103). Whereas fourth level contradictions, “quaternary contradictions”, exist between the central activity and its neighbouring activities (Engeström, 1987, p. 103). Neighbouring activities here include “object-activities” (activities that embed the central activities’ objects and outcomes), “instrument-producing activities” (producing instruments for the central activity), “subject-producing activities” (education and schooling of the subjects) and “rule-producing activities” (administration and legislation) (Engeström, 1987, p. 103). These neighbouring activities interact with the central activity, through which quaternary contradictions occur (Engeström, 1987).

In this study, contradictions helped to explain the root causes of ICSs’ recursive problems. These four types of contradictions were used as a reference for analysis wherever it was relevant. For instance, ICSs’ learning experiences in Australia – when I modelled their activity system, the structural contradictions were brought by the introduction of a new element (for instance, need to voluntarily ask questions in class: the new object). This introduction collided with some other components of the activity system (for instance, the dated rule: giving priority to saving face). This collision thus generated a structural contradiction within the activity system: between the dated rule and the new object. This type of structural contradiction is defined as secondary contradictions that occur between elements of an activity system (Engeström, 1987). In this case, secondary contradictions became very relevant for analysis.

*The collective activity triangle*

Engeström (1999) maintains that activity theoretical studies need to take the collective activity system as its basic unit of analysis. When analysing activity systems, an
analysis of its structure is commonly documented (see Adams et al., 2003; Jonassen & Rohrer-Murphy, 1999).

The collective activity system modelled by the collective activity triangle defines the context for actions. Analyzing actions against the collective activity system makes it possible to understand how various activity systems impacted ICSs’ learning. Taking the activity system of school learning, for example, through analyzing how they were purposefully intervened (e.g. to study hard) and what outcomes were achieved through these purposeful interventions (e.g. success in the examination system), their learning that has been framed by this context is revealed. Analyzing actions against the collective activity system also makes it possible to define structural contradictions that occur between elements of the activity triangle. This not only helps to define the dynamics occurring within the activity system, but also helps to reveal root causes of their recursive problems.

Analyzing actions against the collective activity system, therefore, assists in the exploration of cultural influences on the individual (through examining mediating artefacts), and also helps to analyse dynamics occurring within one context (structural contradictions). This illustrates the necessity for this study to include the activity system model in the model surface for conceptual analysis.

*Polycontextuality and boundary crossing*

Polycontextuality refers to the state of subjects’ simultaneous involvement in multiple tasks, frameworks or activity systems, whilst boundary crossing is concerned with subjects’ movement between or amongst tasks, frameworks or activity systems (Engeström et al., 1995). Polycontextuality is the subject’s working surfaces, whereas boundary crossing defines the dynamics amongst these working surfaces.
It has been argued that boundary crossing is the fundamental form of operation in organizations that are team-based (Engeström et al., 1995). It bears an essential feature of problem-solving capacity, which is based on activity systems that are ‘iteratively connected’ but share little commonality (Engeström et al., 1995, p. 321). This problem-solving capacity thus acts as a critical lens to examine how ICSs relied on crossing boundaries to resolve problems. In this study, polycontextuality and boundary crossing are used as theoretical tools to define and analyse dynamics occurring amongst various activity systems.

The above four sections provided detailed information on the four respective theoretical tools that are essential for analysing how ICSs’ learning experiences have been framed by their cultural and historical heritage, and how this influenced their experience of issues in Australia. The following section continues to discuss the rest of the surfaces used in the CLA.

The middle surface
The middle surface is kept especially for ideas and tools (Engeström, 2005). When analysing experiences against the theoretical tools in the model surface, Engeström (2005) believes “intermediate cognitive tools” are often needed (p. 294). The tools that needed for this study included categorization of interview data, and drawing of diagrams of various activity systems that ICSs participated in. Because these tools functioned as supportive tools aiding the process of analysis, they were not highlighted in the presentation of findings. However, this does not undermine the value of the critical role these tools played during the analytical process. The ideas that this surface was reserved for were not applied in this study. This was because these ideas apply to the “intermediate ideas and partial solutions” that the group of workers came up (Engeström, 2005, p. 294). This was aimed at resolving pressing issues through the collective of workers with the aid of intervention. This falls outside the scope of this study. The middle surface thus was only kept for tools that were of significance to this particular study.
The vertical dimension of the surfaces

The vertical dimension of the surfaces in the CLA model represents movement of time (an expansive cycle), which typically starts from current problems of the mirror surface, and then moves to examine the root of the current problem through mirroring past experiences and the past activity system (Engeström, 2005). This is then followed by modelling the current activity system and its inner contradictions, which enables the team of workers to “focus their transformation efforts on essential sources of trouble” (Engeström, 2005, p. 294). The work then proceeds to “envision a future model of the activity, including its concretisation by means of identifying ‘next-step’ partial solutions and tools” (Engeström, 2005, pp. 294-295). This is followed by a subsequent implementation and consolidation of the new model (Engeström, 2005). The dynamics involved in the vertical dimension of the surfaces reflected Engeström’s implementation of an expansive cycle in the CLA.

The CLA was primarily used in work organization settings and was also used mainly as an interventionist approach, which typically takes an expansive cycle as its central method (Engeström, 2005). Taking the movement between the two levels of action and activity as its key, the expansive cycle consists of seven “specific epistemic or learning actions”, namely, questioning, analysing, modelling, examining the model, implementing the model, reflecting on and evaluating the process, and consolidating the outcomes (Engeström et al., 2014).

As this study focuses on exploration instead of intervention, these “specific methodological steps” were thus not rigidly applied (Engeström et al., 2014, p. 123). Rather they were both carefully adapted to the local circumstances and boldly experimented with in this study to highlight their theoretical advances in understanding student experience, without impeding its analytical and interpretative strength. This adaptation is not only shown by the theoretical tools used in the model surface for conceptual analysis, but also by the configuration of the methods section of this study. As is shown in the following figure, the
methods section is organized into three main phases: the preparation phase: collecting mirror data, the analytic phase: analysing mirror data and the interpretative phase: through the lens of the adapted CLA.

![Diagram of research design](image)

**Figure 3.4 Activity theory informed research design.**

As Figure 3.4 shows, procedures involved in this research design (Creswell, 2009) were informed by activity theory. The CLA with its adaptations is used to inform methods used to collect and interpret data. Specific methods used to obtain, analyse and interpret ICSs’ experiences included a three-phase process, which were the preparatory, analytical and interpretive phases. The following section provides detailed information on this.
3.2.2 Methods

In consideration of research procedures, strategies or methods used to gather analyse and interpret data, the procedures used in this study were informed by a dual influence of the CLA and the research questions raised in this enquiry. In-depth interviewing was employed as the main data collection method, which aimed to obtain data that could closely mirror ICSs’ experiences. Prior to interviewing, this study used a questionnaire survey to collect data that provided basic snapshot information about the range of students available to the researcher. This also performed as a foundation from which to select information-rich participants for interviewing. The questionnaire survey thus acted as a preparation for interviewing, which was conducted after the completion of questionnaire survey analysis.

The process of data collection started after the completion of the preparatory stage of collecting and analysing questionnaire survey data. This was then followed by an analytical phase, which was composed of three sequential stages – coding, “historical-genetic” analysis and “actual-empirical” analysis (Engeström et al., 2014, p. 123). After the analysis, interpretation of data and organization of findings were discussed. The following three sections give detailed information about these aspects of the study.

3.2.2.1 Preparatory phase: Collecting mirror data

This phase focused on data-gathering strategies or methods, which performed as an initial or preparatory stage for the analytical phase. This preparatory phase consisted of two sequential phases of collecting and analysing questionnaire survey data in preparation for the main data collection stage of obtaining data through interviewing.

Preparatory Stage: Survey data collection and analysis

The preparatory stage for interview data collection involved collecting and analysing survey questionnaire data. Incorporation of a survey was based on Burns’ (2000) argument that this method could ensure “elicit[ing] information from a respondent that covers a long period of
time in a few minutes, and it could also go beyond description to looking for patterns in data” (p. 567). The rapid turnaround and the economy of employing this method made it a suitable choice for obtaining snapshot information about the range of students available, as well as providing a basis for follow-up in-depth interviews. The survey was cross-sectional and took the form of an Internet survey, with data collected in one time period.

**Sampling design**

One of the key criteria for determining sampling schemes (“specific strategies used to select units” (Collins & Onwuegbuzie, 2007, p. 283)) is whether the objective of the study is to generalize findings or to “obtain insights into a phenomenon, individuals, or events” (Collins & Onwuegbuzie, 2007, p. 287). If the objective of a research study is to generalize findings, then random sampling is the appropriate choice because it ensures selecting a “representative sample” (Gravetter & Forzano, 2009, p. 134). However, when obtaining insights into a phenomenon is set as the objective, non-random sampling should be considered (Collins & Onwuegbuzie, 2007) because it allows researchers to identify “information-rich cases that will allow them to study a case in-depth” (Mertens, 2005, p. 317).

The primary purpose of employing a survey questionnaire in this study was not about “generat[ing] statistics about a population” (Fowler, 2009, p. 19), nor was about providing “precise representativeness” (Babbie, 1990, p. 97). Therefore, non-random sampling was used. Non-random sampling is also commonly referred to as nonprobability sampling (Gravetter & Forzano, 2009). In nonprobability sampling, as defined by Gravetter and Forzano (2009), “the population is not completely known, individual probabilities cannot be known, and the sampling method is based on factors such as common sense or ease, with an effort to maintain representativeness and avoid bias” (p. 134). When the population is not previously known, researchers cannot employ a random process to select participants, rather
they commonly employ nonprobability sampling that is based on participants that are easy and convenient to obtain.

Regarding collecting survey questionnaire data, “criterion” was used (Collins & Onwuegbuzie, 2007, p. 286). This means the researcher chooses “settings, groups, and/or individuals because they represent one or more criteria” (Collins & Onwuegbuzie, 2007, p. 286). To be selected to participate in the survey questionnaire, ICSs had to be enrolled in postgraduate teacher education course-work programs and also had to be studying as an onshore ICSs at the time of the study.

Sample size

This study is a qualitative based research enquiry, which heavily determined the sample size. Collins and Onwuegbuzie (2007) declare that the sample size for qualitative enquiry should not be too small or too big so as to achieve the two goals of obtaining “data saturation, theoretical saturation, or information redundancy” and achieving “a deep, case-oriented analysis” (p. 289). The final sample size for the survey questionnaire in this study was 27 ICSs, who completed the survey questionnaire online.

Development of the survey questionnaire

The survey questionnaire was an instrument designed to obtain information about ICSs’ learning experiences and to provide a basis for the main data collection phase: interviewing. The development of the survey questionnaire was influenced by various factors. These factors not only included specific guidance from the four overarching research questions and the general guidance of activity theory, but also included influence from previous research studies and a review of documents, which outlined the goals that the respective universities expect their graduates to achieve.
The four overarching research questions acted as the primary source that guided the development of the survey questionnaire. Research question 1: what issues do ICSs experience as challenging with their learning in Australia and 3: how does learning in China influence ICSs’ experience of challenges with their learning in Australia mainly focused on obtaining information around ICSs’ perceptions of their learning experiences in Australia. In the questionnaire (see Appendix 1), the following questions were included to gain information about these two research questions.

Question 10 asked about their learning back in their home country. Question 14 and 15 were designed to elicit the most unexpected way their Australian teachers have taught, and the subsequent effect on how they learnt. Question 17 asked about opportunities for learning in Australia and Question 18 asked about challenges, Question 22 asked about similarities and differences between Australian and Chinese/Taiwanese learning and Question 25 asked about the role of teachers in Australia.

Research question 2, concerning how learning was framed/influenced in China, focused on obtaining information about the approaches these students and their teachers used to achieve their respective learning goals. Question 9 on their learning in their home country, Question 12 on the learning approaches they experienced in the classroom back in their home country, Question 13 on other learning approaches they experienced in the classroom back in China and Question 24 on the role of teachers in their home country were considered important in addressing this.

Research question 4, concerned how ICSs approach the challenges they experience with their learning in Australia. Four open-ended questions were designed to elicit information on this. Question 16 asked about the experiences they had adjusting to the Australian learning context, Question 19 the methods they have used to help their learning since coming to
Australia, Question 20 the strategies they have used to improve their English language and Question 23 the changes they made to become more successful at learning in Australia.

Apart from these questions, the questionnaire included three more questions. Question 8 asked about reasons behind their changes of major to Education if their previous major was not in Education, Question 11 asked about their expectations of education programs in Australia and Question 21 asked about the degree of adjustments that they have achieved after some study in Australia. These questions were asked to gauge participants’ perspectives regarding their goals or intentions. The inclusion of these three questions was influenced by activity theory and the review of documents that outlined the goals that universities expect their graduates to achieve. Questions that aimed at obtaining ICSs’ demographic data were also included to provide snapshot information on the available range of students.

After questions were formed, they were organized into two main parts. This organization was mainly influenced by previous research studies, especially the survey questionnaire developed by Gu and Maley (2008), which was used to research Chinese students’ learning in the UK. Part A of the survey used in this research consisted of the first eight closed questions to gain demographic data and the background information about what influenced the participants’ communication, behaviour, values and beliefs in relation to their preferences with their learning. The rest of the questions were organized into Part B to gain descriptive data that could reflect participants’ perspectives and experiences in a holistic way. Both closed-ended and open-ended questions were used in Part B. The inclusion of a variety of question types was intended to attract participants’ attention and interest while filling in the survey.

Pre-testing the questionnaire

As this questionnaire was self-developed, measures were taken to ensure the validity of its content (Creswell, 2009). Content validity concerning whether “the items measure the
content they were intended to measure” (Creswell, 2009, p. 149) was initially checked by two experts who have been working in the field of teacher education and have extensive experience in both teaching and supervising international students. Their feedback was used to change the wording of both open-ended and closed-ended questions. The survey instrument then undertook a “multistage, cumulative process” (Babbie, 1990, p. 223). This process started with a pre-test of the whole instrument “with an open-ended format” (Babbie, 1990, p. 223) with two ICSs pursuing a postgraduate degree in teacher education. Their feedback was used to change the wording and also to “determine appropriate response categories for closed-ended questions” (Babbie, 1990, p. 222). This was followed by another pre-test of the improved version through the form of an interview to “permit a better determination of problems” (Babbie, 1990, p. 222). The feedback from the interview was used to mainly change the order of both open-ended and closed-ended questions. This penultimate version was then transformed into an online survey through use of the RMIT Qualtrics software. Please see Appendix 1 for the final version of the survey questionnaire.

**Administering the questionnaire**

Prior to distributing the questionnaire, deans of faculties of education from various universities in Victoria were sent an email advertising my research and to request their permission to recruit participants from their respective schools. After permission was obtained, deans/program/course coordinators were asked to advertise my research to ICSs and invite them to participate in my research through accessing the anonymous survey link: 

https://rmit.asia.qualtrics.com/SE/?SID=SV_7OObAh836pR5cg

[Note: This did not track identifying information.]
Because this questionnaire was carried out through the Internet, actions were taken to ensure a high response rate (Creswell, 2009). These measures included a four-phase process (Salant & Dillman, cited in Creswell, 2009).

1. Deans/program/course coordinators at various universities were asked to send a short advance-notice letter to all ICSs to advertise my study with a Plain Language Statement

2. The anonymous survey link was distributed to all ICSs around one week after the advance-notice letter

3. A follow-up email was sent to all ICSs one week after the anonymous survey link was sent

4. The final phase was a thank-you letter sent to deans/program/course coordinators to distribute to all participants in this research around three weeks after the follow-up survey. It also invited those students who had not participated to participate if they still wanted to but had not yet had time to complete the survey (with a reminder of survey closing time).

Handling questionnaire data

The purpose of the questionnaire was to provide basic snapshot information on ICSs’ perspectives about their learning experiences. Therefore, descriptive statistics were analysed and represented using SPSS 21. The objective was to discover trends, so the results were primarily focused on the consistency (or not) with interview findings.

Findings of questionnaire survey were reported in two broad sections: Part 1 on ICSs’ demographic data and Part 2 on their perceptions of their learning experiences. In consideration of the four overarching research questions raised in this enquiry as well as the main concept of object in activity theoretical studies, Part 2 was further divided into four
categories. These four categories were object, ICSs’ perceptions of their learning experiences in China, ICSs’ perceptions of their learning experiences in Australia in comparison to that of China, and the dynamics involved in their negotiations with the Australian learning context. Detailed information is presented in chapter 4a.

Main process: Interview data collection

One of the main reasons for choosing in-depth interviewing as the main data collection method relates to the “epistemological positions” that this study took (Minichiello, Aroni, & Hays, 2008, p. 68). Activity theoretical positions, especially the CLA helped to select those methods that would help to collect data about participants’ perspectives. As ICSs’ perceptions of their learning experiences were what this research was to examine, the qualitative data collection method of in-depth interviewing was chosen. This choice was also influenced by the intention to highlight “subjective human experience”, and by the range of research questions that this study tried to address (Minichiello et al., 2008, p. 69). The four overarching research questions of this enquiry to a large extent influenced the choice of data collection method that could best address these questions.

In-depth interviewing, according to Taylor and Bogdan (1984), offers “face-to-face encounters between the researcher and informants directed toward understanding informants’ perspectives on their lives, experiences or situations as expressed in their own words” (p. 77). As previously stated, the aim of this enquiry was to understand ICSs’ perceptions of their learning experiences regarding issues that they found challenging, with a consideration of how their previous learning experiences influenced their experience of and the way they handled these challenges. In-depth interviewing was found to be the most useful method of gaining access to the “verbal accounts of their interpretations of their significant experiences” (Minichiello et al., 2008, p. 66). Using interviewing in this study was also based on a belief that the interviewees’ responses would provide a rich repertoire of attitudinal and perceptual
expressions, which in turn provides a solid ground for the researcher to access participants’ perspectives (Oppenheim, 1992).

This study highlighted participants’ voices and perspectives, but in an organized manner (Stake, 1995). Some researchers, for instance Oppenheim (1992), argue that the ideal interviewer in in-depth interviewing will encourage a free-style continuous monologue “by the respondent on the topic of research” (p. 67). Stake (1995) argues that any researcher needs to keep their minds organized and yet be open for the unplanned, unorganized and unexpected. Therefore, “semi-structured interviews” (Minichiello et al., 2008, p. 47) were used in this study. The list of topics was developed around the issues that were central to the research questions, “but [the interviewer] is free to vary the wording and order of the questions to some extent” (Minichiello et al., 2008, p. 52). This ensured greater flexibility, which provided “a more valid explanation of the informants’ perceptions and constructions of reality” (Minichiello et al., 2008, p. 51). This adjustment helped participants to articulate those issues that were of particular importance to them and meanwhile also stayed focused on issues of particular interest to this study.

Development of interview questions

The development of interview questions was carried out under the framework of the four overarching research questions. The interview questions, therefore, focused on the broad topics of ICSs’ learning experiences in China, how this has influenced their experiences of challenges with their learning in Australia, and their handling of these challenges.

In constructing the questions, the researcher focused on both the order and the type of questions. The order of the research questions in this study followed the expansive cycle of the CLA, which started from the present to the past then back to the present again. This order was adjusted to follow the chronological order, starting from their verbal accounts of their
past experiences and moving to their current experiences. Although the process of interviewing generally followed this chronological order, the specific order and wording of interview questions were flexible. For instance, some participants started to talk about their learning challenges in Australia prior to finishing talking about their learning experiences in high school. In this case, the interviewer adjusted the order and followed the interviewee’s lead and probed with more questions relating to the challenges with their learning in Australia. After this, the researcher then led the participant back to the topic that had not been finished.

Regarding the types of interview questions, as the researcher focused on gaining rich data, therefore, she used the types of questions that could assist in obtaining detailed information about ICSs’ experiences. Therefore, open-ended questions were predominantly used to “encourage respondents to talk, determine the nature and amount of information to give” (Stewart & Cash, 2011, p. 56). Apart from open-ended questions, closed-ended (Babbie, 1990) and probing questions (Creswell, 2009) were also used to “ask individuals to explain their ideas in more detail and to elaborate on what they have said (Creswell, 2009, p. 183). As their perceptions of experiences were of importance to this study, participants were free to use either Chinese or English during the interview to minimize inaccuracy that could have been caused by unfamiliarity with the English language.

Selection of interview participants

Based on the results of the survey questionnaire, those participants who responded to my survey and left contact details for in-depth interviewing voluntarily became the accessible population for my research (Gravetter & Forzano, 2009). From this accessible population, a sub-sample for interviewing was selected.
The main sampling scheme for selecting interview participants was purposeful sampling or non-random sampling (Collins & Onwuegbuzie, 2007), the power and logic of which, as Patton (2002) argues, “lie in selecting information-rich cases for study in depth” (p. 230). As such, those cases who could provide the most in-depth information and understanding were the cases that selected for my study. Through studying those cases, in-depth understanding should result (Patton, 2002). Under the broad category of purposeful sampling, three sampling schemes were used to recruit interview participants: “maximum variation”, “extreme case” and “snowball/chain” (Collins & Onwuegbuzie, 2007, pp. 285-286).

Maximum variation concerns “choosing settings, groups, and/or individuals to maximize the range of perspectives investigated in the study” (Collins & Onwuegbuzie, 2007, p. 285). Extreme case refers to “selecting outlying cases and conducting comparative analysis” (Collins & Onwuegbuzie, 2007, p. 286). These two sampling schemes were used to select interview participants based on their questionnaire responses in order to capture a diverse cluster of ICSs (Patton, 2002; Oppenheim, 1992). Maximum variation was used prior to extreme case. As this study is concerned about ICSs’ learning-related issues, maximum variation helped the researcher to select participants who could maximize the range of perspectives. Extreme case was used after comparison of the cases, because it could provide more insights and understanding than statistically picked average cases (Patton, 2002). For instance, Xin was selected because of the deviant nature of her belief that being quiet in class was the best way to cope well in Australian universities. Most other participants, however, expressed a need to be active and articulate in class. The snowball sampling scheme was used to recruit more potentially information-rich participants from outside the range of the questionnaire sample because the rate of volunteering for interviews was disappointing. The sample for in-depth interviewing included nine ICSs.
The procedure

The procedure of in-depth interviewing in this study took place in two stages: the first phase was conducted face-to-face and the second over the phone.

For the semi-structured interview conducted face-to-face, all participants were interviewed individually, for between 50 and 90 minutes. Time and places were negotiated with the participants and they all took place at various group study rooms at various universities.

In relation to the virtual interview process, I started by asking participants general questions (“ice-breaking questions” (Creswell, 2009, p. 183)) at the beginning of each interview in order to enhance rapport (Collins & Onwuegbuzie, 2007). These general questions for instance included “could you tell me a little bit about yourself, please”. After rapport was established, some “indirect questions” (Kvale & Brinkmann, 2009, p. 136) were asked in order to elucidate detailed in-depth data. These indirect questions included “what was the most memorable learning experience you had regarding your school learning back in China?” It was believed that these types of questions could not only minimize the “element of control” (Minichiello et al., 2008, p. 53), but also help gain rich information about what participants regarded as “significant experiences” (Minichiello et al., 2008, p. 66). In addition to these indirect questions, “direct questions” (Kvale & Brinkmann, 2009, p. 135) were also asked to keep participants “relating experiences and attitudes that are relevant to the problem” (Burgess, cited in Minichiello et al., 2008, p. 53). For instance, “what challenges do you think learning in Australia has posed for you?” Both direct and indirect questions were asked after the rapport had been established. In order to let participants “explain their ideas in detail [or] to elaborate on what they have said” (Creswell, 2009, p. 183), probing questions were also often used during the interview process.
During the interview process, notes were taken to allow more free-talk and less interruption, and also to make records of the participants’ nonverbal gestures. Although “in-depth interviewing focuses on, and relies on, verbal accounts of social realities” (Minichiello, Aroni, Timewell, & Alexander, 1995, p. 69), “nonverbal features of the interaction” (Fontana & Frey, 2005, p. 713) were also recorded to enable the researcher to further understand and interpret participants’ social reality. Through focusing intently on direct interaction with them, depth of understanding was achieved. Participants were told to choose whichever language (i.e. either English or Mandarin) they felt comfortable with during the interview so they could express their perceptions in an easier way. For those students (for instance, Sarah) who found expressing their ideas in English a little challenging, speaking in their mother tongue helped the researcher to obtain their perceptions more concisely.

All face-to-face interviews were audio-recorded for data transcription and analysis. After all the data analysis was completed, I interviewed my participants a second time over the phone. This was influenced primarily by the researcher’s deepened understanding of the participants’ social reality through repetitive examination of those cases. The second round interview was semi-structured, with a list of specific topics to ask about. Unlike the first in-depth interviewing, the second interviews were much shorter. They varied from 10 to 30 minutes. Also different from the first round interviewing, the questions I asked in the second interview varied from participant to participant. This variation was determined by what information was lacking in their first interview but was important for understanding. For instance, the questions I asked Chen were particularly focused on peer and parental influences on her learning, while questions I asked Avery were on what had influenced her decision to do a thesis on gender and sexuality.

The phone interview was not audio recorded. I paraphrased and doubled checked my understanding with participants during the process of the phone interview in order to ensure
that I understood them correctly. The notes were also immediately transcribed in order to record as much information as possible.

3.2.2.2 Analytical phase: Data analysis

Data analysis is argued to be “a process of examining something in order to find out what it is and how it works” (Corbin & Strauss, 2008, p. 72). It involves “giving voice” (Stringer, 2004, p. 96) or “taking something apart, and giving meaning to the parts that are important to us” (Stake, 1995, p. 71). This analytical process often requires “disciplined study, creative insight, and careful attention to the purposes of the study” (Patton, 1987, p. 144).

Most studies define data analysis as a process and, therefore, often explain or demonstrate analysis in the form of a procedure (Corbin & Strauss, 2008; Creswell, 2009; Sharmaz, 2008). The analytical process in this study was a three-stage procedure: the initial stage focused on coding (Sharmaz, 2008), the second stage on historical-genetic analysis (Engeström et al., 2014) and the third stage on actual-empirical analysis (Engeström et al., 2014). The following sections provide detailed information about the three stages.

The initial process: Coding

The CLA, especially the theoretical tools in the model surface, were used for conceptual analysis to understand how ICSs’ cultural and historical background, including various other activity systems, had influenced their learning, and how this influence impacted their experience of challenges with studying at university in Australia. Prior to this process, coding was employed to learn, detect and label what the data was about (Sharmaz, 2008). Coding techniques from grounded theory, specifically Sharmaz’s (2008) method of line-by-line coding to focused coding helped to reveal and define “what the data are about” (p. 92). Coding techniques from grounded theory acted as a critical initial preparation for the conceptual analysis phase.
The process of line-by-line coding, according to Sharmaz (2008), involves defining what each line of the data meant. This not only ensures building the analysis “from the ground up without taking off on theoretical flights of fancy” (Sharmaz, 2008, p. 94), but also reduces the likelihood of forcing researchers’ “motives, fears, or unresolved personal issues” (Sharmaz, 2008, p. 94) to the data. Line-by-line coding thus helps researchers to interpret participants’ perspectives in a more concise way.

Line-by-line coding was the first analytical procedure this study employed for data analysis. It was used to detect what the data was about (Sharmaz, 2008). An example is provided in the following to illustrate the use of this coding process in the study.

<table>
<thead>
<tr>
<th>Sarah: I was frequently being beaten. The stool my dad used to beat me broke with the beating once, so it is impossible to escape classes.</th>
<th>Being beaten</th>
<th>Receiving “bad” beating</th>
<th>Not escaping classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah: I tell you how scary it is, normally, one parent beats, the other one tries to stop the beating, but my mum does not like this, my mum exacerbates my dad’s beating, yes, I was very angry, very angry. When my dad was not there, I can sometimes argue with my mum, whenever my dad was there, I was not dare to because he was the one who enacts the action, my mum was blah, blah… beside him.</td>
<td>Feeling scared</td>
<td>Mum acting differently from norm</td>
<td>Mum exacerbating beating</td>
</tr>
<tr>
<td>Feeling angry</td>
<td>Arguing with mum</td>
<td>Accepting parental discipline</td>
<td></td>
</tr>
</tbody>
</table>

Focused coding is used to “synthesize and explain larger segments of data” (Sharmaz, 2008, p. 96). It involves using “the most significant and/or frequent earlier codes to sift through large amounts of data” (Sharmaz, 2008, p. 96). This process is similar to the process of meaning condensation, which also “entails an abridgement of the meanings” (Steinar & Svend, 2009, p. 205). In this study, focused coding was used after the initial stage of line-by-line coding to tell what a segment of data was about (Sharmaz, 2008). The same excerpt is provided in the following to illustrate the use of this coding process in the study.
Sarah: I was frequently being beaten. The stool my dad used to beat me broke with the beating once, so it is impossible to escape classes.

Sarah: I tell you how scary it is, normally, one parent beats, the other one tries to stop the beating, but my mum does not like this, my mum exacerbates my dad’s beating, yes, I was very angry, very angry. When my dad was not there, I can sometimes argue with my mum, whenever my dad was there, I was not dare to because he was the one who enacts the action, my mum was blah, blah… beside him.

In the process of focused coding, what became especially useful was the definition of “meaning units”, which referred to “thematizing [sic] the statements from the subject’s viewpoint as understood by the research” (Steinar & Svend, 2009, p. 207). Therefore, focused coding served to identify, define and explain what the meaning unit was (Steinar & Svend, 2009). This was also what meaning condensation entailed. Therefore, in the process of focused coding, conceptual categories, which explicate long segments of text, were formed (Sharmaz, 2008).

Categories explicate “meaning units” (Steinar, 2009, p. 207) through “telling words” (Sharmaz, 2008, p. 98). They are conceptual – “with abstract power, general reach, analytical direction, and precise wording” (Sharmaz, 2008, p. 98). Forming conceptual categories involves precise and extensive categorization of data. This categorization process is conducted through assigning analytical meaning to codes and advancing these codes to theoretical categories in the form of narratives (Sharmaz, 2008). To create categories, Sharmaz (2008) believed researchers not only need to “compare data, incidents, contexts and concepts” (p. 100), but also need to take active roles through asking questions and making comparisons. Conceptual categories were formed simultaneously with the process of focused coding and categories were built and clarified through examining all the data and through identifying deviances within the category and between other categories (Sharmaz, 2008).
This study adopted Sharmaz’s (2008) coding process when analyzing the raw data. During the coding stage, raw data was analysed through a recursive process of line-by-line coding to focused coding to defining data and to forming conceptual categories. During this stage, memo-writing as an analytical tool (Sharmaz, 2008) was also adopted to explicate categories and to make comparisons within each case or amongst cases. This was followed by a second round analysis, which mainly involved focused coding, conceptualization of new categories and a constant comparison of new categories with initial categories to ensure accurate and comprehensive interpretation of meaning.

Coding, especially line-by-line coding, minimizes researchers imposing their values and vested interests on their respective participants and the data. However, every study is still framed and interpreted through their individual specific perspectives (Steinar & Svend, 2009). The vantage point this study took to interpret meaning was the adapted CLA. This was carried out through the two types of analysis: historical-genetic and actual-empirical, which are discussed below.

**Historical-genetic analysis**

The main purpose of historical-genetic analysis is to “discover causes or exploratory mechanisms through tracing its origins and evolution” (Engeström et al., 2014, p. 123). This type of analysis primarily focuses on exploring the history to discover root causes of present issues.

The process historical-genetic analysis takes involves making an important decision about what and how much historical data was going to be considered for analysis. This decision was made based on a joint influence of the focus of the study on ICSs’ learning experiences and the general guidance of Beach’s (2003) speculation about “leading” activity systems. Beach (2003) explained “whether or not an activity is ‘leading’ and, therefore, dominant in
influence compared to other activities the person may be participating in is co-determined by
the sequence of activity categories characteristic of a society and the period in an individual’s
history at which he or she participates in the activity” (Beach, 2003, p. 51). Regarding the
sequence of activity categories, Beach (2003) contended that “each learning activity serves as
preparation for the next” (p. 51). Based on his illustration of “leading activity categories
characteristic of most European and North American societies” (the sequence of playing,
followed by schooling, working, and retirement, for instance) (Beach, 2003, p. 51), this study
included at least two previous leading activity systems that performed as preparations for the
ICSs’ current leading activity system of university learning in Australia.

In historical-genetic analysis, three leading activity systems of learning (their current
leading activity system of university learning in Australia and their previous two leading
activity systems of school learning and/or university learning) in China were included for
analysis. Other non-leading activity systems of family, peers and/or work were also included
for analysis. This inclusion was based on Engeström et al.’s (1995) speculation about the
concept “polycontextuality”, which means that

[Subjects] are engaged not only in multiple simultaneous tasks and task-specific
participation frameworks within one and the same activity. They are also increasingly
involved in multiple communities of practices [activity systems] (p. 320).

This made it necessary to include participants’ involvement in various other networks that
jointly influence their experience. Therefore, in considering what and how much historical
data was going to be used for analysis, this study also considered participants’ experiences
with other non-leading activity systems of family, peers and/or work, which they articulated
as being important in influencing their experiences.
After this decision was finalized, codes that had been formed through the recursive process of line-by-line coding to focused coding and to arriving at conceptual categories were organized into chronological order to delineate root causes of ICSs’ current pressing issues.

**Actual-empirical analysis**

Actual-empirical analysis interprets findings through giving it meaning in broad CLA language (Engeström et al., 2014). This analysis relied on iterative processes occurring between the mirror surface and the model surface of the CLA model (Engeström et al., 2014). Regarding theoretical tools used in the model surface, instead of relying on the activity triangle and the expansive cycle, this study relied on mediation, contradictions, the activity triangle and polycontextuality and boundary crossing (Engeström, 1999; Engeström, 2001; Engeström et al., 1995). Detailed information about these theoretical tools was discussed in section 3.2.1. Through analysing ICSs’ experiences against these theoretical tools, how their cultural and historical background has framed their learning and how this influenced their experience of issues with studying at university in Australia were revealed. Findings are presented in chapter 5.

### 3.2.2.3 Interpretative phase: The adapted Change Laboratory Approach

Meaning interpretation as proposed by Steinar and Svend (2009) is the final stage of analyzing interview data. Meaning interpretation normally goes beyond what is apparent in the texts, and often involves making the implicit explicit – re-contextualizing “the statements within broader frames of references” (Steinar & Svend, 2009, p. 207). Steinar and Svend (2009) advocated a “hermeneutic” perspective on text interpretation, which is the interpreters’ presumptions and questions “codetermine[ing] the subsequent analysis and co-constitute[ing] the meanings interpreted” (p. 212). This highlights how the theoretical foundation of the CLA frames the interpretation of meaning.
In the interpretative phase, this study used the adapted CLA approach as a framework of reference to interpret ICSs’ experiences of learning. As previously mentioned, this study adapted the theoretical tools used in the model surface for conceptual analysis. These tools were also used primarily to interpret meaning that ICSs assign to their experiences. This is presented in chapter 5, which discusses the meanings that ICSs assign to their experiences through the specific lens of the adapted CLA.

The presentation of findings was broadly guided by the dynamic part of the CLA. However, the sequence involved in the organization of findings did not strictly follow the vertical dimension of the surfaces in the CLA model. This is shown by the configuration of chapter 5, which began with reporting ICSs’ past experiences and modelling their past activity systems, then goes on to exploring their challenges with learning in Australia, and modelling their current activity systems and ends with modelling the dynamic processes involved in the resolution of their challenges and explicating root causes of those challenges that they did not resolve.

Stage 1: ICSs’ past experiences and modelling their past networks of activity systems

This study reported findings chronologically to fulfil the explanatory purpose of the historical-genetic analysis in tracing the origins and evolution of ICSs’ current learning situations: started from their school, to university, and then to their current university learning experiences. Detailed contextualized individual narratives threaded around their respective leading activity systems of learning are presented in chapter 4b. Detailed findings of the actual-empirical analysis are interpreted and presented in section 1 of chapter 5.

Stage 2: ICSs’ challenges with learning in Australia and Modelling their current activity systems and contradictions

The second stage presented ICSs’ challenges with learning in Australia and modelled their current activity systems. Detailed findings are presented in section 2 of chapter 5.
Stage 3: Modelling dynamic processes involved in resolution of challenges and explicating root causes of non-resolved challenges

This was followed by modelling dynamic processes involved in resolution of challenges and explicating root causes of non-resolved challenges. In particular, it looked at which types of structural contradictions got expansively resolved, what dynamics were involved in the resolution of contradictions, what types of structural contradictions were not resolved, and what root causes prevented ICSs from resolving those. This is presented in section 3 of chapter 5.

3.3 Trustworthiness

Neuman (2006) argues that “a commonsense framework is likely to contain implicit assumptions, biases, ethnocentrism, and ill-defined concepts from dominant cultural values” (p.459). Therefore, my previous experience in China and the fact that I am currently an RMIT student will certainly bring bias to this research. I view things from a culturally specific perspective, which affects the choice of interview questions, analytical approaches and selection of data for this study. Therefore, I need to foreground my own values and beliefs as a researcher, and be aware of their influence in shaping this study.

Enhancing the validity of qualitative research involves the trustworthiness of both the way the research is conducted and the presentation of the findings (Yardley, 2008). Yardley (2008) demonstrated a series of methods that can be drawn on for increasing the validity of qualitative research. These methods include “triangulation….participant feedback….disconfirming case analysis and a paper trail” (Yardley, 2008, pp. 238-243). These, as she claimed, are not exact prescriptions but they can provide a useful reference (Yardley, 2008).

Miles and Huberman (cited in Kvale & Brinkmann, 2009) outlined some similar tactics for establishing the validity of qualitative research, which include “checking for
representativeness and for researcher effects, triangulating, weighing the evidence, checking the meaning of outliers, using extreme cases, following up on surprises, looking for negative evidence, making if-then tests, ruling out spurious relations, replicating a finding, checking out rival explanations, and getting feedback from informants” (p. 250). However, Kvale and Brinkmann (2009) warned that going too far might further corrode validity: “the more one validates, the greater the need for further validation … beware when they swear they are telling the truth” (p. 260). An ideal scenario was depicted by Kvale and Brinkmann (2009) as “the quality of the craftsmanship results in products with knowledge claims that are so powerful and convincing in their own right that they, so to say, carry the validation with them, like a strong piece of art” (p. 260). When the research design, the results and the findings are convincingly transparent, evident and true, validity in this way becomes “superfluous” (Kvale & Brinkmann, 2009, p. 260).

Nevertheless, the following strategies were adopted to enhance trustworthiness:

- Follow-up questions were used to resolve discrepancies.
- Triangulation of data – multiple ways of collecting data were used (documents, interviews, surveys).
- Database creation – during the data collection period, in order to organize and document the collected data, a case study database was created and a chain of evidence was maintained to increase credibility.
- Member checking – participants’ own case narratives, as presented in Chapter 4b (sections 4b.3.1, 4b.3.2, 4b.3.3) were sent to them for review and/or correction in order to verify whether they are consistent with their experiences (Carlson, 2010).
3.4 Potential ethical issues

This study involves collecting data on ICSs’ personal information around perceptions, attitudes and beliefs through interviewing and a survey questionnaire. It was, therefore, not possible to avoid intruding into personal privacy (Babbie, 1990; Stake, 1995). Various ethical procedures were thus followed to minimize this intrusion (Babbie, 1990).

Voluntary participation: Participation in the research was entirely voluntary. Participants were also free to withdraw from the study at any time. A plain language statement was sent or handed to both questionnaire and interview participants to inform them about the research so they could make informed decisions on whether or not to participate.

Anonymity and confidentiality: The survey questionnaire was entirely anonymous. Regarding the interview, in order to protect participants’ personal privacy, pseudonyms were used during the processes of analysing and interpreting the data.

Management of data: Data were secured as password-protected files stored only on my personal computer. Analysed data were not accessed by any person who was not involved. Storage of the original data will be kept in my personal computer for a period of five years, after which, it will be discarded so it will not be misused.

3.5 Chapter summary

This chapter briefly looked into the historical development of activity theory. Specifically, it focused on contributions of the first, second and third generations made by the central figures of Vygotsky, Leontiev and Engeström respectively. This theoretical foundation functioned to provide guidance for understanding the research issues from a cultural and historical perspective. It also helped to identify the most appropriate research design: the adapted CLA for obtaining the most suitable data to address these research issues. After this, how this approach was adapted to suit the explorative purpose of this enquiry was examined. The three
developmental phases of preparatory, analytical and interpretive methods were then discussed in detail. Measures taken for enhancing trustworthiness and potential ethical issues were also mentioned. The next chapter presents findings based on analysis of both the questionnaire survey and the in-depth interview data.
Chapter 4 Part 1: Reporting questionnaire findings: The preparatory phase

As discussed in the previous chapter, the questionnaire data served as a preparation for the main phase of collecting in-depth interview data. This chapter reports findings from questionnaire survey data. These findings offer basic snapshot information on international Chinese students’ perspectives about their learning experiences. This chapter provides an overview of participants’ perceptions of their learning experiences in regard to the overarching research questions raised in this study. The findings are reported in two sections: section one on demographic data and section two on general information about participants’ perspectives about their learning experiences. Part 2 is further divided into four subsections.

4a.1 Part 1: Demographic data

The first section of the questionnaire survey was designed to collect demographic data from participants. In particular, they were used for the purpose of getting information about the range of participants, which also acted as a guide at a macro activity theoretical level to help me understand my participants. Specific question items included gender, age, university program the international Chinese student was enrolled in, their home region, their length of stay in Australia, previous degree and major in their previous degree, as well as current level of study and reasons for change of major to education. Results from these questions are presented through the following tables, which is then followed by a summary.

Table 4a.1

*Gender of questionnaire participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 4a.2

*Age of questionnaire participants*

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4a.3

*Level of enrolment*

<table>
<thead>
<tr>
<th>Degree/Diploma program enrolled in</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Diploma (Early Childhood Education)</td>
<td>8</td>
</tr>
<tr>
<td>Master of Applied Linguistics</td>
<td>2</td>
</tr>
<tr>
<td>Master of Education</td>
<td>4</td>
</tr>
<tr>
<td>Master of Organizational Leadership</td>
<td>2</td>
</tr>
<tr>
<td>Master of Teaching (Secondary)</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 4a.4

*Participants’ country of origin*

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>2</td>
</tr>
<tr>
<td>Mainland China</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 4a.5

*Length of stay in Australia*

<table>
<thead>
<tr>
<th>Length of stay in Australia (Years)</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>2</td>
</tr>
<tr>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4a.6

*Previous level of degree*

<table>
<thead>
<tr>
<th>Previous level of degree</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s Degree</td>
<td>19</td>
</tr>
<tr>
<td>Graduate Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4a.7

*Previous study major*

<table>
<thead>
<tr>
<th>Major in previous degree</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education</td>
<td>2</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>International Business and Trade</td>
<td>2</td>
</tr>
<tr>
<td>Journalism</td>
<td>2</td>
</tr>
<tr>
<td>Management o Cultural Industry</td>
<td>2</td>
</tr>
<tr>
<td>Media and Communication</td>
<td>5</td>
</tr>
<tr>
<td>News Editting and Mass Media</td>
<td>2</td>
</tr>
<tr>
<td>Teaching LOTE</td>
<td>2</td>
</tr>
<tr>
<td>Teaching Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>TESOL</td>
<td>6</td>
</tr>
</tbody>
</table>
Analysis of participants’ demographic data revealed the following: the great majority of participants were female (25 out of 27). The overall age range seems to be fairly limited (from 22-30 years) and as expected, the majority of participants were from Mainland China (25 out of 27). Although participants’ length of stay in Australia varied a great deal from two months to eight years, their length of stay was clustered around three and six years, which strongly points to a hypothesis that these participants might have completed their previous degree (the majority had Bachelor’s or Master’s as their previous level of study) in Australia. Table 4a.3 further demonstrates that the majority of the participants in this study were enrolled in Master of Teaching (Secondary) and Graduate Diploma in Early Childhood. Both these courses were no longer than four semesters. This further indicates the strong possibility that participants possibly pursued previous degrees in Australia.

Only around half reported that their previous study major was related to or in education, with the other half majoring in non-education related courses. It is interesting to know that education could attract students from a broad range of disciplinary backgrounds (e.g. business). However, were these students really motivated to learn to be a teacher? Questions 8 (If your major was not in education, why did you decide to study education here in Australia?) and 11 (What were and are your expectations of education programs in Australia?), which deal with their reasons for change of major and their expectations from their respective education programs, may provide answers for this. This is detailed in the following section: Part 2.

4a.2 Part 2: International Chinese students’ perceptions of their learning experiences

The remaining questionnaire items were categorized as Part 2. This part included both scale questions and open-ended questions, both of which were intended to obtain information to address the four overarching research questions and the central concept object. Although this
section incorporated both statistical and descriptive data, both served two purposes: to obtain basic snapshot information on ICSs’ perspectives about their learning experiences and to provide the basis for in-depth interviewing. Findings in this part were organized into four sections (informed by four research questions and the critical role played by the concept object). Each of the following sections starts with a brief introduction, which is followed by tables that present the findings from the structured questions. These sections also conclude with a summary of findings from both structured and open-ended questions.

4a.2.1 Object

In activity theory, object is acted upon by the subject to satisfy his/her needs. The object is “the physical or mental product that is sought …. It represents the intention that motivates the activity” (Jonassen & Rohrer-Murphy, 1999, p. 63). Although objects are illusive, they are embedded in goal-directed actions (cf. Engeström, 2005). Therefore, questions 8, 11 and 21 were included in the questionnaire to obtain information relating to participants’ goals/intentions. Questions 8 (If your major was not in education, why did you decide to study education here in Australia?) and 11(What were and are your expectations of education programs in Australia?) were intended to obtain information about their goals, findings from which are reported through text only as these are open-ended questions. Regarding question 21 (How effective or comfortable are you with the following after some study in Australia?), findings are organized in a table for illustration.

In consideration of questions 8 and 11, the majority reported that the main reason for changing their major to education was the career pathways that these programs could lead them to (over 40% believed it would be easier to find a job). Surprisingly few (less than 15%) participants reported that their reasons for studying education programs were based on their wanting to improve their pedagogical practices as teachers (“to widen my teaching
techniques”). This implied that their goals in studying these programs were mainly around career pathways. Through the means of pursuing these courses, they wanted to achieve the end of being able to find a job; i.e. viewed education as a means to an end (Lee, 1996).

This finding reflected that most participants’ goals were strongly linked to extrinsic purposes. Although this practical orientation contradicts the Western philosophical orientation to education that “learning should be its own end and that education loses meaning if focused on an extrinsic goal” (Tweed & Lehman, 2002, p. 95), findings from question item 11 on their expectations of these programs negated this belief, with the majority (80%) reporting that their expectations were strongly tied to improving their learning and teaching practices.

Question 21 varied from the previously mentioned two questions on goals. This scale question was designed to understand to what extent participants had achieved their goals after they had pursued a period of study in Australia. This question was also used to understand to what degree they had reached the expected goals of the respective universities they had enrolled in (for instance, they were expected to be innovative, creative, dialectic, cooperative as well as ensuring academic integrity (La Trobe University, 2012; RMIT University, 2012; University of Melbourne, 2009)).
Table 4a.8

*Self-rated achievements after a period of study in Australia*

<table>
<thead>
<tr>
<th>Area of Achievement</th>
<th>Not Good</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking responsibility in a group</td>
<td>0%</td>
<td>55%</td>
<td>35%</td>
<td>10%</td>
</tr>
<tr>
<td>Working with other international or local students</td>
<td>10%</td>
<td>0%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Coursework generally</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Being active in group discussion</td>
<td>10%</td>
<td>35%</td>
<td>45%</td>
<td>10%</td>
</tr>
<tr>
<td>Understanding course requirements</td>
<td>0%</td>
<td>10%</td>
<td>55%</td>
<td>35%</td>
</tr>
<tr>
<td>English language fluency</td>
<td>10%</td>
<td>25%</td>
<td>55%</td>
<td>10%</td>
</tr>
<tr>
<td>Adapting to the Australian learning context</td>
<td>10%</td>
<td>10%</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Conducting independent research</td>
<td>0%</td>
<td>10%</td>
<td>55%</td>
<td>35%</td>
</tr>
<tr>
<td>Problem-solving and critical analysis</td>
<td>0%</td>
<td>10%</td>
<td>70%</td>
<td>20%</td>
</tr>
<tr>
<td>Understanding Australian conventions around plagiarism</td>
<td>0%</td>
<td>0%</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>Creative thinking</td>
<td>0%</td>
<td>55%</td>
<td>22.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Engaging in rational debate</td>
<td>10%</td>
<td>55%</td>
<td>22.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Being innovative</td>
<td>0%</td>
<td>80%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Freely expressing alternative points of view (freedom of expression)</td>
<td>0%</td>
<td>0%</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Major decision-making</td>
<td>0%</td>
<td>45%</td>
<td>35%</td>
<td>20%</td>
</tr>
<tr>
<td>Maintaining academic integrity</td>
<td>0%</td>
<td>10%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Learning and intellectual independence</td>
<td>0%</td>
<td>20%</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Being an active and lifelong learner</td>
<td>0%</td>
<td>45%</td>
<td>35%</td>
<td>20%</td>
</tr>
<tr>
<td>Achieving academic excellence</td>
<td>0%</td>
<td>55%</td>
<td>22.5%</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

Table 4a.8 shows that almost all participants (80% or above) rated themselves as good or very good in areas of: working with other international or local students, coursework generally, understanding course requirements, adapting to the Australian context, conducting independent research, problem-solving and critical analysis, understanding Australian conventions around plagiarism, freely expressing alternative points of view (freedom of expression).
expression), maintaining academic integrity, and achieving learning and intellectual independence. Just over half (55-65%) reported themselves as being good or very good in four areas: being active in group discussion, English language fluency, major decision-making (45% rated themselves as average) and being active and lifelong learners (45% rated themselves as being average). Although the majority rated themselves as being good or very good in most items, there were five items in which the majority rated themselves as being average (55-80%). These five areas were: taking responsibility in a group, creative thinking, being innovative, engaging in rational debate and achieving academic excellence. The findings of this section, especially in the areas of: working with local students, understanding course requirements, freely expressing alternative points of view and being active in group discussion, with the majority rating themselves as being good or very good, seem to contradict with findings from the interview. Most interview participants seem to have had difficulties in these areas. The questionnaire survey was distributed by their course coordinators, who represented more authority and knowledge, so they might have wanted to, for instance, save face (cf. Liu, 2002) and over rated themselves. The interview was conducted by the researcher, who they might have viewed as someone who shared a relatively more equal status with them (the researcher used to be an ICS herself). This might have helped interview participants to reveal different kinds of reality.

Although the majority rated themselves as being good or very good in the areas of working together with other international or local students, being active in group discussion, English language fluency, and adapting to the Australian learning context, 10% rated themselves as not being good in these respective areas. This indicates a possibility that after a period of study in Australia, not all students had developed or strengthened their social skills, they had not been keen to participate in group discussion, had not gained fluency with their language or had not adapted to the Australian learning context well. These four areas and
engaging in rational debate were also shown to have the greatest spread. These five areas are also the only areas in which some participants (10%) reported themselves as being not good. This illustrates diversity regarding participants’ level of adaptation into the Australian learning context.

4a.2.2 ICSs’ perceptions of their learning experiences in China

Within this broad category, four questions were included to obtain information on ICSs’ perceptions of their learning experiences in China. These questions were included particularly to obtain information on the approaches these students adopted. Some examples follow. Question 9: Here are some statements about your learning back in your home country, please show how much you agree or disagree by selecting the appropriate box; Question 12: What learning approaches did you experience in the classroom back in China? (Please click on the number of stars from 1 to 5 to indicate from the least used to the most frequently used); Question 13: Besides the ones mentioned above, what other learning approaches did you experience in the classroom back in China? (Please specify)). The following question was included to ask about their teachers: Question 24: Here are some brief statements of what you might think the role of teachers in your home country. Please show how much you agree or disagree by selecting the appropriate response. Findings from Questions 9, 12 and 24 are reported in three tables, which are then followed by the findings from question 13. This section concludes with a brief summary about participants’ responses to these four questions.
Table 4a.9

Learning experiences in China

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understood well what I needed to learn</td>
<td>0%</td>
<td>0%</td>
<td>30%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>I used repetition and memorization to learn</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>My learning was about getting the “correct answer” for tests</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>70%</td>
<td>0%</td>
</tr>
<tr>
<td>My thinking was often challenged by teachers; if A or SA please give an example.</td>
<td>0%</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Creativity and originality were valued in Chinese courses</td>
<td>0%</td>
<td>50%</td>
<td>20%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Analytical and critical thinking were focused on in Chinese courses</td>
<td>10%</td>
<td>50%</td>
<td>20%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Chinese language skills had a strong impact on my academic performance</td>
<td>0%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Regarding ICSs’ perceptions of their learning experiences in China, the majority (70-90%) reported that they understood well what they needed to learn and that they used repetition and memorization to learn. Although they use the English word ‘repetition’, they meant repeated visits of the same material to gain new understandings each time, rather than reinforcement of precisely the same understanding each time. A better choice of the English word they chose, ‘repetition’ is revisit. However, data from interviewing revealed that ICSs not only learn through ‘repetition’, but also through various other approaches (for instance, reflective and collaborative learning). Open-ended questions were used in the interview, which helped to gain insights into participants’ various approaches to learning including revisiting the same material to gain new understandings. Although the majority reported their learning was to get the “correct answer” for tests (70%), half said that neither creativity nor originality was valued in their courses, nor was their thinking challenged by their teachers. Half also said that analytical and critical thinking were not focused on in Chinese courses. Relating to the
question item: Chinese language skills had a strong impact on my academic performance, around 30% reported Chinese language did not have a strong impact on their academic performance. These students were fairly fluent users of Chinese, so possibly did not recognize the impact of language skills on academic performance. For fluent users of English, the language might not be a barrier to learning, but for those who struggle with English, it impacts on their learning. This question item was thus asked in comparison with the question item: English language skills had a strong impact on my academic performance. Relating to the latter, the majority (80%) reported English language skills had a strong impact on their academic performance. Chinese learners speak Chinese language as their mother tongue. In China, their teachers delivered lessons in Chinese, except on lessons relating to studying English as a school subject. In comparison to learning through a foreign language (e.g. English), barriers to learning through their native language might have been seen as less significant. The impact of their native language skills on learning is perhaps not as obvious as the impact of their skills with the English language on their attainment of their respective learning goals. There were exceptions relating to their perceptions of their learning experiences in China. These exceptions were illustrated through some participants’ very different views in the above four mentioned areas, with 20% reporting that their learning was not to get the “correct answer” for tests, 30% reporting that creativity and originality were valued in their courses, 10% reporting that their teachers generally challenged their thinking, and 20% reporting that analytical and critical thinking were focused on in Chinese courses.
Table 4a.10

Learning approaches experienced in class in China

<table>
<thead>
<tr>
<th></th>
<th>Least frequently used (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Most frequently used (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetition</td>
<td>0%</td>
<td>13%</td>
<td>38%</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Underlining</td>
<td>0%</td>
<td>0%</td>
<td>25%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>Learning by myself</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
<td>38%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Table 4a.10 reports the frequency of learning approaches participants used specifically in relation to repetition, underlining and learning by self. The majority reported their frequent use of repetition and underlining. This was consistent with the findings from the previous question, in which the majority also reported that they frequently used repetition and memorization approaches. However, their responses to frequencies of learning by self were diverse, with 50% saying they frequently learned by themselves, and the other half reporting that they very rarely learned by themselves. This points to the possibility that these students might have learned through collaboration. This affirmed the finding on the previous questions that there existed diversities in their teachers’ practices (some encouraged them to learn by self, whilst others created activities that required students to cooperate with each other in class).
Table 4a.11

Perceptions about their teachers in China

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers were in total control of my learning</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
<td>70%</td>
<td>20%</td>
</tr>
<tr>
<td>Teachers used a range of strategies to guide my learning</td>
<td>0%</td>
<td>45%</td>
<td>10%</td>
<td>45%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers assessed my learning through timed tests and exams only</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
<td>55%</td>
<td>35%</td>
</tr>
<tr>
<td>Teaching was often the transmission of set curriculum material</td>
<td>0%</td>
<td>0%</td>
<td>22.5%</td>
<td>55%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Teachers encouraged independent and critical styles of thinking</td>
<td>12.5%</td>
<td>35%</td>
<td>35%</td>
<td>22.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers modelled hypothetical and creative thinking</td>
<td>10%</td>
<td>22.5%</td>
<td>45%</td>
<td>22.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers did not promote a collaborative approach to learning</td>
<td>0%</td>
<td>10%</td>
<td>35%</td>
<td>45%</td>
<td>10%</td>
</tr>
<tr>
<td>Teachers set assignments requiring critical analysis and problem-solving</td>
<td>35%</td>
<td>45%</td>
<td>10%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>Teachers generally did not help me with difficult areas of my learning</td>
<td>0%</td>
<td>35%</td>
<td>45%</td>
<td>20%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 4a.11 illustrates findings on ICSs’ perceptions about their teachers’ teaching practices in China. A large majority reported that their teachers were in total control of their learning (90%), teaching was often the transmission of set curriculum material (77.5%), teachers set assignments that did not require critical analysis or problem solving skills (80%), and their learning was assessed through timed tests and exams only (90%). However, there were exceptions in their perceptions about their teachers’ teaching practices. This is demonstrated through some participants’ opposing views regarding whether their teachers set assignments requiring critical analysis and problem-solving skills and on whether their teachers assessed their learning only through timed tests and exams.

The above table also shows around half reported that their teachers did not use a range of strategies to guide their learning, did not encourage independent and critical styles of
thinking, nor did their teachers promote a collaborative approach to learning. Yet, there were also exceptions in their perceptions about their teachers’ teaching practices regarding these three areas, with 45%, 22.5% and 10% reporting their agreement respectively. Moreover, the table also shows that, although some reported that their teachers did not model hypothetical and creative thinking (32.5%), and that their teachers did not help them with their areas of difficulty in learning (35%), some disagreed with 22.5% and 20% respectively reporting the opposite.

ICSs’ answers to question 13 about what other learning approaches they experienced in classes in China showed that although a small proportion (20%) reported they learned through peer-assisted learning, the majority (80%) relied much on memorization of textbook/exam answers. This further enriched findings from question 12 concerning those students who reported they did not learn by themselves.

In general, findings in this section on ICSs’ perceptions of their learning experiences in China showed that diversities exist concerning their perceptions about teachers’ teaching practices, their learning experiences and their approaches to learning. Vogotsky’s idea of mediation helps to understand the mediating artefacts (e.g. set curriculum material and exams) that their teachers used to purposefully intervene their learning (cf. Kaptelinin & Nardi, 2006). However, the diversities amongst teachers’ practices and their approaches to learning show that despite the fact that they come from the same cultural heritage, their learning has been mediated differently to achieve diverse outcomes. This was supported by interview data (for instance, Avery’s university teachers designed activities (e.g. group assignments) that required them to collaborate with each other).
4a.2.3 ICSs’ perceptions of their learning experiences in Australia in comparison to those in China

Seven questions were included in this section because they focused on obtaining information around ICSs’ perceptions of their learning experiences in Australia. In particular, two structured questions, 10 (ICSs’ perceptions of their learning experiences in Australia) and 25 (their perceptions of their teachers’ teaching practices in Australia), were paired with the two scale questions 9 and 24 from the previous subsection for comparison.

Results of these two scale questions 10 and 25 are reported in the following two Tables 4a.12 and 4a.13 respectively. Apart from these questions, five open-ended questions (14, 15, 17, 18 and 22) were also included to provide further text data to understand more about how teaching practices in Australia have influenced ICSs’ learning. These five open-ended questions were about what they have found most unexpected about the way their teachers taught them, how this affected the way they learned, the opportunities and challenges in their learning in Australia, as well as similarities or differences that existed for them between learning in Australia and learning in China. Findings from the open-ended questions were reported through text. This subsection concludes with a summary of findings regarding questions relevant to this section.
### Table 4a.12

**Learning experiences in Australia**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand well what I need to learn</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Creativity and originality are valued in Australian courses</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
<td>60%</td>
<td>30%</td>
</tr>
<tr>
<td>I was familiar with Australian learning approaches before I arrived</td>
<td>10%</td>
<td>50%</td>
<td>30%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>My thinking is often being challenged by teachers</td>
<td>0%</td>
<td>30%</td>
<td>0%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>English language skills have a strong impact on my academic performance</td>
<td>0%</td>
<td>10%</td>
<td>10%</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>Learning approaches here are very different from those I experienced in my home country</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>I find it difficult to adjust to critical and creative learning expectations</td>
<td>0%</td>
<td>30%</td>
<td>20%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>Analytical and critical thinking are focused on in Australian courses</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>A learner-centred environment is very demanding for me</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td>Collaborative learning and peer discussion are challenging</td>
<td>0%</td>
<td>30%</td>
<td>30%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Tests/exams are the main source of assessment</td>
<td>20%</td>
<td>50%</td>
<td>10%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Group work and discussion are helpful for my learning</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
<td>50%</td>
<td>40%</td>
</tr>
</tbody>
</table>

The above table shows almost all participants (90-100%) found learning approaches in Australia were very different from those they experienced in their home country; believed Australian courses not only focused upon analytical and critical thinking, but also valued creativity and originality; acknowledged that group work and discussion were helpful for their learning. In addition, the majority (70-80%) also reported: their thinking was often challenged by teachers in class; exams/tests were not the main source of assessment; and English language skills had a strong impact on their academic performances. Just over half (60%) reported they understood well what they needed to learn. The same proportion also
reported they perceived a learner-centred environment as being demanding. These difficulties showed that their learning was mediated differently from that of China (cf. Engeström, 2001). This means that they need to internalize these mediating artefacts that were practiced in the Australian learning context in order to achieve those outcomes that are expected out of them (cf. Kaptelinin & Nardi, 2006).

Almost all participants believed learning approaches in Australia and China were very different. With only 10% reporting they were familiar with Australian approaches before their arrival, it was expected that they would experience great difficulties with their adjustment. However, surprisingly, only around half reported they found it difficult to adjust to critical, creative learning expectations (30% reported it was easy) and a learner-centred environment. And even less than half (40%) reported that they found collaborative learning and peer discussion challenging (30% reported that it was not challenging). This demonstrates diversities exist in ICSs’ learning experiences in Australia. This diversity was further illustrated through participants’ contrasting responses in the areas of: English language skills had a strong impact on their academic performances (80% agreed while 10% disagreed); understood well what they needed to learn (60% agreed while 20% disagreed); their thinking was often being challenged by teachers (70% agreed while 30% disagreed); collaborative learning and peer discussion were challenging (40% agreed while 30% disagreed); tests/exams were the main source of assessment (20% agreed while 70% disagreed); difficult to adjust to critical and creative learning expectations (50% agreed while 30% disagreed); and a learner-centred environment was very demanding (60% agreed while 20% disagreed). That diversity existed in ICSs’ learning experiences in Australia is further supported by interview data. This shows that any stereotypical categorization over these students would risk misunderstanding them (e.g. Burns, 1991).
Table 4a.13

*Perceptions of their teachers in Australia*

<table>
<thead>
<tr>
<th>Perceptions of teachers in Australia</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers are in total control of my learning</td>
<td>10%</td>
<td>55%</td>
<td>35%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers encourage independent and critical styles of thinking</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Teachers model hypothetical and creative thinking</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Teachers do not promote a collaborative approach to learning</td>
<td>10%</td>
<td>70%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers set assignments requiring critical analysis and problem-solving</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Teachers generally do not help me with difficult areas of my learning</td>
<td>0%</td>
<td>45%</td>
<td>45%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Teachers use a range of strategies to guide my learning</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Teaching is often the transmission of set curriculum material</td>
<td>10%</td>
<td>10%</td>
<td>35%</td>
<td>45%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 4a.13 reports findings on ICSs’ perceptions of their teachers’ teaching practices in Australia. All participants (100%) believed their teachers in Australia: encouraged independent and critical styles of thinking; modelled hypothetical and creative thinking; and set assignments requiring critical analysis and problem-solving. In addition, the majority (80%) also reported that teachers in Australia not only used a range of strategies to guide their learning, but also promoted a collaborative approach to learning. However, surprisingly, nearly half (45%) reported that teaching was often the transmission of set curriculum material in Australia, although to a lower extent compared to China (where 77.5% believed this occurred). This difference in the mediating artefacts that Australian teachers used for purposeful intervention means that ICSs need to internalize those to achieve desired outcomes that their Australian teachers wanted them to achieve (cf. Kaptelinin & Nardi, 2006).
In comparison to the structured question 24 on ICSs’ perceptions of their teachers’ practices in China, the findings did show a difference between practices in Australia and China in terms of encouraging independent and critical styles of thinking, modelling hypothetical and creative thinking, setting assignments requiring critical analysis and problem-solving. Nearly all participants reported that teachers in Australia not only used a range of strategies to guide their learning, but also promoted a collaborative approach to learning. Yet only a small proportion reported these were practiced by teachers in China.

The four open-ended questions were used to collect data on any surprises ICSs experienced about the ways teachers teach in Australia and how these in turn posed challenges and provided opportunities. Their responses revealed that they found five areas unexpected. These five areas were: teachers used group discussion as a new form of learning, asked many questions, pushed them to read broadly, pushed them to elaborate on their ideas, and held the assumption that they knew everything about Australian culture and society.

ICSs believed that these unexpected practices in turn posed challenges. These challenges included them not knowing what to say in group discussion (with some reporting that they always felt excluded in class), experiencing challenges in the areas of critical and creative thinking, encountering difficulties relating to the English language, as well as lacking cultural background knowledge. Apart from experiencing these challenges, they also noted that the unexpected teaching practices also brought opportunities. These opportunities were: having more opportunities to express their ideas, having more interactions with teachers and peers, and gaining more information about their learning areas, as well as Western education and learning in general.

Overall, findings in this section seem to point to the fact that differences exist between teaching practices in Australia and China. This variation in turn not only posed challenges,
but also provided opportunities for these students. In addition the findings point to the fact that more diversity existed amongst teachers’ teaching practices in China than those in Australia. This diversity might have caused these students’ varying attitudes toward the teaching practices in Australia (with some finding it difficult to adjust to whilst others did not).

4a.2.4 Dynamics involved in ICSs’ negotiations with Australian cultural learning

Four open-ended questions (16, 19, 20 and 23) were included in the questionnaire to obtain information regarding the dynamics involved in ICSs’ negotiations with learning in the Australian context. In particular, these questions included the experiences they had in adjusting to the Australian context, the methods they used to assist their learning, English language and the change they made to become more successful at learning in Australia. Due to the open-ended nature of these questions, the findings were reported only through text.

Regarding different teaching practices in Australia, some students seem to have negotiated and adjusted to the new demands this difference made of them. For instance, some claimed that they had become more critical with their learning, and also had been inspired to think and reflect more. Others believed their understanding about knowledge was enriched in that they believed that knowledge is not gained only through the teaching-learning process, but is also created through the process of discussion. Their adjustment to the new demand was further reflected by their improved abilities, spreading from the areas of learning (being more active in group discussions, or being more independent) to the areas of research (improved skills). This showed that some ICSs successfully internalized those mediating artefacts to achieve the expected outcomes of the Australian learning context, and their learning experiences in Australian also greatly impacted their cognitive development (cf. Kaptelinin & Nardi, 2006).
However, not all participants believed that the unexpected teaching practices influenced them in a positive way. Those new mediating artefacts did lead to the formation of certain structural contradictions (cf. Engeström, 1987). This was reflected by the negative feelings these students had. These included: their feeling of exclusion, not believing they learned much in class, their inertia or deciding not to fit in was reinforced (they chose to be quiet in class).

The differences between teaching and learning practices in Australia and those in China have impacted ICSs’ learning both positively and negatively. However, all participants seem to have adopted methods to handle their perceived challenges. This reflected the active roles that they took attempting to resolve these challenges (also see Tran, 2008). The methods they adopted incorporated:

- actively talking with both international and local people
- asking questions or rephrasing their meaning in order to confirm
- consulting with tutors, discussing with classmates, and searching for relevant information on the Internet
- seeking help from bodies such as academic skills units for English help (which was not productive)
- questioning, critical thinking
- reading.

To improve their English language, half reported the methods they used were watching TV, or talk shows, whilst the other half reported they just relied on practice, either by themselves or with others. To become more successful with their learning, just over half argued that becoming more independent in both research and learning helped them most, whilst the rest believed that being more active, putting more effort into reading books related
to the area of learning, and figuring out what was required for assessment worked for them. Through use of various methods, many ICSs seemed to transform both their learning and their lives (see Gu and Brook, 2008).

4a.3 Chapter summary

Questionnaire findings seem to indicate that diversities exist in both ICSs’ approaches to learning and their teachers’ teaching practices in China. This diversity seems to have influenced their diverse attitudes toward the differences in teaching practices and their levels of adaptation to the Australian learning context. In addition, the findings also illustrated differences exist between Chinese and Australian teaching practices. Although this difference has impacted ICSs’ learning both positively and negatively, all participants seem to have adopted methods to deal with their perceived challenges.

This chapter, which reported findings from questionnaire survey data, offered information on the range of participants in this study. The findings also offered basic snapshot information on international Chinese students’ perspectives about their experiences of learning, which served as a preparation for the main phase of collecting in-depth interview data. The findings obtained through analysis of interview data are presented in the next chapter: 4b.
Chapter 4 Part 2: Exposition – International Chinese students’ perceptions of their learning experiences

[Learners’] interest and understanding of the learning process itself will clearly influence the learners’ progress in acquiring a new skill or the ability to perform an activity (Hewitt, 2008, p. 3)

As discussed in chapter 3, this chapter reports initial interview findings based on analysis of in-depth interview data (carried out mainly through coding and historical-genetic processes of analysis). These findings are reported through individual narrative cases.

4b.1 Introduction

Analysis of questionnaire survey data showed that diversities exist in ICSs’ approaches to learning and their teachers’ teaching practices in China. This diversity influenced their varying attitudes toward differences in teaching practices between Australia and China and in their adaptations to the Australian context. This informed use of sampling schemes of “maximum variation” and “extreme case” to select interview participants that would maximize the range of perspectives (Collins & Onwuegbuzie, 2007, pp. 285-286). As stated in the methods section in chapter 3, a questionnaire survey was used as preparation for in-depth interviewing. Findings from the questionnaire survey were only used for this purpose. It was thus not mixed with data from in-depth interviewing.

This chapter presents initial findings from the interview data. It is presented through individual narratives. These narratives were threaded together by ICSs’ learning-related issues to mirror their experiences in-depth. This presentation was informed by the approach this study adapted: the Change Laboratory Approach (CLA) and by historical-genetic analysis (Engeström et al., 2014, p. 123). Specifically, the mirror surface of the CLA functioning to represent data that could closely mirror ICSs’ experiences, which is prepared
for historical-genetic analysis to examine root causes of recursive issues, particularly informed presentation of narratives. In addition, since participants experienced learning differently from one another, root causes of recursive issues that a particular participant experienced could be understood only through tracing this particular participant’s previous learning experiences. Individual case instead of thematic analysis is, therefore, presented (comparisons amongst these cases were carried out during the conceptual analysis).

4b.2 Participants

While there were nine participants initially, only six were analysed due to unexpected time constraints. The data generated from these six participants, however, proved to be more than adequate for the purpose of this research. The data generated by the other three participants will be analysed and published at a later date.

The approach this research takes informed selection of participants: present data that mirrors ICSs’ experiences as closely as possible. This study is aimed at contributing to and extending previous literature from a cultural and historical perspective. This is carried out through specifically emphasizing how various networks of institutions, peers and family frame their learning, how they respond to this, as well as how this frame in turn influences how they experience of and approach to issues in Australia. To realize this objective, in-depth, complex and detailed presentation of reality is needed. Presentation of in-depth detailed individual narratives is thus both significant and necessary for conceptual analysis, which is presented in the next chapter.

Analysis of the interview data also informed selection of participants. Participants’ levels of education achieved in their home country were found to influence their experience of issues in Australia differently (cf. Engeström, 2005). Based on variations in levels of education they achieved in their home country, participants were grouped into three
categories. That is participants who had learning experiences in China up to Year 12 were categorized into group 1 (Sarah, Xin, Chenoa). Participants who had learning experiences in China up to completing their undergraduate degree were categorized into group 2 (Chen, Zoe and Hua). Hua did part of her undergraduate study in China and finished her undergraduate study in Australia but was also categorized into group 2 because her university study experiences in China seemed to have influenced her learning in Australia in a way that was similar to members of this group. Participants who had working experiences after completing their undergraduate degree in their home country were categorized into group 3 (Yan, Avery and Lucy).

The primary purpose of this chapter was to mirror ICSs’ experiences as closely as possible so as to provide solid ground for conceptual analysis. This purpose coupled with limitations on scope of the study resulted in a final selection of six narratives. The principle that guided the selection was to select as wide a spread of participants as possible. The methods used to implement this principle came from a joint influence of historicity (two in each group) as well as the data itself (every group happened to have one participant who was very successful with her academic achievements back in China and one who was not as successful). Therefore, the six consisted of two participants from each group, and each group had one who was very successful with her academic achievements in China and another who was not.

The final six ICSs’ demographic data, relating to country of origin (city), age range, length of stay in Australia and level of study when this interview took place, is presented in the following table.
Table 4b.1

*Interview participants’ demographic data*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Interviewee</th>
<th>Home city</th>
<th>Level of study achieved in China</th>
<th>Age group (Years)</th>
<th>Length of stay in Australia (Years)</th>
<th>Degree of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sarah</td>
<td>Zhejiang (Wenzhou)</td>
<td>Up to Year 12</td>
<td>20-25</td>
<td>8</td>
<td>GD-1</td>
</tr>
<tr>
<td></td>
<td>Xin</td>
<td>Hubei (Wuhan)</td>
<td>Up to completing undergraduate degree</td>
<td>26-30</td>
<td>6</td>
<td>Master’s</td>
</tr>
<tr>
<td>2</td>
<td>Hua</td>
<td>Liaoning (Fushun)</td>
<td></td>
<td></td>
<td>4.5</td>
<td>GD+2</td>
</tr>
<tr>
<td></td>
<td>Chen</td>
<td>Xinjiang (Urumqi)</td>
<td>Had working experience after completion of undergraduate degree</td>
<td>31-35</td>
<td>3</td>
<td>Master’s</td>
</tr>
<tr>
<td>3</td>
<td>Avery</td>
<td>Taiwan (Kaohsiung)</td>
<td></td>
<td></td>
<td>4</td>
<td>GD+</td>
</tr>
<tr>
<td></td>
<td>Yan</td>
<td>Xinjiang (Turpan)</td>
<td></td>
<td></td>
<td>4</td>
<td>GD+</td>
</tr>
</tbody>
</table>

As the above table indicates, interview participants came from various regions of China (North West, North East, South East, Central, and Taiwan) and they also represented a wide age range, from 20 to 35 years. Their age range seems to have corresponded with the level of education they achieved in China. Their length of stay in Australia also illustrated a wide range, from three to eight years. Of these six interviewees, two were studying for Master’s degrees when the interview took place, and the others were studying a one-year graduate diploma course.

4b.3 The narratives

These narratives were threaded together by the research questions that this study sets out to address. ICSs’ learning experiences, Beach’s (2003) speculation on leading activity systems, Engeström et al.’s (1995) speculation about polycontextuality and previous literature pointing to the critical role these students’ cultural and educational heritage plays in understanding issues they experience with their learning in Australia (see Shi, 2006) helped to define the macro scope of these narrative cases. In particular this helped to limit each narrative to include their respective leading activity systems of university learning in Australia, their

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1 GD- stands for interviewee’s pursuit of their current Graduate Diploma course without achieving a Master’s degree

2 GD+ stands for interviewee’s pursuit of their current Graduate Diploma course with a previously achieved Master’s degree
previous respective leading activity systems of school and/or university learning, and also their respective activity systems of family, peers and/or work. The micro structure of these narratives was particularly guided by theoretical tools of mediation, contradictions, the collective activity system model, polycontextuality and boundary crossing used in the model surface of the Change Laboratory Approach. These four theoretical tools helped to explain how their experiences were framed by their participation in various contexts (school learning, family, university learning, peers), the dynamics within these contexts, amongst these contexts, and root causes of recursive problems. The following sections offer detailed narratives about the selected participants.

4b.3.1 Xin’s narrative

![Political map of P. R. China with Hubei province highlighted.](image1)

*Figure 4b.1* Political map of P. R. China with Hubei province highlighted.

![Political map of Hubei province with Wuhan city highlighted.](image2)

*Figure 4b.2* Political map of Hubei province with Wuhan city highlighted.

4b.3.1.1 Introduction

Xin is from Wuhan, the capital city of Hubei province. She did her primary and secondary education in Wuhan until she turned 16.
I was going to a place in the university, and I found it is really boring, you know you just go there, every day the same thing, but I do not want it.

Wanting to do something more challenging with her life, she decided to come to Australia to further her education, as she believed she could

learn more in this kind of contrast and difference, it is kind of torture, but torture is blessing!

Xin’s belief reflected an underlying assumption that higher achievement is associated with harder experiences of learning. Her interpretation of hardship as a blessing reflected a divergence from the logical understanding of hardship. Her interpretation seems to demonstrate a very deep-rooted influence from the Confucian traditional belief that prior to assigning great missions to an individual, he/she must endure both physical and mental hardship (Li, 2001). Xin’s reflections on her learning experiences in China and in Australia are captured and detailed in the following discussion, which reflects her belief that learning in contrasting and different contexts is both difficult and rewarding.

4b.3.1.2 School learning in China: Family, school and peers

Family

Xin believed her parents did not put much pressure on her while she was at school:

my parents were not very pushy and demanding in terms of my performance at school.

But I think they did hand over the responsibilities to me and stressed that every choice I made would lead to different pathways in life.

Xin believed her parents brought her up through reason and support. This contradicts the traditional Chinese value of “parental control and discipline of children” (Lin & Fu, 1990, p. 430). One outcome of her parents’ use of reasoning was her achieving independence in relation to decision-making. She argued that because her parents emphasized that every decision she made would lead to different life pathways, she had the opportunity to
understand both the importance and the consequences involved in the process of decision-making. Her parents’ nurture of independence supports Lin and Fu’s (1990) finding that Chinese parents encouraged their children’s development of independence.

Xin contended that her parents helped her to become an independent decision-maker, and they also fostered various values, for instance, time-management skills, self-regulation skills and discipline.

One thing they taught me which was really valuable was time management. It was important for me to set up routines in my daily life and stick to it no matter what I decided to do within a certain amount of time.

Her development of discipline/concentration corresponds to Li’s (2001) argument that this attribute emphasizes “studying with consistent resolution and dedication without ever swerving from it” (p. 124).

**School**

Xin argued that her learning in high school was examination-orientated, which supports Li’s (2009) argument that examination system continues to dictate school learning. This examination-oriented learning was reflected by frequency of exams (every week, every month), and also by her teachers’ practice of ranking. She claimed that after every test, her teachers ranked the students so that they were consciously aware of how they had performed. She believed that this ranking practice in turn added more stress to her learning experiences in junior high school.

The teachers rank you, like they rearranged the mark like who is got the highest, who is got the lowest, and the next time, when they rearrange you into different classroom for the exams, they actually follow that order, so you can see that in a certain room, that the top 30 and that goes on, so you just know where you are at all the time, they make you aware of that.
The frequency of exams coupled with teachers’ practice of explicit ranking implied the importance of doing well in exams. This importance was further demonstrated by the critical role the examination system played in terms of determining the future (cf. Bai, 2010). Xin explained it this way:

*the end exam is kind of determining your future, in terms of which senior high school you are going to go to and that is going to decide which university you are going to go to.*

Xin noted that frequency of exams and her teachers’ constant practice of ranking led to her internalizing how important it was to do well in exams in terms of determining her future (cf. Kaptelinin & Nardi, 2006). As a consequence this internalization further influenced her behaviour (for instance, working hard).

*I had to stay up till one o’clock every night. I remember I had to start my day at around 7, we did not get much time for lunch or break or anything, and it was highly stressful.*

In order to achieve well in the final exam, Xin worked hard: staying up late and not taking breaks. Her approach seems to imply an underlying belief that effort leads to the expected outcome of success. In addition, accepting or voluntarily selecting physical hardship like sleep deprivation and stress also seems to have demonstrated her adherence to hardship as a precursor to great rewards (cf. Li, 2001). The great reward in her case was instantiated through her receiving an offer from a good senior high school.

Xin speculated that because she did well in her exam, she was accepted to one of the best senior high schools in the city. She explained that the senior high school she went to was a very affluent boarding school. However, she said that her learning experiences at this school were relaxed, which she attributed to the fact that some of the examination pressure was taken off her. As she explained
being a student in this school also does not have pressure into getting to universities,
because we have been given a quota, you know, almost half of the classes are going to
the university.

Xin’s relaxed learning experience was only possible because the examination pressure was
taken off. The practice of assigning a quota for university admission did not indicate that
exams were not important. On the contrary, it illustrated how important exams were (cf. Li,
2009).

Lower examination pressure made relaxed learning experiences possible and it also made
a series of other practices possible. Xin stated that these practices included:

*extra curriculum activities, many elective subjects, no extra homework and exams and
a diverse group of teachers from overseas, who brought in the different idea of
teaching into the classroom.*

Xin’s learning experiences in these two high schools appear to be in complete contrast.
Although her junior and senior high school learning experiences were different, even
contradictory, both pointed to the critical role that exams have played in her schooling.

Peers

Like Sarah (see appendix 3 for details), Xin was also bullied by her peers. However, her
approach was totally different from Sarah’s. Instead of becoming a member of the bullying
group, Xin chose not to join in. Moreover, she did not even make the effort to try to change
her peers’ actions, rather she left them alone.

*I was bullied at one stage when some girls said nasty things and spread rumours
about me. I started to withdraw from social life a bit from there but I learned to be
resilient from that unpleasant time.*

Influences from her peers contradicted Chen et al.’s (2011) finding that the group of peers is
also an important context where learning occurs.
Xin’s independent decision-making as an outcome of her parents’ intervention through reasoning and support, coupled with her implicit belief in physical and mental hardship as precursors to great achievements, might have helped her to make the decision to choose to leave the bullies alone because she would have been more interested in achieving highly than hanging out with her peers. In addition, having supportive and non-authoritarian parents, and also being very successful with her academic study, she received support from both her family and the school, which might also have contributed to her deciding to leave bullies alone.

4b.3.1.3 Learning in Australia

Xin stated she was included in the quota assigned for university admission. However, she did not choose to pursue an undergraduate degree in China. She believed this was neither interesting nor challenging. She decided to embark on a more challenging and interesting route: pursuing an undergraduate degree in Australia. Her choice seems to have further implied her conformity to the Confucian value of hardship as a precursor to great missions (cf. Li, 2001).

The challenging and interesting route Xin took was materialized through her pursuing an undergraduate degree in Australia. However, after she arrived, the challenge she encountered was much greater than anticipated.

*It was so hard, and he [the host for her home stay] speaks English all day, I do not like it. The food was terrible, and everything was just felt so different.*

Xin felt she really had difficulties in areas of English language fluency and complying with the new system in general. Initially these difficulties were so acute that it made her wonder why she had come to Australia in the first place.
Although regretting her decision occasionally, Xin was determined to keep going. During this process, she also managed to overcome her difficulties.

But it just worked out. You were kind of living in a new context, you have to fit in, you had the obligation to fit in, so you have to learn as you go along, so there is no choice, just learn how they do things and how they function every day, and see what I can learn from it.

Through observing how locals did things and functioned every day, Xin learned to cope with the new system. But what motivated her to want to fit in and why did she tell herself she had an obligation to fit in? One obvious explanation lay in her belief that physical and mental hardship was a precursor to great missions (cf. Li, 2001). Thus, hardship functioned as the necessary condition for rewards: her motive. This might explain why she felt she had an obligation to fit in. And the need to fit in seems to have driven her to search for strategies to do so. She thus chose to observe and learn from other people to achieve her goal of fitting in. Her choice of observing and learning from other people seems to have reflected her use of the skill: learning through positive modelling.

Feeling of separateness: “You”, “your” from “me”, “my”

After she learned how to cope with the new system, the purpose of being able to do so no longer seems to have motivated Xin, rather, the choices of doing so (whether she wanted to or not) seem to have. This was reflected through her discourse on the necessity of doing things ‘their way’:

I have to speak the language, I have to do the things the way they do it. If I do not, they do not value what you are doing at all.
Although Xin appears to be complaining, it points to her dissatisfaction with the current practice of privileging the local dominant culture and marginalizing or minimizing the minority cultural group that she belonged to. In addition, her conscious division of ‘you, your way’ from ‘me, my way’ also indicated that she positioned herself as outside the mainstream group and was unwilling to break that boundary.

*Three of them, I was the only one with black hair in the classroom, they just know and then they just sit with themselves and exclude you, no one talks to you, but that is hard,*

Xin revealed that being excluded really felt unbearable. She did have the desire to be part of the community. However,

*I did not know how to negotiate, I did not know how to say hi, no one ever told me that.*

Xin wanted to join in, but she lacked tools to do so. This realization coupled with her feeling of crisis (i.e. what am I going to do?) drove her to initiate contact.

*At some stage, I had a little bit attempt to say hello to some people, I feel like still at some point, I could not fit in*

Xin tested her new initiative but this test failed. She then stopped initiating more alternatives. Also because others did not make any effort to try to include her into this community, her sense of separateness was strengthened.

*I just made that conscious decision; I am just not going to do it.*

Xin’s decision making regarding being part of the community was identified as a continuous identity negotiation process. Although she eventually chose not to be part of the
community, a diagnosis of ‘passive’ would be a misread of Xin’s activity. Although Xin was engaged in an active process of identity negotiation regarding whether to be part of the community, this nevertheless does not support Wang’s (2012) argument that ICSs are capable of making adjustments and changes regarding “communication skills, ways of thinking and perceiving” (p. 533) to meet the learning expectations of their host community. Xin did actively negotiate her identities but this did not help her to achieve optimal outcomes, where collaboration amongst peers, a learning expectation of her host community, is encouraged.

Apart from being excluded by her peers, Xin also said that some of her lecturers also purposefully excluded her:

*some teachers, they are racists, they hate Chinese for some reason, or they hate I do not know, they just do not include you, they do not even try to help to understand you, I mean they are educated people, but they still have that you know, they have the ‘otherness’, they think you are not us.*

Xin interpreted this as some of her lecturers hating her and ‘othering’ her. Her impression might have been coloured by her problems with English and her lack of familiarity with Australian social norms. However, she accepted their unprofessional practice:

*if you cannot do it, then that is fine*

The unequal relationship existed between the teachers and herself that Xin internalized with her learning in China restricted her to act to respect this hierarchy. This prohibited her from embracing a refusal of her teachers’ racist practice. This supports Wang’s (2015) argument that Chinese students were constrained by their deference to the teacher’s power or authority.
Xin did not have a sense of belonging in her learning community. She had made an effort to join in but this failed. This implies that individual effort was inadequate in resolving this problem. When there was no visible effort made by the other parties (peers and lecturers) Xin’s decision to remain an outsider (inertia reinforced) seems to have been reinforced.

Although Xin emphasized that this exclusion did not affect her academic performance much, it did make her learning experiences unpleasant and even unbearable. Yet she had to push through and force herself to continue. It might also be worth noting that as a high school student, her experience of being bullied (and learning to be resilient) might have helped her to survive the unbearable experiences she encountered in Australia.

Voicing opinions in class

Apart from being isolated in the learning community, Xin also emphasized her difficulties in voicing her opinions in class.

*I could not contribute in the classroom very well. Like first, I got language problem, and next I did not do the readings, but whenever I can do both and understand the topic better than anyone else in the classroom, I still cannot do it, I do not feel comfortable doing it. I feel all the eyes on me, I do not feel that is my turn, I do not feel I should initiate it in the first place; I wanted you [the teacher] to say, ok, here is your turn, here is your turn.*

Xin felt expressing her ideas in class was only possible when she was given explicit permission to do so. Whenever she was given the opportunity, she was happy to voice her opinions. Otherwise, she did not feel comfortable doing so. The reason/s behind her inability to voluntarily voice her opinions in class might lie in her embedded belief in the unequal relationship between the teachers and herself (cf. Wang, 2015). Her action of waiting for the
teachers to nominate her to participate seems to indicate her respect for them and gives salience to this unequal relationship.

After witnessing alternative courses of actions (i.e. local peers voicing opinions without explicit teacher permission), Xin also wondered whether she could embrace this new action. Therefore, she envisioned a new model that attempted to embrace this new course of action. However, this new model was rejected through her degrading her abilities i.e. that she would not be able to speak English and not able to remember anything:

   if I was not asked by the teacher, I feel I cannot speak English, I cannot remember what I was going to say.

Her use of humiliation of self as an envisioned outcome of her new action in voicing opinions without teacher permission further proved her unwillingness to challenge that unequal relationship. This unwillingness was further supported by her envisioning a chain reaction – if she voiced her opinions without teacher permission, she would not be able to speak English. She believed this would result in further humiliation because she felt her local peers would have thought she was just dumb:

   the locals do not understand you, they think that you are just dumb, that is it.

Not wanting to lose face, coupled with her unwillingness to challenge the unequal relationship between the teacher and herself, prevented Xin from voicing opinions without explicit permission. Not being able to embrace this new action (which Xin viewed as unimportant), her mentality of remaining an outsider, as a consequence, was strengthened. What further contributed to her decision to remain an outsider was her realization that fitting in was not a crucial condition to achieving academic success.
Now I just gave up, I do not say anything, that is me, I can write an essay and I have all the opinions and that is it. I am not fitting in, I am pretty good, and so I do not have to fit in your system. Yes, that is what I think [laugh].

Although Xin was happy to remain outside the learning community, it is also worth thinking about what she could have done to achieve more constructive outcomes. In addition, to achieve more constructive outcomes, her lecturers and local peers might have needed to become more culturally sensitive and could have appreciated or celebrated the diversities that were brought by students of other cultural backgrounds.

**Essay composition**

Xin only experienced limited challenges with essay writing, unlike the students in Lee et al.’s (2013) study, in which they found that essay composition was the most difficult task that international Chinese students (ICSs) needed to manage. She attributed her not experiencing much challenge to her one-year foundation course.

_in foundation studies, one of the subjects that is really helpful is English for Academic Purposes, they basically teach you how to write an essay at the university standard, and so how to do intro, how to do body, and how to do a conclusion, including how you should have clearly standard answer for each paragraph. And also have a trial arts subject, which is called History, and it tells you how you can put your ideas together, how you can make your argument looks more complicated, so you know how you sit on the fence, yes, ok, I think this is right, but hang on, it might not be that right, because this and that. And conclusion I think it is 60% right and 40% not right. And for improvement, I think I can do this and I can do that. And for further reference, I think I can do this and I can do that. So these are like my tools, they get me through._
Xin believed foundation studies equipped her with the tools for university study, and having these tools at hand, she believed it not hard to meet learning expectations in Australia.

*It is just a skill, once you learn it, off you go.*

In addition, Xin seems to be consciously aware of the hidden conventions in academic writing in Australia. Because of this awareness, she was able to play the “new game” very well.

*Foundation studies just gave me the very obvious tools, like how to write, and just gave me a sneak peak of what was the culture is like. So I think that helped most, but you need that, a course or somehow in your life someone teaches you how this whole thing functions, you know how you transform your knowledge, argument and everything into to a new order, which is how they write essays here and your thinking, your argument, how you should verbalize it as how they do it here. This is like the vessels, the vehicles.*

It appears that these new tools on how to draft essays as well as Xin’s realization of how the system works helped her to avoid what otherwise would be a challenge. Apart from enriching her cognitive mentality, Xin also kept practicing writing essays until she internalized these new ways of writing (cf. Kaptelinin & Nardi, 2006). And this internalization in turn helped her to excel at her academic study:

*In my first year, it took me on average one to two weeks to write an essay for around 2000 words, which is unthinkable now, now it is only three days maximum, or one night which is very normal [laugh]. Yes, you just get better as you go along; there is no short cut to it, if you write more essays, if you read more, then you just get better. I still get high marks.*
Xin’s mentality that practice makes perfect helped her to internalize new ways of writing. This also reflected that she had internalized the cultural value of ‘practice makes perfect’. This practice helped her to excel. It is also important to note that intervention from foundation studies seems to have worked well together with an individual willingness to both accept and positively internalize this intervention. Xin used what she learned from this particular teacher: intervention along with a resource that she gained from her past experiences with school learning: ‘practice makes perfect’ to help her to internalize Australian conventions of academic writing. This supports Hu and Lam’s (2010) finding that ICSs are involved in active processes of drawing on strategies to improve their writing. It is also consistent with Tran’s (2008) argument that ICSs exercise agency in solving the problems involved in writing.

Reading: Amount of material to get through

Xin said that she also experienced challenges with her reading in relation to the amount of material she needed to get through. This is consistent with Lee et al.’s (2013) finding that managing the reading load is a particular challenge area that ICSs need to handle. Again she told herself that she had an obligation to do it. This determination again reflected her belief that hardship was a precursor to great missions. This belief seems to underlie her enduring this challenge as an obligation (must do it). In order to achieve the goal of overcoming this challenge, she sought the means to help herself to do so.

*There is no trick to it, the more you do it, the better you will get,*

The belief that practice makes perfect in turn helped her to increase her reading speed. This increased speed assisted her in overcoming the challenge of having too much reading material. Her use of various approaches including practice makes perfect helped her to handle her challenge with reading. This supports Gu and Brook’s (2008) finding that ICSs were
active, competent and also capable of overcoming their challenges. This finding is also consistent with Tran’s (2008) argument that ICSs took active roles in drawing on various strategies to handle issues with studying at university.

**Agency: Total versus limited control**

Apart from experiencing a challenge with her reading speed, Xin also noted a conflict existing between her learning experiences in China and in Australia in relation to limited and total control of agency. She declared that with her learning in China, she was not in control of what she learned, but was in control of how she learned. Regarding her learning in Australia, she asserted she had control over both, and she preferred to have control over both. However, she also argued there were problems with having too much control over what and how she learned. One of these was having too much free time to manage. She firmly believed this required good time management skills. Facing the danger of wasting time, she claimed she had to draw on skills that she gained from her Chinese education system to avoid this danger. She said if she had not known how to use time wisely, she would have wasted time easily.

*I learned in China how you can cope with that pressure, and everything, and exam conditions, as well I learn in China that you need to exercise, I think that is the most important things I learned out of my education system. So if you have never been taught how to think inside a box, if you do not have that torture, like the rules you have to follow, just rules you have to follow and how you should manage your time and everything, you can never ever be able to get outside of that box that well.*

Xin had much free time to take control and manage by herself. Therefore, she claimed that her learning was more dependent on herself, on how she managed and organized time and pressure. According to her, the skills required for this were those she had gained from her Chinese education. She thought because of the education she had had in China, which taught
her well how to think inside the box (this included being very well-organized, putting a lot of pressure on herself to achieve well within a strict structure), she could do well outside a strict structure. Moreover, she also noted her specific growing-up experience (in particular, independence, discipline and self-regulation skills), to a large extent, helped her to manage many of her challenges. Her use of resources from her learning in China to resolve problems here strongly supports Engeström et al.’s (1995) argument that boundary crossing has a strong problem-solving capacity.

4b.3.1.4 Summary

Concerning Xin’s learning in Australia overall, she encountered challenges in the areas of writing, reading, self-regulation, fitting in, voluntarily voicing her opinions in class, language and learning culture in general. With respect to language and learning culture in general, she overcame her challenges by telling herself that she had to fit in and by applying an internalized tool on learning through positive modeling. A joint effort between herself and the staff from foundation studies was made in managing challenges regarding structure and argument in essay writing. Her belief in no shortcuts to success and practice makes perfect helped her to remove the obstacles with reading. With respect to self-regulation, what she relied on to avoid the danger of wasting time was a range of outcomes from her Chinese education system.

Xin showed great success in relation to the above mentioned areas, in other words, she was very successful academically. However, with reference to voicing her opinions in class and fitting in, she experienced huge difficulty. This difficulty was the result of her implicit adherence to the hierarchical relationship between teachers and students and giving priority to saving face, which seem to have prohibited her from stepping out of her comfort zone to try alternatives. This challenge was further contributed to by her local peers and some teachers’ purposeful practices of excluding her from the learning community.
4b.3.2 Chen’s narrative

Figure 4b.3 Political map of P. R. China with Urumqi city, Xinjiang province highlighted

4b.3.2.1 Introduction

Chen is from Urumqi city, Xinjiang province, which is in the most north-western part of the People’s Republic of China. Chen said ever since she was a little girl she wished she could enter a good university and this dream came true when she got an offer from one of the most prestigious universities in Australia. She explained that what motivated her to have this dream was the belief that once she was in a good university, she would be more knowledgeable, more welcomed and would be guaranteed a reputable job. Her belief is consistent with the traditional value relating to education: accomplishments/purposes of learning are linked to an end (Lee, 1996). This belief, however, was eroded by her university learning experiences in Australia. This was reflected through her gradual realization that the university itself did not offer these benefits, rather it was her own effort that determined what outcomes she would gain. Although she realized that it was she herself rather than the university degree that could make changes in her life, she still felt she was lucky to have the opportunity to pursue study overseas. The following narrative offers details on how her belief was eroded and how an overseas learning experience nevertheless represented a good opportunity.
4b.3.2.2 School learning in China: Family, school and peers

Family

Chen said while she was a high school student, her parents did not intervene in her learning much. As a result, she felt supported. Her parents also fostered various values and skills, such as her internalization of her parents’ belief that examination ensures a good future (cf. Lee, 1996)

Chen said she loved to study; as such, she invested lots of effort studying. This she believed was consistent with what her parents wanted from her. The reason behind her parents’ non-intervention seems to lie in the consistency between her parents’ and her own motives. As a result, this consistency did not pose a need for her parents to intervene. This conclusion is supported by their frequent intervention in her sister’s study:

my parents put a lot pressure on my sister, as she loved to play around. They normally asked her how much score she got and what level of performance she achieved.

Her parents’ varied approaches to her and her sister’s learning indicates that their non-intervention was conditional and was grounded in the consistency between her and their motives.

School

Chen defined her school learning experiences as examination-focused learning in that the entire purpose of learning was to pass exams to achieve “the end” of entering a university. This seems to have been strictly tied to the role exams played in ensuring a good future (Bai, 2010). This was shown by Chen’s belief that once she was in university, she would become more knowledgeable, and would be able to obtain a reputable job.
Chen’s belief that exams ensure a good future resulted in her being motivated to get good scores. This objective in turn motivated her to initiate activities (for instance, spending after-school hours studying) that would assist her to achieve this motive.

Chen declared getting good scores was a goal that she tried to achieve, which also was an ultimate objective that her teachers tried to realize. This supports Li’s (2009) argument that the examination system continues to dictate school learning in China. She stressed that this goal and the fact that exams mainly tested textbook knowledge drove teachers’ adoption of a textbook-orientated curriculum.

*The teachers will focus on the textbook, yes, normally they will focus on the textbook and they will follow the textbook structure.*

The important role exams played coupled with the fact that they mainly tested textbook knowledge restricted the teachers to a textbook-focused curriculum. This in turn limited the teachers’ practice to a predominantly teacher-centred pedagogy. Chen argued that this practice was reflected through her teachers focusing on delivering textbook knowledge, and also through the students just listening quietly.

There seems to be no direct cause-effect relationship between teacher-centred teaching and the students’ behaviour in listening quietly. In other words, a teacher-centred pedagogy does not necessarily lead to students choosing to listen quietly (i.e. no matter how teacher-centred the pedagogy was, students could still choose not to listen quietly, they could still question, for instance). What else contributed to students listening quietly? Chen said,

*in that culture, teachers are not people, they are the god, they are the god with knowledge, and they are very knowledgeable people.*
Chen believed that the teachers represented expertise, and also a higher moral status. This indicated her internalization of the hierarchical relationship between the two parties (Wang, 2015), and also implied that whatever was delivered by the teacher was absolutely right. This contributed to her willingness to respect teacher authority (conservative) and accept teacher expertise (wholehearted acceptance).

*We were just students, we sit there quietly and behave very conservatively, like, ah, And we need to show respect. And we do not question if the teacher did something wrong. We never challenge them, we felt whatever the teacher delivered to us is the good thing, it is absolutely correct, we never question, I think. I never questioned myself.*

Not asking questions to avoid challenging teacher authority or expertise shows Chen’s willingness to respect and accept teacher authority and expertise. In order to show respect to teacher authority and expertise, Chen was limited to act within the framework of obedience: she never questioned. This seems to imply that questioning was predominantly tied to either challenging teacher authority or expertise. The action of questioning was thus ruled out as it was viewed as being disobedient and/or disrespectful.

The action of asking questions was also suppressed by students’ association of it with revealing their own stupidity. Chen claimed students did not ask questions in class. If any student asked a question, it meant they did not possess the concept or knowledge the teacher had tried to deliver.

*If you (want to) ask a question, you will consider the other students - they will look down upon you. So I do not ask questions (in class), because I do not want people to see me as a low achiever.*
Chen began giving priority to saving face early in her schooling, which started to regulate her actions. As a result, she prohibited herself from committing to actions that would result in losing face. The action of asking questions in class, which means losing face, was thus prohibited.

Chen argued that student obedience in the Chinese classroom was shown by not challenging teacher authority or expertise, and by their obeying teacher instructions (for instance, taking notes, or doing assigned homework). Regarding homework, she said that although the forms varied (for instance, worksheets for maths, copying new vocabulary dozens of times for Chinese literacy), they all seem to have served the same purpose: reinforcement of their memorization of textbook knowledge.

Chen’s teachers’ practices of requiring students to copy vocabulary repetitively or to do worksheets so that they could memorize certain mathematics formulae illustrated her teachers’ adherence to the underlying belief: practice makes perfect. This was further instantiated through them asking students to copy vocabularies they did incorrectly in exams up to 100 times.

\textit{And if you participate in an exam, and your result is very low, the teacher will punish you to copy the vocabulary which you did wrong, they will ask you to copy the vocabulary 50 times, or 100 times [laugh].}

Although on most occasions Chen completed her homework to show her respect for her teachers’ authority, there were still times that she failed to complete her homework. And on those occasions, she received punishments from her teachers. Her teachers’ practice of punishments reinforces one of the qualities that Chinese teachers had/continue to have: being strict (Wang, 2015).
If you did not do your homework, you will get punishment from the teacher, yes. The teacher will tell you that you need to do ah, cleaning the corridor, to clean the tables for them after class, or the teacher would ask you to do the homework in her office, or the teacher will ring your parents, I think the best punishment is you were asked to clean the toilet. The toilet there in my high school was really different from here, it is very large, there is no privacy, and very dirty.

However, Chen said, students failing to complete their homework might have been the result of unavoidable factors (for instance, needing to look after a younger sibling). The teachers’ intervention in this problematic situation through punishments further increased the inequality between them and their students, and also failed to achieve student obedience:

some students practice how to use the left hand to write, some of them can write with both hands, so they can write quickly [laugh], and some students will use two pens put together, one line, second line, one vocabulary, that means you write once, you get two vocabularies. Yes, [laugh].

The above seems to show that even the most taken-for-granted behaviours might result in unexpected innovations or outcomes (e.g. students practicing writing with two hands or two pens). This shows that although these students appeared to have obeyed teacher instructions, they were against it. The teacher-student relationship reflected a constant battle between the teachers: using punishments to achieve student obedience and the students: being unwilling to accept this.

Peers

Chen believed once she entered a good university, she would be guaranteed good employment. This belief motivated her to work hard to obtain good scores to achieve her goal of entering a good university. Approaches she used to achieve this goal included putting extra
effort into her learning, and included use of collaborative learning and reflective skills. Her use of collaborative learning was shown through her learning collaboratively with her peers (she quite often went to her friend’s home to do maths homework together, for instance). She explained that she and her peers normally completed their homework on an individual basis, and then checked with each other whether they had arrived at the same answer. Whenever there was a difference, they would verbally compare the processes they had used to arrive at their answers. This in turn helped her to reflect on the processes she took to arrive at the answers, and to make subsequent changes accordingly. Chen’s practice of reflection and collaborative learning supports Chen et al.’s (2011) finding that the context of peers is an important context where learning occurs. Chen’s practice of reflection was also shown by her use of it relating to her friendships. She said she wanted to maintain good relationships with her friends, so she often reflected on these relationships.

Chen argued that although students did practice reflection, this practice was limited because everything was prepared for them. At school, for instance, the teachers told her what she needed to learn, and she was totally familiar with everything in the society in which she lived. She believed this preparedness and familiarity meant she had a limited need to reflect. However, her use of reflection and collaborative learning argues against the perception that Chinese learners only learn through rote (Samuelowicz, 1987).

Chen’s belief in education as a means to an end seems to indicate that she studied for an extrinsic purpose. However, it does not preclude the conclusion that she was also learning for intrinsic needs. For example, she believed mathematics was useful in exercising her thinking skills, which inspired her to learn maths. She added she only needed new concepts to be illustrated and explained to learn them. Her strength in learning through abstract concepts and logical understanding contributed to her happy and rewarding experiences with learning.
maths. This also led to her being good at maths. She thus believed pure memorization skills would not assist her in learning maths, rather she needed other approaches (thinking and understanding for instance) to do so.

4b.3.2.3 University learning in China

Although she had not realized it in high school, Chen noticed that learning for intrinsic purposes was beneficial in the long run:

when I entered university; I picked up mathematics as well. When I learned topology, I felt the algebra I learned from high school was very valuable. But when I was learning in high school, I never thought that.

Although she had not realized the potential benefits of learning for intrinsic purposes while she was in high school, Chen still made choices based on her intrinsic interest (i.e. she chose mathematics as her undergraduate major). Her choice of major demonstrated a divergence from her belief about learning for extrinsic purposes.

Chen’s choice of major was grounded in learning for intrinsic purposes, which also brought another outcome: her enriched cognitive mentality about scaffolding learning:

your knowledge is built up step by step. It is scaffolding, it is not something you work on at the top, but you do not have the base

Although this belief was formed as a result of her making choices based on intrinsic interest, it appears to be a qualitatively different form of knowing: school learning as scaffolding. This new form of knowing consequently enriched her meaning perspectives.

In retrospect, Chen claimed that her undergraduate university learning experiences were similar to that of high school: her teachers were still highly respected, they also adopted a
predominantly teacher-centred approach, examination was still the main form of assessment, she still had much textbook-oriented homework to do, and still did not ask questions.

Chen further noted that as at high school, her university peers also influenced her learning to a large extent (Chen et al., 2011). Not only did she learn collaboratively with her peers, but she also viewed them as providing a source of motivation for her learning. She explained that in a competitive context, her peers often bore a role of competitor. This special status provided her with a source of motivation, in that whenever she saw a peer achieving higher scores, she would be in a state of unease and felt threatened. This uneasy state drove her to adopt whatever approaches she needed to achieve her ultimate goal of being the best.

Chen argued that the only thing that changed was her role as a student leader, which sometimes required her to spend class time performing other duties. As a consequence, she had to go to her teachers’ offices to enquire about what they had delivered. She, therefore, claimed she had the ability to ask questions of her teachers:

because I was a student leader, sometimes I was not in that lecture; sometimes I will go to the teacher’s office and ask the teacher about the things I am not familiar with

Chen had the ability to ask questions at university only when she was obtaining information about unfamiliar knowledge. Although she asked questions, these questions appear to have sat within her teachers’ representation of expertise. Her action of asking questions showed her respect for her teachers’ expertise.

4b.3.2.4 Learning in Australia

Transformation of belief

After Chen completed her undergraduate degree, she went to a prestigious university in Australia to study for her Master’s degree in teaching. Thus, she believed her dream of entering a good university had come true.
I know it sounds like stupid, but when I was at that age, that was my dream, I think once I am in the university, I can ah, I can be more knowledgeable people, more welcomed when I graduate, and I can get a reputable job.

Chen emphasized that she still believed good universities represented better jobs during her first semester of study at this university. However, she lost this belief at the start of the second semester:

I know lots of people, some friends, like they failed and they failed the course and they went back with less confidence, it is very sad. I changed my mind.

Seeing her friends failing their courses might have warned her that the university itself would not ensure she became reputable and knowledgeable. Her own reflection coupled with examples around her helped her realize that her previous belief was no longer valid in helping her to attain her goal of even wanting to pass. Positioning herself in the same sort of crisis as her friends, she thought:

I think it is no matter about the university, it is yourself. Because, if you do not learn, if you do not improve through different ways by yourself, people [will] not help you, no matter where you are.

In order to survive, she needed to attain autonomy. This new belief coupled with various other approaches (for instance, reflection) helped her to transform various behaviours and beliefs. This was demonstrated through the transformation of her goal of learning to pass to learning for self-improvement. According to Chen, this transition was further assisted by her dissatisfaction with the imbalance between the high cost of tuition fees and her planned outcome of just passing assignments. Her dissatisfaction with the exchange value of the higher education she was getting drove her to overcome this imbalance. Another outcome she
achieved as a result of this new belief was the realization that she was unprepared to be a teacher in the new context. This realization as a consequence assisted her in searching for various approaches to improve her situation.

**Group discussion as a new form of learning**

Chen emphasized that the biggest surprise she had during her first class in Australia was that she was assigned to a tutorial group.

*I still remember one tutor said I will group you, I will let you be a group of five. I do not understand why we have to be a group of five.*

Chen’s surprise seems to be produced by her tutor’s use of group discussion as a means of learning and the fact that she did not know what a group discussion was, let alone how to use it to achieve other purposes of learning. This demonstrated a tension between not knowing what group discussion was and the goal of wanting to use tutorial opportunities (such as group discussion) to learn. This tension was resolved after the tutorial when she grasped that the purpose of a group discussion was to share ideas with her peers and to reflect for self-improvement:

*in that group discussion, you get ideas from other people, if people’s opinions are different from yours, then you analyse theirs, then reflect on yours. You may automatically compare these two different opinions*

Her resolution of this tension seems to indicate that she used appropriate means to achieve her purpose of understanding the purpose of group discussion. The approaches she embraced included reflection and learning from her peers, who provided a model for her to learn from. This further supports Chen et al.’s (2011) argument that the context of peers is an important context in which learning occurs.
Voicing opinions in group discussion

Chen believed that a group discussion was a form of learning through which ideas were shared and communal learning occurred. Although she understood this, she mainly listened to what her peers had to say, instead of offering her ideas to the rest of her group. She stressed that the main barrier prohibiting her from contributing to the group discussion was her low language proficiency skills, particularly listening comprehension. This seems to have reflected an existence of a tension between her problem situation of not understanding what her peers were talking about and her lack of a ready means of resolving this. Not being able to understand her peers led to her feeling nervous and stressed. This in turn pushed her to search for the means to resolve the pressing issue. The approaches she used were complex, which included listening to music, watching multimedia, reading books and talking to peers. She believed that these methods improved her listening comprehension skills.

Although her listening comprehension skills improved, Chen noticed that she still could not contribute to group discussion because of her lack of background knowledge about what her peers were talking about. Not being able to understand her peers made her feel very stressed. This stress was a result of tension between the problem situation of her not being able to understand the topic her peers were discussing and her lack of means for resolving this, which drove her to adopt new approaches. The approaches she used included reflection, observation and a combination of these two. She observed that Australians were highly interested in sports, so she read about that so she could discuss it:

what I felt is that Australian people, they are very keen on football, they are very into football, sports, I think. At that time, I read stuff from last year I read the newspaper section on sports, so I know some (thing about the) players.
These efforts alleviated her stress. Although she still could not fully understand the topics her peers were discussing, she could at least guess what her peers might have meant. Having the ability to make such assumptions resulted in her confidence being boosted.

Chen became more confident and could understand her peers but she still preferred not to participate in group discussions whenever she was grouped with local peers:

*when I talk to the local people, I will consider my accent, I will feel they maybe do not understand me, because of my accent, because my English is not that fluent. I felt they will laugh at me if I say something wrong and so I don’t speak*

Her concerns about her English fluency and her accent reflected her ultimate worry about not being understood by her local peers. Her belief that she would be laughed at if she made mistakes showed her concern for losing face. She did not allow herself to engage in actions that would risk losing face, for instance, voicing opinions, which she prohibited herself from doing. Her belief that she would be laughed at if she made mistakes showed her concern about losing face and her preference in preserving/saving face.

Liu (2002) examined ICSs’ silence from a cultural vantage point and concluded that saving face led to the choice of silence. Although ICSs appeared to be silent, they were engaged in an active process of analysing and synthesizing information (Liu, 2002). Therefore, silence might be mistakenly seen and interpreted as ICS being passive or having nothing to contribute. In this study, Chen used various approaches to improve her language and cultural knowledge. Although she chose not to voice her opinions because of her concern of losing face, reading her activity as ‘passive’ would be a misreading of Chen.

Chen’s interpretation of her local peers as not being sympathetic (because she thought they were laughing at her accent) also implied her intention of purposefully distancing herself
from her local peers. This intention of distancing herself from her local peers (and viewing herself as an outsider and them as outside the group of international students) also seems to have resulted from “group think”; which was defined by Janis (cited in Engeström et al., 1995) as “a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members’ strivings for unanimity override their motivation to realistically appraise alternative courses of actions” (p. 321). This prohibited Chen from embracing alternative courses of action. This was further shown by the different approach she used if her group members were international students.

When I was speaking to international students, I was totally confident; I felt they will not laugh at me even if I say something wrong.

English language: Listening comprehension

Chen claimed that the biggest challenge she faced with her learning in Australia related to proficiency in the English language. This was shown by her difficulties in understanding her peers in group discussion scenarios as discussed above. She also encountered similar challenges during her teaching at schools.

When I was practicing high school teaching in mathematics in the very first semester, in my class, one boy was sitting at the back of the classroom, he challenged me, he said “miss, why do you do it that way?” Then I explained very logically, then he sat down, he said something very fast, but I do not understand, but I know that he said something, then another girl sat in the front, she respond very very fast, and I do not understand what she said, she said square something.

Not being able to understand her students’ language was a pressing problem for Chen. This problem reflected a lack of a shared mental model (the same language) that she could use to overcome that barrier. This in turn reinforced her separation from her student (her
student said “Just forget it” in the end). The outcome of strengthened separation seems to have been driven by the tension between her goal of wanting to understand her students’ language and her poor listening comprehension skills, which led to the problem in the first place.

Chen felt that not being able to understand her students’ language was a serious issue, and her mentor felt the same way:

my mentor teacher said, Lucy asked you the question why do you square that? My mentor teacher told me, I have to understand their questions. Otherwise, they will not follow you. For that moment, I think yes, it is not only the language I speak, it is the language that the young people use.

Her mentor’s intervention coupled with her own reflection helped her to acknowledge that she needed to understand not only her subject knowledge, but also the language her students used. This deepened understanding coupled with her realization that different generations use different speaking styles assisted her to form the cognitive mentality that language learning was a continuous lifelong pursuit.

Because different generations prefer different styles of speaking. So I think learning a language is endless.

Chen’s understanding that language learning was a continuous lifelong process helped her to adopt various approaches to improve her language. These approaches included formations of new perspectives (e.g. practice makes perfect: improving language on a daily basis) and use of several other approaches:
so to improve the language, I normally improve my written language through reading papers, books, oral language, talk with people, and watching movies, I also read newspapers, and also through internet I watch talk shows.

The approaches Chen used included use of resources from her peers (talking to them), from her learning in China (practice makes perfect), and learning from her students.

Sometimes they will speak adolescents’ language like; oh, you’re bloody good. Before I was practicing (teaching at) high school, I do not understand, I will think bloody is negative, but there in high school it is positive, it is very positive, it is excellent.

The various approaches Chen resorted to, including reflection, practice, listening to talk shows and talking to her peers resulted in an improvement of her comprehension skills. Her use of various approaches to overcome this challenge supports Tran’s (2008) finding that ICSs do actively resolve their challenges. It also supports Gu and Brook’s (2008) finding that ICSs are active, competent and also capable of overcoming their challenges.

English language: Writing

Chen argued that her challenge regarding the English language was also demonstrated in her difficulties in the areas of writing. This challenge was initiated through a special experience she had with her very first assignment:

very first semester, and very first assignment, the teacher of mathematics, she grabbed me and talked to me for about 20 minutes, she said that I may have a misunderstanding about the topic, she said I did not answer the question, the teacher said, “I will give you another chance [laugh], to rewrite your assignment”

Rather than showing that she had difficulties with her written language, this seems to demonstrate that she did not know the implicit conventions about writing. The rupture
between herself and her teacher demonstrated a conflict between her not knowing the implicit conventions about writing and her need to complete assignments using these implicit conventions. The advice from her teacher sent her a warning and also inspired her to resolve the issue:

*I still remember that assignment, it is something that you need to tell specifically about how you will teach the student. I wrote lots of paragraphs about teaching, about teaching the topic, but I did not say I will teach, for example, I will teach $3x + 1 = 5$ and $x = -\frac{4}{3}$; I did not say step by step how I will tell the student, and what I will ask the students to do. I did not say it like that, what I did on my paper is by research, it is about the topic, so I did not answer the question.*

Facing the danger of failing, Chen felt horrible but her reflective, analytical skills and her teacher’s intervention seem to have helped her to resolve her conflict. She realized the importance of addressing requirements for assignment writing. Her challenge supports Lee et al.’s (2013) finding that understanding requirements was one of the obstacles that posed challenges to ICSs in the area of essay composition.

Knowing the importance of addressing requirements for assignment writing has impacted Chen’s assignment writing ever since:

*before I do an assignment, I need to analyse the instructions, what I am expected to do. That experience helped me to think in every inquiry, did I answer the question, did I write something that was expected, yes, I will go back and read these instructions.*

Chen’s use of a teacher intervention and a resource that she gained from her past experiences with school peers (a reflection) to help her to address the requirements for essay composition, supports Tran’s (2008) argument that ICSs exercise agency in solving the
problems involved in writing. It is also consistent with Hu and Lam’s (2010) finding that ICSs were involved in active processes of drawing on strategies to improve their writing.

Seeking assistance

Chen noted that it was the same teacher who suggested she seek language help from the Academic Skills Unit, which provided language help to international students. However, she chose not to go:

maybe because I was reluctant to say that I was not a good student, because I regard myself as a good student, so I did not go.

Chen seems to have interpreted the language program as providing assistance for under-achieving students. Wanting to maintain the profile of being a good student prohibited her from seeking help.

Because that program, what I felt is if you go to the language program, that means you are labelled, labelled as a student who has language barriers [laugh].

Chen’s unwillingness to be associated with negative labels reflects her intention not to lose face/her preference for preserving face. Her priority of saving face constrained her to act within the boundaries set by this rule. Actions that would risk losing face were suppressed, however much they might have benefitted her in Australia. Thus she did not seek help from the language program.

Answering teachers’ questions on a voluntary basis

Chen said she was unwilling to answer teachers’ questions voluntarily because she did not want to be viewed as showing off. This interpretation demonstrated her intention to avoid being disliked (Wang, 2012).
The beliefs/rules that she internalized with her learning in China appear to continue to constrain her to act within the limits set by these rules. For instance, her adherence to deferring to group consensus continued to constrain her to act within the limits set by this belief/rule: not answering questions to avoid being disliked. This consequently prohibited her from meeting the expectations of her current learning context, where answering questions voluntarily was promoted.

**Asking questions on a voluntary basis**

Without any knowledge or understanding about the implicit conventions of Australian learning expectations, Chen operated under the guidance of the beliefs that she internalized with her learning in China. For instance, her adherence to giving priority to saving face continued to constrain her to act within the limits set by this belief/rule: not asking questions to avoid losing face (did not want to be viewed as a low achiever) (Liu, 2002). This internalized rule thus became a barrier that prohibited her from meeting expectations in Australia, where asking questions voluntarily was promoted.

Chen said, however, if educators of ICSs could intervene in enriching/expanding their beliefs about their accustomed behaviours (e.g. not asking questions) by stating that asking questions is regarded as a sign of being clever, they might be able to modify their behaviours accordingly. She said she received such an intervention from one of her lecturers, that enriched/expanded her belief about her accustomed action of not asking questions.

*Ah, what I, ah very impressive communication with one lecturer is she said, if you have questions, you ask, then I think you are knowledgeable, you are clever. And if you have questions, and you do not ask, ... That means you are stupid.*

This intervention resulted in Chen believing that asking questions voluntarily also meant gaining face, which contradicted with her internalized rule/belief that asking questions
voluntarily risked losing face. This challenged her association of asking questions with risking losing face. This conflict of motives (to lose or gain face) helped her to realize that she needed to accommodate herself to the new system. This need motivated her to search for a means to meet this need. This was instantiated through her assigning a new identity to herself: a learner. The approach of assigning a new identity expansively resolved the perceived conflict between asking questions voluntarily as gaining face or losing face. It also depicted a new objective for her: to resolve the central issues of being a learner. Asking questions became a means to meet the needs of being a learner.

Ah, before that communication, I was very, very quiet. I do not want to ask, even if I do not understand. But after that communication with the lecturer, I changed my mind. Then, after that, I ask questions, I was willing to tell people that I do not understand, because, I do not think that means I have problems, it (just) means I do not understand something.

After her lecturer’s intervention, Chen assigned a new identity to herself and began to ask questions to meet the needs of being a learner. However, this transformational process did not fully take place. There were still occasions when she wanted to ask questions, but failed to do so:

I think I did not change myself completely at one time, I think gradually, ah, if I felt I am really in a struggle with that question, I will ask. Yes, so there will still be occasions I want to ask but I do not.

Asking questions only when she was really struggling implies that Chen’s lecturer’s intervention (showing her that asking questions meant she was knowledgeable and clever) did not help her to completely transform this problem area. It is worth noting that the reasons for this might be complex. Due to her learning in China, Chen initially adhered to giving priority
to saving face, and also to deferring to group consensus. Her teacher’s intervention broke the association of asking questions with the cultural value of saving face. However, asking questions as an indicator of cleverness worked against her adherence to group consensus, which constrained her to act to avoid being disliked-she wanted to avoid being self-congratulatory. Asking questions was thus prohibited by her intention to avoid being self-congratulatory.

Although Chen initially wanted to defer to group consensus to avoid being disliked, and achieved this through not ask questions voluntarily, she eventually overcame this limitation. This transformation was also driven by her realization that her peers could not help her with her work in the course. She believed that her teachers were the ones who could provide the correct explanations and she emphasized they were the only group that could address her needs of being a learner. Thus, deferring to group consensus lost value for her, because the group (of peers) could not help her reach her goals. This situation, her teacher’s earlier intervention, her assigning herself an identity as a learner and her use of reflective skills that she gained with her school peers in China all helped her to achieve transformation: she asked many questions voluntarily in the end.

4b.3.2.5 Summary

Chen’s learning experiences in China were influenced by various explicit and implicit rules, which to a large extent regulated both teachers’ practices and students’ learning activities (e.g. textbook-oriented learning). Moreover, her learning experiences also demonstrated the existence of various tensions and conflicts (for instance, teachers using punishments to enforce students’ obedience but students refusing to accept this). Failing to be aware of these conflicts consequently reinforced each party’s inertia.
Chen encountered various challenges with her learning in Australia. Her use of various approaches with/without teacher intervention expansively resolved some of these challenges such as asking questions voluntarily in class, improving her writing by addressing assignment requirements, learning for self-improvement, listening comprehension and group discussion as a new form of learning. On the other hand, her adherence to some internalized beliefs due to her learning in China continued to constrain her to act within the limits set by these rules, such as not seeking help, and not voicing opinions in a group discussion. This prohibited her from meeting some of the expectations of learning in Australia.

4b.3.3 Yan's narrative

Figure 4b.4 Political map of P. R. China with Turpan city, Xinjiang province highlighted

4b.3.3.1 Introduction

Yan is from Turpan, the capital city of Xinjiang province, mainland China. She completed her undergraduate degree in China. She then had several years working experience prior to her study in Australia. The following details her experiences of learning experiences in China and in Australia.

4b.3.3.2 School learning in China: Family, school and peers

Family

Yan said her experiences of learning at primary school were very relaxing. This she believed was because her parents did not put much pressure on her. She said her parents also
cultivated her moral values and fostered her independence. They sent her to a boarding school for junior high school in Jiangsu province, which is located in the eastern coastal region of China. This helped her to become independent.

Yan stressed her parents helped her to become independent and they also helped her to exercise autonomy:

*my parents are generally quite open-minded, they supported me, they provided a quite free environment for me to let me be who I want to be or who I want to achieve. So they never narrowed my thinking.*

Her up-bringing was offered as evidence that her parents opposed the traditional value of controlling and disciplining children (Lin & Fu, 1990). Yan claimed this offered her opportunities to develop autonomy, which assisted her to excel with her learning at school.

School

Yan believed her learning experiences were examination-orientated to a large extent (cf. Li, 2009). Examinations as Yan said acted as an important goal that every student tried to attain (for instance, learning to pass exams). They also acted as a regulative force that strongly shaped both students’ and teachers’ actions to achieve the ultimate goal of obtaining examination success. This was shown by her teachers’ adoption of textbooks, homework, lecturing, and exercises as their main means to mediate student learning, and also by students focusing on memorizing textbook knowledge, doing homework, taking notes and doing exercises as their main approaches to studying. Both teachers and students aimed to achieve examination success.

Yan argued that her teachers’ teaching practices were not only restricted by examinations, but were also heavily defined by the whole community and by what was available to them:
[the teachers] just follow very traditional way [teacher and textbook-oriented teaching], that is the only way, it is not their fault, they cannot invent something new, because the whole environment would be against that, or even if they want to make some changes, they do not have resources to get access to.

Yan seems to indicate that the goals that her teachers wanted to attain were consistent with those of the whole community (i.e. achieving examination success). The teaching practices they adopted seem to have suited that system. Yan claimed that the community, the assessments, and the teaching all reflected one ultimate interest: wanting students to be competitive in the examination system. This drove every student to achieve this goal, which for Yan resulted in very stressful experiences of learning.

Yan noted that although this competitive atmosphere made her learning very stressful, she learned to be competitive. She emphasized that the approaches she used to do so were determined by how she was assessed. Knowing how she was assessed, Yan adopted repetition as a learning strategy:

*in China, it still depends on memorising things, memorising things for the final exam*

Yan said repetition was an important approach to learning, and she still uses it today:

*for me, repetition is a good skill to memorise things, I still believe it. Like for example, now like some people, they invent comprehensive learning skills or other different activities, yes, it is good tools, but in some situations, you have to use repetition, you have to memorise things, you have to repeat the same thing several times.*

Yan believed repetition was an important tool. However, she warned that repetition was effective only under certain conditions and was not repeating just for its own sake:
because every time when you repeat, you have a different understanding about the same text.

Her understanding about repetition supports Biggs’ (1998) argument that Chinese students use of rote learning is part of a deep approach. Repetition seems to be a deep, not a surface, type of learning, as Yan describes it. Although Yan stressed that repetition was an important approach, she rarely used it by itself:

*for example doing math when I was in China, I have to do it, but some people they memorise it just by heart. I cannot, I could not, I have to memorise everything by doing it, so I do things. I am a kinesthetic learner, I love to do things, in order to learn better, I have to do things, so by physically doing things, I learn better*

Yan added that she also used various other approaches to help her to excel in an intensely competitive environment. These included her investing time and effort in studying hard (normally she went to bed around 12 midnight or 1am) and using complicated thinking skills:

*we would not only depend on memorising things because memorising is just one of the skills you learn from school, but in order to achieve high, you have to combine some complicated thinking methods in it.*

As a result, Yan became competitive. One interesting point to note was that although she used repetition, repetition was not used alone even for completing one specific task. Repetition was only one of the approaches she used, so she cannot be defined as a repetitive learner. Her use of various approaches to learning opposes some researchers’ (for instance, Burns, 1991) labelling of Chinese students as rote surface learners.

Yan contended that her use of various approaches to learning resulted from her being autonomous, which she attributed to her parents’ influence. Her parents brought her up to
become an independent girl. Growing up in this kind of family environment, she seems to have gradually internalized her parents’ beliefs: her identification of herself as an independent learner and also as someone who was taking full control of her own learning. This internalization influenced her learning at school. For instance, she felt that it was beneficial that her teachers did not have enough time to focus too much on her learning because she had more freedom to focus on self-development. The class size at high school was big (60-70 students) so the time teachers could invest in each student was limited. She viewed this as beneficial:

actually, it was good for me, because, I like got a free choice, free time to focus on myself, or to explore my own methods.

Yan’s parents helped her to become independent and autonomous, which she exercised and developed further at the boarding school. This development helped her to improve herself, believing that her teachers not having much time for her was beneficial for self-improvement:

so the teachers, they promote, like they focus on the exam, apart from the exam, we got more time to kill, that was the time I explored things for myself.

The goal of improvement of self, motivated Yan to use spare time to work towards achieving this goal. The means she sought included broad reading and learning from peers.

For example like left-brain, right brain, so I remember by, probably in 1990s in China, some books, or magazines, or newspapers, they published some articles on left brain or right brain, so I read those articles, I thought, oh, I was inspired by these ideas, I thought ok, I should try left brain, or right brain, so I did experiments on myself,
Her improvement of self was further shown by her perception that the Chinese school learning was narrow:

*the whole environment, the environment is quite academic, achievement centred, they focus, the parents, the society, even the teachers, the students they all focus on the achievement part instead of their human naturalist part, as a human, you need to know more about who you are, or what can, like the qualities, or something related to the spiritual things, so, basically, it is quite narrow-minded learning environment.*

This narrow approach to learning as Yan claimed could not assist her to achieve self-development because it only focused on achievement. This seems to have pointed to a conflict between her goal of development of self and the approaches that the learning context failed to provide. This realization motivated her to search for approaches that she could use to achieve her goal of development of self, such as learning from reading classics (cultural heritage):

*for example, moderation, Confucius, we promote moderation, I think moderation is a great idea, now we need moderation all the time, another example, like meditation, because in China, one of the Chinese values is you meditate yourself, you reflect on yourself, meditate on yourself, improve yourself everyday, this is what I learned from China. So personally I benefit a lot from this and there is a lot of Chinese sayings I think even today, they are old, but they are valuable in today’s life, for example the words “业精于勤荒于嬉”, it means in order to improve your professional skills, you have to be diligent, and if you muck around and play all day long, probably you will lose your skills, which is true in today’s life.*
Her learning from reading classics resulted in the acquisition of various values (moderation, reflection and diligence) and helped her to improve herself. The skills or values she gained also helped her to excel in the intensely competitive learning context.

**Peers**

Yan explained that to some extent she learned collaboratively with her peers (they helped each other to overcome their weak areas of study). However, she viewed them more as competitors. Wanting to succeed in this intense competition motivated her use of various approaches to achieve her goal of being the best.

> *In China, because we have intense competition, the students have to use some skills or some tools to make themselves strong and competitive*

Her use of various approaches provided evidence that argues against the categorization of Chinese students as rote learners (see Burns, 1991).

**4b.3.3.3 Learning in a college: Transition**

After completing her junior secondary school study (Year 9), Yan went to a teachers’ college to be trained as a primary school teacher. This decision as she explained was based on her parents’ view, especially her father’s advice that being a teacher was a good choice for her.

**4b.3.3.4 University learning in China**

Yan took her father’s advice to become a primary school teacher. Through working as a primary school teacher, she realized that this was not what she wanted to do. Thus, she decided to pursue an undergraduate degree. She explained:

> *I think I just followed my own dream, I thought I just wanted to know who am I, what I am really like, I guess that is the main motivation for me to keep pushing myself to pursue higher education*
Referring to father advice in decision-making prohibited Yan from materializing following her own dream. She wanted to follow her own dream; however, she continued to refer to other for decision making: submitted to teacher expertise. This is shown by her choosing Teaching English as a Foreign Language as her major of study because a teacher thought she would be good at it:

*I guess the reason I chose to study English after five years not having access to English language, like the motivation is probably because my English teacher in Year 7, he helped me a lot, he complimented me in front of the whole class, he said, “oh, Yan responds to questions very well, everybody should learn from her”*

Yan’s decision to take Teaching English as a Foreign Language as her undergraduate major indicated her submission to teacher expertise as the basis for decision-making. She also seems to have relied on giving priority to saving face in her decision-making. Her teacher’s acknowledgement and praise set her up as a positive model for her peers to learn from, which helped her to gain face.

Yan said her learning at university was very challenging. She had not learned English for five years. Thus she believed she was very uncompetitive compared to her peers. This made her feel uneasy because she wanted to be competitive and this motivated her to study hard to achieve this goal:

*I had to catch up with my peers, that was when I was around 20, yes, the first year, I really knuckled down, I studied extremely hard,*

Yan relied on diligence to achieve the goal of being competitive (an indication of her relying on reading broadly). The approach she used was successful in helping her to achieve her goal of being competitive and also some other outcomes.
So later on, the result was very good, and I passed the English test band 4, 6, and 8 straight away without repeating those exams.

4b.3.3.5 Further transitions

In order to find out who she was/what she wanted to be/do, Yan went to university to pursue an undergraduate degree. However, she submitted to teacher expertise when making this decision, which did not help her to achieve her goal of finding out what she wanted to do. This was shown by her realization that learning Teaching English as a Foreign Language was not what she wanted to do and by her decision to go to Beijing to study film.

Yan’s university study seems to have been one means that she used to achieve her ultimate goal of finding out what she wanted to do/who she wanted to be. But this failed to achieve that goal. She then modified this means through going to Beijing to learn how to make films. She helped others to cast films but discovered that she did not like these people’s communication styles or the interpersonal relationships in this domain. Therefore, making films also failed to achieve her goal. She modified her means again through working as a kindergarten teacher. She used being a kindergarten teacher as another modified means to achieve her objective. This was tested and was modified again, by her becoming a trainer to train kindergarten teachers. This was tested and modified further – she became a facilitator in an NGO (providing training for rural women in the northwest part of China). This was tested and modified again, to becoming a teacher in an international school. It is important to note in order to achieve her goal of finding out who she was/what she wanted to do, she created, tested and modified her means at a fast pace. It can be argued that she transformed herself during the process of creating and using means (cf. Engeström, 2005). This, however, did not help her to achieve her goal of finding out what she wanted to do because she continued to refer to others when making decisions.
The last means Yan adopted to achieve the goal of finding out what she wanted to do in China was being a teacher in an international school. She noted while she was at the international school, working with teachers from English-speaking countries, her salary was only one-quarter to one-third of theirs, which was not adequate to help her to settle in Beijing. This realization coupled with influence from colleagues helped her to decide that a Western qualification would help her to get a highly paid job. So she came to Australia to pursue a Masters’ degree.

4b.3.3.6 Learning in Australia

Regarding her learning experiences in Australia, Yan said that most things were expected and thus she did not experience any shocks or surprises.

*When I was in China, I worked in this NGO, they used participation teaching method, we trained women, so I worked with some professors from Canada, from America, Harvard uni, by then in 2004, 2005, they used quite advanced methods to train Chinese women, after that, I worked in an international school for a few years, so the way we teach or we presented ourselves were very similar to what they were doing in Australia. Basically I immersed myself for maybe 7, or 8 years to this environment before I moved to Australia, so this shift did not affect my learning that much.*

Working with professors from Canada and the USA to train Chinese women and working with teachers from English-speaking countries in an international school helped Yan to expand her repertoire of learning methods. She was not only familiar with the explicit forms of learning that were appropriate in the Australian context, but also used these in China. As a result, she did not feel she experienced challenges in areas of participation in group discussion, contribution of ideas, or asking questions.
When I moved to Australia, in uni classroom, for me, I personally just felt, ok, we discuss, I already had this mindset, I would not learn just by listening to the lecture, or taking notes, so I contributed myself because I know this is the way for me to learn.

I participate in discussion, contribute my ideas, asking questions, so for me, it is just part of my way to learn.

Her large repertoire of learning approaches including those that were perceived as appropriate in the Australian learning context (for instance, contribution to class discussion, expressing her own ideas and asking questions) assisted her to adjust very well to the learning culture in Australia.

English language: Understanding Australian slang

Although her familiarity with many learning approaches used in Australia helped her to adjust to the Australian learning context very well, this as she stressed did not prevent her from encountering challenges. One of those was around language proficiency, which occurred whenever

*lecturers or students use Australian slang, that is the moment, for me personally I feel it was not easy to catch up.*

Her challenge regarding listening comprehension was around understanding Australian slang. This seems to have indicated a conflict between her problem situation of not being able to understand Australian slang and her lack of means to resolve this. She sought various means to achieve the objective of being able to understand Australian slang. The approach she sought firstly was the formation of a thought: taking responsibility for her own learning:

*if you have language problem, you go to see the language experts, or ask for help, but not to expect a lecturer or like if they teach math, you think “oh, math teacher,*
you should help me with my language”, no, no way, so that is your responsibility to catch up.

Her taking responsibility for her own learning shows a visible influence from her upbringing: being independent and autonomous. Wanting to take responsibility for her own learning motivated her to adopt various approaches to achieve her goal of being able to understand Australian slang.

Just talking to friends, watching TV, attend the different activities, or read newspapers, yes, basically do what the Australians do; or sometimes you can ask who is Australian, Australia now is a very multicultural society, it is based on European style, but actually nowadays, it is quite diverse. But since it is Australia, we think it is an English-speaking country on Christian culture, I think that is a part you just need to adapt to this environment.

The means Yan adopted included talking to friends, watching TV, attending social activities or reading newspapers, and also questioning and reflection. These approaches improved her language fluency. However, this did not help her resolve her challenge regarding understanding Australian slang. This coupled with her reflection and thinking skills helped her to realize:

the more you learn, the more you realise actually language can be a big part in my study

The realization that language was important and that it was critical to resolve challenges regarding language drove Yan to create/use new approaches to address her challenge.
Because I can catch up with myself very well in a very short time, so for me, I would not think that is a challenge, but I just tell myself, “ok, this is what happened, if I do not know, I ask”, yes, just cope with it.

Reflection and her realization that she could catch up in a fast pace helped her to target the approach that she could use to address her challenge: ask whenever she could not understand. Her ability to ask questions due to her working experiences in China helped her to overcome this challenge.

Yan’s use of various strategies, including asking questions whenever she did not understand, helped her to overcome her challenge relating to comprehension. This supports Gu and Brook’s (2008) finding that ICSs were active, competent and capable of overcoming their challenges. This finding is also consistent with Tran’s (2008) argument that ICSs took active roles in drawing on various strategies to handle issues with studying at university.

It is very interesting to note that Yan’s ability to ask questions in class seems to have separated her from the rest of the participants in this study (for instance, Chen associated asking questions with being a low achiever, and Avery viewed asking questions as being rude). Yan said she had the responsibility of resolving her own learning issues (being independent and autonomous). This ownership of learning might have made the action of asking questions possible. For her, asking questions as one approach to learning she had already used in China might have been associated with a specific learning goal (like repetition), rather than the culture value of face (low achiever, rude) (Liu, 2002). Therefore, she used the approach of asking questions to achieve a specific purpose (for instance, for clarity) whenever this approach was considered efficient in helping her to achieve that purpose. It is also important to note that her experiences of work in an NGO and in an international school might also have challenged the association of asking questions with the
cultural value of saving face (Liu, 2002). For her, asking questions was just one of the approaches to learning.

Yan’s practices of independence and autonomy due to her upbringing were shown by her taking responsibility for her learning as mentioned above. It was also shown by her view of plagiarism.

Plagiarism did not affect my learning much, because I hate cheating, I know learning is for myself, so I am not learning for others, I got this habit, yes, I do not care about the final result, as long as I learn, so there is no point for me to cheat others, so I do not have trouble with this.

Achieving high results

Yan said her experiences of learning in the first year were highly stressful. She believed this stress was caused by the goal she set for herself: of achieving high academic results. In order to achieve her objective, she thought she needed to be diligent and write high quality papers based on sound research.

I said I was familiar with this learning environment, but really, in order to achieve high academic results, I really need to work very hard, which is part of the uni life, you have to read, or you have to write, it is not to write something, I mean it is not like writing something simply come out of your mind, I have to write something valuable, and valuable and high quality paper, yes

In order to write high quality papers, the first approach Yan adopted was psychological: formation of the perspective--the need to follow Australian conventions of writing.
Let me put it in this way, like in order to achieve HD, you cannot just write in English, you have to write in English with a good quality research, yes, so basically in Australian or English way, not the Chinese way

The thought of following Australian conventions of writing in turn impacted Yan’s use of various other means to achieve this goal. These approaches included planning, researching, brainstorming, drafting, editing and proofreading.

My way is I plan very well, I really need to think, think, plan, research, brainstorm, after that, put my first draft, edit my first draft, probably leave it alone for a few days, to write the second draft. Sometimes, I will ask a friend to do proofreading, but it is quite rare, because I do not have enough time to wait,

These means including help from peers helped her to achieve her goal of achieving good results. She got High Distinctions (HD) in most of her assignments. The roles that she took to resolve her issues with her writing correspond to Tran’s (2008) finding that ICSs took active roles to resolve issues with their learning overseas. It is also consistent with Hu and Lam’s (2010) finding that ICSs were involved in active processes of drawing on strategies to improve their writing.

Coping with stress

Yan emphasized that although aiming for high results did lead to her achieving HD in most of her assignments, this caused much stress. The means she used to deal with her stress were diverse, and included doing physical exercise, attending social activities, and also seeking help from professionals (visiting psychologists).

Seeing a psychologist for me is just a way to release my stress, because I think a professional, because I had this psychotherapy training before I moved to Australia,
so I understand getting help from professionals, but not from like chatting, for me to see a psychologist is just part of my life, I go to see a psychologist regularly.

These multiple means improved Yan’s psychological wellbeing and helped her to manage the stress that resulted from her pursuit of achieving high academic standards.

Based on Vygotsky’s speculation about humans having the ability to control their behaviours through the use and creation of mediating artefacts, Engeström (2005) developed activity theory, particularly the concept of mediation, to provide a pathway for understanding how humans gain control over their future and their life. Yan seems to have controlled a series of artefacts that mediated her behaviours, which in turn helped her to take control over her learning and her life. This was reflected through her creating and using various means to resolve her challenges regarding understanding Australian slang and managing stress, and also through her approach to making friends.

I identified myself not just as Chinese, I identified myself as an international citizen, a world citizen, so I make friends with different nationalities, but at this age, I choose friends, so anyone who makes me comfortable, I choose to be with them, anyone who stress me, so I just keep away from them.

Through assigning a new identity to herself, Yan minimized the gap that was caused by nationality. Because she eliminated this boundary gap by identifying herself as an international citizen, the thought of making friends with whoever despite their nationality made her feel comfortable became possible. As a result, she had friends among her local peers, and also from other nationalities.
I have friends, I have my classmates, like I do not have a lot of Chinese friends actually, I have a lot of Australian friends, and we chat, so we meet during the weekend, probably we catch up in the city to have a cup of coffee somewhere.

Yan had a preference for making friends with local peers, who she believed, just happened to make her feel comfortable.

The reason I do not like to be around Chinese, or the international students, because I feel probably they are very shy, they are scared of making friends with others, I generally do not like that.

Through assigning herself a new identity, Yan was able to make friends with whoever she felt comfortable with. She also used this means to resolve another pressing challenge she encountered: that of becoming an insider in the Australian learning community.

Becoming an insider in the Australian learning community

Apart from encountering challenges in understanding Australian slang, achieving high academic results, and managing stress, Yan also experienced difficulties regarding becoming an insider in the Australian community. She explained that the main challenge was her feeling that the more effort she put in, the more she realized she was an outsider. This contradiction between outsider and insider perspectives was the most challenging issue that she had encountered with her learning thus far. What she relied on to resolve this challenge, as mentioned in the previous paragraph, was assigning a new identity for herself.

The more you learn, the more you realize you need more experience to immerse yourself into this cultural environment, put yourself as an as Australian more than as a Chinese. I call myself Australian Chinese, so I can settle myself very quickly. I adjusted myself through acknowledging my identity.
Yan’s identification of herself as an Australian more than a Chinese further illustrated her realization of the important role the Australian learning system played in influencing her learning behaviours. Noticing this importance, she was motivated to work out how this system operated, and this helped her to adopt approaches to mediate her own learning behaviours. These means included assigning a new identity and remaining connected to the community (through using the Internet, attending lectures, studying in the library, etc).

*I think because first I check Internet, check my student account regularly almost everyday, and I maintain my contact with the school on daily basis, chat with friends, so we turn up in the class, I feel it is just normal*

She added:

*in university education, for example, you can learn online, you can learn through lecture, you can learn from some, like study support, or library, especially I really like the library environment. In Australia, I think the library is one of my favourite places to go, yes, you learn through there*

Through assigning a new identity to herself and remaining connected to the community using various means, Yan felt she became an insider in the learning community. Through this process, she also seems to have mastered various means that were considered important in the Australian context. Her internalization of these means consequently helped her adjustment process.

After this period of adjustment, wanting to know who she was/what she wanted to do began to play a dominant role in directing Yan’s behaviours.
Chinese encourage students to be a hard worker, Australia encourage students to be a thinker, so it is a good doer, and thinker, so if we combine these two together, probably it is a good idea.

As a result of this perception, she was able to take specific approaches that would help her to improve herself.

In China, the whole environment was focused on exam, or on academic achievement, so we did not have enough time to focus on our quality development, or our thinking skills, or on our creative part, so these are the parts I am helping myself to develop in Australia.

Regarding her goal of wanting to know who she was/what she wanted to do, Yan appeared to have gained control over her life through creating and using various means (cf. Engeström, 2005) but this goal had still failed to materialize, and so she re-considered being a teacher.

According to my friends, they think I have a lovely character, I generally communicate with children very well, and the children love me, love to be around me, yes, I think that is a reason, yes, probably I can be a teacher again, [laugh].

As a consequence, Yan thought she could be a teacher again and she enrolled in a graduate diploma course after completing her Master’s degree.

Although Yan realized she liked to be with children, she again referred to others when making decisions: she chose to be a teacher based on her friends’ influence. However, being a teacher was not what she wanted to do; she wanted to own a school.

My dream, right now my dream is to own my own school, [laugh], I want to have my own school, actually I helped my friend to have a school in China, but I thought now, I am living in Australia, it is impossible for me, at this stage to move back to China,
so, one of my goals I have is to have my own school, probably own a kindergarten, or just a private school.

The possibility that Yan was not going to be a teacher on a permanent basis was strong, and having her own school was probably not going to last for long either. The reason was the same as that behind her pursuit of a graduate diploma course: reference to others for decision-making. Without knowing what prohibited her from realizing her goal, this action became repetitive. In other words, she could not realize expansive transformation without knowing what prohibits her, such as her adherence to referring to other (parents, teacher, friends etc.) for decision-making.

4b.3.3.7 Summary

Overall, Yan’s experiences in both China and Australia seem to have worked toward one ultimate object: materializing what she wanted to do/who she wanted to be. This was illustrated by a series of careers in China, and also by her pursuing a graduate diploma course in Australia. Although she appeared to have gained control over her learning and her life through creating and using various means (reflected through her expansive resolution of her challenges in the areas of listening comprehension (understanding Australian slang), writing (achieving high academic results), managing stress and becoming an insider in the Australian learning community), she seems to have failed to achieve her ultimate goal of materializing what she wants to do, due to her adherence to referring to others for decision-making.

4b.4 Chapter summary

This chapter reported findings on ICSs’ perceptions of their learning experiences based on analysis of in-depth interview data. It found that although their teachers predominantly adopted an examination-oriented curriculum and a textbook-oriented teaching approach, they themselves adopted various approaches to learning. These means not only included
repetition, but also included collaborative learning, various internalized values (diligence, moderation, meditation, etc.), and complicated thinking skills (for instance, reflection).

Although all participants experienced various challenges with their learning in Australia, the findings also revealed that they all adopted various approaches to achieve academic success. However, due to their implicit adherence to various internalized rules of their home culture, there were areas in which they failed to achieve expansive transformation, such as Xin’s failure to voice opinions in group discussion. The chapter mirrored ICSs’ experiences of learning as closely as possible. This is to offer solid ground for the conceptual analysis that is carried out in the next chapter. With the assistance of theoretical tools of mediation, contradiction, the collective activity system model and polycontextuality and boundary crossing, the next chapter specifically addresses how ICSs’ experiences of learning in the past has been framed by various contexts, how they responded to this frame as well as how this influenced their experience of and approach to pressing issues in Australia.
Chapter 5 Activity theoretical perspectives on ICSs’ perceptions of their learning experiences: An adapted Change Laboratory vantage point

The learner as an individual and as a member of a wider social context at the same time is entirely consistent. Learners have to adapt their thinking in response to new experiences in the...school (Hewitt, 2008, p. 5)

Results from conceptual analysis of the in-depth interview data from the final selected six narratives are presented in this chapter. This is documented through the lens of the adapted Change Laboratory Approach (CLA). Specifically, mediation, contradictions, the collective activity system model and polycontextuality and boundary crossing from the model surface of the CLA were used to analyse findings conceptually. There are three main sections in this chapter:

- Analysis of the cultural and educational heritage frame of ICSs’ learning,
- Identification and Explication of root causes or contradictions that led to their experience of pressing issues in Australia, and
- Analysis of how various contexts interacted to impact their attempts to resolve pressing issues.

These three main sections serve the purposes of offering in-depth understanding of ICSs’ experiences from the specific lens of the adapted CLA, and also addressing the main research questions raised in this study.

5.1 ICSs’ learning in China/Taiwan

This section analyses how ICSs experienced learning prior to their learning in Australia. This is carried out through analysing mirror data against theoretical tools used in the model surface of the Change Laboratory Approach (i.e. the four theoretical tools of mediation, contradictions, the collective activity triangle and polycontextuality and boundary crossing).
Specifically, external mediating artefacts that various agents (e.g. teachers, parents) used for purposeful intervention in ICSs’ learning were examined to explicate how their learning was framed (cf. Kaptelinin & Nardi, 2006). To achieve the same purpose, rules that functioned to impact various agents’ (e.g. teachers) use of certain mediating artefacts to intervene in student learning were also analysed. Analysis of mediating artefacts and rules was situated in contexts of school learning, school peers, family and university learning, university peers and work that were of importance for ICSs. Structural contradictions that led to pressing issues were analysed to discover possible root causes of these issues. How various contexts interacted to impact on the participants’ approach to pressing issues is also presented in this section. Through analysis of how various contexts framed their learning, this section also addresses the second research question by including a consideration of historicity (Engeström, 1999).

5.1.1 The theoretical tools

One collective activity system model: An example

One example of a collective activity system is modelled here to illustrate the boundary of the contexts that ICSs were involved in. An activity system comprises the subject, the object, mediating artefacts, rules, community and division of labour (cf. Engeström, 2001). The following figure provides an example of this structure.
The above figure shows the structure of an activity system based on analysis of the scenario of Sarah doing homework. In this activity system, the subject is Sarah. The object of this activity system is the “raw material” she was working on: i.e. her homework. Mediating artefacts included both primary tools (for instance, pens) and semiotic signs (for instance, her notes). Through use of mediating artefacts, the object (her homework) was transformed into an outcome (her completed homework). Community here mainly comprised her parents and her teachers, who shared the same general object with her (her homework). Rules in this case might include, for instance, no cheating (based on the communal understanding between her teachers and herself that she was expected to do her homework by herself) and completing homework within the allocated time span. In considering the division of labour, the horizontal division of tasks, although not explicitly articulated, could include the implicitly assigned roles that each member of the community was expected to play. This might include: teachers playing the role of assigning homework regarding what, how much or when to return it to the students; Sarah playing the role of accepting teacher instructions and her parents playing the role of assisting her in terms of providing food, and a comfortable place for her to complete her homework. The vertical division of power and status is demonstrated by the unequal power and status between her teachers and herself and by the hierarchical relationships between her parents and herself.
As detailed in section 3.2.1, the collective activity system modelled by the collective activity triangle defines the context for actions. It sets the boundary of local contexts that participants involved in. Analysis of actions against the collective activity system model assists the analysis of cultural influences on the individual (through examination of mediating artefacts, rules), and also aids the analysis of dynamics occurring within one context.

**Mediation**

As detailed in section 3.2.1, mediation is used in the model surface as a theoretical tool to understand how ICSs’ cultural and historical heritage influenced or determined their learning. This section looks into two concepts: mediating artefacts and rules that were found to be important to this understanding.

**Mediating artefacts**

Based on Engeström’s (1993) categorization of mediating artefacts into “physical and symbolic, external and internal tools (mediating instruments and signs)” (p. 67)), mediating artefacts that were used for external intervention were categorized. Through analysis of the narratives, agents who adopted these mediating artefacts to intentionally intervene in student learning were also identified (M1-3 were enacted by the Ministry of Education, M4-20 were used by teachers). The following table details the repertoire of mediating artefacts that were intentionally used to intervene in ICSs’ learning externally. This repertoire resulted from the analysis of findings from the narratives and from the questionnaire survey.
Table 5.1

**Mediating artefacts of past networks of activity systems (Part 1)**

<table>
<thead>
<tr>
<th>Category of mediating artefacts</th>
<th>Mediating artefacts (M)</th>
<th>External Symbolic Tools (EST)</th>
<th>Identified source of en-action</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>Exams</td>
<td>EST</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>M2</td>
<td>Textbooks</td>
<td>EST</td>
<td>Education</td>
</tr>
<tr>
<td>M3</td>
<td>Teaching outlines and guidelines</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M4</td>
<td>Preparation tests</td>
<td>EST</td>
<td>Teachers</td>
</tr>
<tr>
<td>M5</td>
<td>Homework</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M6</td>
<td>Teacher-centred teaching (teachers were in total control of learning)</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M7</td>
<td>Textbook-orientated teaching (teaching was often the transmission of set curriculum material)</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M8</td>
<td>(Limited) learner-centred teaching</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M9</td>
<td>Group discussion (practice-based)</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M10</td>
<td>Individual and group assignments (writing)</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M11</td>
<td>Oral presentation</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M12</td>
<td>Explicit labelling (ranking)</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M13</td>
<td>Discipline ([Corporal) punishments]</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M14</td>
<td>Teachers used a range of strategies to guide learning</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M15</td>
<td>Teachers encouraged and challenged independent and critical styles of thinking</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M16</td>
<td>Teachers modelled hypothetical and creative thinking</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M17</td>
<td>Teachers promoted a collaborative approach to learning</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M18</td>
<td>Teachers set assignments requiring critical analysis and problem-solving</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M19</td>
<td>Creativity and originality were valued in Chinese courses</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M20</td>
<td>Analytical and critical thinking were focused on in Chinese classes</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M21</td>
<td>Memorization</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M22</td>
<td>Underlining</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M23</td>
<td>(Task-orientated) repetition</td>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>M24</td>
<td>Learning by self</td>
<td>EST</td>
<td></td>
</tr>
</tbody>
</table>

In the above table, exams, textbooks and teaching outlines and guidelines (M1-3) were specifically adopted by the Ministry of Education to externally mediate the assessment, content and pedagogy of the teach-learn process. As these were adopted by the Ministry of Education, they initially acted as external symbolic tools for the students. With repetitive reinforcement, learners might internalize them into internal symbolic ones. These three mediating artefacts mediated participants’ learning in every individual case.

Preparation tests, homework, teacher-centred teaching, and textbook-oriented teaching (M4-7) were mainly practiced by high school teachers to intentionally intervene in student
learning. Some high school teachers (for instance, Xin, Chen, Hua and Avery’s) also used explicit labelling (ranking) (M12) and discipline (corporal punishment) (M13). (Limited) learner-centered teaching, group discussion (practice-based), individual and group assignments (writing), and oral presentation (M8-11) were practiced by a few university teachers (for instance, Hua’s and Avery’s university teachers). Most teachers also practiced memorization (M21), underlining (M22), (tasked-orientated) repetition (M23) and learning by self (M24). With repetitive reinforcement, learners might also internalize these into internal symbolic ones.

Other mediating artefacts were practiced by a small fraction of questionnaire survey respondents’ teachers back in China, and were also identified in some interview participants’ teachers’ practices (for instance, Avery’s university teachers). These included teachers who used a range of strategies to guide learning, encouraged and challenged independent and critical styles of thinking, modelled hypothetical and creative thinking, promoted a collaborative approach to learning, set assignments requiring critical analysis and problem-solving, taught Chinese courses which valued creativity and originality, and taught classes focused on analytical and critical thinking (M14-20). These are included here to show the diversity that existed amongst ICSs’ teachers’ use of mediating artefacts, which were used to facilitate a broad range of developmental outcomes.

Internalized mediating artefacts that ICSs themselves used to achieve their various learning goals were also identified in this study. Analysis showed that mediating artefacts used by ICSs emerged from their use of outcomes that they had either achieved previously (for instance, collaborative learning achieved in the activity system of peers) or internalized (implicit rules that resulted from repetitive reinforcement) through involvement in various activity systems. These mediating artefacts were all internal symbolic tools (Engeström, 1993). These are listed in the following table.
Table 5.2

**Mediating artefacts of past networks of activity systems (Part 2)**

<table>
<thead>
<tr>
<th>Category of mediating artefacts</th>
<th>Mediating artefacts (M)</th>
<th>Internal symbolic tools (IST)</th>
<th>Identified source of en-action</th>
</tr>
</thead>
<tbody>
<tr>
<td>M25</td>
<td>Collaborative learning</td>
<td>O</td>
<td>Learners</td>
</tr>
<tr>
<td>M26</td>
<td>Continuous effort</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M27</td>
<td>Reflective skills</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M28</td>
<td>Learning through understanding</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M29</td>
<td>Learning through audio and video aids</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M30</td>
<td>Learning through doing</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M31</td>
<td>Self-regulation skills</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M32</td>
<td>Self-referent/family-referent in decision-making</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M33</td>
<td>Problem-solving skills</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>M34</td>
<td>Learning through positive modelling (LPM)</td>
<td>O (Internalized Rule (IR))</td>
<td></td>
</tr>
<tr>
<td>M35</td>
<td>Continuous focus on goals</td>
<td>O (IR)</td>
<td></td>
</tr>
</tbody>
</table>

Mediating artefacts listed in the above table were practiced by students themselves, which functioned as internal symbolic tools. Only one of these was adopted through involvement in the activity system of school or university learning (e.g. M34). The remainder were drawn from outside the activity systems of the classroom and school learning. This demonstrates participants’ boundary crossing in using resources gained from other contexts to achieve their respective goals. These are, for example, from peers: collaborative learning, reflection (Chen, Yan, Avery for instance), or from family: self-regulation, independence (Xin, Chen for instance).

Analysis of the range of mediating artefacts that participants used showed that they included external symbolic tools enacted by the Ministry of Education and their teachers, and also included internal symbolic tools, which resulted from their use of outcomes achieved through involvement in a range of contexts. With repetitive reinforcement, the external symbolic tools enacted by other (e.g. teachers) were likely to have transformed into internal symbolic tools through the process of internalization.
Rules

Rules, implicit rules in particular, were also found to impact various agents’ (e.g. teachers) use of mediating artefacts to intervene in student learning. For instance, Avery’s teachers’ belief in the use of violence to motivate study constrained them to act within the limits set by this belief: they used corporal punishment to influence Avery’s motivation for learning. Chen talked about a time in primary school when she asked the teacher to explain again a concept that she had failed to understand. Her request had resulted in being ridiculed by other students after class, which led to loss of dignity/loss of Face. The cultural value or ‘rule’ of not losing Face became very important to her, and came to constrain her to act within certain limits. She said if she wanted to ask a question, she would consider the other students (who) would look down upon her. Her subsequent behavior of not asking questions (in class), because she did not want people to see her as a low achiever, was thus attributed to constraints set by the cultural rule: saving face. Understanding the rules that various agents adhere to is important in identifying how students’ learning can be influenced by various contexts.

The following table details the rules that were identified by these six participants as having either regulated their actions or constrained their interactions. Agents (e.g. teachers) that issued and/or followed these rules are identified in the following table. For instance, Chen’s internalization of giving priority to saving face is seen as an influence from her peers’ practice.
Explicit rules that regulated participants’ learning at school included regulations for high school students (R1), daily behaviour norms (standards) for high school students (R2) and teaching outlines and guidelines (R3). These were issued by the Chinese central Ministry of Education, primarily functioning to constrain learners’ actions. The Ministry of Education first issued regulations for high school students (R1) in 1991 mainly to cultivate students’ moral values. They comprise 10 general norms, which were revised in 1994 and revised again in 2004 resulting in the third version (Baidu Encyclopaedia, 2014). The latest version also includes 10 general norms functioning to constrain and regulate high school students’ actions, such as No 1. “Be patriotic, cherish the people, be industrious, revere science, value socialism and respect the Communist Party of the P.R.C.” (Baidu Encyclopaedia, 2014, Start with latest version section, para. 1). Behaviour norms for high school students are issued by the Ministry of Education and are mainly concerned with general daily requirements for high school
students. Issued in 1981, revised in 1991 and 1994 resulting in the current version, this comprises 40 general norms to achieve the purpose of regulating students’ actions. For example, No 18 advises students to “review and revise carefully, study voluntarily, finish homework on time, no cheating in exams” (Baidu Encyclopeadia, 2015, Start with follow rules and study hard section, para. 3). The Ministry of Education issued teaching outlines and guidelines (R3) primarily to act as explicit rules that constrain teachers’ teaching actions (for instance, on content knowledge) and teachers’ interactions within the activity system of learning (for instance, on pedagogical knowledge) (Wang, 2003). This subsequently influenced the mediating artefacts that teachers adopted to mediate student learning.

The rest of the rules identified were implicit rules that were followed by teachers, parents or peers to constrain student actions and interactions. Examples such as examination success ensures a good future (R4), effort leads to success (R5), use of physical violence to motivate study (R15) and use of punishment to motivate study (R16) are four implicit rules that both teachers and parents enacted. Xin’s teachers’ practice of ranking and Sarah’s parents’ repetitive talks, when they told her that doing well in exams would ensure a good future, reflected their adherence to R4. This influenced their adoption of mediating artefacts such as ranking to intervene in student learning. The rule effort leads to success was evidenced by teachers’ actions of assigning a lot of homework to intervene in student learning, and through Sarah’s father’s action of restricting her from watching videos so that she could spend more time studying. Use of physical violence to motivate study was also adhered to by both teachers and parents. This influenced their adoption of certain mediating artefacts to intervene in these students’ actions, such as Avery’s teachers’ practice of slapping her face and Sarah’s father’s corporal punishment.

Rules such as no one can exceed their perceived capabilities (R6), hierarchical relationships between one’s teachers and oneself (R7), teachers and students are co-learners
practice makes perfect (PMP) (R9) and exhibiting modesty in front of authority, 
expertise and knowledge (R13) are implicit rules that seem to have been enacted by teachers. Their adherence to these rules regulated their actions, which led to them intervening in student learning within the limits set by these rules. Sarah’s teacher’s adherence to R6 for instance led him to suspect her of cheating. Avery’s Chinese teacher’s adherence to R7 restricted her to act within the limits set by this rule, which is shown by her forcing students to obey her instructions. Avery’s university teachers telling her that they were co-learners, and that she could correct them if she felt they were incorrect indicates the influence they had from R8. Chen’s teachers’ followed R9, which was shown by them ordering students to copy characters dozens of times. Various teachers adhered to the implicit rule of exhibiting modesty in front of authority, expertise and knowledge. This also influenced their adoption of mediating artefacts to intervene in student learning, such as telling students that they needed to show modesty.

Learning through positive modelling (LPM) (R10) and giving priority to saving face (R11) are implicit rules that seem to have been enacted by both teachers and peers. Yan’s teacher’s use of her as a positive model for her peers to learn from and Sarah’s peer’s use of Cantonese for her to learn the language illustrated their adherence to LPM. Chen’s peers in ridiculing her and labelling her a slow learner when she asked the teacher to explain again a concept resulted in her fear of losing face: not asking questions because she did not want to be viewed as a low achiever.

Deferring to group consensus or appeasing (R12) is often aimed at avoiding being disliked in order to make favourable impressions (Wang, 2012). This was enacted mainly by peers. Having peers who adhered to this rule meant that their actions of “showing off”, being assertive or self-congratulatory, such as saying “I disagree”, or “I know the answer”, would not be tolerated (Wang, 2012). Chen’s peers’ practice of this rule was shown through their
use of unfriendly facial expressions when Chen voiced she knew the answer. This showed their objection towards those who were self-congratulatory or broke the consensus.

*Physical and mental hardship as precursor to great missions* (R14), *hierarchical relationships between one’s parents and oneself* (R17) and *use of reasoning to foster independence* (R18) were observed by parents. Xin’s internalization of R14 and her parents’ *use of reasoning to foster independence* (R18) showed her parents’ adherence to these two rules. In contrast, Sarah’s parents in making decisions for her showed their adherence to the *hierarchical relationships between one’s parents and oneself*. This influenced them to intervene in their children’s learning accordingly.

These rules identified from participants’ narratives were initiated or enacted by one or more of four actors: the Ministry of Education, teachers, parents or peers. Adherence to certain rules influenced adoption of certain mediating artefacts to intervene in student learning to achieve certain developmental outcomes. These interventions not only often led to the students achieving these outcomes, but also sometimes to their internalization of these rules. Xin’s belief that examinations determined her future, Chen’s belief that her teachers were gods and Yan’s motivation to be a positive model all demonstrated their internalization of these various rules, which subsequently regulated or constrained their actions.

Thus far, mediating artefacts used for intentional intervention to facilitate certain developmental outcomes have been analysed to understand how ICSs’ learning was mediated. In addition, internalized mediating artefacts that ICSs themselves used to achieve their varied learning goals were examined. Further, rules that were initiated or enacted by the Ministry of Education, teachers, parents or peers were also examined. Adherence to these rules also influenced the use of mediating artefacts to intervene in student learning to achieve certain developmental outcomes: students’ attainment of these outcomes and also their
internalization of these rules that their teachers, parents, or peers adhered to. This aids analysis of how ICSs’ learning was framed by various contexts.

**Structural contradictions**

Also as detailed in section 3.2.1, contradictions are “source of change and development” (Engeström, 2011, p. 609) and play an important role in explaining root causes of recurring problems. Examination of contradictions could lead to understanding the development and change occurring within the activity (Allen et al., 2011) and also an understanding of the root causes of recursive problems. Analysis of contradictions helps to analyse root causes of ICSs’ recurring issues and to illuminate what can be done to help them resolve these.

Engeström (1987) recognized four levels of contradictions: i.e. “primary, secondary, tertiary and quaternary contradictions” (pp. 102-103). These four types of contradictions were used as a reference for analysis wherever it was relevant.

**Polycontextuality and boundary crossing**

As detailed in section 3.2.1, polycontextuality and boundary crossing are used as theoretical tools to define and analyse dynamics occurring amongst various activity systems. As an illustration, take the challenge that Avery experienced: lacking topics to discuss for instance, she relied on crossing boundaries to address this challenge. Through crossing boundaries from the context of work in Taiwan (practical issues she met there), she dealt with this challenge.

Mediation, contradictions, the activity system model, polycontextuality and boundary crossing, offer solid theoretical guidance for the analysis of how ICSs’ learning was determined by various contexts, the dynamics within one context (structural contradictions) and dynamics amongst various contexts (polycontextuality and boundary crossing). The
following section offers analysis of ICSs’ learning in China/Taiwan based on this theoretical guidance.

5.1.2 Analysis of ICSs’ learning in China/Taiwan

This section analyses ICSs’ learning in China/Taiwan. Mediating artefacts used for external intervention, (implicit) rules that various agents (teachers and parents in particular) adhered to, were analysed in order to clarify how their learning was influenced by their involvement in contexts of school learning, university learning, and family in particular. Contradictions in activity systems of school learning, university learning, and family were looked into to explore the root causes of pressing issues. The dynamics involved in the resolution/non-resolution of pressing issues experienced in the leading activity systems of school and university learning were also analysed. This was undertaken to explore any processes employed in the resolution of such issues. This is detailed in the following three sub-sections: Group 1, 2 and 3.

5.1.2.1 Group 1: Sarah and Xin: Educated to year 12 in China

Both Sarah and Xin attended school to Year 12 back in their home country. The contexts that had framed their learning were those of school learning, family and school peers. They had fewer years of education in total in China than those that other participants were involved in. This is believed to have influenced their learning in Australia differently. The following section focuses on analyzing how Sarah’s and Xin’s learning were influenced by their involvement in the contexts of school learning, family and school peers.

Sarah’s learning in China

This section analyses how the activity system of school learning, family and school peers influenced Sarah’s learning and how she engaged in boundary-crossing to resolve issues.
The activity system of school learning

According to Sarah’s narrative, her focus was to learn exam-related materials, textbook knowledge, follow teaching that was guided by teaching outlines and guidelines, learn through doing preparation tests, homework, teacher-centred teaching and textbook-orientated teaching, memorization, underlining, repetition, and learning by self.

She noted that the range of external mediating artefacts that were used to purposefully intervene in her school learning included exams (M1), textbooks (M2), and teaching outlines and guidelines (M3) that were issued and enacted by the Ministry of Education. They also included preparation tests (M4), homework (M5), teacher-centred teaching (M6) and textbook-orientated teaching (M7), memorization (M21), underlining (M22), repetition (M23), and learning by self (M24), which were used by teachers to intervene in her learning. These mediating artefacts were used by the Ministry of Education and teachers to externally mediate Sarah’s learning to achieve certain outcomes. With repetitive reinforcement, Sarah was likely to have transformed these into internal symbolic tools. For instance, she could learn through underlining on an automatic basis, which no longer required her teacher to externally intervene.

Sarah noted her school and teachers obeyed explicit Ministry of Education regulations for high school students (R1), daily behaviour norms (standards) for high school students (R2), and teaching outlines and guidelines (R3) issued by the Ministry of Education. This influenced their intervention in her learning through using external mediating artefacts of students’ memorization of R1, R2 and teachers’ adoption of teaching based on R3. This influenced Sarah to act within the limits set by R1, R2 and to learn within the limits set by the outlines and guidelines.
Sarah’s narrative also demonstrated her teachers adhered to implicit rules: *examination success ensures a good future* (R4), *no one can exceed their perceived capabilities* (R6), *hierarchical relationships between one’s teachers and oneself* (R7), *practice makes perfect* (R9), and *effort leads to success* (R5). Their adherence to these rules restricted them to act within the limits set by these rules, which influenced their use of certain mediating artefacts (e.g. suspicion of cheating) to intervene in Sarah’s learning. This resulted in Sarah learning through gaining examination success, being suspected of cheating, respecting teacher authority, doing a lot of practice and making a lot of effort. Under repetitive enforcement, Sarah (partially) achieved the outcomes that her teachers tried to facilitate (e.g. learning through practice), also (partially) internalized the various rules that her teachers adhered to (her internalization of a hierarchical relationship between herself and them for instance).

The external mediating artefacts that were used by teachers to mediate Sarah’s learning quite often met resistance from Sarah. For example, she refused to accept her teacher’s suspicion of cheating on her part. This conflicting force was understood through analysis of contradictions against the collective activity system model.

Close examination of pressing issues that Sarah noted with her school learning revealed that most of these issues were led to by two types of secondary contradictions that occur between components of the activity system (Engeström, 1987). These secondary contradictions occurred between mediating artefacts and objects (SC (M-O)) and between rules and objects (SC (R-O)). The analytic model that illustrates these is shown in the following figure. The secondary contradictions are represented through the lightning-shaped elbow double arrow connectors.
The pressing issue of Sarah’s boring learning experience at school, shows that this issue resulted from a SC (M-O). Being bored resulted from the conflict between a lack of mediating artefacts and the problem space of being bored as the object. Lacking the means to transform this problem space into a desired outcome led to the outcome of her continuing to be bored with her learning. Her belief, as she revealed in her interview, that school learning meant learning something that was not interesting shows that this secondary contradiction has not been resolved.

There was also a SC (R-O), which resulted from a conflict between her adherence to the implicit rule: *hierarchical relationships between her teachers and herself* and the problem space of her inability to transform this boring learning experience as the object. Consequently, she was restricted to using mediating artefacts that would show her adherence to this hierarchical relationship, such as acceptance of teacher-centred teaching, respecting teacher power and status and not proposing alternative ways of teaching to the teachers. This contradiction was also not resolved.

Sarah’s experience of boredom with her learning was produced by these two structural contradictions. To transform this problem space, she would have needed to overcome these two contradictions, but she did not.
Pressing issues Sarah experienced might also have been caused by one type of tertiary contradiction (cf. Engeström, 1987) (TC). This TC “appears when representatives of culture (e.g. teachers) introduce the object and motive of a culturally more advanced form of the central activity into the dominant form of the central activity” (Engeström, 1987, p. 103). He gives an example of a student (as the subject of the central activity) going to school in order to play with their peers (the dominant motive), whilst the teacher wants him or her to study (the more advanced motive) (Engeström, 1987). This results in the generation of a TC. The TC in Sarah’s case was generated when her teachers introduced the culturally more advanced motive of trying to make Sarah study over the dominant motive of Sarah wanting to have fun. Sarah did not actively seek this culturally more advanced motive; rather she resisted working towards it and this contradiction was not resolved. Her continuing view of school learning as being forced to learn something that is not interesting might also demonstrate this TC.

*The activity system of family*

Sarah noted her parents used corporal punishment, tedious talks about needing to study hard, which would be good for her in the future, created an environment to develop independence (by accident), forced her to believe what they believed, assigned her responsibility to study, forced her to form the habit of studying, and restricted her access to entertainment to intervene in her learning. These were practiced by her parents to externally mediate her learning.

Sarah’s narrative also demonstrated her parents adhered to *effort leads to success* (R5), *use of physical violence to motivate study* (R15) and *hierarchical relationships between one’s parents and oneself* (R17). This influenced their use of mediating artefacts such as corporal punishment to intervene in Sarah’s learning. This resulted in Sarah (partially) achieving outcomes that her parents expected her to achieve (for instance, acceptance of corporal
punishment), and also led to her (partial) internalization of these implicit rules that her parents adhered to (for instance, her use of family-referent decision-making (M32)).

However, Sarah did not wholeheartedly accept her parents’ external mediation. She resisted studying hard. When analysing this conflicting force against the collective activity system model, it seems that this conflicting force might result from a tertiary contradiction, generated when her parents introduced the culturally more advanced motive (trying to make Sarah to study hard) to the dominant motive (wanting to have fun). She resisted working towards this more advanced motive. She had a motive to have fun. For example she connected the cables at home to the right place so that she could watch videos to entertain herself. This led to her achievement of outcomes outside her parents’ influence. These included self-referent decision-making (M32) and problem-solving skills (M33), so her motive sometimes continued to contradict the advanced motive her parents introduced.

Whenever she was having fun, her parents used various mediating artefacts to intervene (for instance, tedious talks or corporal punishment) so that she could achieve the goals that they set for her. These repetitive interventions might have caused Sarah to internalize various values her parents adhered to, which to a large extent could have influenced Sarah to achieve the developmental outcomes that they wanted to facilitate. This could have minimized Sarah’s opportunities to learn based on her own motives (for instance, self-agency, autonomy). The method that Sarah used to deal with this contradiction was submission to parental authority. In other words, whenever there was a conflict between these two parties, she would resort to parental authority (family-referent decision-making.)

When analysing pressing issues against the collective activity system of family, pressing issues also resulted from a SC (M-O). Take the pressing issue of her facing corporal punishment, for example. This was a pressing issue for her because she lacked mediating
artefacts that she could use to transform the “problem space” of her facing corporal punishment as the object. The deterioration of this conflict was demonstrated through the repetition of each party’s actions (her father’s constant choice of corporal punishment and her continuous acceptance of corporal punishment). Repetition of these actions led to her enduring physical pain, feeling fear (she felt her parents were scary) and accepting parental authority.

This pressing issue also resulted from a SC (R-O): her implicit adherence to *hierachcal relationships between one’s parents and oneself* (R17) and her inability to transform the object (facing corporal punishment) into a desired outcome. This limited her to act within the constraints of this rule so that she accepted corporal punishment. The method that she relied on to deal with this conflict was her submission to parental authority, which did not help her to resolve this contradiction. Rather her adherence to this rule seems to have been reinforced. This was demonstrated through her referring to family in decision-making – at university– she was still following her parents’ advice although her parents were not physically forcing her to do so.

Referring to family in decision-making showed her internalization of the unequal relationship between her parents and herself. It also indicated that she might experience some difficulties if she wanted to achieve independence in decision-making. Her internalization of this hierarchical relationship meant that she might have lost conscious awareness of her actions; in other words, she followed parental advice on an automatic basis. Her automaticity in referring to family in decision-making posed immense difficulties for her to overcome if she chose to achieve expansion. If she wanted to resolve this contradiction, she would have to break the automaticity first. Then she would also need to have mediating artefacts that she could use to help her to achieve this expansion, and internalise this to become an automatic operation so that she could draw on it on an automatic basis.
Sarah’s narrative revealed experiences of being ridiculed, bullied and isolated by her peers at school. Sarah said she felt angry and sad. Thus the external mediating artefacts that were used to purposefully intervene in her learning in the activity system of school peers included ridiculing, bullying and isolating, which Sarah endured. Implicit rules that her peers adhered to that influenced their actions to intervene were not clearly evident from what Sarah said in her narrative, but it is likely that they included deferring to group consensus (appeasing) (R12). This group of bullies were likely to be deeply involved in a cohesive in-group. This caused them to target Sarah, the outsider in this community, and to ridicule and isolate her.

Sarah’s narrative revealed the existence of one type of structural contradiction: between the “problem space” of her facing bullies as the object and her lack of mediating artefacts to transform this object. Sarah wanted the bullies to stop bullying her, which motivated her to take actions to resolve her issue. Her initial strategy was to aim to get good achievement scores. To achieve this, she used outcomes achieved from the context of family: shown by her use of an internalized symbolic tool (effort leads to success). This resulted in her achieving good academic scores at one stage. This demonstrates boundary-crossing between family and the activity system of school learning, which resolved a SC (M-O). However, this failed to work, because she continued to be isolated even after her achievements were much better. Her strategy in getting good achievement scores also demonstrates an influence from the activity system of family. Because she was beaten by her parents for not studying hard, she thought if she studied hard, her peers might stop bullying her (as her parents would).

Her solution was become a member of the bullying group herself. What drove her to this might have arisen from a joint influence from the contexts of family and school learning. Her implicit adherence to the unequal power relationships between her teachers and herself and between her parents and herself constrained her to act within the scope of these implicit rules,
so that the possibility of her being able to negotiate with her parents or her teachers, who represented authority and higher power status, was minimal. This coupled with the realization that being angry with her peers would not help her to join the community drove her to modify her approaches further. Sarah said she chose to stop being angry with them, to laugh together with them, and to become one of the bullying group herself. In this way, submission to a majority as a mediating artefact helped her to transform her object (being bullied) into the outcome of her no longer facing bullies. Another consequence of joining this group, Sarah believed, was that she became lazy and her academic grades dropped, which resulted in her being unable to enter a good senior high school.

Sarah’s resolution of the conflict in her peer network demonstrated her use of problem-solving skills, which she achieved from the network of family based on her own motive to have fun. She had solved problems independently at home when she had wanted to have fun. This demonstrates boundary-crossing between family and the activity system of school peers, and also shows how various networks can interact to influence an approach to a pressing issue; it seems likely that the influences from the contexts of school learning and family to a large extent impacted the ways that she approached her peers.

It is important to note that Sarah’s peers (the bullying group) and Sarah bullied other students as their communal motive. This motivated them to initiate actions (for instance, ridiculing and bullying other students) to achieve this communal motive. The outcomes she achieved through ridiculing and bullying other students would work against the goals that her teachers and her parents wanted her to achieve. As her teachers and her parents wanted her to spend time studying, the outcomes that she achieved to attain her peers’ communal motive would not be useful in achieving her teachers’ or her parents’ motives. This minimized the usability of the outcomes that she achieved from the network of peers in achieving the goals set by her teachers or her parents. Opportunities to cross boundaries and rely on outcomes of
the context of peers to resolve issues in the context of school learning or family were small. In addition, the hegemony between the activity system of family and the leading activity system of school learning in that they both stressed hierarchical relationships also seems to have restricted the movement across the boundaries between these two activity systems.

The following figure reflects the analytic model that was developed to represent structural contradictions existing within the activity system of school learning, family and school peers in which Sarah was involved. Movement across these activity systems is shown. Structural contradictions are represented by lightning-shaped elbow double arrow connectors, broken lines stand for boundary crossing between activity systems, and the arrows on these broken lines indicate the direction of movement between activity systems.

![Analytic Model](image_url)

*Figure 5.3 Analytic Model representing structural contradictions existing within Sarah’s past network of activity systems and her approach to issues.*
Xin’s learning in China

This section analyses how the activity systems of school learning, family and school peers influenced Xin’s learning and how she crossed boundaries to resolve issues.

The leading activity system of school learning

Although some of Xin’s experiences of school learning were similar to Sarah’s, she also had very different experiences.

According to Xin’s narrative, her junior school experience included exams (M1), textbooks (M2), teaching outlines and guidelines (M3) that were issued and enacted by the Ministry of Education. It also included preparation tests (M4), homework (M5), teacher-centred teaching (M6) and textbook-orientated teaching (M7), memorization (M21), underlining (M22), repetition (M23), and learning by self (M24), which were used by teachers to intervene in her learning. Consequently, the range of external mediating artefacts that were used to purposefully intervene in her junior school learning was very similar to Sarah’s. However, Xin’s teachers also used explicit labelling (ranking) (M12) to intervene in her learning in order that she was conscious of the important role exams played in her learning. These mediating artefacts were used by the Ministry of Education and teachers to externally mediate Xin’s learning. With repetitive reinforcement, it is highly likely that Xin transformed these into internal symbolic tools.

At senior high school, the range of mediating artefacts that Xin’s teachers used to externally mediate her learning were very different from those Sarah’s teachers used. These included a broad range of strategies to guide learning (M14) (for instance, extra curriculum activities), and learner-centred teaching (M8) that were practiced by overseas teachers. These external interventions influenced her to learn through a broad range of strategies and through learner-centred teaching. With repetitive reinforcement, she transformed these into internal
symbolic tools. The varied mediating artefacts used by her senior high school teachers helped her to achieve the developmental outcomes they wanted to facilitate, but also expanded the repertoire of internal symbolic tools for Xin, so that they were much broader than Sarah’s.

Xin’s school and teachers implemented explicit Ministry of Education regulations for high school students (R1), daily behaviour norms (standards) for high school students (R2), and teaching outlines and guidelines (R3) issued by the Ministry of Education. This influenced their intervention in her learning through the external mediating artefacts of students’ memorization of R1 and R2 and teachers’ adoption of teaching based on R3. This influenced Xin to act within the limits set by R1, R2 and to learn within the limits set by the outlines and guidelines.

In addition, her narrative also reflected her teachers’ adherence to these implicit rules: examination success ensures a good future (R4), hierarchical relationships between one’s teachers and oneself (R7), practice makes perfect (R9), and effort leads to success (R5). Their adherence to these rules restricted them to act within the limits set by these rules, which influenced their use of certain mediating artefacts (e.g. ranking) to intervene in Xin’s learning. This resulted in Xin learning through striving for examination success, respecting teacher authority, practicing a lot and making a lot of effort. Xin (partially) achieved the outcomes that her teachers tried to facilitate (e.g. learning through hard effort) and also (partially) internalized the various rules that her teachers adhered to (her internalization of this hierarchical relationship, for instance).

Close examination of the pressing issues that Xin experienced revealed that these issues resulted from two types of secondary contradictions, which, as with Sarah occurred between mediating artefacts and objects and between rules and objects.
Analysing the pressing issue of experiencing stress against the collective activity system model of school learning revealed that this stress was caused by a secondary contradiction between her desire to gain a high rank as the object and her temporary shortage of mediating artefacts that she could readily use to help her to achieve that goal. Through use of outcomes that she achieved in the context of family (for instance, continuous effort (M26), self-regulation skills (M31), continuous focus on goals (M35) and being prepared to endure hardship (due to internalization of physical and mental hardship as a precursor to great missions R14)), she resolved this structural contradiction. In doing so, she gained a high rank. In other words, through crossing boundaries, she resolved her issue.

There was another secondary contradiction, this time between rules and objects. Her adherence to the implicit rule of hierarchical relationships between one’s teachers and oneself led her to accept the teachers’ explicit ranking, which caused her to experience stress. The time and effort she needed to invest in studying to maintain her position in the ranking list was quite demanding: she had to stay up until 12 or 1am, which caused her to experience a lot of stress. Her acceptance of her teachers’ higher power and status made it impossible for her to reject her teachers’ practice of ranking. She became successful in the ranking system, her efforts in striving to be successful demonstrated her respect and submission to her teachers’ power and status. Becoming successful academically resolved the SC (M-O). However, it failed to resolve the SC (R-O).

Xin’s narrative did not show her experience of a tertiary contradiction between her motive and the more advanced motive that her teachers introduced. Rather her motive in wanting to study hard to gain a high rank seems to be consistent with those that her teachers introduced. Because of this congruity, she actively sought the more advanced motive that her teachers introduced and was also internally motivated to do so.
The activity system of family

Xin noted her parents mainly used reasoning, support, and fostering various values and skills to externally intervene in her learning, which is different from the ones that Sarah’s parents used. Xin’s parents used these aims to achieve the developmental outcomes of her being independent in decision-making, being supported, and being able to acquire various values and skills like time management skills, self-regulation skills, and continuous focus on goals. Through the process of internalization, she turned these into internal symbolic tools: she took the responsibility in decision-making, received support from her parents, and also became good at the values and skills her parents tried to foster.

It is important to note that the range of outcomes that Xin achieved from the context of family seems to be much broader than Sarah’s. This seems to be a decisive resource for her to use to apply to pressing issues, especially in the leading activity system of school learning. This seems to be also determined by the heterogeneity existing between this activity system and the other activity systems, especially the activity system of school learning. For instance, her parents used reasoning to cultivate an independent child, whilst her teachers wanted her to abide by a hierarchical relationship.

Implicit rules that her parents adhered to when intervening in Xin’s learning mainly included use of reasoning to foster independence (R18), physical and mental hardship as a precursor to great missions (R14), and examination success ensures a good future (R4). Their adherence to these rules determined their use of certain mediating artefacts, for instance, explanation and reasoning. This helped her to achieve the developmental outcomes that her parents tried to facilitate because she better understood her parents’ motives, and also to internalize the various rules her parents adhered to. This internalization regulated her actions, for instance, she purposefully chose to endure hardship as she believed this would lead to her achievement of missions.
Xin’s narrative did not seem to show any secondary contradictions that caused pressing issues. Her narrative also did not seem to show the existence of any tertiary contradictions. Unlike Sarah, Xin had the motive to achieve examination success. Her parents’ motive in wanting to foster independence and the implicit rule: *use of reasoning to foster independence* (R17) that they adhered to influenced their use of mediating artefacts that assisted Xin to develop independence. This was conducive to helping Xin achieve her own motive of examination success. This was different from Sarah’s parents, who forced Sarah to work toward their motive.

*The activity system of school peers*

Like Sarah, Xin was bullied by her school peers. Her peers also mainly used ridiculing, bullying and isolating. Xin endured being ridiculed, isolated and bullied. Her peers also engaged in *deferring to group consensus (appeasing)* (R12), which caused them to target Xin as the outsider in this community, and to ridicule and isolate her in order to sustain the cohesion of the group. When analysed against the collective activity system model, it seems that Xin’s pressing issue of facing bullies was produced by a secondary contradiction between a lack of mediating artefacts and the “problem space” of being bullied as the object. What she relied on to address this issue was outcomes that she achieved from her activity system of family: independence in decision-making, her internalization of *physical and mental hardship as a precursor to great missions* (R14) and *examination success ensures a good future* (R4). Being motivated to achieve examination success, coupled with the understanding of the importance of decision-making, influenced her to choose to leave the bullies alone. She did not join them, as Sarah did, nor did she confront them. This did not stop the bullying, nor did it help her to resolve the structural contradiction. She withdrew from social life. Xin’s use of outcomes that she gained from the activity system of family to
address being bullied in the activity system of peers demonstrated her boundary crossing capacity, even though this failed to resolve the structural contradiction.

It is, however, important to know why Xin decided to leave bullies alone. What were the differences amongst the mediating artefacts used by Sarah and Xin to resolve the same kind of problem? Compared to Sarah, Xin did not seem to have felt as strong a need to resolve this contradiction. Her motive in wanting to achieve examination success and her ability in decision-making might have impacted her view that resolution of conflict with peers was neither necessary nor important. In addition, her involvement in contexts of school learning and family might have also influenced her choice to leave bullies alone. Having supportive parents, wanting to achieve great missions (so she could not spend time playing), and being a successful learner, she had the advantage of being a member of various communities (family and school). This seemed to reduce the importance of her joining another community (her peers), especially when this community drew her attention away from achieving her motive. In contrast, the importance of joining her peers’ community was not reduced for Sarah, rather it seemed critical because she was unable to join in any of the other communities because both Sarah’s schoolteachers and parents believed in the value of hierarchical relationships. These impossibilities might have contributed to Sarah’s view that changing her peers’ behaviours was the only option for her to join a community. This example shows how different contexts interact to impact participants’ approach to their pressing issues.

The following figure shows the analytic model that represents structural contradictions existing within Xin’s past network of activity systems and her approach to issues.
Figure 5.4 Analytic Model representing structural contradictions existing within Xin’s past network of activity systems and her approach to issues

Brief summary

Regarding their respective leading activity systems of school learning, the mediating artefacts that Xin’s teachers used for purposeful intervention seem to be broader than that of Sarah’s teachers. Xin’s teachers also used explicit labelling, a broad range of strategies to guide student learning, and learner-centred teaching. This helped to expand Xin’s repertoire of internal symbolic tools due to the process of internalization. Sarah’s teachers seem to have adhered to one more implicit rule (no one can exceed their perceived capabilities) than Xin’s teachers. This led to Sarah experiencing a pressing issue: her teacher’s suspicion of cheating. Both Xin and Sarah experienced the same two types of contradictions: SC (M-O) and SC (R-O), however, Xin did not seem to experience a tertiary contradiction when her teachers introduced a culturally more advanced motive because her motive in wanting to achieve examination success was the same as the advanced motive that her teachers introduced. This congruity helped her to accept her teachers’ intervention willingly. However, Sarah and her
teachers had different motives. Sarah did not actively seek this culturally more advanced motive; rather she resisted working towards it.

There were differences in their respective activity systems of family. This was reflected by the variations between the mediating artefacts that their parents used for external mediation to intervene in their children’s learning, which resulted from the varied rules their parents adhered to. A third difference was found with the types of structural contradictions. Sarah’s experience reflected the existence of two secondary contradictions and one tertiary contradiction, whereas Xin did not seem to experience any structural contradictions. Xin’s parents’ motive in fostering independence influenced them to offer mediating artefacts that were conducive for Xin to achieve her motive. However, Sarah’s parents used mediating artefacts that forced Sarah to achieve their motive, which hindered Sarah from achieving a motive that differed from theirs.

With respect to the activity system of school peers, both Sarah’s and Xin’s narratives reflected their experience of the same secondary contradiction between mediating artefacts and objects. Their resolutions, however, varied: Sarah joined the bullies and became one herself whereas Xin chose to leave bullies alone. Their interactions with their respective activity systems of family and school learning to a large extent influenced their approach to their respective pressing issues within the context of school peers.

On the subject of the dynamics involved in the activity systems, boundary-crossing was very visible for both Sarah and Xin. They both crossed boundaries to resolve issues. The homogeneity between the activity systems of school learning and family seems to have offered limited opportunities for Sarah. However, the heterogeneity existing between these two respective systems proved to be a valuable resource for Xin.
5.2.2.2 Group 2: Hua and Chen: Gained first degree in China

Chen gained her undergraduate degree in China, while Hua did part of her undergraduate degree in China and then came to Australia to finish the rest. The contexts that influenced their learning included school learning, family, school peers, and also included university learning, and university peers. This extra university experience in China means their contexts are broader than Sarah’s and Xin’s. I will argue that these broader contexts have influenced their learning in Australia differently. The following sections analyse how Hua’s and Chen’s learning were influenced by their involvement in these contexts. This is carried out through examining two networks: one is centred on the leading activity system of school learning, with the activity systems of family and school peers interacting with it, and the other is centred on the leading activity system of university learning, with the activity systems of family and university peers interacting with it.

Hua’s learning in China

This section analyses how the activity systems of school learning, family and school peers influenced Hua’s learning and how she crossed boundaries to resolve issues. It then analyses how the activity systems of university learning and university peers influenced her learning and how she crossed boundaries to resolve issues.

The network centred on school learning

How the activity systems of school learning, family and school peers influenced Hua’s learning and how she crossed boundaries to resolve issues are analysed in this section.

The leading activity system of school learning

According to Hua’s narrative, the range of external mediating artefacts that were used to purposefully intervene in her school learning seem to have been very similar to Sarah’s. Hers also included exams (M1), textbooks (M2), teaching outlines and guidelines (M3) that were
issued and enacted by the Ministry of Education. It also included preparation tests (M4), homework (M5), teacher-centred teaching (M6) and textbook-orientated teaching (M7), memorization (M21), underlining (M22), repetition (M23), and learning by self (M24), which were used by teachers to intervene in her learning. Unlike Sarah’s teachers, however, Hua’s teachers also used discipline (punishments (M13)) to intervene in her learning to motivate study. Thus, Hua was also influenced to learn through punishments.

Hua’s narrative reflected that apart from those rules that Xin’s school and teachers followed, her teachers also followed use of punishment to motivate study (R16). This influenced their actions and interactions with Hua, which led to their use of punishments to motivate her to learn. Hua achieved or partially achieved the outcomes that her teachers tried to facilitate (e.g. learning through hard effort), and also (partially) internalized the various rules that her teachers adhered to (her internalization of the hierarchical relationships between her teachers and herself, for instance).

Close examination of the pressing issues that Hua experienced with her school learning revealed that these issues were produced by two types of secondary contradictions: SC (M-O) and SC (R-O) and one type of tertiary contradiction. The contradictions that led to her experience of pressing issues were the same as those of Sarah’s.

The activity system of family
According to Hua’s narrative, her parents mainly used support and fostering various values and skills to externally intervene in her learning. They did so to achieve the developmental outcomes of her feeling that she was supported and was able to acquire various values and skills. These included her strength in memorization skills and strength in learning through audio and visual aids. Hua’s parents resembled Xin’s parents in that they used support and tried to foster various values and skills. However, they also differed greatly in that Xin’s
parents were motivated to foster independence whereas Hua’s parents were motivated to provide support. This might be what led to Xin and Hua achieving different outcomes.

Hua noted that the outcomes that she achieved from the context of family were very helpful. Her narrative showed that she engaged in boundary-crossing when she used resources from the context of family to resolve pressing issues in the context of school learning. For instance, she used her mother’s support to address the pressing issue of her inability to comprehend mathematics. However this did not resolve the structural contradiction between her shortage of mediating artefacts and her problem space of unable to comprehend maths knowledge as the object. Instead her inertia seems to have been strengthened: she continually refused to learn mathematics. This shows that boundary-crossing can be also destructive: she received support but became even more inert around learning mathematics.

Hua’s narrative demonstrated that her parents adhered to hierarchical relationships between one’s parents and oneself (R17). This influenced their use of certain mediating artefacts to externally intervene in Hua’s learning. This helped her achieve the developmental outcomes that her parents aimed to facilitate (Hua could not freely express her thoughts to her mother due to her internalization of this rule), and also helped her to internalize these rules. This internalization regulated her actions, for instance, she followed her mother’s advice and refused to learn school subjects in which she could not rely on memorization skills.

Hua’s narrative also illustrated that her pressing issues (for instance, she believed parental support limited her development of creativity) were the result of a secondary contradiction: between rules and objects. Her implicit adherence to hierarchical relationships between her parents and herself restricted her to following parental advice and refusing to learn school subjects that she was not good at. This showed her adherence to this unequal relationship, and
also illustrated her failure to resolve the pressing issue of the school context, although she relied on parental support in attempting to resolve that.

*The activity system of school peers*

Different from those that Sarah and Xin experienced, Hua’s narrative revealed experiences of being helped and supported by her peers at school. Thus the external mediating artefacts that were used to purposefully intervene in her learning mainly included support and acts of service (for instance, providing their finished work for Hua to copy from). Her peers were likely to have abided by *deferring to group consensus (appeasing)* (R12), which influenced them to sustain the cohesion of the group.

Her narrative showed that she did not have any pressing issues that she needed to deal with. Rather the outcomes of this context seem to have provided her with resources that she could draw on to address her pressing issue of avoiding punishment of the context of school learning. Through copying her peers’ completed homework, she avoided receiving punishment from her teachers. The support she attracted from her peers showed how she crossed boundaries for problem solving.

The following figure shows the analytic model that represents structural contradictions existing within Hua’s past network of activity systems centred on the leading activity system of school learning and her approach to issues.
Figure 5.5 Analytic Model representing structural contradictions existing within Hua’s past network of activity systems centred on the activity system of school learning and her approach to issues

The network centred on university learning

How the activity systems of university learning and university peers influenced Hua’s learning and how she crossed boundaries to resolve issues are analysed in this section.

The leading activity system of university learning

According to Hua’s narrative, most of her university teachers were from Western countries. She believed her teachers taught her very differently to how she expected to be taught in China. She noted her university teachers mainly practiced teacher-centred teaching (M6), limited learner-centred teaching (M8), group discussion (M9), individual and group assignments (writing) (M10), oral presentation (M11). Her teachers also used a range of strategies to guide learning (M14), encouraged and challenged independent and critical styles of thinking (15), promoted a collaborative approach to learning (M17). With repetitive reinforcement, she was likely to have transformed these into internal symbolic tools.

Hua’s narrative indicated that her university teachers did not adhere to any of the particular rules as listed in Table 5.3, but it seems likely that they obeyed various rules based
on their experiences in their own countries. This adherence could have influenced their intervention in student learning through using certain external mediating artefacts (for instance, M17) to achieve particular developmental outcomes.

Close examination of pressing issues that Hua experienced revealed that those were the result of two types of SC (M-O) and SC (R-O) and one TC. As with Sarah, the tertiary contradiction appeared when her teachers introduced the more advanced motive (for instance, they wanted her to ask questions in class) to the dominant motive (her not wanting to ask questions in class).

Hua noted she was unwilling to ask questions, and was also unable to do so. Unable to ask questions in class when analysed against the collective activity system model was produced by a SC (R-O). This pressing issue could be caused by her adherence to one or all the implicit rules of giving priority to saving face, deferring to group consensus, or respecting hierarchical relationships between her teachers and herself. Despite her teachers’ encouragement, these prohibited her from asking questions in class. The interventions of her teachers seem to have achieved very limited outcomes because, as Hua said, nobody asked questions in class. Hua followed hierarchical relationships between her teachers and herself with her school learning, which restricted her to act to respect this unequal relationship (for instance, she did not ask questions because it was viewed as challenging teacher authority/expertize). She also abided by giving priority to saving face, deferring to group consensus due to influences from school peers, school learning and university peers, which consequently restricted her to act within the limits set by these rules (for instance, she did not ask questions to save face: did not want to be viewed as a slow learner or to appease her peers: did not want to break that consensus (no-one was asking questions)). This suggests that Hua’s behaviour of not asking questions in class could be led to by her adherence to three
rules. This also demonstrates that boundary-crossing was also limiting/destructive rather than expansive. It’s important to see boundary-crossing as problematic as well as productive.

*The activity system of university peers*

Hua said her university peers supported her through learning collaboratively with her, enlarging on what her school peers had done: for example, supporting her to ‘cheat’ (copy their work), which is collaborative in nature. Her university peers also helped her to gain more constructive outcomes such as collaborative learning that she could draw on to resolve issues. Her peers were also likely to have engaged in the rule of *deferring to group consensus (appeasing)* (R12), which influenced them to sustain the cohesion of the group. This reinforced her adherence to this rule, which to some extent restrained her from asking questions in class: she wanted to appease her peers thus did not want to break that consensus (no-one was asking questions).

Her narrative did not indicate that she had any pressing issues that she needed to deal with in this context of university peers. Rather the outcomes of this context seem to have provided her with resources that she could draw on to resolve any pressing issues in the context of university learning. For instance, she frequently drew on collaborative learning that she gained from the context of university peers to help to address issues of the context of university learning (needed to complete group assignments for instance).

For Hua, boundary crossing also occurred between the contexts of family and university learning. This for instance was illustrated through her use of resources from the context of family (her parents’ financial support) to resolve issues occurring in the context of university learning (shortage of money).
The following figure shows the analytic model that represents the structural contradictions within Hua’s past network of activity systems centred on the leading activity system of university learning and her approach to issues.

Figure 5.6 Analytic Model representing structural contradictions existing within Hua’s past network of activity systems centred on the leading activity system of university learning and her approach to issues

Chen's learning in China

This section analyses how the activity systems of school learning, family and school peers influenced Chen’s learning and how she crossed boundaries to resolve issues. It then analyses how the activity systems of university learning and university peers influenced her learning and how she crossed boundaries to resolve issues.

The network centred on school learning

How the activity systems of school learning, family and school peers influenced Chen’s learning and how she crossed boundaries to resolve issues are analysed in this section.
The leading activity system of school learning

According to Chen’s narrative, the range of external mediating artefacts used to purposefully intervene in her school learning were the same to Hua’s.

Chen’ narrative reflected that apart from those rules that Hua’s school and teachers followed, her teachers also followed learning through positive modelling (LPM) (R10), giving priority to saving face (R11), and exhibiting modesty in front of authority, expertise or knowledge (R13). Their adherence to these rules influenced their actions and interactions with Chen, which led to their use of certain mediating artefacts (e.g. praising a particular student and asking the rest to learn from him/her) to intervene in her learning. Chen (partially) achieved the outcomes that her teachers tried to facilitate (e.g. respecting the hierarchy between her teachers and herself), and also internalized the rules that her teachers adhered to (her internalization of the hierarchical relationships between her teachers and herself, for instance).

The same as Hua, some pressing issues that Chen noted with her school learning revealed that these issues also resulted from two types of SC (M-O) and SC (R-O).

The same as Hua, Chen’s need to complete her mathematic homework (the “raw material” her activity was directed at) also resulted from a SC (M-O). However, instead of copying her peer’s work as Hua did, Chen relied on learning collaboratively and reflectively with her peers.

The same as Hua, Chen was also unable to ask questions in class (the “raw material” her activity was directed at), which also resulted from a SC (R-O). The rules that she adhered to: giving priority to saving face (did not want to be viewed as a slow learner), hierarchical relationships between her teachers and herself (viewed this as a challenge to teacher
expertize), *deferring to group consensus* (nobody challenged the teacher through asking questions, Chen did not want to break that consensus), stopped her from asking questions.

Unlike Hua, Chen’s narrative did not show that she experienced a tertiary contradiction between her motive and the more advanced motive that her teachers introduced. Rather her motive in wanting to study hard to gain examination success so that she could go to a good university seems to be consistent with those that her teachers introduced. Because of this congruity, she actively sought the more advanced motive that her teachers introduced and she was also internally motivated to do so.

*The activity system of family*

Chen said her parents were motivated to let her achieve examination success, which resembled Sarah’s parents. However, unlike Sarah’s parents, Chen’s parents did not force her to believe what they believed through enacting parental authority. Chen noted her parents mainly used support in forms of not putting much pressure on her learning, not pushing her to finish her homework, and not requesting her to reach a certain level of performance to externally mediate Chen’s learning. She said her parents also used mediating artefacts aimed to foster various values and skills: continuous focus on goals (M35), and self-regulation skills (M31). This to some extent was similar to that used by Hua’s parents, which resulted in Hua’s strength in memorization skills, and in learning through audio and visual aids. Through the process of internalization, Chen also achieved the outcomes that her parents tried to facilitate: feeling supported, gained various skills including continuous focus on goals (M35), and self-regulation skills (M31). From her account of her school learning, it seems these turned out to be very useful resources with which to resolve issues. Her use of M35, M31 and the rule of *examination success ensures a good future* that she internalized to resolve her pressing issue: wanting to gain examination success of the context of school learning demonstrated this.
According to Chen’s narrative, implicit rules that her parents adhered to that influenced their intervention in Chen’s learning mainly included *examination success ensures a good future* (R4), and *hierarchical relationships between one’s parents and oneself* (R17). Their adherence to these rules influenced their use of certain mediating artefacts to externally intervene in her learning. This helped her to achieve the developmental outcomes that her parents aimed to facilitate (studying to achieve examination success), and also helped her to internalize the various rules that her parents adhered to (believed *examination success ensures a good future*). This internalization restricted her to act within these rules: she studied hard to achieve the goal of being able to enter a good university.

Like Xin, Chen’s narrative revealed that she did not experience any structural contradictions within the context of family. Also like Xin, Chen had the motive to achieve examination success. She was internally motivated to search for means (for instance, reflection, collaborative learning) to achieve this. However, her parents’ motives and Xin’s parents’ motives differed from each other. Instead of using reasoning to foster independence, her parents were motivated to let her achieve examination success. Chen’s lack of structural contradictions was built on the condition that her motive and her parents’ motives were the same. Her parents’ support was thus conditional, demonstrated in her account that her parents frequently intervened in her sister’s learning as her sister loved to play instead of work whilst Xin’s was not. Chen’s parents’ conditional intervention might result in an over emphasis of examination success (her belief of examination success ensures a good future demonstrated this) and an underdevelopment of self-autonomy for Chen. In contrast, for Xin, her parents’ unconditional intervention to a great extent helped her develop independence.

*The activity system of school peers*

According to Chen’s narrative, the mediating artefacts that her peers used to externally mediate her learning included providing support, use of collaborative learning, use of
reflective learning, offering a positive model for her to learn from and providing a source of motivation. These were very different from those that Sarah’s and Xin’s peers used (isolating and ridiculing them) and were also very different from those that Hua’s peers provided (supporting her to cheat with her homework). Because of this, Chen achieved different outcomes from those achieved by Sarah, Xin, and Hua. These included her receiving support, learning collaboratively and reflectively with her peers, learning through positive modelling and also with more motivation to achieve well. From her account of her school learning, it seems these turned out to be very useful resources with which to resolve issues. This was shown for instance by her use of collaborative and reflective learning from the context of peers to resolve her issue of completing her mathematics homework. Through crossing boundaries, she resolved her issue.

Implicit rules that Chen’s peers adhered to that influenced their interactions with Chen included giving priority to saving face (R11), learning through positive modelling (R10) and deferring to group consensus (appeasing) (R12). Their adherence to these rules restricted their actions and interactions with Chen, which led to their use of certain mediating artefacts. For example, they showed displeasure if she ‘showed off’ by telling the teacher that she knew how to answer a question that the teacher asked the students to voluntarily respond to. Chen achieved or partially achieved the outcomes that her peers wanted her to achieve, such as not answering teacher questions in class, and also seems to have internalized the various rules that her peers adhered to such as deferring to group consensus.

Chen noted when she did not understand the concept that the teacher delivered, she could not ask questions for clarification; because she was afraid of being labelled as a slow learner by her peers. Not being able to ask teacher questions of her own free will, resulted from a structural contradiction between her adherence to giving priority to saving face (R11), and
this problem space as the object. This was not resolved. Rather she seems to have prioritized saving face because she was unwilling to lose face. This demonstrated that boundary-crossing makes problems even more entrenched at times. This production of further restraint echoes that of Hua, for whom, boundary crossing sometimes resulted in more extensive limitations.

The following shows the analytic model that represents structural contradictions within Chen’s past network of activity systems centred on the leading activity system of school learning and her approach to issues.

![Analytic Model](image)

*Figure 5.7 Analytic Model representing structural contradictions existing within Chen’s past network of activity systems centred on the activity system of school learning and her approach to issues*

*The network centred on university learning*

How the activity systems of university learning, and university peers influenced Chen’s learning and how she crossed boundaries to resolve issues are analysed in this section.

*The leading activity system of university learning*

Unlike Hua, Chen noted that her university learning resembled that of school learning. This was demonstrated through the range of mediating artefacts that her university teachers used
to externally mediate her learning, which was very similar to those her school teachers used. These also included preparation tests (M4), homework (M5), teacher-centred teaching (M6) and textbook-orientated teaching (M7), memorization (M21), underlining (M22), repetition (M23), and learning by self (M24). This consequently reinforced her to learning through these mediating artefacts.

This similarity as Chen described was also shown by the rules that her university teachers adhered to, which also included those that her high school teachers adhered to: examination success ensures a good future (R4), hierarchical relationships between one’s teachers and oneself (R7), practice makes perfect (R9), effort leads to success (R5), learning through positive modelling (LPM) (R10), giving priority to saving face (R11), and exhibiting modesty in front of authority, expertise or knowledge (R13). Their adherence to these rules led to their use of similar mediating artefacts (e.g. asking questions was repressed) to intervene in her learning. She achieved or partially achieved the outcomes that her teachers tried to facilitate (e.g. not asking questions), and also internalized the various rules that her teachers adhered to (her internalization of the hierarchical relationships between her teachers and herself, for instance).

Like her school learning experiences, Chen’s pressing issues with learning at university resulted from SC (M-O) and SC (R-O). Chen noted at one stage, some of her peers achieved better scores than she did, which resulted in her feeling stressed as she wanted to be the best. The analysis of her not being the best at one stage, shows that this was resulted from a structural contradiction between the problem space of her not having the highest score and her temporary lack of the means to help her to do so. She used resources from the context of university peers (motivation) and from the context of family (continuous focus on goals for instance) to resolve this issue. Through crossing boundaries, she gained the highest score.
Chen noted like learning at school, when she had a different perspective towards the knowledge that the teacher delivered, she still could not inform the teacher either through voicing her perspective or questioning the teacher. She viewed both as not respecting teacher expertise, not being modest, or as risking being disliked. Her pressing issue of being unable to voice her perspective was the result of a structural contradiction between her adherence to hierarchical relationships between one’s teachers and oneself, exhibiting modesty in front of authority, expertise or knowledge and her inability to achieve this goal. Her university teachers’ actions based on their adherence to these rules (for instance, discouraged those who showed to be assertive) further reinforced her adherence to these rules. This is likely to have diminished her opportunities to resolve this issue. In addition, her adherence to deferring to group consensus (she did not want to be the anomaly/ or to be self-congratulatory) among her school and university peers also prohibited her from resolving this issue. This shows how two separate contexts interacted to influence her approach to the pressing issue. This again demonstrated that boundary-crossing makes problems even more entrenched at times.

The activity system of university peers
According to Chen’s narrative, her experiences within the context of university peers resembled that of her school peers. Her university peers also learned collaboratively and reflectively with her, provided source of motivation and offered positive models for her to learn from. From her account of her university learning, it seems these also turned out to be very useful resources with which to resolve issues. Apart from this, Chen said the outcomes that she gained from the context of family (belief in examination success ensures a good future for instance) also helped her to achieve her goals within the context of university learning.

Chen noted the similar experiences that she had from the context of university peers and from her school peers was also demonstrated through the rules that her university peers
adhered to: the same as those that her school peers adhered to and through the structural contradictions that resulted in her experience of pressing issues: SC (R-O). Because of this similarity, how the context of university peers influenced her learning is not repeated here.

The following figure shows the analytic model that represents the structural contradictions existing within Chen’s past network of activity systems centred on the leading activity system of university learning and her approach to issues.

*Figure 5.8 Analytic Model representing structural contradictions existing within Chen’s past network of activity systems centred on the activity system of university learning and her approach to issues*

**Brief summary**

Regarding Hua’s and Chen’s experiences of school learning, they learned in a similar way. However, Chen’s teachers adhered to more implicit rules (R 10, 11 and 13). The internalization of some of these rules (for instance R10: learning through positive modelling) was helpful for her. However, she was also constrained to act by more rules: the limits set by giving priority to saving face for instance. Hua’s motive in learning subjects in which she could rely on memorization partially contradicted with the more advanced motive. This
incongruity resulted in a contradiction for Hua. However, Chen’s was congruent with the more advanced motive that her teachers introduced. Because of this congruity, Chen was more willing to accept external mediation.

In relation to their activity systems of family, they had similar experiences. Their parents all provided support and fostered various skills and values, which became resourceful for them to resolve issues in contexts of school and university learning. Chen’s parents adhered to one more rule than Hua’s parents did (*examination success ensures a good future*). The internalization of this rule to a great extent helped Chen to work towards achieving examination success willingly. They both drew outcomes they achieved from the context of family attempting to resolve issues of the context of school learning. Chen’s helped her with achieving some of her school goals. However, Hua’s to some extent resulted in further limitation.

They had varied experiences with their school peers. Hua’s was limited to supporting her to cheat, whilst Chen’s were very rich: providing support, use of collaborative learning, use of reflective learning, offering a positive model for her to learn from and providing a source of motivation. The resources that Chen gained with her peers were more constructive and more conducive for her learning. However, Hua’s were not. Chen’s peers also followed *learning through positive modelling (LPM)*. The internalization of this became an internal symbolic tool for Chen (for instance, learning from positive models amongst her peers). They both crossed boundaries to draw on support from peers to resolve issues with their school learning. Chen’s was constructive to her learning, Hua’s was not. However, for Chen, internalization of LPM was resourceful.

Hua and Chen had varied experiences of university learning. Hua’s university learning was very different from her school learning, which expanded the repertoire of resources (for
instance, group assignments) that she achieved through the process of internalization. From her account of her learning at university in Australia, it seems these turned out to be very useful resources with which to resolve issues, which to some extent helped her to adjust to learning in Australia.

Hua’s experiences within the context of school peers differed a great deal from Chen’s. However, her experiences with her university peers vastly expanded the repertoire of resources (for instance, collaborative learning, group assignments) that she could use to resolve issues. From her account of learning at university in China, it seems these turned out to be very useful resources with which to resolve issues (collaboration to finish group assignments). These also turned out to be very useful resources with which to resolve issues with her learning in Australia (group work experiences). Because of learning at a private university run by a Canadian, Hua learned through Western ways of learning whilst in China. This positioned her in an advantage relating to adjusting to university learning in Australia.

5.2.2.3 Group 3: Avery and Yan: Gained first degree and had work in China/Taiwan

Both Avery and Yan had teaching experiences in their home country prior to studying in Australia. The contexts that had influenced their learning included school learning, family, school peers, and university learning, university peers, and also included teaching/work and colleagues. Their experiences were consequently broader than those of Sarah’s, Xin’s, Chen’s and Hua’s. These broader contexts are also believed to have influenced their learning in Australia differently. The following section analyses how Avery’s and Yan’s learning experiences were influenced by these contexts.

Avery’s learning in Taiwan

This section analyses how the activity systems of school learning, family and school peers influenced Avery’s learning and how she crossed boundaries to resolve issues. It then
analyses how the activity systems of university learning, university peers, and teaching influenced her learning and how she crossed boundaries to resolve issues.

*The network centred on school learning*

How the activity systems of school learning, family and school peers influenced Avery’s learning and how she crossed boundaries to resolve issues are analysed in this section.

*The activity system of school learning*

Analysis of Avery’s learning at school revealed that the range of external mediating artefacts that were used to purposefully intervene in her learning was very similar to Chen’s and Hua’s. Unlike Chen’s and Hua’s teachers, Avery’s used explicit labelling (M12). Avery said she was put into a low achiever class in high school, which made her learn under explicit labelling.

In regard to rules, Avery’s school teachers also followed most of those that Sarah’s school teachers followed: R_3to7, 9. Like Hua’s teachers, Avery’s also followed R_16. Unlike the rest of the participants’ teachers, Avery’s followed *use of physical violence to motivate study* (R_15). Her teachers’ use of physical violence (Avery said her teachers often slapped her on the face) led Avery also to learn through corporal punishments. Under repetitive reinforcement, Avery (partially) achieved the outcomes that her teachers tried to facilitate (e.g. acceptance of teacher authority in denying her talents in drawing), and also (partially) internalized various rules that her teachers followed (her internalization of the *hierarchical relationships between her teachers and herself*, for instance).

Like Sarah and Hua, pressing issues that Avery experienced in her school learning also resulted from SC (M-O), SC (R-O) and a tertiary contradiction. Take the pressing issue: the denial of her drawing talents for instance. When analysing this against the activity system model, it shows that this resulted from her implicit adherence to R: *the hierarchical*
relationships between her teachers and herself and her inability to reject her teachers’ decision due to this adherence. This adherence restricted her to act within the confines of this rule. Her acceptance of corporal punishment, and her acceptance of being explicitly labelled as a low-achieving student showed the non-resolution of this contradiction.

Like Sarah’s and Hua’s, Avery’s pressing issues also resulted from a tertiary contradiction. For instance, when her teachers introduced the more advanced motive (students should obey teacher instructions) to the dominant motive (she would not obey teacher instructions if they failed to make sense), this resulted in a tertiary contradiction. This contradiction prevailed and was not resolved. Continuing to refuse to read classics out aloud proved her resistance to work toward her teacher’s motive and also showed the prevalence of this tertiary contradiction. Unlike Hua, Avery did not submit to teacher authority, rather she continually refused to accept teacher authority. During this process, she practiced and showed strong self-agency, which she attributed to the support she received from her parents. This example shows that boundary crossing can lead to the rejection of a rule and that sometimes rules are not internalized initially. However, Avery’s practice of agency did not thrive with her school learning. Under her school and teachers’ repetitive reinforcement (frequent punishment, explicit labelling), her practice of agency was diminishing and internalization of R: the hierarchical relationships between her teachers and herself took place.

The activity system of family

Like Xin’s parents, Avery’s parents were also motivated to foster independence. However, rather than using reasoning, support and fostering various values and skills as Xin’s parents did, Avery’s parents relied on not judging academic performance and not intervening in her learning, in order to help her achieve autonomy. Avery’s narrative also showed that her parents, unlike Xin’s parents, seem to have not talked about any rules. Although this did not help Avery internalize rules that might have been helpful to her, such as examination ensures
a good future, it is likely that this helped her to develop the autonomy that was strongly shown by her practice of self-agency within the context of school learning.

Like Xin, Avery did not believe she experienced any pressing issues within the context of family. This might have been produced by her parents’ motive to foster autonomy, which in turn guided them to help Avery to achieve this. From her account of her university learning, it seems the outcomes that she achieved from the context of family (self-referent in decision-making) turned out to be very useful resources with which to resolve issues.

The activity system of school peers

Avery’s experiences within the context of school peers were almost the same as Hua’s. Like Hua’s school peers, her school peers also mainly used support and acts of service to help her feel supported, such as helping each other to form the idea of putting newspapers in pants to alleviate the pain from corporal punishment. Her peers were also very likely to have deferred to group consensus (appeasing) (R12), which restricted them to sustaining the cohesion of the group.

Like Hua, her narrative showed that she did not have any pressing issues that she needed to deal with. From her account of her school learning, it seems the outcomes that she achieved from the context of peers turned out to be very useful resources with which to resolve issues. Her use of peer support (the idea of putting newspapers in pants) to deal with the corporal punishment from her teachers demonstrated this.

The following figure shows the analytic model that represents structural contradictions existing within Avery’s past network of activity systems centred on the leading activity system of school learning, and her approach to issues.
Avery became a kindergarten teacher after high school because her marks were not high enough for her to apply for university study. After a few years practicing teaching in kindergarten settings, she decided to get her undergraduate degree in early childhood education. She went to university as a part-time student because, at the same time, she was still working as a full-time kindergarten teacher. The context of work was thus also one important context that she participated in while studying at university.

The network centred on university learning

How the activity systems of university learning, university peers and teaching influenced Avery’s learning and how she crossed boundaries to resolve issues are analysed in this section.

The activity system of university learning

As in Hua’s case, Avery's university learning experiences were very different from that of her school learning. Avery said she also had university teachers who used learner-centred
teaching (M8), group discussion (practice-based) (M9), individual and group assignments (writing) (M10), oral-presentation (M11), a range of strategies to guide learning (M14), and also encouraged and challenged independent and critical styles of thinking (M15), promoted a collaborative approach to learning (M17) to mediate her learning. These were initiated or used by her teachers to externally mediate her learning. Under repetitive reinforcement, Avery also (partially) transformed these into internal symbolic tools. This subsequently expanded the range of resources Avery internalized. This expansion the same as Hua also was shown to be very helpful for her adjustment with her learning in Australia.

Regarding rules, Avery said her teachers believed that *teachers and students are co-learners* (R8). This influenced their intervention in student learning through using certain external mediating artefacts such as telling students that they could correct teacher mistakes, which was conducive to Avery’s development of agency. This contrasted with what her school teachers believed and practiced, that teachers represented a higher power status.

Analysis of pressing issues that she experienced showed that these resulted from SC (M-O). Analysis of one showed that Avery drew on practical issues (from work), and collaborative learning (from peers) to resolve her lacking topics to discuss with peers in the university setting.

*The activity system of university peers*

Like Hua’s, Avery’s university peers also mainly used support and collaborative learning to learn collaboratively with her and to help her feel supported. Avery noted learning collaboratively with her peers helped her to address group assignments with her learning at university.

Her narrative showed that she had no pressing issues that she needed to deal with in this context.
The activity system of teaching

When analysing the structure of the activity system of teaching, the role Avery played was different from that of the activity system of learning. Instead of being a student, she was a teacher, so the subject was Avery and the object was her students with their learning issues. The main mediating artefacts that she used to mediate her teaching included teaching, reflection (M27), thinking skills (M32), learning from experienced colleagues, and learning from university. Rules included explicit and implicit conventions and regulations on teaching practices (taken from the local Ministry of Education). Her colleagues, her parents and the principal shared the same object with her, which was her students with their general learning issues. The horizontal division of tasks includes any division of tasks with colleagues. The vertical division of power and status is shown by the hierarchical relationships between the principal and herself or between experienced colleagues and herself. The structure of the activity system of teaching is presented here because Avery’s role as a learner/student changed: she became a teacher. All the other students mentioned earlier did not experience this role change.

Analysis of the issues Avery experienced while teaching, revealed that they were the result of a SC (M-O). Practical issues that she met during teaching, such as how to meet learners’ diverse needs, were caused by her lack of mediating artefacts to transform them into desired outcomes. Through use of resources from the context of university learning, such as theories of learning, and also through use of resources from colleagues, such as using their experiences to improve her own teaching pedagogies or as a source of reflection, she resolved these issues. Avery noted she also used experiences she gained from work to help her to understand theories learned at university better.
The following figure shows the analytic model that represents structural contradictions existing within Avery’s past network of activity systems centred on the leading activity system of university learning and her approach to issues.

*Figure 5.10 Analytic Model representing structural contradictions existing within Avery’s past network of activity systems centred on the activity system of university learning and her approach to issues*

When taking the context of teaching as the leading activity system, interactions between other contexts and this one were also shown to be very rigorous. The following figure shows the analytic model that represents the structural contradictions within Avery’s past network of activity systems centred on the leading activity system of work and her approach to issues.
This section analyses how the activity systems of school learning, family and school peers influenced Yan’s learning and how she crossed boundaries to resolve issues. It then analyses how the activity systems of university learning and university peers influenced her learning and how she crossed boundaries to resolve issues. Following this, how Yan used her activity systems of work to help her to achieve becoming a transformer is analysed.

The network centred on school learning

How the activity systems of school learning, family and school peers influenced Yan’s learning and how she crossed boundaries to resolve issues are analysed in this section

The activity system of school learning

According to Yan’s narrative, her teachers apart from using the range of external mediating artefacts that Sarah’s teachers’ used: M1-7, 21-24, also used other-referent in decision making (M32) and learning through positive modelling (LPM) (M34) to mediate her
Yan’s school and teachers followed rules that were almost the same as those followed by Chen’s school and teachers. They also included R1-5, 7-11 and 13. Their adherence to these rules restricted their actions and interactions with Yan, which led to their use of certain mediating artefacts, such as use of her as a positive model, to intervene in her learning. Yan achieved or partially achieved these outcomes that her teachers tried to facilitate, such as studying hard to maintain being the positive model, and also internalized the various rules that her teachers adhered to, such as her internalization of LPM. In her account of university learning, it seems the outcomes that she achieved from the context of school learning turned out to be very useful resources with which to resolve issues. Her use of LPM to improve level of achievements demonstrated this. Her internalization of other referent for decision making however, was shown to further have prevented her from make decisions independently (frequently referred to other for making decisions).

Like Xin and Chen, pressing issues that Yan noted with her school learning resulted from two types of SC (M-O) and SC (R-O).

*The activity system of family*

Like Avery’s parents, Yan’s parents were also motivated to foster independence and autonomy. However, unlike Avery’s parents, Yan’s parents also intervened through cultivating various moral values, which also helped Yan to achieve outcomes such as continuous effort, continuous focus on goals. These outcomes were valuable for her to
resolve the issues she experienced at school. Her use of continuous effort to improve her achievement scores demonstrated this.

Yan’s narrative showed that her parents did not seem to have followed any rules that constrained her actions. Like Xin, and Chen, Yan’s narrative did not show that she had experienced any contradictions. Rather, she seems to have acquired various outcomes and became autonomous. As a result of this autonomy, she was able to select and read broadly to improve herself. She viewed “the whole environment is quite academic, achievement centred, the teachers focus on the achievement part instead of their (the students’) human naturalist part”. She therefore, read broadly (the classics for instance, where she acquired various values including moderation, meditation, reflection, diligence), and learned from peers to compensate the so called “narrow minded teaching context”. Being autonomous to a great extent helped her to improve herself.

*The activity system of school peers*

According to Yan’s narrative, her experiences within the context of school peers were almost the same as Chen’s. Like Chen’s, her peers also provided support, learned collaboratively with her, and also acted as a source of motivation. However, instead of offering a positive model for her to learn from as Chen’s peers did, Yan performed as a positive model for her peers to learn from. Like Chen, Yan also achieved various outcomes: she received support, learned collaboratively, learned through being a positive model and also received more motivation to achieve well. From her account of her school learning, it seems the outcomes that she achieved from the context of peers turned out to be very useful resources with which to resolve issues. Her use of collaborative learning (from peers) to improve academic achievements demonstrated this.
Like Chen’s peers, the implicit rules that Yan’s peers adhered to included giving priority to saving face (R11), such as when Yan gained face amongst her peers due to praise from her teachers), and learning through positive modelling (R10) (being a positive model). However, unlike Chen, Yan loved to answer questions, and her teacher’s praise: “Yan loves to respond to questions, everybody should learn from her” to some extent promoted her to be the positive model and also be the anomaly. This to some extent “protected” her from being sneered at by her peers if they thought she was showing off, like Chen’s peers did. Yan (partially) achieved the outcomes that her peers influenced her to achieve, such as working hard to sustain being a positive model, and also internalized the various rules that her peers adhered to, such as her internalization of learning through positive modelling.

The following figure shows the analytic model that represents structural contradictions existing within Yan’s past network of activity systems centred on the leading activity system of school learning and her approach to issues.

Figure 5.12 Analytic Model representing structural contradictions existing within Yan’s past network of activity systems centred on the activity system of school learning and her approach to issues

After completing Year 9, Yan went to a teachers’ college to be trained as a primary school teacher. After working as a primary school teacher for a couple of years, she went to
university to pursue an undergraduate degree majoring in teaching English as a foreign language, which as she noted was what her dream was, at that time.

*The network centred on university learning*

How the activity systems of university learning, and university peers influenced Yan’s learning and how she crossed boundaries to resolve issues are analysed in this section.

*The activity system of university learning*

Yan’s narrative reflected that her experience of university learning was very similar to that of her school learning, which was also examination and achievement oriented. This resembled what Chen experienced, and is probably because the range of mediating artefacts that Yan’s university teachers used to externally mediate her learning was the same as those Chen’s university teachers used. These external mediating artefacts also included preparation tests (M4), homework (M5), teacher-centred teaching (M6) and textbook-orientated teaching (M7), memorization (M21), underlining (M22), repetition (M23), and learning by self (M24). This to a large extent reinforced Yan to learn through these mediating artefacts.

Yan’ did not elaborate much about the rules that her university teachers adhered to in intervening in her learning. However, her narrative showed that the rule: *hierarchical relationships between one’s teachers and oneself* (R7) continued to influence her learning at university.

Analysis of pressing issues that she experienced showed that these resulted from SC (M-O) and SC (R-O). Analysis of one showed that Yan drew on motivation (from her peers), continuous effort (from her family) and motivation to be the positive model (from her school learning) to improve her skills in English. She worked hard to keep abreast with her peers, shows a visible influence from her being a positive model at school. This to a great extent helped her to be successful academically: she said she did well in exams. However, this also
demonstrates her continuous adherence to the belief in the greater worth of teachers. Her adherence to the hierarchy continued to restrict her from working towards her goal of choosing her own career.

The activity system of university peers

Yan’s experiences within the context of university peers resembled that of her school peers in the use of mediating artefacts and rules. Because of this similarity, how the context of university peers influenced her learning is not repeated here.

The following figure shows the analytic model that represents structural contradictions existing within Yan’s past network of activity systems centred on the leading activity system of university learning and her approach to issues.

Figure 5.13 Analytic Model representing structural contradictions existing within Yan’s past network of activity systems centred on the activity system of university learning and her approach to issues
Yan as a transformer: The network centred on the activity system of a transformer

While Yan was studying at the boarding school, her practice of autonomy was very visible. As mentioned earlier, she chose to read broadly and learn from peers to compensate what she called the “narrow-minded” context. However, her teachers’ praise and selection of her as the positive model for her peers to learn from and her adherence to the hierarchical relationships between her teachers and herself seem to have gained a much greater influence. Her belief in the greater worth of teachers resulted in her referring other for decision making. Her pursuit of an undergraduate degree, attempt in being a film-maker, being a kindergarten teacher, a trainer, a facilitator, a teacher in an international school, pursuit of a masters’ degree in Australia, a Graduate Diploma in primary teaching and being a primary school teacher in Australia attested this, which meanwhile reinforced her internalization of referring other for decision making.

Yan claimed wanting to find out who she was and what she loved to do was her goal, she did do many things attempting to achieve this goal. However, rather than out of her own will, she referred to other for decision making, which resulted from the process of internalization due to her experiences in the contexts of school learning. Her adherence to referring other for decision making also restricted her from working towards her goal of choosing her own career.

It can be argued that through the process of creating, testing and modifying mediating artefacts, Yan to some extent achieved transformation. However, her referring to other for decision making seems to have prohibited her from transforming herself: her transformations seem to have been directed by other people.
The following figure shows the analytic model that represents structural contradictions existing within Yan’s past network of activity systems centred on the leading activity system of a transformer and her approach to issues.

Figure 5.14 Analytic Model representing structural contradictions existing within Yan’s past network of activity systems centred on the activity system of a transformer and her approach to issues

Brief summary

Although Avery’s and Yan’s school teachers used similar mediating artefacts to mediate their learning, their learning experiences varied a great deal, probably due to different implicit rules to which their teachers adhered. Avery’s teachers employed physical violence and
punishments to motivate study. Yan’s teachers followed the rule of *learning through positive modelling (LPM)*, which influenced their use of the mediating artefact of selecting her as the positive model for instance to influence Yan’s learning. The difference between the learning experiences of these two participants was also demonstrated by the contradictions that produced their respective pressing issues. Yan’s resulted from SC (R-O) and SC (M-O). In addition to these two secondary contradictions, Avery’s was also caused by a tertiary contradiction. Yan did not experience a tertiary contradiction when her teachers introduced the culturally more advanced motive. Her motive in wanting to gain a high rank was the same as the advanced motive that her teachers introduced. This congruity helped her to take her teachers’ intervention willingly. However, Avery did not actively seek this culturally more advanced motive; rather she resisted working towards it. This contradiction was not resolved, so it continued to exist for her.

Regarding Avery’s and Yan’s respective contexts of family, the motives that their parents introduced were the same: that of facilitating autonomy. However, they mediated this differently. Avery’s parents offered support through fostering independence in decision-making, not judging academic achievements, and not intervening, whilst Yan’s parents offered support through cultivating the values of continuous effort, continuous focus on goals, and encouraging autonomy.

Their experiences in their peer contexts also differed. This difference was demonstrated through the range of mediating artefacts that their peers used. Yan’s (providing support, use of collaborative learning, being a positive model for her peers to learn from and providing a source of motivation) was much broader than Avery’s (limited to supporting her creating the idea of putting newspapers in pants). This broad range in turn helped Yan to gain many more
resources from her peers than Avery did. This turned out to be valuable for Yan to draw on to solve pressing issues.

Boundary crossing amongst various contexts centred on the leading contexts of school learning was very visible for both Avery and Yan. Through this, Yan expansively resolved the secondary contradiction between mediating artefacts and objects, however, Avery did not resolve any.

Their university learning experiences differed a great deal. Whilst Yan’s university experiences resembled those of her school learning, Avery’s differed a lot. Avery’s university teachers, for instance, believed they and their students were co-learners, also adopted mediating artefacts (for instance, individual and group assignments, learner-centred teaching) that were radically different from those that her school teachers used. This helped Avery to expand internal symbolic tools that she could use to resolve issues. Yan experienced two secondary contradictions. However, Avery experienced only one: between mediating artefacts and objects.

Avery’s university peers influenced her learning differently from the way that her school peers did. This was demonstrated through the expanded range of mediating artefacts that her university peers used (for instance, collaborative learning). This helped her to have similar experiences to those Yan experienced with her university peers. Boundary crossing amongst the contexts centred on the leading activity system of university learning was very visible for both Yan and Avery. Avery’s seemed to be more dynamic than Yan’s. Whilst Yan’s movement resembled those that she experienced with her school learning, Avery’s was much more dynamic. The roles that their activity systems of work played differed. Whilst Avery’s was a leading activity system that she participated in, Yan’s functioned as a tool that she used to help her to achieve her motive in finding out who she was.
5.2 ICSs’ learning in Australia: Against the collective activity system model

How ICSs’ cultural and educational heritage framed their learning was discussed in the previous section. This section looks at the issues that they experienced as challenging/difficult to manage in Australia and analyses root causes or contradictions that led to their experience of these issues.

5.2.1 Issues that ICSs’ experienced as challenging/difficult to manage with their learning in Australia

In the face to face interview, participants were asked to elaborate/reflect on the areas that they experienced as challenging/difficult to manage in Australia. Their elaborations on this or anything that they recalled as challenging/difficult/anything that fitted in this were analysed and categorized.

The following table outlines the types of challenges/issues these participants experienced in the Australian learning context: Sarah and Xin from Group 1, Hua and Chen from Group 2, Avery and Yan from Group 3. M versus O or R versus O stands for structural contradictions that led to their experience of these challenges. The types of challenges not resolved are marked in red, which are further explored in section 5.3.
Table 5.4

Challenges by per participant

<table>
<thead>
<tr>
<th>Groups</th>
<th>Interviewee</th>
<th>Challenges/Issues</th>
</tr>
</thead>
</table>
| 1      | Sarah       | 1. Writing (understanding instructions) (M versus O)  
2. Self-regulation (M versus O)  
3. Reading (vocabulary) (M versus O)  
4. Decision-making (R versus O)  
5. Answering questions in class on a voluntary basis (R versus O)  
6. Asking questions in class on a voluntary basis (R versus O) |
| 2      | Xin         | 1. Language in general (M versus O)  
2. Learning culture in general (M versus O)  
3. Writing (structure) (M versus O)  
4. Writing (argument) (M versus O)  
5. Reading (amount of reading material) (M versus O)  
6. Self-regulation (M versus O)  
7. Voicing her opinions in class on a voluntary basis (R versus O)  
8. Fitting in /exclusion (R versus O) |
| 2      | Hua         | 1. Listening comprehension (M versus O)  
2. Self-regulation (M versus O)  
3. Reading (searching articles) (M versus O)  
4. Writing (understanding instructions) (M versus O)  
5. Fear of failing (M versus O)  
6. Asking questions in class on a voluntary basis (R versus O)  
7. Voicing opinions in group discussion (R versus O) |
| 2      | Chen        | 1. Listening comprehension (M versus O)  
2. Group discussion as new form of learning (M versus O)  
3. Learning for self-improvement (M versus O)  
4. Writing (addressing requirements) (M versus O)  
5. Asking questions (R versus O)  
6. Answering questions in class on a voluntary basis (R versus O)  
7. Seeking help (R versus O)  
8. Voicing opinions in class on a voluntary basis (R versus O) |
| 3      | Avery       | 1. Lacking topic knowledge on sexuality (M versus O)  
2. Answering questions (M versus O)  
3. Writing (to be understood) (M versus O)  
4. Verbally discussing sensitive topics in public (R versus O)  
5. Asking questions (R versus O) |
| 3      | Yan         | 1. Listening comprehension (Australian slang) (M versus O)  
2. Writing (achieving high academic results) (M versus O)  
3. Managing stress (M versus O)  
4. Fitting in / inclusion (R versus O) |

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The analysis undertaken in this study identified a total of 19 types of issues. Amongst these, eight types were experienced by two or more participants and 11 were encountered by only one. The following table details their issues by frequency of experience.

Table 5.5

*Challenges by frequency of experience*

<table>
<thead>
<tr>
<th>Types of challenges</th>
<th>Frequency of encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. English language (Writing)</td>
<td>6 (Sarah, Xin, Hua, Chen, Avery, Yan)</td>
</tr>
<tr>
<td>2. Asking questions in class</td>
<td>4 (Sarah, Hua, Chen, Avery)</td>
</tr>
<tr>
<td>3. English language (Reading)</td>
<td>3 (Sarah, Xin, Hua)</td>
</tr>
<tr>
<td>4. English language (Listening)</td>
<td>3 (Hua, Chen, Yan)</td>
</tr>
<tr>
<td>5. Answering questions in class on a voluntary basis</td>
<td>3 (Chen, Avery, Sarah)</td>
</tr>
<tr>
<td>6. Self-regulation</td>
<td>3 (Sarah, Xin, Hua)</td>
</tr>
<tr>
<td>7. Voicing opinions in class on a voluntary basis</td>
<td>3 (Xin, Hua, Chen)</td>
</tr>
<tr>
<td>8. Fitting in/exclusion</td>
<td>2 (Xin, Yan)</td>
</tr>
<tr>
<td>9. Decision-making</td>
<td>1 (Sarah)</td>
</tr>
<tr>
<td>10. Language in general</td>
<td>1 (Xin)</td>
</tr>
<tr>
<td>11. Learning culture in general</td>
<td></td>
</tr>
<tr>
<td>12. Fear of failing</td>
<td>1 (Hua)</td>
</tr>
<tr>
<td>13. Group discussion as new form of learning</td>
<td>1 (Chen)</td>
</tr>
<tr>
<td>14. Learning for self-improvement</td>
<td></td>
</tr>
<tr>
<td>15. Seeking help</td>
<td></td>
</tr>
<tr>
<td>16. Lack of topic knowledge on sexuality</td>
<td>1 (Avery)</td>
</tr>
<tr>
<td>17. Verbally discussing sensitive topics in public</td>
<td></td>
</tr>
<tr>
<td>18. Negotiating with teachers</td>
<td></td>
</tr>
<tr>
<td>19. Managing stress</td>
<td>1 (Yan)</td>
</tr>
</tbody>
</table>

Of these 19, the most commonly experienced area of challenge was around issue 1: writing. All six elaborated on this. Regarding this challenge, specific areas of challenge varied from participant to participant. This variation ranged from experiencing pure linguistic difficulties in relation to understanding what written instructions meant (Sarah and Hua: “I did not understand what the assignment requirements were so I had conversations with my peers to clear the requirements about assignments”) to encountering challenges relating to interpreting subtle implicit rules governing the academic discourse of writing (for instance, Xin on structure and argument composition, and Avery on converting to the Australian styles of writing in order to be understood), and to managing obstacles due to the high goals that
they set to achieve with their writing (for instance, Yan’s self-imposed challenge to achieve high academic results: “I set a very high standard for myself, that is a reason I put myself in a very stressful situation”).

Regarding challenge type 2: voluntarily asking questions in class, four participants (Hua, Chen, Avery, Sarah: “I have been here for so many years, for parts I do not understand, I just cannot put my face down, still feel embarrassed to ask”) articulated difficulties in this area. The basis of this challenge seems to be their adherence to giving priority to face saving. Sarah said she did not want to be viewed as having problems, Chen said she did not want to be viewed as a low achiever, Hua did not want to be viewed as rude/silly, and Avery said she did not want to be viewed as rude. In order to save face, the action of voluntarily asking questions, which was viewed as face losing, did not occur for these four students.

With regard to challenge type 3: reading, Sarah, Xin and Hua noted that they experienced challenges in this area. There were also variations in this area. This variation ranged from experiencing pure linguist challenges (Sarah: “for reading English reference books alone, no, dear, I cannot read it. You know, for one sentence, I might look up the dictionary several times”) to facing difficulties in terms of managing the amount of reading material. For example, Sarah did not know much of the vocabulary involved in the reading materials whereas Xin found it difficult to finish reading the amount of material, and Hua did not know how to search for reading material.

Relating to challenge type 4: listening comprehension, Hua, Chen and Yan experienced challenges with this. Their challenges seemed to occur around experiencing linguistic difficulties that were related to comprehension. For instance, Hua claimed not having adequate vocabulary stopped her from comprehension of her peers’ topics. Challenges also seem to be compounded by cultural factors. For instance, Chen said inadequate knowledge
about the target culture hindered her from understanding her peers’ conversation although she knew the meaning of every word.

Considering challenge type 5: voluntarily answering questions in class, Sarah, Chen and Avery encountered difficulties in this. Chen reported experiencing challenge in this area as she believed this was showing off: “when I know how to address a question, but I am reluctant to hand up to answer the question, because I do not want to show off”. Avoiding being disliked in order to gain favorable impressions by her peers (cf. Wang, 2012) prohibited her from answering questions voluntarily. Sarah, however, was worried that the teachers would ask her to answer their questions because she felt it would be humiliating if she did not know the answer. Avery, instead of having difficulties in voluntarily answering questions in class, had difficulties in addressing the unexpected questions her teachers asked her. This, however, was tied to her lack of content knowledge instead of avoiding being disliked.

Regarding challenge type 6: self-regulation, areas of challenge also varied. This variation ranged from time management (Sarah, Xin) to self-disciplining. Hua said she had to sit at the table to finish assignments and Xin said she had to discipline herself to form the habit of finishing one assignment within three days maximum.

Three and two participants respectively reported experiencing challenges in voicing opinions in class (Hua: “I did not voice my opinions in class. I was thinking, oh, my god, I have an accent, no, I am not going to talk, I am going to look and listen to them”) and fitting in. Xin, Hua and Chen said that they faced challenges in voicing their opinions in class. Their reluctance to do so seemed to be related to various factors. Whilst Xin viewed it as disrespectful to teachers (she valued hierarchical relationships between teachers and students), Hua felt ashamed of her accent (face-saving), and Chen was prohibited by a
combination of her English language proficiency, and giving priority to saving face. Both Xin and Yan faced difficulties around fitting in (Xin: “they just sit with themselves and exclude you, no one talks to you, but that is hard”). Their degree of willingness to join the Australian community also varied. Xin wanted to be included only in the general academic community, whilst Yan wanted to have a sense of belonging and also to become an insider in the community.

The eight types of challenges described above were experienced by two or more participants. Apart from these, there were another 11 types (challenge episodes from 9 to 19 as shown in Table 5.5), which analysis identified as experienced by one participant only. These 11 types comprise decision-making (Sarah), language and learning culture in general (Xin), fear of failing (Hua: “I could not understand the lectures and tutorials, so I was like, oh, my god, I am going to fail, I am going to fail definitely”), group discussion as a new form of learning, learning for self-improvement, seeking help (Chen: “my lecturer suggested me to go to that language program, it is free for international students, but I did not. Maybe because I was reluctant to say that I was not a good student, because I regard myself as a good student”), lacking topic knowledge on sexuality, verbally discussing sensitive topics in public, not being able to negotiate with teachers (Avery), and managing stress (Yan).

5.2.2 Root causes that led to ICSs’ experience of issues in Australia: Analysis by the collective activity system model

This section presents root causes or contradictions that led to ICSs’ experience of these issues. This is carried out through the analysis of these issues against the collective activity system model with a consideration of historicity. For the analytic model that used for this analysis, please refer to Figure 5.2. A large proportion of these issues comprised SC (M-O) (see Table 5.4 for Sarah (1-3), Xin 1-6, Hua 1-5, Chen 1-4, Avery 1-3, Yan 1-3). The rest
comprised SC (R-O) (see Table 5.4 for Sarah (4-6), Xin 7-8, Hua 6-7, Chen 5-8, Avery 4-6, Yan 4). The following provides detailed analysis on this.

Given what Sarah said in her narrative concerning her pressing issue of not being able to comprehend reference books (O): she said she could not read it, because “for one sentence, I [Sarah] might look up the dictionary several times”, her issue was thus attributed to a lack of required vocabulary (M). It therefore was taken to indicate a secondary contradiction between mediating artefacts and objects (SC (M-O)). The same analysis applied to her challenges in areas of understanding assignment requirements and time management. Her pressing issue of not being able to voluntarily ask questions in class (O) was attributed to her adherence to saving face (R). She said she would feel embarrassed if she asked questions. It thus was taken to indicate a secondary contradiction between rules and objects (SC (R-O)). Her challenges 4-6 were attributed to SCs (R-O).

Given what Xin said in her narrative concerning her pressing issue of not being able to finish the amount of reading materials within certain time period (O): “I could not cope with the reading in the first place, … it [the amount of reading] was too much”, her issue was thus attributed to a lack of the tools (M) to achieve her O: finish the amount of material. It therefore was taken to indicate a SC (M-O). Her challenges 1-6 were attributed to SCs (M-O). Her pressing issue of not being able to voice opinions without teacher explicit permission (O) was attributed to her adherence to hierarchical relationships between teachers and herself (R). To voice her opinions, she said she needed explicit teacher permission to do so: she needed her teachers to tell her that it was her turn. Otherwise, it would be a challenge to teacher authority: she said if she did it without permission, she felt she could speak English, could not remember what she was going to say. It thus was taken to indicate a SC (R-O). Her challenges 7 and 8 were attributed to SCs (R-O).
Given what Hua said in her narrative concerning her pressing issue of not knowing how to search for articles (O): she said she did not know what databases to use and how to find relevant articles online, her issue was thus attributed to a lack of skills (M). It therefore was taken to indicate a SC (M-O). Her challenges 1-5 were attributed to SCs (M-O). Her pressing issue of not being able to voice opinions in group-discussion (O) was attributed to her adherence to *saving face* (R). She said she had an accent, and thus would feel embarrassed to talk. It thus was taken to indicate a SC (R-O). Her challenges 6 and 7 were attributed to SCs (R-O).

Given what Chen said in her narrative concerning her pressing issue of not knowing how to learn through group work (O): “one tutor said I will group you, I will let you be group of five, I do not understand why we have to be a group of five”, her issue was thus attributed to a lack of knowing what group work was and how to learn through group work (M). It therefore was taken to indicate a SC (M-O). Her challenges 1-4 were attributed to SCs (M-O). Her pressing issue of not being able to seek help (O) was attributed to her adherence to *saving face* (R). She said she did not seek help to improve her language as she did not want to be labelled or viewed as a student who had language problems. It thus was taken to indicate a SC (R-O). Her challenges 5-8 were attributed to SCs (R-O).

Given what Avery said in her narrative concerning her pressing issue of not knowing how to avoid beating around the bush with her writing (O): she said she had difficulties in avoiding beating around the bush with her essay writing, her issue was thus attributed to a lack of knowing the Australian conventions on essay composition (M). It therefore was taken to indicate a SC (M-O). Her challenges 1-3 were attributed to SCs (M-O). Her pressing issue of not being able to ask questions in class (O) was attributed to her adherence to *appeasing/deferring to group consensus* (R). She said she did not ask questions because she thought this would waste other students’ time. She was concerned about being viewed as rude.
and thus did not want to annoy her peers. It thus was taken to indicate a SC (R-O). Her challenges 4-6 were attributed to SCs (R-O).

Given what Yan said in her narrative concerning her pressing issue of not being able to understand Australian slang (O): she said she had difficulties in understanding the meanings of Australian slang that her teachers used, her issue was thus attributed to a lack of understanding/knowledge about the Australian slang (M). It therefore was taken to indicate a SC (M-O). Her challenges 1-3 were attributed to SCs (M-O). Her pressing issue of not being able to become an insider (O) was attributed to her initial adherence to deferring to group consensus (R). She said the more she tried to become an insider, the more she realized she was an outsider. The invisible boundary she unconsciously set by the insider/outsider perspectives prevented her from gaining that sense of belong. It thus was taken to indicate a SC (R-O).

In conclusion, participants’ pressing issues were caused by SC (M-O) and SC (R-O). Participants’ learning experiences in China to a large extent influenced the production of these pressing issues. Pressing issues that were caused by the SC (M-O) were due to participants needing to meet new demands (O) and their lack of M to draw on, due to their previous learning, to address these demands. Pressing issues that were caused by SC (R-O) showed that these were mostly caused by their adherence to R (for instance, giving priority to saving face) as a result of their previous learning in China/Taiwan.

5.3 ICSs’ approaches to issues: Dynamics in processes of resolution and/or non-resolution of issues

This phase of analysis focuses on ICSs’ approaches to issues. In particular, it identifies the dynamic processes involved in their resolution of issues, such as boundary crossing. Root causes that continued to prevent them from resolving their issues are also identified. This
analysis addresses the research question: how their past experiences influence or frame their resolution of issues that they experienced in Australia. Detailed information is provided in the following three groups.

5.3.1 Group 1

This section examines the dynamic processes involved in Sarah’s and Xin’s resolution and non-resolution of pressing issues (specific challenging issues are detailed in Table 5.4). It should be noted that length of explanation varies from participant to participant to avoid redundancy (ie. whether or not it has been explained in previous cases).

**Sarah’s approaches to pressing issues**

Sarah’s narrative indicated that she experienced six challenging issues with her learning in Australia. These resulted from SC (M-O) (challenges 1-3) and SC (R-O) (challenges 4-6). The first two were resolved, whilst the last four were not.

Sarah used boundary crossing to resolve some of her pressing issues. These included challenge issue 1 (not being able to understand assignment requirements), and 2 (not knowing how to regulate her time). Regarding the issue of not being able to understand assignment requirements, for instance, she used resources that she gained from the context of Australian university peers (collaborative learning for instance) to resolved this. Through crossing boundaries from the context of Australian university peers to the context of university learning, she resolved this secondary contradiction.

Sarah’s challenge issues 3 (not being able to comprehend reference books) that resulted from SC (M-O) and 4 (unable to make decisions independently), 5 (worried about being asked by teachers to answer questions), 6 (unable to ask questions) that resulted from SC (R-O) were not resolved. Although she used resources from the context of Australian university peers (collaborative learning: Sarah asked her peers to memorize vocabularies through
watching TV), this did not help to increase her ability to comprehend reference books. Her repetitive actions of forcing herself to read reference books showed the non-resolution of this issue. This indicates the importance of realizing where contradictions lie, and also the importance of using appropriate tools in order to maximize expansive resolution.

Her adherence to the *hierarchical relationships between her parents and herself* resulted in her being unable to make decisions independently in Australia. Her reference to family for decision-making demonstrated the non-resolution of this issue and also the continuance of the secondary contradiction.

Sarah’s adherence to *giving priority to saving face* influenced her experience in Australia, as in challenge issue 5: being worried about being asked by teachers to answer questions, which she thought would humiliate her (she said she was not sure about the answers on most occasions). Her adherence to this rule also resulted in her being unable to ask questions (challenge issue 6) as she did not want to be viewed as having problems. These issues were not resolved.

Sarah’s adherence to the *hierarchical relationships between her parents and herself* and to *giving priority to saving face* as a result of involvement in contexts of family, school learning and school peers in China influenced her experience in Australia, as in challenge issues 4 and 5, 6; and also restrained her from resolving these issues. This also demonstrated how these contexts interacted with the context of university learning, Australia to influence her experience and her approach to pressing issues.

The following figure shows the analytic model that represents Sarah’s approaches to issues. In this and the following five figures, the activity systems on the left side of the vertical rectangle were those that she involved in in China, which continued to constrain her learning in Australia. On the right side of the vertical rectangle, the activity systems drawn
with solid lines were those that she involved in in Australia. The ones with dotted lines were those that she involved in in China but performed as resources for her to resolve issues. Broken arrow lines connecting two activity systems represent movement between these two systems (i.e. boundary crossing) with the arrow indicating direction of movement. Numbers beside these broken arrow lines indicate specific challenging issues. Broken arrow lines going through the vertical rectangle indicate how past contexts continued to prevent her from resolving pressing issues. The broken arrow lines connecting various activity systems on the right side demonstrate how she crossed various contexts to resolve pressing issues.

*Figure 5.15* Analytic Model that represents Sarah’s approaches to issues

Xin’s approaches to pressing issues

Xin’s narrative indicated that she experienced eight challenging issues with her learning in Australia. These resulted from SC (M-O) (challenges 1-6) and SC (R-O) (challenges 7, 8). The first six were resolved, whilst the last two were not.
Xin, like Sarah, used boundary crossing to resolve some of her pressing issues. These included challenge issues 1 (having difficulties in comprehending the English language), 2 (having difficulties in complying with the new learning), 5 (could not handle the amount of reading materials) and 6 (challenges in self-regulation). Regarding the issue of having difficulties in comprehending the English language, for instance, she used resources that she gained from the context of university peers, Australia (models to learn from), her school learning in China (internalization of learning through positive modelling), foundation studies (opportunities for practice) and family (independence in decision-making: she made the decision that she had the obligation to fit in) to resolve this issue. Through crossing boundaries from the contexts of university peers, Australia, school learning in China, foundation studies and family to the context of university learning, she resolved this secondary contradiction.

Unlike Sarah, Xin used a combination of intervention and boundary crossing to resolve two of her challenging issues: 3 (not knowing how to structure essays) and 4 (not knowing how to make arguments with essay writing). Regarding the issue of not knowing how to structure essays, for instance, she used resources that she gained from the context of foundation studies (her teachers’ instruction on how to structure essays), and from the context of school learning in China (internalization of practice makes perfect) to resolve this issue. Her teacher’s intervention with her use of boundary crossing helped her to resolve this contradiction.

Xin’s challenge issue 7 (not able to voice opinions in class without teacher permission) and 8 (not able to fit in) that resulted from SC (R-O) were not resolved. Her adherence to the hierarchical relationships between her teachers and herself (R7) resulted in her being unable to voice opinions without teacher permission (this she thought was a disrespect for teacher
authority). Her continuing experience of this issue demonstrated the non-resolution of this issue and also the prevalence of the secondary contradiction.

Xin’s association of achievements with great rewards, i.e. *achievement success ensures a good future* (R) to some extent influenced her difficulties in not fitting into her local peers’ community (O). Xin said her local peers excluded her: “they know I am the one with black hair and then they just sit with themselves and exclude you, no one talks to you”. She attempted to join in at one stage; this effort, however, did not help her to fit in: she felt her local peers still excluded her. She then realised that she could express her opinions as much as she liked during assignment writing, which also helped her to gain high marks, another of her objectives. Consequently, she came to think that joining in her peers’ discussion was not critical and thus made the decision to be an outsider of her local peers’ community. She again valued academic achievement more than fitting in her peers’ community. This again showed how the context of family (in specific motivation to achieve great missions) interacted with her university learning in Australia to impact her approach to this pressing issue.

Xin’s continuing adherence to the *hierarchical relationships between teachers and herself* and *achievement success ensures a good future* as a result of her involvement in contexts of school learning, and family in China influenced her experience of challenge issues 7 and 8, and also prevented her from resolving these issues. This also demonstrated how the contexts of school learning, and family interacted with the context of university learning, Australia to influence her experience and her approach to pressing issues. The following figure shows the analytic model that represents Xin’s approaches to issues.
Figure 5.16 Analytic Model representing Xin’s approaches to issues
The following table details how Sarah and Xin resolved pressing issues that they experienced with their learning in Australia.

Table 5.6

Mechanisms involved in resolution of issues

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenging issues</th>
<th>Dynamic process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah</td>
<td>Writing</td>
<td>Boundary crossing (BC) (the activity system of university peers Australia: collaborative learning)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-regulation</td>
<td>BC (the activity system of family: reinforced adherence to her parents’ discipline), BC (the activity system of university peers, Australia: support), the activity system of intrinsic learning, Australia (graphic design, Cantonese)</td>
<td></td>
</tr>
<tr>
<td>Xin</td>
<td>Language in general</td>
<td>BC (the activity system of school learning China: Learning through positive modeling: LPM), BC (the activity system of university peers, Australia: models to learn from), BC (the activity system of family: independence in decision-making), BC (the activity system of foundation studies: opportunities for practice), belief: have the obligation to fit in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning culture in general</td>
<td>BC (past activity system of school learning China: LPM), BC (the activity system of university peers, Australia: models to learn from), BC (the activity system of family: independence in decision-making), BC (the activity system of foundation studies: opportunities for experiencing), belief: have the obligation to fit in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing (structure)</td>
<td>Intervention &amp; BC (past activity system of school learning China: practice makes perfect: PMP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing (argument)</td>
<td>Intervention &amp; BC (past activity system of school learning China: PMP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading (amount of material)</td>
<td>BC (the activity system of school learning China: PMP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-regulation</td>
<td>BC (the activity system of school learning China: experiences in practicing self-regulation skills), BC (the activity system of family: self-regulation skills)</td>
<td></td>
</tr>
</tbody>
</table>
Root causes that led to their experience and non-resolution of similar pressing issues in Australia are detailed in the following table.

Table 5.7

**Root causes preventing resolution of issues**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenging issues</th>
<th>Factors preventing resolution of issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reading (comprehending reference books)</td>
<td>Applied inappropriate tools: BC (the activity system of university peers Australia: collaborative learning) Implicit adherence to <em>hierarchical relationships between one’s parents and oneself</em> as one outcome of her activity system of family was repackaged through re-contextualization and continued to prohibit her from achieving independence in decision-making</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decision-making</td>
<td>Implicit adherence to <em>giving priority to saving face</em> as one outcome of the activity system of school learning, China was repackaged through re-contextualization and continued to prohibit her from answering questions (does not want to be humiliated)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Sarah</td>
<td>Implicit adherence to <em>giving priority to saving face</em> as one outcome of the activity system of school learning, China was repackaged through re-contextualization and continued to prohibit her from answering questions (does not want to be humiliated)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Answering questions</td>
<td>Implicit adherence to <em>giving priority to saving face</em> as one outcome of the activity system of school learning, China was repackaged through re-contextualization and continued to prohibit her from answering questions (does not want to be humiliated)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asking questions</td>
<td>Implicit adherence to <em>hierarchical relationships between one’s teachers and oneself</em> as one outcome of the activity system of school learning was repackaged through re-contextualization continuing to prohibit her from voicing her opinions in class (regarded as disrespect)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicing opinions in class on a voluntary basis</td>
<td>Implicit adherence to <em>achievement success ensures a good future</em> as one outcome of her activity system of family, China was repackaged through re-contextualization and constrained her from fitting in her local peers’ community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Xin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fitting in/exclusion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**5.3.2 Group 2**

This section examines the dynamic processes involved in Hua’s and Chen’s resolution and non-resolution of pressing issues (specific challenging issues are detailed in Table 5.4).
Hua’s approaches to pressing issues

Hua’s narrative indicated that she experienced seven challenging issues with her learning in Australia. These resulted from SCs (M-O) (challenges 1-5) and SCs (R-O) (challenges 6, 7). The first five were resolved, whilst the last two were not.

How Hua resolved her pressing issues was very similar to Xin’s approach. Hua, like Xin, used boundary crossing to resolve some of her pressing issues. These included challenge issues 2: experiencing difficulties in regulating self, 3: not knowing how to search articles for reading and 4: having difficulties understanding instructions for writing. Regarding the issue of not knowing how to search articles for reading comprehension for instance, she used resources that she gained from the context of university peers, Australia (support) to resolve this issue. Through crossing boundaries from the contexts of university peers, Australia, to the context of university learning, she resolved this secondary contradiction.

Like Xin, Hua also used a combination of intervention and boundary crossing to resolve two of her challenging issues: 1: not being able to comprehend English and 5: not knowing how to manage her fear of failing. Regarding her being unable to comprehend much of what was said in class, for instance, she used help from intervention provided by an Academic and Language Support Unit, and used resources that she gained from the context of school learning, China (learning through positive modelling) and of the context of university peers, Australia (positive models) to resolve this issue. Her university’s intervention provided by the Academic and Language Support Unit and her use of boundary crossing helped her to resolve this contradiction.

Hua’s challenge issue 6 (unable to ask questions in class) and 7 (unable to voice opinions in class) that resulted from from SC (R-O) were not resolved. Her adherence to deferring to group consensus and giving priority to saving face resulted in her being unable to ask
questions in class to avoid being disliked: regarded as rude and to avoid being laughed at: regarded as silly. Her continuing experience of this issue demonstrated the non-resolution of this issue and also the prevalence of the secondary contradiction.

Hua’s adherence to *giving priority to saving face* influenced her experience in Australia, as in challenge issue 7: not being able to voice opinions in class (being ashamed of her accent). This showed how the contexts of school learning, school peers, university learning, and university peers interacted to impact her experience and non-resolution of this pressing issue.

Hua’s continuing adherence to *deferring to group consensus* and to *giving priority to saving face* as a result of her involvement in contexts of school learning, school peers, university learning, and university peers in China influenced her experience of challenge issues 6 and 7, and also constrained her from resolving these issues. This also demonstrated how these contexts interacted with the context of university learning, Australia to influence her experience and her approach to pressing issues.
The following figure shows the analytic model that represents Hua’s approaches to issues.

Figure 5.17 Analytic Model that represents Hua’s approaches to issues

Chen’s approaches to pressing issues

Chen’s narrative indicated that she experienced eight challenging issues with her learning in Australia. These resulted from SC (M-O) (challenges 1-4) and SC (R-O) (challenges 5-8). The first five were resolved, whilst the last three were not.

Chen, like Hua, Xin, and Sarah, used boundary crossing to resolve some of her pressing issues. These included challenge issues 2 (not knowing how to learn through group discussion) and 3 (challenges in working towards learning for self-improvement). Regarding the issue of not knowing how to learn through group discussion, for instance, she used resources that she gained from the context of school learning (practice makes perfect) to resolve this issue. Through crossing boundaries from the contexts of school learning, China to the context of university learning, Australia, she resolved this secondary contradiction.
Like Xin and Hua, Chen also used a combination of intervention and boundary crossing to resolve three of her challenging issues: not being able to comprehend English, not knowing how to address requirements with assignment writing and not able to ask questions in class. Regarding her not knowing how to address requirements with assignment writing for instance, she used help from intervention provided by one lecturer, and used resources that she gained from the context of school peers, China (reflection) to resolve this issue. Her lecturer’s intervention and her use of boundary crossing helped her to resolve this contradiction.

Unlike Sarah, Xin, and Hua, Chen resolved a pressing issue (not able to ask questions in class) that resulted from a SC (R-O). She used help from intervention provided by her teacher (who told her asking questions meant she was clever), and also used resources that she gained from the contexts of school peers, China (reflection) and university peers, Australia (her peers could not help her with her questions, so she was more reliant on her teacher) to resolve this issue. Through this, she resolved the SC (R-O).

Chen’s challenge issue 6 (unable to answer questions in class), 7 (unable to seek help) and 8 (unable to voice opinions in class) that resulted from SC (R-O) were not resolved. Her adherence to deferring to group consensus: appeasing resulted in her being unable to answer questions in class (not doing so to avoid being disliked for ‘showing off’). Her continuing experience of this issue demonstrated the non-resolution of this issue and also the prevalence of the secondary contradiction.

Chen’s adherence to giving priority to saving face influenced her experience in Australia, as in challenge issue 7: being unable to seek help because she did not want to viewed as a low achiever, and 8: not being able to voice opinions, because she was ashamed of her accent.
This showed how the contexts of school learning, school peers, university learning, and university peers interacted to impact her experience and non-resolution of these issues.

Chen’s continuing adherence to *deferring to group consensus* and to *giving priority to saving face* as a result of her involvement in contexts of school learning, school peers, university learning, and university peers in China influenced her experience of challenge issues 6, 7 and 8, and also constrained her from resolving these issues. This also demonstrated how these contexts interacted with the context of university learning, Australia to influence her experience and her approach to pressing issues. The following figure shows the analytic model that represents Chen’s approaches to issues.

*Figure 5.18 Analytic Model representing Chen’s approaches to issues*
The following table details how Hua and Chen resolved pressing issues that they experienced with their learning in Australia.

### Table 5.8

**Mechanisms involved in resolution of issues**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenging issues</th>
<th>Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hua</td>
<td>Listening comprehension</td>
<td>BC (past activity system of school learning China: PMP), BC (the activity system of family), intervention (language and academic support)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-regulation</td>
<td>BC (past activity system of school learning China: LPM), BC (the activity system of university peers Australia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading (searching articles)</td>
<td>BC (the activity system of university peers Australia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing (understanding requirements)</td>
<td>BC (the activity system of university peers Australia)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fear of failing</td>
<td>BC (past activity system of university learning in China), BC (the activity system of university peers Australia), intervention (language and academic support), cognitive mentality: assignments play important role</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chen</td>
<td>Listening comprehension</td>
<td>Intervention (Teacher talk), BC (the activity system of university peers Australia), BC (the activity system of teaching practices), BC (past activity system of school learning China: PMP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group discussion as new form of learning</td>
<td>BC (past activity system of school learning China: PMP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning for self-improvement</td>
<td>BC (past activity system of school learning China: LPM), BC (past activity system of school peers China: reflection); BC (the activity system of teaching practices), belief wanting to be prepared to meet new demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing (addressing requirements)</td>
<td>BC (past activity system of school peers China: reflection), intervention (teacher talk)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asking questions</td>
<td>Intervention (teacher talk), BC (past activity system of school peers China: reflection), assigning new identity (identified herself as a learner), BC (the activity system of university peers Australia), belief: peers could not meet her needs.</td>
<td></td>
</tr>
</tbody>
</table>
Root causes that led to their experience and non-resolution of similar pressing issues in Australia are detailed in the following table.

Table 5.9

Root causes preventing resolution of issues

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenge episodes</th>
<th>Factors preventing resolution of issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hua</td>
<td>Asking questions</td>
<td>Her implicit adherence <em>deferring to group consensus</em> (avoiding being disliked: did not want to be viewed as rude) and <em>giving priority to saving face</em> (avoiding being laughed at: did not want to be viewed as silly) as outcomes of her past activity systems of school, school peers and university learning, university peers was repackaged through re-contextualization continue to prohibit her from asking questions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicing opinions</td>
<td>Her implicit adherence to <em>giving priority to saving face</em> as one outcome of her past activity systems of school, school peers and university learning, university peers was repackaged through re-contextualization continue to prohibit her from voicing her opinions (ashamed of having an accent).</td>
<td></td>
</tr>
<tr>
<td>Chen</td>
<td>Answering questions</td>
<td>Her implicit adherence to <em>deferring to group consensus: appeasing</em> as outcomes of her past activity systems of school learning, school peers, university learning and university peers was repackaged through re-contextualization continue to prohibit her from answering questions (not want to be viewed as showing off to avoid being disliked).</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Seeking help</td>
<td>Her implicit adherence to <em>giving priority to saving face</em> as outcomes of her past activity systems of school, school peers and university learning, university peers was repackaged through re-contextualization continue to prohibit her from seeking help (do not want to be viewed as a low achiever to avoid being laughed at).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicing opinions in group discussion</td>
<td>Her implicit adherence to <em>giving priority to saving face</em> as outcomes of her past activity systems of school, school peers and university learning, university peers was repackaged through re-contextualization continue to prohibit her from contributing to group discussion (do not want to be laughed at for having an accent).</td>
<td></td>
</tr>
</tbody>
</table>
5.3.3 Group 3

This section examines the dynamic processes involved in Avery’s and Yan’s resolution and non-resolution of pressing issues (specific challenging issues are detailed in Table 5.4).

* Avery's approaches to pressing issues

Avery’s narrative indicated that she experienced six challenging issues with her learning in Australia. These resulted from SC (M-O) (challenges 1-3) and SC (R-O) (challenges 4-6). The first four were resolved, whilst the last two were not.

Avery, like Chen, used boundary crossing to resolve some of her pressing issues. These included challenge issue 1 (not having knowledge on sexuality), 2 (not knowing how to address unexpected questions that her teachers asked her to address), and 3 (not knowing the linear way of writing). Regarding the issue of not having sufficient knowledge on the pedagogies of gender and sexuality, for instance, she used resources that she gained from the context of thesis writing (which provided her with the knowledge) and the context of teaching, Taiwan (motivation in addressing children’s curiosity) to resolve this issue. Through crossing boundaries from the contexts of thesis writing and teaching in Taiwan to the context of university learning, she resolved this secondary contradiction.

Like Chen, Avery resolved one of the pressing issues (not knowing how to verbally discuss sensitive topics in public) that resulted from a SC (R-O), and also like Chen, Avery relied on a combination of intervention and boundary crossing to resolve her issue. Avery used help from intervention provided by her supervisor (who encouraged her to discuss sensitive topics through questioning her), and also used resources that she gained from the contexts of thesis writing, from the broader Australian community (models: she observed how they talked) and from teaching in Taiwan (motivation: wanting to address children’s curiosity) to resolve this issue. Through this, she resolved the SC (R-O).
Avery’s challenge episodes 5 (unable to ask questions in class) and 6 (unable to change teachers’ teaching practice) that resulted from SC (R-O) were not resolved. Her adherence to deferring to group consensus resulted in her being unable to ask questions in class (to avoid being disliked or being thought rude). Her continuing experience of pressing issues that resulted from this adherence demonstrated the non-resolution of this issue and also the continuance of the secondary contradiction.

Avery’s adherence to hierarchical relationships between her teachers and herself, even though she felt her expectations were not met, influenced her experience in Australia, as in challenge episode 6: feeling unable to negotiate with her teachers. This showed how the context of school learning interacted with her experience of learning in Australia to impact her experience and non-resolution of this pressing issue.

Avery’s continuing adherence to deferring to group consensus and to the hierarchical relationships between her teachers and herself as a result of her involvement in contexts of school peers and school learning in Taiwan influenced her experience of challenge episodes 5 and 6, and also restrained her from resolving these issues. This also demonstrated how these contexts interacted with the context of university learning, Australia to influence her experience and her approach to pressing issues. The following figure shows the analytic model that represents Avery’s approaches to issues.
Analysis of Yan’s narrative indicated that she experienced four challenging issues with her learning in Australia. These resulted from SC (M-O) (challenges 1-3) and SC (R-O) (challenge 4). She resolved all her challenges.

Like all the other participants, Yan also used boundary crossing to resolve her challenging issues. These included challenge issue 1 (unable to comprehend Australian slang), 2 (challenges in achieving high results with assignments), and 3 (not knowing how to manage stress). To resolve not knowing how to manage stress, for example, she used resources that she gained from the contexts of physical wellbeing (physical exercises), social activities (chatting with friends), and psychological wellbeing (seeking help from professionals). Through crossing boundaries, she managed her stress.
Like Chen and Avery, Yan resolved a pressing issue that resulted from a SC (R-O). This is shown by her resolution of challenge issue 4: not being able to become an insider of the Australian community. However, instead of relying on a combination of intervention and boundary crossings as Chen and Avery did, Yan used boundary crossing to resolve her issue. Her use of resources from the contexts of school learning, China (reflection skills) and a transformer (her ability in transforming self) assisted her to assign a new identity to herself (she identified herself as Australian Chinese). This dual identity helped her to become an insider in the Australian community. Through crossing boundaries from the contexts of school learning and a transformer, she resolved this secondary contradiction. The following figure shows the analytic model that represents Yan’s approaches to issues.

*Figure 5.20 Analytic Model representing Yan’s approaches to pressing issues*
The following table details how Avery and Yan resolved pressing issues that they experienced with their learning in Australia.

Table 5.10

*Mechanisms involved in resolution of issues*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenging issues</th>
<th>Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Avery</td>
<td>Lack of topic knowledge on sexuality</td>
<td>BC (the activity system of thesis writing), BC (past activity system of work, Taiwan: motivation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answering questions</td>
<td>BC (thesis writing through communicating with supervisor), BC (past activity system of work Taiwan), BC (the activity system of work in Australia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing (to be understood)</td>
<td>BC (the activity system of university peers Australia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verbally discuss sensitive topics in public</td>
<td>Intervention (supervisor: encouraged her to talk through asking her questions), BC (the activity system of thesis writing), BC (the activity system of broader Australian community: models: observed how they talked around these topics), BC (the activity system of teaching, Taiwan: motivation: wanting to address children’s curiosity)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BC (past activity system of school learning China: reflection), BC (past activity system of school learning China: LPM), BC (past activity system of being a self-transformer: being autonomous), BC (past activity system of work in NGO: familiarity with asking questions); BC (past activity system of work in an international school: familiarity with asking questions); BC (activity system of various social activities: opportunities for practice) BC (the activity system of university peers Australia), belief: ask if do not understand</td>
</tr>
<tr>
<td></td>
<td>Yan</td>
<td>Listening comprehension (Australian slang)</td>
<td>BC (past activity system of school learning China: reflection), realization: how was assessed, needed to write good quality papers: lots of reading, aware of differences in styles, BC (the activity system of university peers Australia)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing (achieving high academic results)</td>
<td>BC (the activity system of physical exercise), BC (the activity system of social activities), the understanding that she needed to seek help from professionals, BC (activity system of psychological assistance)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managing stress</td>
<td>BC (past activity system of school learning China: reflection), BC (activity system of self-transformer), assigning dual identity (Australian-Chinese) to self</td>
</tr>
</tbody>
</table>
Root causes that led to Avery’s experience and non-resolution of pressing issues in Australia are detailed in the following table.

Table 5.11

*Root causes preventing resolution of issues*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Participants</th>
<th>Challenging issues</th>
<th>Factors preventing resolution of issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avery</td>
<td>Asking questions</td>
<td>Her implicit adherence to <em>deferring to group consensus</em> as outcomes of her past activity system of school peers was repackaged through re-contextualization continue to prohibit her from asking questions (do not want to be viewed as rude)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negotiating with teachers</td>
<td>Her implicit adherence to <em>hierarchical relationships between one’s teachers and oneself</em> as one outcome of her past activity system of school learning system was repackaged through re-contextualization, which prohibited her from viewing negotiating with her teachers as impossible</td>
</tr>
</tbody>
</table>

5.3.4 *Section summary*

It was found that most pressing issues (12 out of 15: 80%) that resulted from SC (R-O) were not resolved. Most ICSs’ adherence to *saving face* as a result of their involvement in various contexts of their previous learning constrained them to act within the limits of this rule in Australia: they chose to keep face by not asking questions in class. This action resulted in their experience of not meeting learning expectations in Australia. Other rules they adhered to as a result of their involvement in various contexts of their previous learning that prohibited them from resolution included submission to *hierarchical relationships between one’s teachers and oneself, between one’s parents and oneself* and *deferring to group consensus (appeasing)*. This constrained them to act within the limits set by these rules: they chose to please their peers by not answering questions in class for instance (did not want to show off). This demonstrates how some of their previous contexts interacted with the context of university learning in Australia to produce pressing issues, and also shows that their approach to such pressing issues was further constraint.
In contrast, almost all pressing issues resulting from secondary contradictions between mediating artefacts and objects were resolved (23 out of 24: 96%). Various outcomes that participants had achieved through participation in previous contexts became valuable resources that they used to address the pressing issues they experienced with their learning in Australia. Such resources included reflective learning with school peers, and also included various rules (effort leads to success for instance) that they internalized with learning in China/Taiwan. Through crossing boundaries between contexts of school learning, school peers, and/or university learning, university peers, and/or work, they resolved these pressing issues with their learning in Australia. This shows how previous contexts can interact with the context of university learning in Australia to produce solutions to pressing issues.

This analysis demonstrated the ways in which ICSs’ past experiences might determine their experience and approach to pressing issues with their learning in Australia. It also illuminated why certain issues remained non-resolved. In terms of addressing issues that result from a SC (R-O), knowing that adherence to implicit rules due to ICSs’ previous experiences might prohibit them from meeting learning expectations in Australia is valuable for both educators and ICSs themselves. Knowing that previous experiences might provide ICSs with resources that they can use to resolve issues in the Australian learning context is also valuable for educators and ICSs themselves. It might help them to identify and implement these resources.

5.4 Chapter summary

This chapter analysed participants’ pressing issues with the assistance of the theoretical tools of the model surface of the adapted Change Laboratory Approach: mediation, contradictions, the collective activity system, polycontextuality and boundary crossing. This not only captured dynamic processes involved in participants’ resolution of issues, but also delineated
root causes that prevented them from resolving issues. How various contexts interacted to impact their experience and approach to pressing issues was also illuminated to demonstrate how their past experiences influenced their experience and approach to pressing issues in Australia. The next chapter extends the findings of this study through engaging in the ongoing discussion on ICSs’ issues with studying at university in Australia.
Chapter 6 Discussion and conclusion: International Chinese students’ challenges with studying at university

This chapter discusses the findings of this study in relation to research on international Chinese students’ (ICSs’) issues with studying at university. This discussion focuses on three key areas (English language, approaches to learning, and cultural and educational heritage) that arose from the review of relevant literature (6.1). The contributions that this study made regarding identifying the complexities in ICSs’ issues in relation to the English language, their approaches to learning and the influences of their heritage, and of the contexts of school learning, school peers, family, and/or university learning, university peers, and/or work are discussed (6.2). Section 6.2 also discusses the importance of considering their experiences of learning in China in order to understand their learning in Australia; the root causes of recurring challenges that they experienced and did not resolve; and the processes and resources that they used to resolve the challenges. Following the discussion of contributions, strengths and limitations of this study (6.3) and recommendation/implications for further study (6.4) are then discussed. This chapter ends with a short summary.

6.1 Discussion: ICSs’ challenges with studying at university

This section discusses findings about ICSs’ challenges with studying at university in comparison with the literature. The discussion focuses on three key areas of the English language (6.1.1), approaches to learning (6.1.2), and influences of heritage and contexts (6.1.3). The first part of the discussion focuses on difficulties ICSs had with learning in the English language. Second, the need to consider the complexities of approaches to learning is elaborated upon. Thirdly, the discussion explores the need to analyse the complexities involved in the influences of cultural and educational heritage and of the various contexts. All three sections are important in promoting understanding of this group of students.
6.1.1 English language

The English language is a substantial problem in the learning of many ICSs (Leder & Forgasz, 2004; Lee et al., 2013; Robertson et al., 2000). ICSs in this study found the English language was problematic in similar ways to students in previous studies. In particular, difficulties in the areas of writing, speaking, listening and reading were found to be influenced by linguistic, cultural, contextual and individual factors. The following sections provide detailed information about their difficulties in the areas of writing, speaking, listening and reading, and compare the findings of this study with the literature.

Writing

In the area of writing, essay composition was found to be the most difficult task that ICSs needed to manage (Lee et al., 2013). Particular obstacles identified by the literature included: understanding requirements (Lee et al., 2013), formulating well-developed arguments (Felix & Lawson, 1994), avoiding plagiarism (Gu & Brooks, 2008), and converting ideas from native language to English (Scheyvens et al., 2003). The findings of this study strongly support the argument that essay composition is a major problem for ICSs. All participants said they found this a challenge. Also consistent with findings of Lee et al. (2013), participants in this study identified understanding their lecturer’s requirements as a particular obstacle. For example, one of Chen’s lecturers required her to argue how she was going to teach a particular topic in schools for one assignment. However, Chen had written an essay about the topic itself. Her misunderstanding of her lecturer’s requirements led to her near failure in that assignment.

Felix and Lawson (1994) found formulating arguments that would be judged as well-developed was an obstacle for ICSs in essay composition. Xin’s experience of challenge in this area strongly supported this. She did not learn how to formulate arguments in the
Western linear way when she was a student in China. This posed a great challenge for her. However, Hua did not find formulating well-developed arguments an obstacle, probably because she went to a private university in China that was run by a Canadian. Because almost all her teachers came from English-speaking countries, she was taught how to formulate arguments in the Western linear way.

In contrast with Gu and Brooks’ (2008) study, plagiarism was not found to be a factor in essay composition for the ICSs in this study. Yan’s perception was that this was cheating, which she did not like, and she took responsibility for her own learning (she saw cheating as depriving herself of learning) offers some insight here. Although Scheyvens et al.’s (2003) study found converting ideas from native language into English was a factor that contributed to ICSs’ challenges in essay composition, participants in this study did not identify this as a factor.

Cultural factors contribute to ICSs’ challenges in essay composition (Arkoudis and Tran, 2007; Beamer, 1994; Chang and Strauss, 2010; Connor, 1996; Tang, 2012; Tran, 2009). Explicit versus implicit messages, logic, direct versus indirect writing, structures of thinking, the view of the world, valuing and construction of knowledge, communicating with audiences, and organizing discourses are different across cultures and these differences pose challenges related to essay composition (Beamer, 1994; Tran, 2009). The findings of this study strongly support this view. This is particularly shown by Avery’s experience with her writing. Her difficulties in converting to linear ways of writing illustrated the differences in the written discourses between these two cultures. A mismatch between the conventions of the written discourses of China and Australia posed challenges for Chen, which resulted in her nearly failing her assignment, given that her approach to writing did not meet her teachers’ disciplinary expectations.
Some researchers (Gu & Maley, 2008; Arkoudis & Tran, 2007) argue that individual level factors also influence ICSs’ challenges relating to writing. In their view, cultural influences on students’ expectations, interpretations and approaches to writing are not entirely “deterministic” (Gu & Maley, 2008, p. 226). Arkoudis and Tran’s (2007) study showed that the degree of challenge was less for those students who had had previous exposure to the “Western linear approach to writing” (p. 164). Hua, Avery and Yan provided evidence to confirm this. In Hua’s university learning experience in China, she practiced linear ways of writing due to studying in a private university and being taught by teachers from Western countries. This positioned her to meet expectations in Australia, where she achieved high marks for her writing. In Avery’s university learning experiences in Taiwan, her teachers taught her Western linear ways of writing. This also positioned her to meet expectations in Australia. Yan worked in an international school, where she worked with colleagues from America and England. Her colleagues taught her Western linear ways of writing. Her years of teaching experience in this international school in China also gave her an advantage in Australia.

In contrast, Chen’s experience did not help her. This is because she had had no experience with linear ways of writing in China. Her teachers, who were all native Chinese, did not teach her this way of writing. Although all these participants are from China, differences in their previous experiences within China led to variations in the challenges they had with writing.

Another individual factor that influenced the degree to which participants experienced challenge with writing was differences in the goals that they set. As an illustration, Yan set a goal to achieve high results with her writing, which resulted in her experiencing specific challenges that she needed to overcome to achieve this goal. For instance, she needed to manage the stress that was caused by her pursuit of this objective. As she wanted to write high quality papers based on thorough research, she needed to do much research and reading.
This coupled with her needing to allocate time for part-time work meant that the time she had for research and writing was limited. She found having limited time to compose high quality essays based on thorough research was stressful. She used various approaches to manage this stress, which included doing physical exercise, attending social activities, and also included seeking professional help from psychologists.

Although some authors such as Lee et al. (2013) have viewed ICSs as a homogeneous group unable to “think logically and argue” (p. 924), most authors now adopt a more positive lens. In various studies (Tran, 2008; Hu & Lam, 2010), ICSs were found to be active and also achieving at a competent level. In Tran’s (2008) study, ICSs were involved in active processes of “drawing on various strategies and problem-solving skills” (p. 245) to understand conventions about writing. ICSs in Hu and Lam’s (2010) study used peer review to improve their writing. The findings of this study support the view that ICSs were active in resolving issues. Sarah’s use of peer support to help her to resolve the issue relating to understanding essay requirements is an example of this. Sarah took an active role, asking her peers for clarity about assignment requirements, which helped her to meet course requirements.

Although the participants in this study experienced substantial problems with writing, their challenges were all resolved. Through identification of the resources they drew on and the ways in which resolution was achieved, this study extends knowledge of ICSs’ issues relating to writing. For instance, Chen used a combination of teacher intervention and boundary crossing to address her problem of meeting requirements with her writing. She used a resource that she gained from her past experiences with school peers and that of reflection. This helped her to understand why she failed to address the requirements. It also helped her to process her teacher’s intervention (she needed to discuss how she could teach that topic instead of a discussion about the topic itself) effectively. Therefore, she was able to approach
her assignment in the expected way the second time. In Chen’s case, identification of the resources (e.g. reflection and teacher intervention) and the dynamics (boundary crossing and intervention) that she used explains how she resolved her challenge regarding addressing essay requirements.

Speaking

Studies by Liu (2002), Mak (2011), Marlina (2009), Wang (2012), Wright and Lander (2003) into ICSs’ use of English in class demonstrated that the experience of speaking in class was limited for ICSs. They found that factors that posed challenges to ICSs’ willingness to speak in class were linguistic, cultural, contextual and individual.

Gallagher (2013) and Liu (2002) found that proficiency in English affected ICSs’ successful participation in in-class activities. This finding was supported by this study. The length of time that some of the participants took to find the appropriate words inhibited their willingness to speak. For example, Hua’s concern about the length of time that it took her to express herself in a clear and concise way prohibited her from speaking in class.

Gallagher (2013), Liu (2002), Mak (2011) and Wang (2012) argued that ICSs’ limited experiences of speaking in class were influenced by cultural factors. The cultural factor of ‘protection of face’ was found to be the most prominent one (Liu, 2002; Mak, 2011; Skyrme, 2010; Wang, 2012). Liu (2002) argues that ‘protection of face’ is concerned with how an individual perceives her/his behaviour being judged by the public (peers or teachers). The concern around being evaluated negatively (Mak, 2011) often leads to a choice to avoid “subjecting [oneself] to public evaluation” (Skyrme, 2010, p. 212). Protection of face was the most influential cultural factor governing ICSs’ speaking in class in this study. For instance, Chen’s concern about being laughed at stopped her from voicing her opinions. Sarah’s concern about being viewed as having problems also inhibited her from speaking in class.
The cultural factor ‘protection of face’ also influenced ICSs speaking in class in relation to asking questions, answering questions and seeking help. For example, Chen did not ask questions in class because she believed she would be viewed as a low achiever if she did, and this was a judgement she did not want. Avoiding being labelled as a low achiever also inhibited her from seeking help to improve her spoken English. Sarah’s concern about being singled out by her teacher to answer questions in class was based on her belief that she did not know enough to provide adequate answers. Her silence when asked questions by the teacher demonstrated her unwillingness to subject herself to negative public evaluation.

Other cultural factors that were found to inhibit ICSs’ willingness to speak in class were appeasing behaviours, maintaining group harmony and low power self-positioning (Wang, 2012). In Wang’s (2012) study, these three factors were linked respectively to avoiding being disliked, avoiding confrontation with others, and conveying respect for authority, experience, knowledge and expertise. In this study, participants’ comments confirmed that these three factors inhibited their willingness to speak in class. For instance, Chen interpreted answering teachers’ questions as being self-congratulatory (showing off), which she believed would put her at risk of being disliked by other students. This is the opposite of appeasing behaviour. In order to make favourable impressions, she did not engage in the self-congratulatory behaviour of answering questions. Xin used implicit appeasing expressions such as “they (her peers) do not need to ask questions about everything”, instead of a more explicit and confrontational expression like “they ask stupid questions” to describe avoiding confronting her peers. Xin conveyed respect for authority and knowledge by not voicing her opinions without the teacher’s explicit permission, intentionally positioning herself in a low power position.

Although the cultural background of ICSs plays a significant part in their lack of verbal participation in class, contextual factors also play a critical role in shaping their participation.
in in-class activities (Marlina, 2009; Yates & Wahid, 2013; Wang, 2012). Higher levels of verbal participation occurred when group members were open, friendly, and encouraging, and when tutors were respectful and approachable (Marlina, 2009; Wang, 2012). This is affirmed by the findings of this study. Xin’s experience of exclusion by her peers (who were not friendly and not encouraging) and by her teacher (who excluded her) demonstrated how important these contextual factors were. She felt her peers’ behaviour in sitting by themselves and not talking to her was unbearable. Although she attempted to join in, she still could not fit in. Some of her teachers purposely excluded her, which also resulted in her being the outsider. She viewed her peers’ exclusive practice as unacceptable (shown by her attempts to join in); however, she believed her teachers’ action to exclude her was acceptable. She said, “if they cannot do it [include her], then that is ok”, demonstrating her acceptance of her teachers’ purposeful exclusion. It is likely that her implicit adherence to the rule: *hierarchical relationships between her teachers and herself* due to her experiences of learning in China constrained her to act within the limits of this rule.

Although linguistic, cultural, and contextual level factors affect ICSs’ reluctance to speak in in-class activities, individual differences cannot be overlooked (Liu, 2002; Marlina, 2009; Yates & Wahid, 2013). While earlier literature viewed ICSs as a homogenous group (cf. Samuelowicz, 1987), newer literature identifies a great diversity amongst individuals. ICSs in Liu’s (2002) study showed that, although they shared a similar heritage, differences existed amongst them: some were willing to articulate in class, whilst others were not. Liu (2002) found participants who were familiar with Western forms of learning tended to be more active in articulating their opinions, in that the participant who had prior experience in overseas study actively participated in discussions. The findings of this study confirm that a consideration of individual differences is important. While most participants articulated their unwillingness to speak in class voluntarily, Yan was willing to voice her opinions whenever
she felt she had the need to. Her working experiences in Beijing, where she worked with professors from Canada and the USA and with teachers from English-speaking countries in an international school, helped her to know and practice forms of learning such as participating in group discussions and asking questions that were used in Australia. This helped her to enlarge her repertoire of learning methods, and also helped her to adjust to the learning context in Australia very well. She said participation in discussions, asking questions and contributing her ideas were her means to learn.

Although some participants demonstrated some changes in order to meet learning expectations in Australia, most participants in this study were reluctant to change with regard to speaking in class and voicing their opinions, asking questions or answering questions on a voluntary basis. This study used the adapted Change Laboratory Approach with a consideration of historicity to identify possible root causes that might have led to their non-resolution of these issues. It found that these were most likely to be the rules that they internalized with their learning in China/Taiwan. For example, Chen’s adherence to giving priority to saving face with her learning in China stopped her from voicing her opinions in class in Australia. The identification of possible root causes that prevent ICSs from resolving pressing issues with their learning in Australia is significant in at least two ways: a greater understanding of ICSs (they did not want to voice opinions in class because they were concerned about losing face for instance), and the possible ways that these behaviours can be transformed (with greater understanding of ICSs, lecturers might be able to better intervene in these students’ behaviours).

**Listening**

Studies of ICSs’ comprehension in understanding and following lectures found this was the most challenging experience for them (Lee et al., 2013; Mulligan & Kirkpatrick, 2000). The unfamiliar Australian accent, fast-paced speech, and use of slang/idioms have been found to
inhibit ICSs’ comprehension of lectures (Lee et al., 2013; Scheyvens et al., 2003). In this study, Hua said that she was not able to comprehend much due to her lecturers’ accents and fast-paced speech. Most participants, however, did not find it a challenge to comprehend lectures.

However, participants reported that they experienced challenges in the areas of group discussion and teaching practice in schools. Chen’s inability to understand what her peers were talking about during group discussions and her inability to understand what her students were talking about during her school teaching practice demonstrated this. Not being able to understand her peers in group discussions led to her feeling nervous and stressed. She searched for means to resolve this. She used listening to music, watching multimedia, reading books and talking to peers to improve her listening comprehension skills. Her inability to understand her students during her teaching practice in schools reinforced her separation from her students. Her students refused to communicate with her after an initial period. She felt this was a serious problem, which she aimed to overcome. This also led to her mentor’s intervention, so she actively sought means to resolve this challenge. She used what she gained from her experiences of learning in China: reflection (she needed to understand her students’ language and realized language learning was a lifelong process), internalized rule (practice makes perfect), and she used multimedia (listening to talk shows, for instance) and assistance from her peers (through talking to them) to overcome this challenge.

Research into ICSs’ comprehension of lectures also considered factors that contributed to their challenges. Comprehension is influenced by linguistic factors that are related to a set of skills such as “real-time processing and lexico-grammatical knowledge”, which involve listening as a foreign language (Flowerdew, 1994, p. 12). The ephemeral nature of a listening text according to Flowerdew (1994) means that it “must be perceived as it is uttered” (p. 12).
Listeners are thus required to comprehend at the same time that the text is perceived. They also need to have phonological knowledge to be able to tell “irregular pausing, false starts, hesitations, stress and intonation patterns” as well as lexico-grammatical knowledge to process the vocabulary and grammar of the foreign language (Flowerdew, 1994, p. 12). Lacking skills in these areas would pose challenges relating to comprehension. Evidence from participants in this study strongly supports the view that these linguistic factors pose a great challenge to ICSs’ comprehension in lectures, and also in group discussion and on teaching practice. As an illustration, inadequate vocabulary heavily impeded Hua and Chen’s ability to comprehend in group discussion scenarios. Lacking real-time processing skills, phonological and lexico-grammatical knowledge also impeded Chen’s comprehension of her students’ language during her teaching practice.

Comprehension is influenced by cultural factors (Flowerdew & Miller, 1995; Mulligan & Kirkpatrick, 2000). Students who spoke English as a foreign language in Mulligan and Kirkpatrick’s (2000) research were found to have great difficulties comprehending examples specific to Australian culture or jokes due to their lack of knowledge about local culture. Comments made by participants in this study provide evidence that cultural factors influence their ability to comprehend. Lacking knowledge about local culture, for instance, impeded Chen’s understanding of her peers’ topics. Although she understood the literal meaning, she felt she sometimes still missed the point being made.

Contextual factors also impact ICSs’ comprehension (Mohamad & Wu, 2013; Mulligan & Kirkpatrick, 2000). The context of the situation including the physical environment (e.g. noise level) and speakers’ input (e.g. accent) impact listeners’ ability to comprehend (Mohamad & Wu, 2013). Participants in this study provided evidence that contextual factors impacted their comprehension. For instance, Hua said her lecturers and tutors had varied accents and varied paces of speech, which resulted in her not understanding what they were
talking about during lectures and tutorials. She interpreted this as meaning she was going to fail, which drove her to search for solutions to get out of this crisis. These means she used included those that she gained with her experiences of learning in China: practice makes perfect, learning through audio and video aids, learning from peers and use of assistance from language support services (she attended every session). These approaches assisted her to improve her comprehension. Chen’s students’ fast-paced speech posed a great challenge for her comprehension, which reinforced her separation from her students. As mentioned earlier, she also actively sought means to overcome this challenge.

Mohamad and Wu (2013) argued that individual factors such as memory, concentration, background knowledge, and metacognitive skills also strongly impact ICSs’ comprehension of the English language. Comments made by participants in this study provide evidence that they had varied abilities in being able to process unknown vocabularies and to return to the ongoing discourse in a timely manner. As an illustration, Yan was able to process unknown vocabularies very quickly, which boosted her ability to comprehend. Chen, however, was not able to do so. This stopped her from fully comprehending her peers’ topics: she said she could only guess meanings for new vocabularies that she encountered. Chen resorted to reflection, practice, listening to talk shows and talking to her peers to improve her comprehension. In addition to these strategies, Yan also attended various social activities and asked questions whenever she did not understand. Yan’s previous working experiences in China meant she was familiar with the means of learning that are practiced in Australia, including asking questions. This helped her to overcome her challenge relating to comprehension.

Although linguistic, cultural, contextual and individual factors contributed to participants’ experience of challenges with comprehension, they all actively attempted to overcome these challenges. By identifying the resources they used and the ways in which resolution was
achieved, this study extends knowledge of ICSs’ issues relating to listening. Several ICSs used a combination of those that they gained from their experiences of learning in China and those of Australia to resolve their challenges in comprehension in group discussion scenarios.

Reading
In Zhang and Mi’s (2010) and Lee et al.’s (2013) studies, reading in English was not found to be a difficult area for ICSs. Zhang and Mi (2010) conducted a quantitative study (self-rated survey; n=40), where they found “the vast majority reported having ‘basically no difficulty’ in reading” (p. 376), so they claimed reading comprehension was not “a problem area” (p. 371). This is a small study, and it was not confirmed by this study. Some participants (Sarah, Xin and Hua) experienced difficulties in this area and for one (Sarah), it was a substantial problem. Sarah found reading comprehension was a considerable challenge, so much so that she had to force herself to read reference books. She actively attempted to resolve it. She used assistance from her peers (asked them to memorize new vocabulary from watching the Olympic Games). However, this failed to resolve this challenge. The new vocabulary did not help her to improve her vocabulary relating to her discipline.

Particular challenge areas that relate to reading comprehension were found to be around managing the reading load (Lee et al., 2013) or developing a higher reading speed (Scheyvens et al., 2003). Participants in this study also provided evidence of challenge in these two areas. For instance, it took a considerable amount of time for Xin to comprehend a reading task, which produced a challenge in terms of managing her reading load. Like Sarah, Xin actively attempted to resolve her challenge. Instead of relying on assistance from peers like Sarah did, Xin used resources that she gained with her experiences of learning in China (internalization of practice makes perfect). This helped her to resolve her challenge. Adding to previous studies, this study found that not knowing how to search for materials also led to participants finding reading a challenge. As an illustration, Hua did not know how to use
databases to find articles. Like Sarah and Xin, she actively attempted to resolve this issue. Hua relied on assistance from her peers to resolve her challenge.

Linguistic factors influence reading comprehension (Carrell, 1987; Grabe, 1991). Having insufficient vocabulary is believed to pose great challenge for ICSs in comprehending a written text (Carrell, 1987). This is confirmed by this study. Not possessing sufficient vocabulary impeded Sarah’s comprehension of texts. Her difficulty supports Grabe’s (1991) argument that vocabulary development is “a critical component of reading comprehension” (p. 392). Although she made an effort to develop her vocabulary as mentioned earlier, this did not help her to resolve her challenge, because the area she focussed on and the area in which she experienced /needed were so different.

Cultural factors influence reading comprehension. Students’ knowledge about the target culture is positively correlated with their reading comprehension (Alptekin, 2006; Carrell, 1983; Johnson, 1981; Li & Lai, 2012). This is confirmed by this study. For example, participants such as Xin said it took much less time for them to comprehend an article after improvement of their knowledge about the target culture.

Contextual factors also impact reading comprehension (Fontanini & Tomitch, 2009; Johnson, 1981). The complexity of the reading text (Johnson, 1981), the mode of text representation (Fontanini & Tomitch, 2009) and rhetorical format (Carrel, 1987) influence comprehension of a reading text. This is confirmed by this study. Sarah experienced immense difficulties in comprehending reference books, which is a complex context. This supports Johnson’s (1981) argument that ICSs experience difficulties in reading syntactically and semantically complex texts. It also supports the view that ICSs’ comprehension of a reading text is influenced by contextual factors.
Reading comprehension is also influenced by individual factors (Fontanini & Tomitch, 2009; Lau, 2004; Phakiti, 2008). Reading skills and strategies (Phakiti, 2008), “working memory capacity” (Fontanini & Tomitch, 2009, p.1), or motivation (Lau, 2004), influence comprehension of a reading text. Participants in this study provided evidence that individual factors influence reading comprehension. Hua’s ‘shortcuts’, for instance, demonstrated her use of various reading skills and strategies. The kinds of strategies she employed were skimming, scanning and memo writing, which enhanced her comprehension. In contrast, Sarah relied only on dictionaries to look up new vocabulary. This difference in reading strategies led to variations regarding their comprehension of the reading text.

Although linguistic, cultural, contextual and individual factors contribute to participants’ experience of challenges with reading comprehension, participants all actively attempted to overcome these challenges. By identifying the resources they used and the ways in which resolution was achieved, this study extends knowledge of ICSs’ issues relating to reading.

Section summary
This section discussed findings of this study in comparison to the literature on ICSs’ challenges relating to the English language. It presented a consideration of factors that contributed to their challenges, which was compared to the literature for consistencies. The actions that ICSs in this study took in the areas of writing, listening and reading to resolve these challenges demonstrated the active roles they took to resolve challenges. However, they were reluctant to change with regard to speaking in class in areas of voicing their opinions, asking questions or answering questions. Regarding those issues that were resolved, the resources that they frequently used were those that they achieved in China/Taiwan (for instance, reflection from school peers). They all employed boundary crossing or a combination of boundary crossing and intervention to achieve resolution. For those that were
not resolved, the root causes of the non-resolution were rules that they internalized (giving priority to saving face for instance) due to their experiences of learning in China/Taiwan.

6.1.2 Approaches to learning

Regarding approaches to learning, ICSs have in the past been categorized as adopting a surface (cf. Samuelowicz, 1987) or a deep approach (cf. Biggs, 1998). This study found ICSs adopt approaches that are far more complex, and so regards this binary distinction as too simple. Participants in this study actively readjusted their learning approaches to make their learning in Australia a transformative experience (cf. Gu, 2009; Tran, 2008; Wang et al., 2012). However, this active readjustment only applied to certain areas. An important contribution that this study makes is an analysis of which areas this readjustment occurred in and how, and which areas ICSs failed to readjust and why.

Earlier research into ICSs’ approaches to learning argued that these students relied much on memorization or tended to adopt a “reproducing orientation” to learn; consequently, they were labelled as passive surface learners (Samuelowicz, 1987, p. 123). This view has been countered in subsequent research (for instance, Biggs, 1998). Biggs (1998) claims that the view that Chinese learners rote learn is a supportable one, however, it is problematic to conclude that they are surface learners. Biggs (1998) explains that because ICSs memorize for understanding, rather than for exact repetition, their use of rote learning could be a “part of a deep approach” (p. 726). [Biggs (1998) defined a deep approach as an approach that “is based on the intention to engage the task on optimal terms, which in most academic tasks means to understand and use knowledge appropriately” (p. 726)].

This study supports Biggs’ (1998) argument that ICSs’ use of rote learning is “part of a deep approach” (p. 726). It also found that ICSs used a variety range of approaches to learning including reflective skills, collaborative learning, and problem-solving skills. This
strongly negates the perception that ICSs predominantly rely on rote learning. This (the same as Wang’s (2012) study) also opposes any labelling of these students as surface rote learners.

The evidence produced in this study shows that ICSs use various learning approaches including those that are required to achieve success in Australia, such as collaborative learning. The analysis in this study of various contexts (institutional and non-institutional (e.g. family and peers)) that ICSs regarded as important in their learning enhances understanding of how these students learn through various approaches, and also extends the literature regarding the important roles that various contexts play in influencing their approaches to learning.

Analysis of participants’ approaches to learning in China revealed that there are complexities. Their various approaches to learning, which were influenced by various contexts that they regarded as important, were part of this complexity. Also complex were the varied approaches they took to resolve the issues they experienced. For some issues, which were the result of conflicts between their shortage of means and their respective objectives, they actively attempted resolution. As an illustration, Xin wanted to gain a high ranking in her studies. Her temporary issue of not having a high ranking resulted from the temporary shortage of means that she could use to transform this objective that she was motivated to achieve. By using resources that she had gained within the context of family (the attributes of being prepared to work hard, and to keep a continuous focus on her goals), she resolved this conflict and gained a high ranking. However, participants did not actively attempt to resolve some other issues they experienced with their learning in China, in particular, those that were the result of the conflict between motives, As an illustration, Sarah had the motive of wanting to have fun. When her parents introduced the culturally more advanced motive of wanting her to study hard, a contradiction was generated. Her approach to this contradiction was submission to parental authority, due to her parents’ repetitive intervention with corporal
punishment. This led to her gradual internalization of parental authority and also an adherence to the rule of acceptance of *hierarchical relationships between her parents and herself*. This influenced her to act within the limits set by this rule on an automatic basis, which explains her being unable to make decisions independently. For example, when mother discouraged her, she did not pursue her interest in studying design in Australia.

This study took an emphasis on historicity, which allowed analysis of the areas that ICSs actively transformed, the processes involved in these transformations, the identification of the areas that they failed to do so, and root causes that led to these (detailed in chapter 5). This furthers understanding of the complexities in their approaches to learning, and also adds new knowledge to the literature regarding this relevant area.

ICSs take active roles in readjusting their learning approaches to make their learning in Australia a transformative experience (Fotovatian & Miller, 2014; Gu, 2009; Schweisfurth & Gu, 2009; Wang et al., 2012). This is shown by their continuous efforts in readjusting or reforming their learning styles (Gu, 2009), developing strategic agencies (Tran, 2008), or forming new expanded identities (Wang et al., 2012). These views are only partially supported by the findings of this study in that ICSs’ active readjustment only applied to certain areas. These areas were clustered around resolving the conflicts between their shortage of means and their respective objectives. For example, Xin experienced a challenge relating to not knowing how to structure essays in the linear way. Through use of the assistance provided by foundation studies’ staff and the resources that she gained with her experiences of learning in China (practice makes perfect), she resolved her challenge and transformed her approaches to learning. However in other areas, participants did not readjust. These areas resulted from the contradictions between their adherence to rules from their learning in China (for instance, *giving priority to saving face*) and the challenges that they experienced/ not resolved (for instance, not being able to ask questions in class) because of
the adherence to these rules. As an illustration, Xin’s reluctance to voice her opinions in class (due to her respect for the *hierarchical relationships between teachers and herself*), and Chen’s unwillingness to seek assistance (she did not want to be labelled as having problems) showed the non-adjustment they made in these respective areas. This points to the importance of avoiding the assumption that ICSs actively readjusted their learning approaches with every area of challenge they experience. It also points to the need to consider the complexities regarding their approaches to challenges.

This section discussed ICSs’ approaches to learning in comparison to the literature. It argues that the findings of this study counter a categorisation of ICSs as either surface or non-surface learners. In addition, it found that ICSs did not actively (re)adjust their approaches to learning to transform every area of challenge. Highlighting the areas that they actively transformed, the processes involved in these, identifying the areas in which they failed to do so, and the root causes of those failures are contributions this section of the study makes to the literature.

**6.1.3 Cultural and educational heritage**

Another area that researchers of ICSs’ challenges with studying at university discuss is the effects of cultural and educational heritages (Bradley & Bradley, 1984; Burns, 1991; Mullins et al., 1995; Samuelowicz, 1987), which is viewed as a factor that contributes to various problems ICSs experienced in their adjustment to the Australian system. For instance, “excessive regard for authority” (Samuelowicz, 1987, p. 124) was argued to have contributed to these students’ deficiencies in “independent thought” (Burns, 1991, p. 62). ICSs’ heritage was criticized as rarely being an adequate preparation for what faces them in Australia (Ballard 1987). Evidence found in this study suggests that the picture is not so simple. This study did not find that ICSs’ heritage was an entirely inadequate preparation for what faced them in Australia. For example, many participants relied on resources drawn from their
learning experiences in China to resolve challenges that they experienced in Australia. As an illustration, through using the rule ‘practice makes perfect’ acquired in China, Xin resolved her challenge relating to managing the amount of material she was required to read in her university course. This, and other similar examples, demonstrated that ICSs experience of learning in China can be a valuable resource in the resolution of issues experienced in Australia.

Rather than criticizing ICSs’ heritage as being inadequate, subsequent research has viewed it in a way for enhancing understanding (Chan, 1999; Hue, 2007; Li, 2001; Liu, 2002; Mak, 2011; Wang, 2012). Researchers such as Tavakol and Dennick (2010) tended to resort to aspects of Confucian beliefs for explanations of Asian students’ attributes (e.g. a ‘positive attitude towards education’). Ryan and Louie (2007) argue that resorting solely to Confucianism to understand ICSs can be problematic and misleading. The findings of this study support this argument. This study offered evidence to show that influences from the Confucian school of thought vary with different ICSs. For instance, in China, Avery refused to read the classics, let alone be influenced by them. She rejected respecting teacher authority and expertise, saying she believed what her teacher said was ‘unreasonable nonsense’, therefore a reliance on Confucian values as the mode of analysis of her behaviours would result in some level of misreading of Avery. This example demonstrates the problems that can result if researchers resort solely to Confucian values to understand this group of students.

Ryan (2010) advocated that additional foci to the focus on Confucianism as a means of understanding influences on ICSs learning be considered. One such other influence suggested by Li (2009) is the examination system. Li (2009) argues that the examination system continues to dictate school learning despite the continuous changes and external pressures
that China is subjected to by today’s globalisation. Comments by the participants in this study offer strong evidence of the pervasive influence of the examination system. Examination success acted as the ultimate goal that every participant aimed to achieve. For example, Xin’s and Chen’s motives in wanting to achieve examination success (they believed this would materialize into a good future for them), and Hua’s interpretation of examination success as representing one’s intelligence level all showed the high value with which ICSs regarded this system. The goal of examination success also regulated both teachers’ and students’ behaviours in examination-orientated teaching and learning. For instance, Xin’s teachers’ practice of ranking, their adoption of an exam-oriented curriculum, her self-discipline in learning the examination orientated curriculum all demonstrated the regulatory influence the examination system played.

As discussed, both the examination system and the Confucian school of thought influenced learners. However, in this study, this influence was found to be experienced differently by each individual, which points to a need to consider individual differences in any such study. Some participants, such as Xin, Chen, and Yan, worked wholeheartedly toward succeeding in the examination system, whilst others such as Sarah, Hua and Avery did not. Chen wanted to achieve examination success so that she could go to a good university, which motivated her to work hard toward achieving success in the examination system. Although she understood examination success was important, Hua refused to study some school subjects (e.g. mathematics), let alone achieve success in exams in these subjects. This example shows that even two students who value examination success might behave differently.

Similarly, some participants (for instance, Yan) demonstrated a noticeable influence from Confucianism, whilst others (for instance, Avery) did not. Yan made efforts in acquiring various values through reading the classics, such as exhibiting modesty and being diligent.
These values or skills helped her to improve herself and also to excel in the examination system. However, Avery did not exhibit any noticeable influence from the Confucian school of thought on reading the classics, because she refused to do so, even when punished. This demonstrates the complexities involved in understanding the impact of ICSs’ cultural and educational heritage, speaking to Arkoudis and Tran’s (2007) and Liu’s (2002) argument that ICSs’ individuality needs to be considered in such an analysis.

Evidence from this study showed that participants’ cultural and educational heritages influenced their experience of and approach to issues in Australia. Their heritages influenced their resolution of issues. They were also found to be a valuable resource that they frequently drawn on to resolve issues. This points to the importance of considering ICSs’ learning in China to understand their learning in Australia. Demonstration of this influence is also one area that this study contributes to the literature.

The reading of Chinese cultural and educational heritage as Confucianism ignores contextual influences such as family (Chi & Rao, 2003; Li, 2002). Chi and Rao’s (2003) study indicates that the context of family greatly influences student learning. In their study, more educated parents were found to have used mediating artefacts that were more educationally supportive to mediate their children’s learning. Li’s (2002) study further supports Chi and Rao’s (2003) finding that non-institutional settings are important contexts where learning occurs. Evidence from participants in this study supports the view that their learning in China is greatly impacted by involvement in contexts of family or peers. As examples, Chen practiced reflective learning and also learned collaboratively through participating in the context of peers. Avery developed autonomy through participating in the context of family,
This study identified how ICSs approached the ways in which pressing issues that they experienced within the context of school or university learning were mediated through family and peer contexts. In Chen’s case, the context of peers helped her to acquire collaborative and reflective learning. These skills helped her to approach pressing issues that she met within the context of school learning: needing to complete her mathematics homework, for instance. Through use of these skills that she acquired within the context of peers, she resolved this issue and completed her homework.

Avery learned to be autonomous within the context of family. She also relied on this to approach the pressing issue of being ordered to follow teacher instructions (when she was asked to read classics out aloud) within the context of school learning. Practising agency helped her to challenge the hierarchical relationship between her teachers and herself (she refused to follow teacher instructions). However, this practice of agency became more limited in subsequent years at school. Repetitive reinforcement from her teachers (for example, corporal punishment) and school (being assigned to a low-achiever class) oppressed her practice of self-agency and made her internalize the hierarchy.

The theoretical tools of analysis used in Activity theory, such as the collective activity system model, contradictions, mediation, polycontextuality and boundary crossing, were used to explore how ICSs learning was framed by the contexts of learning in China and the contexts of family, peers, and (sometimes) employment. This analysis contributes to the literature that seeks to understand the complexities involved in the impact of these contexts on both ICSs’ learning in China and their adjustments to learning in Australia.

Evidence from this study showed that the contexts of family and peers influenced ICSs’ learning greatly in China and in Australia. Context impacted their experience of certain issues, and also their approach to various challenges. For instance, Chen’s reflective and
collaborative learning that she gained through the context of school peers in China helped her to resolve various challenges in Australia. Reflection coupled with her teachers’ intervention helped her to resolve her challenge in addressing assessment requirements in Australia. This points to the importance of taking into account the influences of the contexts of family and peers in influencing ICSs’ learning in China to understand their learning in Australia. Demonstration of the importance of the contexts of family and peers on ICSs’ resolution of issues in Australia is another aspect of this study’s contribution to the literature.

This section discussed how ICSs’ cultural heritage has been misinterpreted, criticized as inadequate and interpreted as not complex. It summarised the complexities involved in the influences of this heritage, such as Confucianism and the examination system and how these can be experienced differently by each individual. It also demonstrated the importance of these complexities in understanding ICSs’ approaches to learning in Australia, such as the root causes of recursive issues and resources for resolution of challenges. Evidence from this study also supported the argument that identification of ICSs’ heritage solely to Confucianism ignores other salient contextual influences. It showed how the complexities involved in the influences of the contexts of family and peers determined their learning, and how this influenced their approach to pressing issues in their learning in Australia. Demonstration of the connections between their experiences of learning in China and in Australia illustrates the complexities involved in understanding the impact of their cultural heritage and family and peer contexts, and also points to the importance of a consideration of these complexities to understand their present learning in Australia.

6.2 Contributions of the current study: Historicity and dynamism

In section 6.1, the discussion focused on issues that were central to ICSs’ experiences: (1) issues with the English language in reading, writing, speaking and listening (2) the need to
look into the complexities of approaches to learning, and (3) the need to look into the complexities involved in influences of cultural, educational heritages and of family and peer contexts. This discussion highlighted that the picture is more complex than that found in the literature. Exploring and identifying a greater level of complexity is one of the contributions that this study makes. The next section focuses on two more of the contributions that this study makes: historicity (the importance of looking into ICSs’ experiences of learning in China to understand their learning in Australia) and dynamism (the processes involved in ICSs’ approach to issues).

**Historicity**

The discussion of the issues as central to ICSs’ experience also points to the importance of considering their experiences of learning in China in order to understand their learning in Australia. Their experiences of learning in China impact their experience of pressing issues in Australia and impact their approach to the resolution or otherwise of these issues.

As detailed chapter 5, the analysis of ICSs’ challenges in Australia concludes that these challenges resulted from contradictions between mediating artefacts and objects and between rules and objects. Analysis also showed that the generation of these contradictions was due to ICSs’ experiences of learning in China. For example, Hua’s challenge in not being able to voice opinions in group discussion was primarily caused by her adherence to face-saving. The face-saving that she internalized in her past experience continued to restrict her in Australia, and she was unable to voice opinions in Australia. Another example is Xin’s challenge in not knowing how to structure her essay. Analysis using the activity system model showed that this difficulty might have been produced by a contradiction between mediating artefacts (for example, a means by which to structure essay writing) and this issue
(the object). Her experiences of learning in China did not appear to have equipped her with the means to meet her learning expectation in Australia.

ICSs’ experiences of learning in China also greatly impacted their approach to the resolution of challenges in Australia. This impact, as detailed in chapter 5, was analysed in two ways: dynamics involved in the resolution of issues and root causes that prevented resolution. Analysis showed that almost all issues that were produced by the contradiction between mediating artefacts and objects were resolved. ICSs frequently used the resources that they gained with their learning in China (either combined with resources that they gained with their experiences of learning in Australia or not) to resolve many of these challenges. For instance, Xin used practice makes perfect that she gained with her school learning in China and intervention from foundation studies to resolve her challenge of not knowing how to structure essays in the linear way. Hua used learning through positive modelling that she learned with her school learning in China and support from her peers in Australia (positive models) to resolve her challenge regarding lacking self-regulation skills. Like Xin and Hua, all the other participants in this study relied on crossing boundaries to resolve challenges that resulted from the contradictions between mediating artefacts and objects. Their experiences of learning in China played an important part in the process of resolution.

In contrast, analysis showed that almost all issues that were produced by the contradiction between rules and objects were not resolved. For example, Hua’s issue of feeling unable to ask questions voluntarily in class remained unresolved due to an implicit adherence to deferring to group consensus and giving priority to saving face. These were an outcome of her involvement in the contexts of school learning, school peers, university learning and university peers in China. In Australia, these continued to constrain her to act within the same limits set by these rules, producing similar issues – feeling unable to ask questions in class (to avoid being disliked (rude) and being laughed at (silly)). Chen’s challenge of feeling unable
to answer questions voluntarily in class also remained unresolved due to an implicit adherence to *deferring to group consensus*. This is also an outcome of her involvement in the contexts of school learning, school peers, university learning and university peers in China. In Australia, this continued to constrain her to act within the same limits set by this rule, producing similar issues. She did not answer questions voluntarily to avoid a perception of ‘showing off’ to minimize being disliked. These examples illustrate the important role that ICSs’ experiences of learning in China played in influencing their non-resolution of challenges in Australia. Analysis also helped to identify the root causes of their failure to resolve challenges. Analysis of their challenges with a consideration of historicity and the demonstration of the link between their experiences of learning in China and in Australia is significant in contributing knowledge about ways in which ICSs’ experiences of learning in China is instrumental in understanding their experiences of and approach to pressing issues in Australia.

**Dynamism**

The capture and demonstration of the processes involved in ICSs’ approach to issues is another area that this study contributes to the literature. Theoretical tools of contradictions and boundary crossing that were used in the model surface of the Change Laboratory approach for conceptual analysis helped to explain and capture processes. Contradictions are used to define both the dynamism and incongruity of an activity (Engeström, 1993). Analysis of contradictions helps to identify root causes of recursive problems (Engeström, 1999, 2011). Analysis of pressing issues that ICSs experienced by means of contradictions (as detailed in chapter 5) helped to clarify what led to their experience of these issues in the first place. Take Chen’s difficulty in seeking help for example. Analysis of this against the activity system model revealed that this issue was caused by a contradiction between a rule (giving
priority to saving face) that she internalized with her learning in China and her refusal to seek help with English.

ICSs actively resolved almost all challenges resulting from contradictions between mediating artefacts and objects. Boundary crossing helped to explain the processes and also helped to identify the resources they used to do so. For example, Yan primarily used resources that she gained with her experiences of learning in China (reflection), from the context of university peers, Australia (support for practicing), and also from the context of various social activities (support for practicing) to overcome her challenge of not understanding Australian slang. Through use of resources from several contexts, she resolved her pressing issue.

However, most issues resulting from contradictions between rules and objects were not resolved. Structural contradictions as a theoretical tool for analysis were very important in helping to understand the root causes of this non-resolution, such as Chen’s issue of not being able to seek help primarily caused by her adherence to face saving. The implicit rule giving priority to saving face that she internalized in China continued to limit her to act within the limits set by this rule in Australia. In order to save face, she thus did not seek help. This rule acted as both a cause of her challenge and as a prevention of resolution.

6.3 Strengths and limitations
This study adapted and used the Change Laboratory Approach for analytical purposes only, compared to previous studies in which it was used typically as an interventionist approach (Anagnostopoulos et al., 2008; Terävä & Lasonen, 2013; Virkkunen & Ahonen, 2011). This adaptation and application is significant in that it not only demonstrated how it could be used solely for analytical purposes, but also illustrated its adaptation capacity (cf. Bakhurst, 2009). Apart from showing that coding techniques of Grounded Theory could strengthen its
analytical power, this adaptation also revealed that the theoretical tools used in the model surface (Engeström, 2005) needed to be carefully thought through to suit various situations. Through introducing key concepts of mediation, contradictions, the collective activity system model and boundary crossing (as detailed in chapter 3), the complexities in issues with the English language, approaches to learning, and influences of heritage and of various contexts were revealed. As discussed above, these theoretical tools also helped to highlight the importance of considering ICSs’ experiences of learning in China in understanding their experiences of learning in Australia and also helped to capture and demonstrate processes. Using and adapting this approach solely for analytical purposes demonstrates its adaptive capacity and its strength in highlighting complexities, in identifying root causes of problems and in capturing dynamics involved in resolution of problems.

Through use of this approach with a consideration of historicity, significant complexities involved in ICSs’ adjustments to study in Australia were shown. These involve issues relating to the English language, approaches to learning and cultural heritage. Regarding the English language, one part of this complexity is shown for instance by participants’ approaches to issues they experienced. They actively tried to transform various challenges in the areas of writing, listening and reading. However, they remained reluctant to ask questions, answer questions and voice their opinions in group discussion scenarios. ICSs’ various and different approaches to learning is another area of this complexity. Influences of ICSs’ heritage in their learning were complex (Confucianism, the examination heritage and how these factors were experienced differently by each individual). The contexts of family, peers and work in which ICSs were involved also differently influenced their learning in China, which impacted their experiences of and approaches to challenges (both in China and in Australia) differently.
This approach with a consideration of historicity also assisted in capture of the dynamics involved in resolution of recurring problems and to identify the resources that ICSs used to resolve these problems. ICSs actively transformed challenges resulting from the contradictions between mediating artefacts and objects. They frequently used the resources that they gained with their learning in China (either combined with resources that they gained with their experiences of learning in the current, in Australia or not) to help them resolve many of these challenges.

This approach with a consideration of historicity also assisted identifying root causes of recurring problems that ICSs did not resolve. ICSs did not resolve those that were caused by contradictions between rules and objects. Rules that they internalized with their learning in China led to them experience certain challenges and also prevented them from resolving these challenges. These rules were found to be giving priority to saving face, deferring to group consensus, hierarchical relationships between one’s teachers and oneself and hierarchical relationships between one’s parents and oneself. Adherence to these rules resulted in them experiencing certain challenges in Australia. Like their adherence to giving priority to saving face resulted in them experiencing being unable to answer teacher questions voluntarily in class (Sarah), being unable to ask teacher questions voluntarily in class (Sarah, Hua), being unable to voice opinions in group discussion (Hua, Chen) and being unable to seek help to improve language (Chen). Deferring to group consensus was the root cause of their experience of and non-resolution of challenges in being unable to fit in (Xin), being unable to ask teacher questions voluntarily in class (Hua, Avery) and being unable to answer teacher questions voluntarily in class (Chen). Hierarchical relationships between one’s teachers and oneself was the root cause of their experience of and non-resolution of challenges in being unable to voice opinions without teacher explicit permission (Xin) and being unable to negotiate with teacher (Avery). Hierarchical relationships between one’s
parents and oneself was the root cause of their experience of and non-resolution of challenges in being unable to make decisions independently (Sarah).

The findings of this study contribute significant new knowledge to the field. However, it is important to be aware of its limitations.

1. The study adopted the CLA to address the research questions raised in this study. However, this approach has limitations in analysing raw data in relation to revealing what the raw data means and lacks theoretical strength for defining interactions amongst various networks. This is why coding from Grounded Theory (Sharmaz, 2008) and the central concept of boundary crossing were adopted to help to compensate for these weaknesses. The purpose was to strengthen the CLA both theoretically and practically to address research issues raised in this study in a more concise manner.

2. The second limitation was the small number of survey respondents. The target population for my questionnaire was not large and the number of responses (27) I received was small. Therefore, there is no possibility of generalizing the results of this aspect of the study. However, the major part of this study is based on a qualitative methodological approach to investigate in depth the learning-related issues ICSs experienced with their learning in Australia, and to link this with an historical analysis of their learning in China. This makes no claims for generalisability. Rather, it seeks to provide insights into the complexities of these issues.

3. The third limitation concerns gender. All interview participants were female, so only female ICSs’ perspectives were documented. Readers, therefore, should be cautious when using the findings of this study to refer to ICSs of a different gender.
6.4 Recommendations/Implications for further study

Differences in ICSs’ approaches to the challenges with the English language implies the need to avoid magnifying the active roles they took, and to avoid operating under the assumption that every student made their overseas learning a transformative experience. Their use of varied and various approaches to learning including reflective and collaborative learning advises against any stereotypical thinking: the categorization/labelling of them as surface rote learners for instance. Complexities in influences of their heritage and contexts warn against resorting solely to Confucianism to understand ICSs, advocates taking influences of additional foci, suggests the need to value individuality, and the need to acknowledge and value the complexities involved in the impact of various contexts.

The main mechanism involved in ICSs’ resolution of challenges was boundary crossing. They all crossed boundaries to resolve challenges that resulted from the contradiction between mediating artefacts and objects. Analysis of these processes also revealed the resources that they used to resolve their challenges. These were resources/outcomes of contexts in which they were involved in China and of various other non-institutional settings in Australia. This points to the significant role that various contexts in which they were involved play in influencing their resolution of challenges. It is important for ICSs and for educators of ICSs to know that their experiences of learning in China are valuable in adjusting to their host culture. Valuing this connection and making use of their experiences of learning in China can help ICSs themselves and educators of these students enhance their resolution of challenges, and assist them with a smoother transition. Expanding their various non-institutional settings in Australia is equally important in terms of enhancing their problem-solving capacity. The resources that they can use to resolve challenges that they experience with their learning can be enlarged through expanding their involvement in non-institutional settings.
Awareness of root causes that led to ICSs’ experience of and non-resolution of challenges is equally important. Knowing this enhances understanding of particular recurring challenges. Knowing what stands in the way of university success in Australia also helps educators of ICSs in terms of providing appropriate intervention to increase the chances of resolving these challenges.

6.5 Chapter summary

This chapter discussed the findings of this study in comparison to the literature. The contributions that this study made regarding the complexities in ICSs’ issues of the English language, approaches to learning and influences of heritage, and of the contexts of family, peers and/work were then discussed. The significance of a consideration of ICSs’ experiences of learning in China to understand their learning in Australia was subsequently argued. Following this, the identification of the root causes of recurring challenges that they experienced and did not resolve, and the demonstration of the processes and the resources that they used to resolve challenges were discussed. The implications of this study regarding the complexities involved in issues central to ICSs’ experience, the value that their experiences of learning in China play regarding resolution of challenges in Australia, and the significance that various contexts in which they were involved in China and in Australia play in their resolution of challenges were subsequently elaborated. The limitations were also briefly discussed in this chapter.

The particular contributions of this study are analyses of the complexities involved in ICSs’ learning at university, the value that their experiences of learning in China play regarding the resolution of challenges in Australia, and the significance that various non-institutional contexts in which they were involved in China and in Australia play in their resolution of challenges. Analysis of issues as central to ICSs’ experiences points to the
significance of valuing the complexities involved in these issues. Analysis of issues that they experienced with their learning in Australia with a consideration of historicity and demonstration of the link between their experiences of learning in China and in Australia points to the important role that their learning in China plays in understanding of their experience of and approach to issues in Australia. It also points to the need to avoid the mistake of discriminating against and marginalizing their heritage as inadequate preparation for what faces them in Australia. The modelling of the dynamic processes involved in their expansive resolution of their issues points to the critical role that other non-institutional settings (including those of China) play in understanding their approaches to issues with their learning in Australia. The explication of root causes that prevented them from resolving issues enhances understanding of non-resolved issues and also points to possible solutions that could lead to transformations in both their learning and their lives. These new insights are very significant in enhancing understanding of this group of students. They are also very significant in helping educators of ICSs offer appropriate assistance to enhance their adjustment to Australian learning in order to achieve transformations that are central to their learning.
References


Baidu Encyclopeadia. (2015). Zhong xue sheng ri chang xing wei gui fan. Retrieved April, 6, 2015, from http://baike.baidu.com/link?url=7JCnYj22BK_jcmMD0zw9sJXPNE0aM2KnAtBv577Qx2PnPyp6uaLYWe6OL3dB338jKEQb08iTJl4c2YJ1A1S8Sq


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Appendix 1 Questionnaire survey

Personal details:

Gender:
- Male
- Female

Age: 

University and Degree/Diploma Program you are enrolled in: 

Your home region is:
- Hong Kong
- Malaysia
- Taiwan
- Mainland China

How long have you been in Australia? 

Previous Degree: 

What was your major in your previous degree? 

If your major was not in Education, why did you decide to study Education here in Australia? 

Thinking about your learning

Here are some statements about your learning back in your home country. Please show how much you agree or disagree by selecting the appropriate response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understood well what I needed to learn</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I used repetition and memorization to learn</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My learning was about getting the &quot;correct answer&quot; for tests</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My thinking was often challenged by teachers; if A or SA please give an example:</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Creativity and originality were valued in Chinese courses</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Analytical and critical thinking were focused on in Chinese courses</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Chinese language skills had a strong impact on my academic performance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Here are some statements about your learning in Australia. Please show how much you agree or disagree by selecting the appropriate response:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand well what I need to learn</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Creativity and originality are valued in Australian courses</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>I was familiar with Australian learning approaches before I arrived</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>My thinking is often being challenged by teachers. If A or SA, please give an example</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>English language skills have a strong impact on my academic performance</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Learning approaches here are very different from those I experienced in my home country</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>I find it difficult to adjust to critical and creative learning expectations</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Analytical and critical thinking are focused on in Australian courses</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>A learner-centered environment is very demanding for me</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Collaborative learning and peer discussion are challenging</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Tests/ exams are the main source of assessment</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>Group work and discussion are helpful for my learning</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
</tbody>
</table>

What were and are your expectations of education programs in Australia?

[Blank field]
What learning approaches did you experience in the classroom back in China? (Please click on the number of stars from 1 to 6 to indicate from the least used to the most frequently used)

- Repetition ★★★★★
- Underlining ★★★★★
- Learning by myself ★★★★★

Besides the ones mentioned above, what other learning approaches did you experience in the classroom back in China? (Please specify)

Since arriving in Australia, what have you found most unexpected about the way your teachers teach you?

How does that affect the way you learn?

Could you say more about the experiences you had adjusting to the Australian learning context?

Can you say more about **OPPORTUNITIES OR CHALLENGES** about your learning here in Australia?

**OPPORTUNITIES:**

**CHALLENGES:**

What methods have you used to help your learning since coming to Australia?
Specifically, what strategies have you used to improve your English language?

<table>
<thead>
<tr>
<th>How effective or comfortable are you with the following after some study in Australia?</th>
<th>Not Good</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking responsibility in a group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with other international or local students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course work generally</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being active in group discussion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding course requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English language fluency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapting to the Australian learning context</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting independent research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-solving and critical analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding Australian conventions around plagiarism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engaging in rational debate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being innovative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freely expressing alternative points of view (Freedom of expression)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintaining academic integrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning and intellectual independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being an active and lifelong learner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving academic excellence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What similarities and differences exist for you between Australian and Chinese/Taiwanese learning?
How have you changed to become more successful at learning in Australia?

Here are some brief statements of what you might think the role of teachers in your home country. Please show how much you agree or disagree by selecting the appropriate response:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers were in total control of my learning</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teachers used a range of strategies to guide my learning</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teachers assessed my learning through timed tests and exams only</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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Here are some statements of what you might think about the role of teachers in Australia. Please show how much you agree or disagree by ticking the appropriate box.

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What sort of assistance from the universities would be valuable to help your learning in Australia?

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What sort of assistance from the teachers would be valuable to help your learning in Australia?

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What other assistance would be valuable to help your learning in Australia?

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Any other comments?

I would love to hear more in detail about your learning experiences here in Australia, which is also very valuable for my present study! IF YOU AGREE TO DO A FACE-TO-FACE INTERVIEW, please add your contact details here:

Name:

Phone/Email:

Thank you so much for the time and effort you have put in for this survey!
Appendix 2 Interview questions

1. Could you briefly tell me about yourself, please?
   - How did you learn back in schools in China?
   - How has your learning changed after you went to uni?
   - What was your major in your undergraduate study?
   - Why did you decide to study education programs?

2. What was the most memorable learning experience you had back in China?

3. Could you describe how high school/uni students learn in China?
   - What are their common approaches to learning?
   - Do you learn the same way as those students do?
   - Why/why not?
   - Have the learning approaches you’ve become used to helped you to achieve your learning goals? Why/why not?

4. How have exams in the China education system affected your choices of learning approaches?
   - Have the learning approaches you’ve become used to helped you to achieve excellence in these exams? Why/why not?

5. What have you gained through your Chinese education?

6. When you first arrived into an Australian classroom, how did you feel?
   - Why?
   - What did you do to handle this?
   - How did you experience shifting from your Chinese learning to Australian learning?
   - Is there anything you did to help yourself cope better in everyday classroom study?
   - What did you do to get used to the Australian everyday study?

7. What was the most memorable learning experience you’ve had since you arrived in Australia?
   - How has the Australian learning culture affected your learning?
   - What learning approaches have you used to help you manage your study? (Handle your assignments here)?
   - Have the learning approaches you chose helped you to achieve your learning goals? Why/why not?
   - What have you gained so far with your study in Australia?

8. Do you think learning in China and learning in Australia are different?
   - How different? And how have these differences influenced your learning?
   - Which learning context do you prefer? The Chinese or the Australian? (Which learning context is more helpful for you?)
   - In your future practice, how will you teach your students?
   - Why/why not?

9. What opportunities do you think learning in Australia has provided you?

10. How has English language fluency influenced your academic performances?
    - What did you do to improve your English language fluency?
• How has English fluency influenced your day-to-day learning in the classroom?
  • What did you do to get language help?
6. Apart from English language difficulties, what challenges do you think learning in Australia posed for you?
  • What did you do to handle those challenges?
7. How did your teachers teach while you were at school in China?
  • How different were your uni teachers from your school teachers in China in relation to teaching?
  • What do they expect their students to achieve?
8. Since you arrived here, what have you found most unexpected/surprising about the way teachers teach here?
  • How did that affect your learning?
  • What do you think Australian teachers expect their students to achieve with their study?
  • Do you think you learn a lot in Australian classrooms, why/why not?
9. How do you perceive local students learn? In the classroom, what have you noticed about their learning?
  • How different is their learning from yours?
  • Will you learn from them?
10. In terms of assignments, have you found the forms of assignments in China and in Australia are different?
  • How different?
  • What have you done to manage the difference?
  • In Australian assignments, how do you normally go about it?
  • Have the methods you chose been successful?
11. In the future, what do you hope Australian teachers will do to help Chinese international students adjust to the Australian learning context?
12. To assist future Chinese international students to adapt to the Australian learning context, what do you suggest they need to do?
13. Are there any suggestions in relation to how to improve their learning transitions?
  • In relation to understanding in the classrooms, what you do propose they need to do?
14. Any other comments?
Appendix 3 Sarah’s narrative

Political map of P. R. China with Wenzhou city, Zhejiang province highlighted

Introduction

Sarah is from Wenzhou city, Zhejiang province, China, where she did her schooling until Year 12. She came to Australia to finish her Year 12 study and then pursued her high education here. The following details her experiences of learning in China and Australia.

School learning in China: Family, school and peers

Family

Sarah was born after the economic reforms and grew up in Wenzhou city, with parents who are owners of small business enterprises. Quite often, both Sarah’s parents worked outside home and left Sarah on her own. This helped Sarah to become independent.

Sarah developed her independence by going shopping and preparing meals for her parents. She also took care of herself when her parents went away for business. She referred to occasions when her parents needed to go to other provinces for three to four days in a row. Her parents asked her to stay at her aunt’s place, but she did not do what her parents told her to. Instead

*I rode my bike home myself, and then enjoyed myself a lot when I was at home by myself.*
Even though her parents did not plan this, by chance they created an environment for Sarah to develop her independence.

When Sarah reached school age, her parents believed that she needed to study hard and they enforced this belief through discipline and corporal punishment. Sarah argued that quite often, her parents would tell her that she needed to go to school and learn hard and, that in the future, this would be very useful for her. Her parents seem to have believed in education as a means to guarantee a good future. This belief corresponds to the traditional value relating to education: accomplishments/purposes of learning are linked to an end (Lee, 1996).

Sarah’s parents enforced their belief on their daughter through tedious talks, and also through assigning her one responsibility only: to study. Sarah claimed her father forced her to form the habit of spending after-school hours studying. However, she believed she should be having fun. This created a conflict of interest between her parents’ motives in wanting her to study hard and her own motive in wanting to have fun (i.e. a tertiary contradiction was generated (Engeström, 1987)). This conflict was further instantiated in the following action:

*I rented videos, my father disconnected all the cables [connecting the DVD player and the TV], I reconnected these cables in the right place.*

Sarah appears to have felt she was negatively affected by her father because of a perceived divergence of interest: having fun versus working hard. Although this action achieved an unexpected outcome – Sarah’s ability to solve problems through figuring out connecting cables – the resolution of this conflict seems to be her submission to parental authority: only when her parents were not present, she would enjoy herself. Sarah’s resistance to her assigned responsibility of studying hard was also illustrated by her staying away from classes. However, this became impossible because of her father’s discouragement through corporal
punishment. Her father’s adoption of corporal punishment visibly illustrates his belief in controlling and disciplining his child (Lin & Fu, 1990). Sarah claimed,

*I am* not brave to live at home and not go to school. *Every day, [I feel] scared.*

Sarah explained that her fear was mainly caused by her father’s frequent corporal punishment. She recalled that her father once used a wooden stool to hit her and the stool broke. She said her mother mostly agreed with her father’s decisions, which escalated her father’s beating. This led to her being very frightened of her parents. As a consequence, she believed escaping classes was impossible. This seems to be caused by the same conflict between her interest in wanting to have fun and her parents’ in wanting her to study hard. The resolution of this conflict also appears to be her submission to parental authority: she was not brave enough to miss classes.

Because she was forced to form the habit of studying, Sarah believed learning was busy and hard.

*For me, I think I was forced to form the habit of spending time to study, forced by my parents. We were not voluntarily to learn, unless on something we are really interested in.*

This demonstrated the same conflict between Sarah’s own motive in wanting to have fun and her parents’ desire in wanting her to study hard. The resolution was again submission to parental authority: being forced to form the habit of learning. With authoritarian parents, who also repetitively used corporal punishment to mediate her behaviours, Sarah gradually internalized the action of submitting to parental authority (Kaptelinin & Nardi, 2006).

**School**

Because she was forced to spend time learning something that was not interesting, Sarah believed learning was extrinsic and involuntary. She believed this extrinsic purpose was not
only enforced by her parents, but also reflected by her school’s practices of learning for passing exams. She recalled that these exams were textbook-orientated and contained

*knowledge-based questions, questions you can answer based on information from textbooks.*

Sarah argues that this exam-orientated assessment influenced her teachers’ adoption of textbook-oriented and teacher-centred teaching practices. She claimed that her teachers not only followed textbooks exclusively, but also used a teacher-centred teaching style in that only the teachers’ voice was heard and only teachers made decisions.

*Teachers only followed the textbooks and usually they just stand in the front of the classroom, write on the board, sometimes, have a walk in the aisles to see who is not paying attention.*

Examination thus not only acted as the purpose of learning, but also restricted Sarah’s learning to mainly memorizing textbook knowledge. This supports Li’s (2009) argument that examination continues to dictates school learning. As a result, she believed learning was textbook-dependent, memory-based and involuntary.

Having no motivation to study and being forced to learn also led to Sarah experiencing a hard time at school. She was not only bored, but also stressed (she believed an examination was a torture). Sarah argued that this, coupled with the examination-orientated learning and textbook-orientated teaching, contributed to her very boring learning experiences.

Although school learning was boring, Sarah claimed she was very interested in part of the biology subject once.

*Then I learned this part very well, then I did very well in my homework, my teacher suspected that I cheated, I argued with him for a long while, I was very angry at that*
moment, he still did not believe me. But later, I did well in that exam, he believed afterwards.

Sarah’s teacher’s practice appears to have been guided by his belief that no student could exceed their perceived capabilities. He seems to have believed that because Sarah generally did not achieve well academically, she could not do well in other areas, such as homework. This incident reflected a conflict between Sarah and her teacher’s motives, when her teacher’s suspicion of cheating made her behaviour less effective (Engeström, 1987). The resolution of this conflict was a compromise. Sarah studied hard and did well in exams, which led to her teacher’s acceptance of her ability in the end. It should be noted that the teacher’s practice seems to have prevented him from making use of Sarah’s initial interest in learning. If he had, he might have influenced Sarah in a positive way.

**Peers**

Sarah encountered conflicts not only within the context of family and the context of school learning, but also within the context of peers. This conflict occurred when Sarah was negatively affected by a group of low-achieving students laughing at her.

> When I was in high school, because I was very chubby since I was little, there were many students laughed at me.

Initially Sarah attempted to resolve this conflict by trying to get good achievement scores. However, this failed because she continued to be isolated even after her achievements got much better. She modified her approach after she realized that:

> when other classmates bullying you, there is no point being angry with them, it is just at the end, I decided to join them and laugh with them together.

Not wanting to be isolated, Sarah chose to be one of them. Because she thought:
this way, I am happy, they are happy, why not?

Through submitting to the majority of her peers, Sarah resolved the conflict she had been experiencing. Although this demonstrated her problem-solving skills, her choice to become a member of her peer group might have been driven by receiving no support from either teachers or parents.

[My head-teacher] was telling my mum that I behave in front of her one way, then behave another way when she is not there. Actually I am a very straight person. It was just I changed.

The sadness of this was added to by her parents. When she had low marks, her parents quite often thought she did not study the right way.

Every time, parents always remind us to have an appropriate method to learning; or how you are going to achieve high marks? Parents, when we did not do well, they always tell us to have a good learning method, and think we do not learn in the right way. They are certainly not going to say: “are you not interested in learning it”, no way. They normally say: “your learning method is not right; “you need to change it”, things like this.

Her parents believed her low marks were a result of her inadequate or inappropriate learning methods. Their advice to Sarah not only reflected a dominant parental voice (authoritarian), but also demonstrated the unequal power relationship (Lin & Fu, 1990). Although her parents attempted to resolve a perceived conflict that resulted in low marks, this effort was not successful. The unequal power relationship seems to have prevented everyone from being able to effectively communicate with each other.
Receiving no support from teachers or from her parents and being forced to learn something that she was not interested in, left Sarah no choice but to seek support from her peers. Her submission to the unequal power relationship between parents and herself and between teachers and herself prohibited her from viewing herself as someone who could negotiate with her parents or her teachers. This limited her to the only option: to negotiate with peers.

Sarah noted that her submission to the majority of her peers led to various negative outcomes. Her academic achievement got heavily influenced in a negative way and she claimed that she became slack.

_I think I must spend some effort in joining in with them, my study was not that well, but there were some sacrifices. I did not grasp my opportunity to study at that time, which also impacted my characteristic of being slack._

Sarah acknowledged there were sacrifices in choosing to be a member of this community, and one of these was that she missed the opportunity to enter a good senior higher school.

_And now I am a little bit regret, I think if I studied hard at that time, my life might not be the way it is now._

The regret she felt indicated a strong influence from her parents and also an indication of her internalization of her parents’ beliefs in education as the means to ensure a good future.

**The transition**

Sarah said, because of her low academic performance, her parents believed the chance of her entering university was minimal. They thus sought other means for her to pursue higher education to achieve a good future, which further demonstrated their belief in education as a means to an end (Lee, 1996).
By chance, the high school Sarah went to worked together with a corporation working to send students to Australia to pursue higher education. Students who wanted to go to Australia to study had to have three semesters’ study in the class this corporation initiated. Sarah was in this class. Most of her classmates went to Australia after their three semesters of study but Sarah did not. Because her visa got refused once, she stayed in a mainstream high school for half of Year 11 before she came to Australia.

It is expected that Sarah might have many friends when she came to Australia, but this was not the case. She said because her mother did not want her to stay in the same city as all other students, Melbourne, so she went to a different city.

Most of them were from rich families, so when they came out, it felt like they were out of parents’ control and can go wild. My mum said once I came out, I need to study well, “we are not like other families can invest so much money for you to play around, you are there to study”.

Under her mother’s control, Sarah chose a smaller city, Adelaide, in which to study. Her mother’s intervention resolved a problem that she might have been facing if she wanted to go to university to study. However, her mother to a large degree seems to have forced her decision on Sarah. Her mother’s action also shows her belief in controlling her child (Lin & Fu, 1990). As a consequence, this might have restricted Sarah from making decisions on her own.

**Learning in Australia**

**Free but bored**

After Sarah arrived in Australia, she was initially very happy. Without her parents being here with her, she felt free – she was not pushed to go to school and also could escape some classes. However, she soon felt
it was too relaxed an environment for me. I know I am very slack [laugh], I need that push behind me.

Being here in Australia, Sarah was free from authoritarian parents. However, her growing-up experience did not equip her with the skills (e.g. management skills, self-discipline) she needed to fill this free time.

**Discovery of interest**

Having much free time to fill and not knowing how to fill this time made Sarah feel uneasy. She relied on what she was familiar with. She acted as if her parents were disciplining her to achieve the outcome of filling free time. This meanwhile also achieved another outcome: discovery of interest.

*Whenever I was free, that year when I was doing home stay in 2004, I normally go to the actress forums, then I discovered some of the signature designs were very attractive, then I started to download Photoshop, then I was gradually good at it, because I was really interested in it. I found it a miracle that I can voluntarily learn something, I stayed on that forum around four years, I became a leader in the beauty work group [laugh]. Every time when I had a breakthrough, I was really happy, then I kept on, after a while, I felt a little bit bored, and wondering I am still on this style, then you have another breakthrough.*

Through managing free time, Sarah discovered her potential and interest in learning design and still could not believe the fact that she could voluntarily learn something. Through doing this, she not only filled her free time, but also enriched her meaning perspective that learning could be both interesting and rewarding. This learning experience seems to have contradicted her interpretations of learning as being disciplined to learn something boring.
Having the need to gain more knowledge about design and wanting to know her level of expertise in designing, she chose a subject related to design.

*That subject was my first subject got HD with my study so far.*

Choosing to do a subject that was related to design not only achieved the outcome of her achieving High Distinction in that subject, but also reassured her that she was good at designing. However, she did not choose design as her major with her undergraduate study.

*What my mum said discouraged me, she said, “there were a lot of competition for ad designing”, for those who can excel, they need distinctive insights, and otherwise, you are just like others.*

Sarah’s own motive in learning based on interest was discouraged by her mother. Due to her adherence to parental authority, she followed her mother’s advice and did not study design as her undergraduate major. Her choice proved her internalization of parental authority (Kaptelinin & Nardi, 2006). Although she regretted missing the opportunity to pursue her interest (she thought it was important for people to grasp their opportunities early on, otherwise it would be difficult to reignite interest later on), her adherence to the hierarchal relationship between parents and herself limited her to submitting to parental authority.

*Referring to parental authority in decision-making*

Her adherence to this unequal relationship was further illustrated by her decision-making in relation to choosing her major of study.

*My dad was a Chinese language teacher in China; he thus supported me to study language teaching.*

Having internalized this hierarchical relationship, she appears to lack the ability to make decisions on her own, even though her parents were not explicitly asking her to do so.
So I was still influenced by them even though I am here in Australia. We still follow their steps and listen to them, when they say this is going to be good for you.

Following her father’s advice, Sarah chose to learn to become a language teacher. Learning for her was still for achieving an extrinsic purpose: studying for immigration. This was boring and also very tiring for her: she said her current course on teaching was boring and she was tired of the readings. What is more, she claimed she had to force herself to do the assignments and only did the assignments for the teachers’ sake. Although she enriched her perspective on learning based on her own motives, she resorted to parental reference on an automatic basis in relation to decision-making. Her internalization of submission to parental authority due to her parents’ repetitive enforcement suppressed her exercise of this newly formed practice: learning based on own motives.

Making decisions not based on her own motives led to unbearable outcomes for her: boring and hard. However, she still achieved some unexpected outcomes: starting to love to teach.

Because you want to do it well. You want to do this job, you want to deliver what you had to the students, you are naturally trying to play with the children.

Motivated by wanting to teach well, Sarah was creative, flexible and could also adopt diverse perspectives with her teaching. She was also reassured by her peers’ feedback that she was good at teaching.

*English language: Reading*

For Sarah, any barriers to learning in Australia were connected to the English language and related to reading and writing. She noted that her difficulty with reading was her inadequate vocabulary, which often led to her taking a long time when reading reference books. This
corresponds to Grabe’s (1991) argument that vocabulary development is “a critical component of reading comprehension” (p. 392).

*For reading English reference books alone, no, dear, I cannot read it. You know, for one sentence, I might look up the dictionary several times, I do not have that patience to read a whole page, so my reading was not that good. Yes, language is the biggest barrier at that time.*

Knowing that her challenge with reading reference books was caused by her inadequate vocabulary, Sarah resorted to her peers when attempting to resolve her problem.

*I asked my best friend to memorize words with me, and we interact with each other, which are very interesting.*

Through resorting to her peers for help, Sarah used resources from her peer network when attempting to resolve her pressing learning issue. This showed her use of boundary crossing to resolve issues (Engeström et al., 1995). However, this failed to resolve her issue, as she explained:

*I was memorizing words from Olympic Games, I tried to memorize the different game names, because I cannot watch Chinese TV programs. The vocabulary I remembered from Olympics for example, they were not helpful for my essay writing.*

Although Sarah attempted to and did draw on help from her peer network, the approach she used was inappropriate in resolving her pressing learning issue. This might be a result of her not knowing the root cause of her problem. Her language problem thus failed to be resolved, reflected by her continuing behaviour of forcing herself to read reference books.
**English language: Writing**

Sarah also relied on the same approach of drawing on assistance from peers when attempting to resolve her pressing issue with her writing: understanding instructions. Her challenge corresponds to Lee et al.’s (2013) finding that understanding requirements is one of the obstacles that ICSs encounter in essay composition. This was successful. This demonstrated that the same approach in drawing on resources from her peer network could lead to various outcomes: one was inappropriate (seems she was not aware of what the root cause was), which led to reinforcement of old behaviour, whilst the other worked in that it assisted her to understand the instructions for assignment writing. This points to the importance of knowing root causes of problems in order to resolve pressing issues at hand.

**Unwilling to answer questions voluntarily in class**

Sarah mentioned she refrained from answering teachers’ questions voluntarily.

> Whenever the teacher asks a question, she looks at the students, and we normally look down [laugh,], this is the common behaviour, always avoid eye contact, always afraid if you look at the teachers, they might think you want to answer [laugh].

The reasons behind Sarah’s unwillingness to voluntarily answer her teachers’ questions were not known. However, based on her experiences in China, one reason lies in her concern of losing face (she might not know the answer, thus would be very humiliating if she provided the wrong answer). Another reason might stem from her view that answering questions voluntarily was showing off (in this case, she knew the answer but was prohibited from doing so as she did not want to be “self-congratulatory” (Wang, 2012, p. 527)). Her poor academic performance and her low English language proficiency point strongly to the former (a concern of losing face (Liu, 2002)). It is important to note that there was no visible
effort invested by lecturers or by Sarah herself in attempting to overcome this challenge. Her behaviour seems to be repetitive.

_**Reluctant to ask questions voluntarily**_

Sarah said she was reluctant to answer teachers’ questions voluntarily, and also reluctant to ask questions on a voluntary basis.

*I do not understand it myself, I have been here for so many years, for parts I do not understand, I still feel embarrassed to ask.*

Sarah associated asking questions with an embarrassment of self. She claimed she did not want to ask questions because she did not want to lose face. However, this understanding did not help her to ask questions voluntarily.

*I do not understand why I still do not want to lose face after being here for so many years, sometimes I think, it is ok, there is nothing to lose even if I ask, I can understand better after they address my questions, ask again when I forgot, but I just cannot put my face down, still feel embarrassed [laugh]. Sometimes, I can understand the logic, but I still cannot do it.*

One of the root causes was her not wanting to lose face. There seem to be more root causes as to why she could not do it. Her action of asking questions might have been regulated by more implicit rules. She might also implicitly adhere to the hierarchical relationships between her teachers and herself. This would limit her to respecting this hierarchy, which subsequently led to her not asking questions voluntarily because that would challenge this hierarchy. Moreover, asking questions voluntarily as a new action requires reinforcement to gain automatization (cf. Bernstein & Bodker, 2003). Without this internalization, it is difficult to draw on this action on an automatic basis.
Peers: A decisive resource

Sarah’s peers played an important role (although they influenced her in a negative way) with her learning in China. Her peers in Australia were also an essential part of her learning. Although her mother stopped her from socializing with her Chinese high school classmates who came to Australia half a year earlier than she did, she managed to build a network of peers. These peers learned collaboratively with her (e.g. memorizing vocabularies, understanding instructions) and also assisted her in discovery of interest.

My house mates are all from Guangdong. They knew I can understand Cantonese, they thus used Cantonese for communication, I can understand, when I talked to them in Mandarin, they replied in Cantonese, they did not talk to me in Mandarin... so I started to speak Cantonese. They did not say my Cantonese was bad, and a friend from Hong Kong, she said, “oh, you can speak Cantonese, and your Cantonese is very good”, which also boosted my confidence. I learned it faster

Sarah’s peers helped and contributed to her experiences of intrinsic learning. This is consistent with Chen et al.’s (2011) finding that the group of peers is also an important context where learning occurs. The achievements and the acknowledgment by her peers seem to have motivated her to go further. Her friends played a very significant role in that they boosted her confidence, provided the appropriate context for practice, and also supported her to grasp the opportunities to master this language.

Being able to learn Cantonese very well, Sarah’s peers thought she was gifted at learning languages. However, Sarah did not believe so because she was not gifted at learning English. She continued to view English as a school subject. Her attitudes toward school learning as being forced to learn something not interesting might have stopped her from learning English intrinsically.
The relationship between Sarah and her peers was reciprocal: she received assistance from peers, and she also helped them to solve their issues.

*My friends car had a problem last time ... I tried various methods, I tried to turn the steering wheel, I turned it a little bit, then I pushed the car, and the problem got solved. She was so impressed and wondered how I thought about pushing the car, I think I already formed the habit of relying on myself to solve problems*

Sarah’s specific growing-up experience forced her to be independent and to be good at problem-solving. Relying on herself to solve problems was reinforced in Australia through her independent learning experiences: discovery of interest and potential with graphic design and Cantonese. This independence and problem-solving skills also assisted her helping her peers to solve their problems.

**Summary**

Sarah experienced visible conflicts within the network of peers, family and school learning. She handled the conflicts with her parents, teachers and peers through submitting to authority, compromise and submitting to the majority. Although she was forced to form the habit of studying hard, she gradually internalized her parents’ beliefs through their repetitive behaviours of tedious talks and corporal punishment. This internalization prohibited her from making decisions independently. To some extent, this seems to have helped her to discover her potential and interest in design and learning languages.

Sarah encountered various challenges with her learning in Australia, which were reflected through barriers in language (reading and writing), answering and asking questions. Although she relied on her peers for assistance, this was not successful in improving her reading. Despite this, her peers did help her in various areas ranging from understanding instructions and reassuring her about her choices, to further motivating her to learn Cantonese. Her
independence and problem-solving skills developed further in Australia. This also helped her to assist her peers to solve their problems. Although having strength in solving problems, her adherence to some implicit rules prohibited her from answering or asking questions voluntarily in class.
Appendix 4 Hua’s narrative

Introduction

Hua is from Fushun city, Liaoning province, China, where she also did her schooling and part of her undergraduate study. After that, she came to Australia to complete the rest of her undergraduate degree. This was then followed by her pursuit of a master’s by research degree. She shifted her major while she was pursuing her master’s degree as she thought she “was not into business”. After completion of her master’s degree, she shifted her major completely to early childhood education by undertaking a postgraduate diploma course. The following details her experiences of learning in China and in Australia.
Hua asserted that her experiences of learning at school were passive, reactive and score driven. She believed this passiveness was shown by her teachers’ adoption of a passive teaching approach, and was also shown by students’ following teacher instructions. She further argued that her teachers’ adoption of a passive approach was grounded in their “blind adoption” of teaching outlines or guidelines (telling them what to teach and how much they needed to cover in each class) issued by the Ministry of Education. In order to cover the stated material, teacher talk often occupied the whole lesson. This led to very limited interaction in class. She further elaborated that because teacher talk often occupied the whole lesson, students spent all the class time taking notes and listening quietly. Both teachers’ practices and students’ behaviours indicate that the teaching outlines issued by the Ministry of Education performed as an explicit rule that governed teachers’ teaching practices and also to a large extent student learning. However, it is worth noting that students listening quietly might not solely be the result of teachers’ adoption of a teacher-centred pedagogy. Rather it might be a result of various influences (respect for authority and knowledge, unequal relationships between one’s teachers and oneself, giving priority to saving face and deferring to group consensus). In other words, students’ listening quietly might be associated with various cultural values (Liu, 2002).

Hua claimed her learning at school was also score driven in that most learning activities (for instance, memorization of textbook knowledge, doing preparation papers or homework) were aimed at getting good scores in exams. This shows that exams acted as a profound rule that regulated her learning activities. She further argued that exams also acted as an ultimate goal that she tried to attain. Achieving examination success for her was of paramount
importance. This is demonstrated by her association of good exam results with various benefits.

*Our learning is very score driven; you need to have good scores. Good scores represent everything, including your intelligence levels.*

Examination results were of paramount importance in Hua’s school learning. This corresponds to Li’s (2009) argument that exams still dictate school learning. Yet an overemphasis on getting high marks in exams might affect developing non-examination related areas and result in a generalization of students’ learning i.e. students who did well in exams would do well in everything else.

Hua contended this score-driven learning required students to have a good memory in that if they could manage to remember all the individual points from the textbooks, they would get high marks. She argued that her teachers’ use of activities to assist them in memorization of textbook knowledge further contributed to her holding this belief. These activities ranged from memorization of textbook knowledge, doing preparation or exercise papers, to finishing large quantities of homework. As a consequence, she believed her school learning was also reactive in that she was reacting to whatever she was asked to do by the teachers,

*I would say I was very reactive, I was reacting to whatever the teacher told me to, so it was very reactive. I would say reacting to all the school things, like I needed to memorise a lot of things, I have a lot of paper to finish [exercise, preparation tests]. And homework, it is the memory that I would never forget, loads of homework.*

*Family*

Hua claimed that her memorization skills were very strong. This gave her an advantage in the score-driven learning that required students to have a good memory. This as she asserted was strongly linked to the way that her mother brought her up.
My mum she was teaching in the kinder, kindergarten, so she, when I was one or two, she kept talking to me about like baby songs, especially things like in baby language, so I tried to, I think I tried to remember what my mum is talking to me, so I think like the proficiency or fluency come from my repetition.

Repeating whatever her mother said demonstrated an underlying activity that was driven by her need to learn her native tongue, which she strongly believed also motivated her to commit to practices of repetition. This mimicking helped her to internalize this skill, which contributed to her strength in memorization skills.

Hua contended that her mother’s influence on her memorization skills impacted her learning positively. However, she also felt she had been negatively affected by her mother in that she came to over-rely on memorization to learn. This limited her creativity. She further explained that her habitual behaviour in repetition might have strengthened imitation skills, which consequently distanced her from grasping opportunities for developing critical thinking skills.

Within the score-driven learning context that required students to have good memorization skills, Hua should be a successful player. However, this was not the case. She traced this back to her parents, especially her mother’s influence in supporting her to learn school subjects that she would mostly rely on memorization skills.

I told my mum, “mum, I can tell you now, I would not use these fabulous mathematical formulas in the rest of my life”, I can do basic calculations and that is good enough for me [laugh]. And my parents, they were persuaded. So they thought if you are not good at it, let us do something that you are actually good at.
Hua’s parents supported her in selecting what she was interested in learning. However, this did not appear to have resolved the conflict that she was facing. She believed textbook knowledge, especially mathematics, was not useful and did not have practical value. She thus believed learning formulas that she would not use for the rest of her life was a waste of her time. Although her parents supported her, it did not resolve the conflict between mathematics textbook knowledge as the means of learning and her rejection of learning this knowledge that led to her experience of the issue in the first place. Their support rather seems to have led to her reinforced inertia: she continued to select what she was good at and continued to refuse to learn subjects she was not good at.

The issue between her choice of repetition as the means for learning and the problem space that she was facing (her unsuccessful learning experiences with mathematics) was due to her use of repetition. Her parents supporting her not to learn math did not help to resolve this conflict. Following parental advice in refusing to learn math and in continuing to learn school subjects in which she could rely on memorization skills, showed her use of submission to parental advice as the approach to deal with the issue.

*School learning: Part 2*

Hua emphasized one outcome of her choosing to learn subjects that favour memorization skills was her obtaining uneven results. She said she enjoyed learning those subjects in which she could rely on memorization skills and she got good results. But for those that required other skills like critical thinking, she refused to learn anything, which led to her failing them.

*I can manage the subjects that I was good at, like the Chinese language, the English language, history, geography, I was good at these subjects. For mathematics, it is just another language I could never comprehend, so it was a big headache for me, [laugh]. So my brain just switched off on these classes.*
Hua said mathematics was a language she could never understand and, as a result, she switched off during these classes. This seems to imply a conflict between the problem space of her inability to comprehend mathematics textbook knowledge and the means that she lacked to help her to comprehend. In addition, she claimed no matter whether you wanted to be in the class or not, you had to be there. Having no choice further impacted her to switch off in these classes.

Hua said she also hated politics. She said politics was too boring, which also made her switch off. This also seems to have reflected a conflict between boring textbook knowledge as the problem space and the means that she lacked to resolve her problem. However, instead of refusing to learn like what she did with her math, she forced herself to learn.

For politics, it did not matter, whether I wanted or not, I had to memorize those fabulous theories because this teacher was in charge of my class, she is the head teacher, so I have to, I had no choice at all [laugh].

Her politics subject teacher was her head teacher (the head teacher was in charge of the class), who represented more power and authority. Hua’s view that she had no choice but to learn this subject shows her submission to teacher power and authority. Her varied approaches toward these two different subjects further proved this. This corresponds to Chan’s (1999) finding that support the hierarchical relationships between one’s teachers and oneself.

Hua’s choice in learning those subjects in which she could rely on memorization was further shown by the varied approaches she used for her homework. For the subjects that she relied on memorization and was also good at like Chinese language, English language, history and geography, she was able to finish the homework. But for mathematics, she said she never finished any. Inability to complete homework seems to be led to by the same
conflict between the problem space of her inability to comprehend math and the means that she lacked to do so. Her choice in not completing homework reflected the non-resolution of this conflict and also led to her facing punishments.

*The teachers always said: “you need to do this, this, and that by tomorrow, and if you do not do this, please come to my office”* [laugh], I would never forget this [laugh] memory.

Hua’s teacher’s use of punishments resonates with one of the qualities that Chinese teachers had/continue to have: being strict (Wang, 2015). This, however, did not help Hua to resolve her problem.

In order not to get punished, Hua found a way to work around her mathematics homework. This was copying other students’ work.

*So sometimes we copy each other’s work, like “can I borrow your homework for a while?”* [laugh], sh...sh...sh...finished.

Plagiarizing helped Hua to avoid being punished. Her teacher’s intervention in the form of punishment, rather than helping Hua to resolve the conflict between her inability to comprehend textbook knowledge and the means that she lacked to do so, seems to have reinforced each party’s inertia. This is further shown by her teacher’s failure to notice what was going on.

*It is like hand written ones, so, perhaps the teacher was drowning in marking homework [laugh], so she did not have time to detect what was going on, so it is like, everybody was very busy [laugh].*
University learning in China

Another outcome of Hua choosing to learn only those subjects in which she could rely on memorization skills was her obtaining uneven results. This prevented her from entering a good university. She went to a private university, run by a Canadian. In this university, she said almost all the teachers were from English-speaking countries. This she believed contributed to her having different experiences from those who went to public universities.

Hua claimed her learning at university contrasted with that of high school in the areas of classroom interaction and means of assessment. In the area of classroom interaction, she said there was not a complete contrast. Although most teachers were from English-speaking countries, a large proportion taught in a teacher-centred way (teacher talk occupied most of class time resulting in limited interaction). This was just like the way her school teachers taught her. However, she also had one or two teachers who were very interactive and also practiced learner-centred teaching. Those teachers as she recalled tried to promote more interaction in class. However, it was not successful. Students were all silent when they were encouraged to ask questions. Although her university teachers practiced different approaches regarding promoting class interaction, they seem to have achieved the same outcome: limited interaction in class.

It is important to note that the couple of teachers failed to achieve more student interaction in class although they encouraged it. Based on Hua’s school experiences, one possible factor that prevented her from asking questions could be her adherence to the hierarchical relationships between her teachers and herself. This adherence would cause her to act to respect this hierarchy. Actions that challenge this hierarchy (for instance, asking questions) were thus prohibited. Her university teachers who were unaware of the factors that prevented her from asking questions thus brought about no differences in promoting more student
interaction. Interaction in class was still limited despite the fact that they were encouraged to do so. In this case, the implicit rule seems to have acted as an obstacle that prohibited Hua from achieving the desired outcome that her teachers promoted.

Hua contended that instead of having exams, her university used assignments as the main form of assessment. Different forms of assessment expanded her views about learning, which before she associated solely with memorization. This new form of learning also expanded her repertoire of resources through the process of internalization (Kaptelinin & Nardi, 2006).

*I would say in university, I learned to write logically, you have to make sure your structure is really logical, you need to link sections closely. I think that is how I was taught.*

This in turn equipped her with appropriate tools that she needed for her learning in Australia (demonstrated through her achieving good marks in her assignments). She thought her learning at this university functioned as a transition that helped her to adapt from the context of China to the context of Australia.

**Learning in Australia: The initial challenges**

Hua claimed the initial challenge she encountered was around listening comprehension. Due to her teachers’ various accents and speaking speeds, she was not able to comprehend anything in class. When she interpreted not understanding anything in class as meaning she was going to fail, she projected herself into a state of crisis. This pushed her to search for means to get herself out of this crisis.

*“I am going to fail definitely, I am going to fail”, so that is how I felt. But then, I found out I need to be active if I want to pass, I need to include myself into this*
learning sort of progress. I cannot wait until lecturers tell me what to do and how to do because they just would not do it

Hua realized that in order to pass, she needed to be active and to take charge of her own learning. This supports Tran’s (2008) finding that Chinese students took active roles to resolve issues with their learning overseas. Wanting to achieve learning autonomy motivated her to search for means to achieve this goal. The means she used included learning from peers (she said participation was important and emphasized that she just listened to how her local peers expressed themselves and this helped her to improve her listening comprehension on a daily basis), and seeking help from language support services (she attended every session). This she believed assisted her in gaining autonomy.

Increased autonomy might not have helped Hua to ease her anxiety about failing in a direct manner but it appears to have helped her in an implicit way. This was shown by her realization that she also needed to take charge of her learning in relation to passing. This and her realization that obtaining help from peers and from the language unit alone would not help her to pass, helped her to realize that assignments played an important role (if I pass all assignments, I will not fail). This new realization helped her to modify the approaches she used through application of new means. These new means included her use of skills from learning at the private university in China (internalization of various skills in writing) and assistance provided by her university in Australia.

There was a department called language and academic support, they run sessions now and then including improve your referencing skills or your report writing skills, things like this, I went to every session

Hua’s experience of learning at the private university in China and the assistance from the language and academic support unit helped her to overcome her issue relating to failing.
Hua stressed she was taught how to compose essays in the Western way whilst she was studying at the private university in China. Thus she did not feel that composing essays was particularly challenging. However, how to complete one essay within certain amount of time was an issue for her. She had many assignments each semester; the time allocated to do each was limited. How to use limited time to complete assignments became a challenge.

In order to finish all the assignments, Hua emphasized the importance of using limited time to complete each piece of the assignment. Hua declared that in order to do so, she needed to improve her self-regulation skills in the area of time management. The means she used to do so was to learn from peers who were good at exhibiting this skill.

*Some people I knew, they get everything prepared, this is what I like, and they implement their self-regulation really well, so, I sort of learned from them, so I learned some techniques from them, like how you squeeze your time, even including how to use online databases.*

Her learning from peers proved Chen et al.’s (2011) argument that the context of peers is also one in which learning occurs. It is interesting to note that her ability to target peers and learn from them also shows her use of learning in China: learning through positive modelling, which assisted her to target positive models from her peer group and learn from them. This consequently helped her to improve self-regulation skills.

Hua said the second approach she used to overcome her challenge relating to limited time for essay composition was efficient use of time. She stressed that there was a close relationship between reading and writing. This helped her to realize that writing was not just for writing, but was a reflection of thinking on reading. This realization motivated her adoption of various reading techniques:
I would think writing assignments reflects how much and what you have been reading, so I cannot say I am good at reading, but I would say I am a smart reader, [laugh]. For me, if I get one journal article online, I use both skimming and scanning. What I normally do is when I finish reading this section, for example, when I finish reading the literature review section, I wrote something on the right hand side.

As a result of using skimming, scanning and memo writing, she developed the “short cuts” for assignment writing.

So before I started to write each of the assignment, I had a piece of paper, and jotted down main points I needed to cover in each assignment, and then I started writing on my computer, it was like I was filling in those points with what I have read, so I was throwing what I was reading [laugh,] into those blanks. That is where I squeezed most of my information [laugh], I found it really worked.

Beside improving her self-regulation skills and employing “short cuts”, Hua also sought assistance from her peers to improve her efficiency in essay composition in the areas of which databases to use, how to find relevant articles online and what assignment requirements meant.

I also had conversations with my peers, but it is after class [laugh], so we had conversations about how to find relevant articles online, and clearing about the requirements about assignments.

Hua said due to her use of various approaches, she overcame the challenge of how to use limited time to complete assignments constructively. This removed her anxiety about failing. This supports Hu and Lam’s (2010) findings that ICSs took active steps to improve their writing.
However, the approaches Hua adopted to deal with challenges with writing had nothing to do with dealing with listening comprehension difficulties, which invoked a series of problems in the first place. Nevertheless, this does not imply that the approaches she adopted to overcome other challenges had no effect in helping her to improve her listening comprehension. For instance, her initial resolution to improve her learning autonomy influenced her in determining to improve many other skills, including listening. This in turn motivated her to seek/create means to improve her listening.

*I would say the fluency and proficiency of the English language, it comes from repetition ... I mean you have to repeat what you have learned in a meaningful way, and constructive way.*

Hua believed the way to improve her listening proficiency was meaningful and constructive repetition. This combined with her strength in memorization skills helped her to employ reading (Harry Potter) and watching movies to improve her listening comprehension.

*I read a lot of fiction, including Harry Potter [laugh], and I watched movies so I tried to remember those lines that I could actually comprehend and I started to use this language, that is how I learned.*

This reflects her use of learning in China that was influenced by her mother and also by her school learning when she primarily relied on repetition to learn. This positive influence opposed the view that ICSs’ learning in China only contributed to the problems that they experienced in Australia (Burns, 1991).

*Participation in group discussion*

Hua stressed her challenge with the English language was also shown through her inability to participate in group discussion in class. She noted that the main factor that prohibited her from doing so was her low language fluency. She said it often took her quite a long time to
pick the right words to express herself. However, after she overcame her language issues and knew how to contribute to group discussions (her university’s language and academic support unit provided workshops on how to contribute to group discussion), she still preferred not to participate. She explained,

*I was thinking, “oh, my god, I have an accent, no, I am not going to talk, I am going to look and listen to them”.*

Not participating in group discussions seems to have been impacted by issues that were not related to the English language. Her concern about having an accent showed that she was unwilling to expose herself to negative evaluations. Thus her intention in preserving her dignity/in saving face (Liu, 2002). It is also important to note that although her university provided workshops that promoted international students’ participation in group discussions, these workshops were not successful (at least not for Hua). This points to the importance of understanding root causes of these students’ undesired behaviours prior to offering any intervention work.

*Reluctant to ask questions*

Hua said she also encountered challenges in relation to asking questions voluntarily in class.

*If I asked questions in the class, my classmates might think it is a waste of their time, so there is no need to ask, because I do not have prior knowledge in early childhood, so if I ask silly questions, [laugh] in class, it would waste their time.*

Hua’s concern about being labelled rude shows her unwillingness to expose herself to negative evaluation. And thus her intention of not upsetting her peers (Wang, 2012). Not wanting to be viewed as silly, that of not wanting to lose face further prevented her from asking questions. This shows that the action of not asking questions might be regulated by
two rules that Hua adhered to. Any intervention work needs to address her adherence to two rules in order to achieve complete transformation of certain undesired behaviours, in this case not asking questions.

Summary

Hua experienced various conflicts with learning at school, most of which occurred between her inability to comprehend certain subject knowledge (for instance, math) and the means that she lacked to do so. Although she sought assistance from family (who supported her to choose to learn what she was good at) and peers (she copied their work), this did not help her to resolve these conflicts. Rather her inertia got strengthened. Similar to her school learning experiences, her adherence to some implicit rules (for instance, hierarchical relationships between teachers and herself) was also shown through her university learning experiences. This led to her experience of certain challenges: not asking questions, for instance. Her university learning also varied from that of her school. For instance, at university, she had assignments as assessments instead of examinations. This was also shown to be very helpful for her assignment writing in Australia.

Hua encountered various challenges with learning in Australia. These challenges ranged from listening comprehension, self-regulation, reading (searching articles), writing (understanding requirements), to asking questions and voicing opinions in group discussions. The approaches she adopted to handle these challenges were complex, which also extended to use of resources from various networks (language and academic support, peers, family and previous university and school learning experiences). This brought expansive resolution for most of her challenges. Nevertheless, due to her adherence to various rules, her challenges in asking questions and voicing her opinions remain unresolved.
Appendix 5 Avery’s narrative

Introduction

Avery is from Kaohsiung city, Taiwan. Instead of going university to pursue an undergraduate degree straight after high school, she worked as a kinder teacher. A few years later, she decided to study for an undergraduate degree in early childhood education as a part-time student because she was working full time. After completing her undergraduate degree, she came to Australia to pursue her master’s degree. She then decided to do a graduate diploma course in order to obtain permanent residency. I interviewed her while she was pursuing this course. By then she had studied in Australia for about four years. The following details her experiences of learning in Taiwan and in Australia.
School learning in Taiwan

School

Avery maintained that in general her learning at school was examination orientated and that the exams mainly tested students’ memorization of textbook knowledge. She explained her belief was based on her teachers’ teaching practice, in which they just “duck fed” textbook knowledge (for instance, teachers asked students to repeat after them). This pedagogical practice failed to hold her interest. She explained that textbook knowledge was too hard to understand and too difficult to memorize because it was too theoretical and lacked practical examples to assist her understanding and memorization. As a consequence, she lost interest in learning.

Avery’s argument reflected a conflict between the problem space of a theory-dominated curriculum and her lack of means to process this knowledge. Rather than being resolved, this conflict seems to have deteriorated. This was demonstrated through her doubt about the very existence of the subject knowledge itself.

*I was wondering why do we need to have a mathematics subject. Knowing the multiplication table is enough. I feel if I know the multiplication table and some basic addition, subtraction, multiplication and division that is ok. We do not use other bits in everyday life.*

Avery’s approach to the above conflict was her submission to the education system. This was shown through her memorization of textbook knowledge a few days prior to exams as a means of complying with the examination-dominated education system. Her experiences of school learning confirm Li’s (2009) argument that examinations still dictate school learning.
Avery emphasized that memorizing textbook knowledge a few days prior to exams was not successful in helping her to comply with the system – she did not get good achievement scores. This resulted in her being placed in a low-achiever class.

In high school, we also had high achiever class and low achiever class, for high achiever class students, they were aiming to go to good senior high school, I was in the low achiever class.

Her school’s explicit labelling of students into high-achiever and low-achiever classes aggravated the conflict that resulted in Avery’s refusal to learn textbook knowledge. Students who were assigned to the low-achiever class, even if they had the motivation to learn textbook knowledge, might have lost faith in themselves.

By forcing a negative label on them, the school in a way forced them to internalize this label (cf. Kaptelinin & Nardi, 2006) and subsequently they might have viewed themselves as low achievers. Avery’s internalization of the negative label was shown by her labelling herself as not being a good student, and also by her perception that her teachers’ corporal punishment was an acceptable practice. She viewed her teachers’ practice of slapping her face when she did something inappropriate, like failing to finish homework or not doing well in exams, as being beneficial for her development. She believed she deserved to be punished corporally. This was further demonstrated by her belief that teachers should punish (though she did not refer to corporal punishment) students who did not behave well.

We are also adults, more mature than we used to be, we normally follow the teachers’ opinions, and we tend to behave very well. But for these students who did not behave well in the class, this way of teaching [teachers let students who did not behave well in class alone] is not necessarily good for them.
Her teachers’ punishments and her perception that teachers should punish students who do not behave resonate with one of the qualities that Chinese teachers had/continue to have: being strict (Wang, 2015).

The other outcome of her poor achievement scores was her having restricted opportunities for developing her talents (for instance, drawing).

*I remember when I was in junior high school, because I was really like drawing at that time, and enjoyed it very much no matter how well or how worse I did. The teacher decided whose is good and then recommend the student to join in a contest county wide, the teacher did not pick me, I was so disappointed, I thought I really enjoyed drawing, why did not she pick mine up to stick on the wall, I was really sad at that time.*

The sadness that Avery felt seems to be an outcome resulting from her acceptance of her teacher’s practice. It seems puzzling that Avery’s teacher had the idea that students who were not good at studying were not good at doing anything else. This idea that no students could exceed their perceived capabilities negatively impacted the learner (disappointment and sadness), and also restricted this teacher from embracing an opportunity to facilitate a genuinely motivated learner. Her teacher’s adherence to this belief prohibited him/her from realistically dealing with an issue that was created by the existence of this belief (Avery’s feeling of disappointment and sadness).

Being a teacher herself, Avery tried to avoid the mistake her teacher made. This demonstrates her attempts at transforming her teacher’s practice.

*So, in my own practice, I was trying to avoid this mistake, trying to avoid this mistake because of my own experience.*
Through labelling her teacher’s practice as a mistake, Avery to some extent refused her teacher’s practice. It is, however, worth noting that she did so after she became a kinder teacher. While she was a high school student, although she felt her teacher was wrong, she accepted her teacher’s practice.

Avery further emphasized that her teachers were very authoritarian. This was also shown by their practices of corporal punishment. According to her, one of the punishments she received was caused by her refusal to obey her teacher’s instructions. Her teacher asked them to read classics out aloud at every morning reading class to purify their thoughts and strengthen their memorization skills. Avery thought this was unreasonable and refused to follow the instruction.

*I felt reading “the Analects” was very boring, so boring. Our teacher thought this would help us to purify our thoughts. She said we had to read it out aloud, so our memories will get strengthened. She believes in Buddhism, her religion background is Buddhism, so she believed reading these would help us to purify our thoughts. I did not like that, I thought what she asked us to do was unreasonable, so I did not read.*

Avery refused because the classics were boring and that she did not agree with the teacher’s belief that reading classics out aloud would purify her thoughts. There seems to be two causes of the above incident: a conflict of motives between her teacher’s belief that students should follow her instructions and her refusal to obey this, and a conflict between the classics as the problem space and the means that she lacked to get interested in these classics.

The approaches that Avery used to deal with the above two conflicts were her refusals to obey teacher instructions and her refusal to read classics out aloud respectively. This resulted in further intervention from the teacher: punishments and the appointment of a back-up
enforcer, a class monitor, who ensured dissenting students followed the teacher’s instructions when the teacher was absent.

*When the teacher was not there, we had classroom monitor, he will take notes about who did not read, for those ones who did not read, the teacher will punish us to clean the corridor or classrooms*

Both these means seem to have failed. This was illustrated by Avery’s continuing refusal to read the classics aloud even after these punishments. Although her teacher attempted to resolve a perceived conflict (students refusal to obey instructions and her motive in wanting them to obey her instructions), rather than resolving this, it aggravated the tension. This consequently led to reinforced inertia of both parties involved.

*I thought what she said was bullshit, she was bullshit as well. I still did not read after I got punished, the teacher got angry sometimes, I just left her alone, did not really cared. She sometimes had upset faces, but I still do not think I was wrong.*

Avery seems to have judged her teachers’ actions very harshly. In the process of refusing to accept her teacher’s external intervention, Avery exercised agency. She not only refused reading the classics out aloud, but also refused to study hard, take notes, or accept a requirement to do a test.

*I handed in a test without answering any question on it, I was not really want to do the test, so I slept, and then handed the test in without answering any question.*

The teacher’s expectation of obedience is customary in Taiwan, as evidenced by the reaction of Avery’s fellow students:

*Certainly, other students would wonder why I behaved this way, I said I do not do it, because I do not like to do it, when I do not like, I just do not do it [laugh].*
Avery’s early refusal to bow to hierarchical teacher-student relationships was partly due to the support she received from her parents. She said her parents agreed with her on most occasions, and this provided her with the strength to follow her own beliefs and to develop her sense of agency. Her use of self-agency in the school context also illustrated her use of resources from the context of family (agency) to resolve the conflict in the context of school learning.

Avery recalled that in high school there were many rules that she needed to obey and if she failed to follow these rules, she would get punishments. According to her, these rules included explicit ones that the school and teachers set out (for instance, the above example that she needed to read classics out aloud) and also implicit ones (for instance, students had to meet teachers’ expectations). When she failed to follow them (failed to finish homework on time or got low exam results), she was punished corporally.

*If not hand in assignment on time, we will get beaten. I still remember we did not do well in exams, our teacher will beat our bottoms with a stick (this is not allowed in schools any longer), and we wanted to escape from being beaten by the teacher so we put newspaper inside our pants.*

Avery’s refusal to obey rules led to her being beaten, and also led to other unexpected outcomes (e.g. putting newspapers in her pants). By putting newspaper in her pants, she resisted her teacher’s “right” to punish her. This also illustrated her use of resources from the context of family (agency) to resolve the conflict in the context of school learning.

Not taking notes, not studying hard, not reading classics out aloud and not taking a test demonstrates Avery’s agency in her early schooling in refusing to accept teacher expertise, authority and the test system. Her school’s repetitive practices (for instance, forcing students to obey conventions) gradually weakened her exercise of agency, and also made her begin to
accept these practices (cf. Kaptelinin & Nardi, 2006). This was illustrated by her compliance to the system by submitting to teacher authority, expertise and the test system. She started to follow rules and invested effort in memorizing textbook knowledge as well as beginning to believe that

\[
\text{if I was diligent, studying hard on memorizing textbook knowledge, I could get high marks.}
\]

Avery maintained that, for one period of time, she did study hard and her marks improved. However, her marks remained at a certain level. No matter how much harder she studied, she just could not get a breakthrough. She became very disappointed. This demonstrated that the memorization she used as the means did not help her to achieve the desired outcome in wanting to achieve high results. This also proved that her hypothesis was not right and that one exclusive approach (memorization) was not sufficient to help her to excel in the test system.

\[
\text{Even when I studied very hard, I still did not get good marks on Chinese literacy and mathematics, I studied hard, but could not have that breakthrough, did not know what to do.}
\]

Avery’s dilemma shows the non-resolution of the conflict between her motive in wanting to achieve desired outcomes and her shortage of approaches that could help her to do so. She attempted to resolve this through working hard and memorization of textbook knowledge, however, this failed. She stopped initiating any further actions to achieve her motive.

\[
\text{So I thought I did not want to study this way. Why do I have to study this hard,}
\]

It is worth noting that Avery’s effort did not seem to be sufficient to resolve the conflict. If she had received some intervention (help) from her teachers or peers, the results might have
been different. In other words, if she had a greater range of resources that she could draw on, she might be able to achieve her desired outcome (e.g. if she had reflective and collaborative learning as a result of her participation in her peers’ network (like Chen), through boundary crossing, she might be able to use these to deal with her problem).

Although she tried and failed to comply with the test system, Avery claimed that this did not influence her much. In other words, she did not believe it was critically important for her to excel in the test system. This she attributed to the support she received from her parents.

*Examination did not influence me much, I think this is mainly because of my parents, they did not give me much pressure at all, when I did well in exams, they did not comment much, when I did not do well, they also did not comment much.*

Avery’s parents did not intervene in her learning no matter whether she did well or poorly. This provided her with much support. They also helped her development of independence through supporting her decision making. Their practices contrasted with her teachers’. Rather than feeling disadvantaged by this contrast, she seems to have benefited in her own practice of agency.

Instead of going university to pursue an undergraduate degree straight after high school, she worked as a kinder teacher. A few years later, she decided to study for an undergraduate degree in early childhood education in Taiwan, and to do that as a part-time student because she was working full time.

**University learning in Taiwan**

Avery said her parents helped her develop independence through supporting her decision-making. When she told her parents which university she wanted to go to, her parents agreed and said,
if you wanted to go, then go.

The ways that her parents used to raise her contrasts with the beliefs that parents should control and discipline their children (cf. Lin & Fu, 1990).

Avery declared her learning at university contrasted with that of high school. There were three aspects to this contrast. One aspect was around the teachers’ practices in terms of pedagogy. She explained that instead of having one authoritarian teacher voice in the class, her university teachers incorporated lots of discussion centred on issues she had at work. This provided opportunities for students to discuss issues they encountered in childcare centres, which correlated with theories the teachers provided at university. This helped her to connect practice to the theories she learned in university classes. She believed this form of learning was interesting, practical, and also provided a shared space in which work and university met.

Another aspect that reflected the difference according to Avery was centred on the roles her teachers played. In comparison to authoritarian figures, her university teachers were co-learners. She explained that her university teachers encouraged students to correct them if they felt there was anything wrong, because they felt the students had more practical experience than they did. The fact that teachers acknowledged that they might have the possibility of getting something wrong demonstrated a strong divergence from the teachers she had in schools. Their willingness to learn from students also seems to have overturned the unequal status between teachers and students that Avery had seen in high school. This also offered data that argues against the stereotyping that all teachers in China are authoritarian (see Burns, 1991).

The third aspect that reflected the difference according to Avery was around assessments. Instead of having exams as the main form of assessment, the forms of assessment at university were diverse: group assignments, individual assignments and presentations. She
noted that these assignments were also practice-based (for instance, how to design a course), which functioned as another shared space for boundary crossing between work and university. This simultaneous involvement in multiple contexts, for instance, work and university, also seems to have assisted Avery in using resources from one context (for instance, experiences from work) to solve problems of the other (for example, university assignments on how to design a course) (Engeström et al., 1995).

**Learning in Australia**

After completing her undergraduate study, Avery came to Australia to pursue a master’s degree. She said her experience of learning at university in Australia was an amalgam of shyness, shock and unexpectedness, all of which occurred in the same class. She detailed this class focused on gender and sexuality, which she regarded as a very sensitive topic. Putting sensitive topics under the spotlight and openly discussing it in public led to her feeling shy and uncomfortable. She noted when she was a school student in Taiwan, her teachers normally avoided teaching sensitive topics. Even if they had to teach the subject knowledge around sexuality, they normally used euphemisms. When she was working as a kindergarten teacher, her colleagues also avoided talking about sexuality in public. Therefore, she believed discussing sensitive topics in public was inappropriate, and even if she had to, she would use euphemisms. Her Australian teacher's practice of putting sensitive topics under spotlight and openly discussing it seems to have operated against her internalized belief. This subsequently led to her feeling shy and uncomfortable. In addition, as her teachers and her colleagues in Taiwan avoided teaching or discussing sensitive topics, she believed she had no background knowledge about gender and sexuality, and did not know how to discuss sensitive topics in public. This resulted in her not knowing how to answer her teacher’s questions and not knowing how to contribute to discussions around sensitive topics.
Avery further stressed, her Australian teachers focused on the topic itself, which was not what she expected. Due to her university learning in Taiwan, where teachers focused on the combination of theory and practice (they taught them how to use theory to address practical issues met in practice), she believed teachers need to teach content knowledge and also pedagogical knowledge. Her teacher’s practice of teaching content knowledge only conflicted with her internalized convention that teacher education students should be taught content knowledge and also pedagogical knowledge. However, she was unable to negotiate with her teachers about this. The hierarchical relationships between her teachers and herself, that she internalized due to her school learning in Taiwan seems to have stopped her from doing so.

However, Avery contended that this teacher covered a broad range of areas (children, adults), which challenged the stereotypes she held around male and female (homosexuality). She further argued this questioning of gender stereotypes coupled with her exposure to some local people openly admitting they were homosexual overturned the stereotypes around males and females she held. This inspired her to change her perspectives toward sexual stereotypes and to look further into this issue. This motive coupled with her desire to address children’s curiosity (they were curious about gender but their teachers and parents avoided talking about it) drove her to study gender and sexuality further: she decided to do a thesis on it.

Through the process of doing a thesis on gender and sexuality, Avery achieved many outcomes. It not only resolved her issue on lack of knowledge on this topic, but also furnished her with tools that she lacked on how to address unexpected questions due to her supervisor’s good questioning skills. Her supervisor’s good questioning skills also helped her to learn to think and to reflect. For instance, a question she asked her participants (Taiwan kinder teachers) was: what did you do when you see a child was playing with his/her genitals? The teachers generally answered: we told him/her it was very dirty. Her supervisor asked her what she would do if she saw a child doing this. Her answer was the same as those
teachers: very dirty. Her supervisor asked her why she thought it was dirty, and why children had the need to do this. She felt her supervisor challenged her thinking through asking these types of questions, and this really helped her to think and to reflect.

**Asking questions voluntarily in class**

After completing her master’s degree, Avery enrolled in a graduate diploma course in early childhood education as a route to obtaining permanent residency in Australia. Although she learned how to answer unexpected questions during her master’s study, she encountered challenges in asking questions in class. Initially she thought the language barrier contributed to this challenge. Therefore, she used various means to improve her language skills, which included reading books, newspapers, watching TV and talking to colleagues at work. This improved her language skills. However, after her language improved vastly, she still did not ask questions because she thought this would waste other students’ time. She was concerned about being viewed as rude. This implies that what prohibited her from asking questions was not language deficiency but her anxiety about being viewed negatively. Thus, her intention of appeasing her peers (Wang, 2012). This adherence influenced her to commit to actions (for instance, not asking questions) that would not risk annoying her peers. The effort she spent on improving her language thus failed to resolve her challenge in not being able to ask questions voluntarily in class.

Although Avery’s adherence to appeasing prohibited her from asking questions voluntarily in class, she realized she needed to ask questions. This was a result of her taking ownership of her own learning.

*You also need to ask questions, not about everything, for these you are concerned, you need to ask questions. This is not related to teachers’ expectations, it is related to*
whether you are responsible for yourself, this is your own study, not something the teacher give you. This is your own learning.

But this need in itself appears to have been inadequate for her to achieve transformation. She took actions but failed to resolve her issues. Not knowing what prohibited her from satisfying her need, she could not initiate appropriate actions to materialize this need. This was shown by her continual choice of not asking questions in class. To achieve transformation, it is important to know the root causes of challenges and also to initiate appropriate actions that help to materialize the need.

*English language: Writing*

In relation to forms of learning, Avery confirmed those she experienced in Australia were very similar to those she had while she was a university student in Taiwan, where she also had group discussions, individual assignments, group assignments and oral presentations. However, she felt there were still some variations in the area of essay composition. She argued these differences were around referencing, formatting, and organization of arguments.

Avery claimed the variation on organization of arguments particularly impacted her because she used to beat around the bush. Her adherence to the implicit convention around academic writing in Taiwan became an obstacle that she needed to overcome in order to resolve the problem space around essay writing. The approach she took to overcome this was seeking help from peers.

*It does not matter that they are not local students, we all have different backgrounds, as a reader, if they can understand our writing, know what we are trying to say. It is not good if they do not understand your writing and not able to tell where your point is [laugh].*
Her peers’ help in reading to clarify whether her writing was clear enough to be understood assisted her to avoid beating around the bush. The active roles she took to resolve her issues support Tran’s (2008) finding that ICSs took active roles to resolve issues with their learning in Australia.

Regarding essay composition, Avery also maintained although her adherence to previous writing conventions set an obstacle for her, her working experiences in Taiwan gave her an advantage in terms of drawing on practical examples. This helped her to achieve good results through drawing on practical examples in her essay writing. Her use of experiences in Taiwan to resolve issues in Australia opposed some researchers’ (for instance Burns, 1991) criticism that ICSs’ learning in China/Taiwan was a factor that only leads to challenges for their learning overseas.

Her working experiences in Taiwan, as Avery said assisted her with her assignment writing, and also provided resources for her to draw on to resolve issues she met during placement. This was demonstrated through her using experiences she gained in Taiwan to resolve a perceived problem she met in placement as a kinder teacher in Australia. During her placement she perceived that kinder teachers’ teaching was neither systematic nor structured compared to that she experienced in Taiwan.

*During my placement here in Australia, some teachers, they basically did not teach anything, they did not participate like how you make this thing, why does it look like this, not very structured nor systematic. Previously when I was in Taiwan, we normally have a unit, like today we look at animals, why there are animals, the children will talk a lot around it, like dogs, cats, horse, and then we have a discussion afterwards.*
It is very likely that she still strongly adhered to implicit Taiwanese conventions about pedagogical practices, which she used to measure teachers’ practices in Australia. As a result, she concluded that teachers’ practices here were neither systematic nor structured. Therefore, she believed the central issue resided in how to help children learn though playing and not just playing for playing’s sake.

*Australia focuses on playing, but how do you help children learn through playing, not just play for playing, ok, they can play, but how you can help them learn through playing, I think this is important.*

Although there is no ground to judge whether her perceptions were legitimate or not, her cognitive mentality does indicate that she was experiencing a conflict: between her problem situation of not knowing how to help children learn through playing and the approaches that she lacked to resolve her issue.

*If I taught this here in Australia, I might use what I learned in Taiwan, I do not think the way I teach children in Taiwan is not good, there was still playing. So in relation to early childhood education, if I teach here, I will still use some of the structured things I learned from Taiwan in my teaching here.*

Through drawing on previous working experiences, Avery resolved the pressing issue she faced during her placement. The approach she used resembled the one she used to provide concrete examples for her assignment writing, which also proved her capacity to draw on resources from one context to resolve pressing issues of another (Engeström et al., 2005).

**Summary**

Although Avery’s high school teachers were authoritarian, she refused to accept teacher authority and expertise (e.g. refusing to take notes, study hard, or obey instructions). This
coupled with her low motivation in learning school subject knowledge resulted in her not achieving good marks. This brought many negative outcomes for her: the school’s explicit labelling, drawing talents got denied, receiving corporal punishment. Although she displayed strong self-agency (due to her parents’ support), her school’s repetitive practice made her internalize various labels (she believed she was not a good student) and various rules (the hierarchical relationships between one’s teachers and oneself, for instance).

Avery’s learning experiences at university as a part-time student completely contrasted with those she had at high school in the areas of pedagogy, the roles her teachers played, and assessments. Her simultaneous involvement in contexts of work and university seems to have provided her with opportunities for crossing boundaries, which in turn assisted her in using resources from one context (for instance, work) to resolve pressing issues of the other (for example, university assignments on designing a course).

Avery encountered various challenges with her learning in Australia, which ranged from lacking topic knowledge on sexuality, verbally discussing sensitive topics in public, answering teacher questions, not being able to negotiate with teachers (teacher taught topic knowledge instead of how to teach topic knowledge to students), avoiding beating around the bush with her writing (being understood), to asking questions voluntarily in class. Through the process of writing a thesis, she claimed she resolved issues regarding the first three challenges. Her challenge regarding writing was also dealt with through boundary crossing (her use of resources from peers). However, her challenge regarding not being able to negotiate with teachers (teacher taught content instead of pedagogy to students) and asking questions voluntarily failed to get resolved expansively due to her adherence to her previous implicit conventions about pedagogical practices and to deferring to group consensus respectively.