Understanding Students' Experiences with E-learning 2.0 in Australian Higher Education: A Grounded Theory Study

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M.S. Educational Technology

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Melbourne, 24/06/2019

Omar Mayan

Abstract

Focusing on the themes of culture and e-learning 2.0, this study provides a Grounded Theory exploration of the experience of Saudi Arabian students in Australia. The research was conducted because a growing number of Saudi Arabian students chose to pursue their studies abroad in countries with very different cultural and educational environments such as Australia, and there is little in the literature that focuses on Saudi Arabian students' experiences, specifically with new learning settings.

The study aims to explore the experiences of Saudi Arabian higher education students in Australia and the opportunities and challenges that emerge from these experiences. An essential part of this research is discovering the role of culture in shaping attitudes and experiences of Saudi Arabian male and female students within an Australian e-learning 2.0 higher education environment. A qualitative approach based on Charmaz's Constructivist Grounded Theory approach was adopted to allow the participants to describe their experiences and to analyse the gathered data. Three theoretical underpinnings based on cultural, educational and technological theoretical perspectives, were used to understand the data gathered.

Twenty Saudi Arabian higher education students sponsored by the Saudi Arabian Ministry of Education to study at Australian universities were surveyed and interviewed using semi-structured interviews. The twenty interviews were transcribed into 5000 lines of text and over 800 excerpt basic statements were subsequently extracted from the raw data. Through a line-by-line initial coding process, over 400 line-by-line initial codes emerged. Through the constant comparative method focusing on coding the relevant data, a reduced list of (38) initial codes emerged; these were identified as the most frequently repeated and relevant codes to address the research questions. The focused codes were categorised into three conceptual categories: 'adaptation to the Australian cultural environment,' 'adaptation to the Australian education system,' and 'engagement in learning through technology.' Each of the three categories was associated with a set of subcategories. Through the theoretical coding process, key theoretical concepts were drawn, and the conceptual categories and their interplay were specified and explained in a theoretical model.

Key findings from the analysis indicated that: (i) Saudi Arabian students experienced a number of cultural and educational challenges while studying in the Australian higher education environment; (ii) Saudi Arabian students were able to utilise the e-learning 2.0 environment in their respective universities as a learning enabler to help them overcome some of their educational challenges. In an e-learning 2.0 environment, they were able to interact with other people while preparing themselves to become more interactive in their classes. The enabling affordances of the e-learning 2.0 environment also served as a learning facilitator where the students successfully engaged in, and adapted to, the Australian higher education environment. Furthermore, (iii) e-learning 2.0 platforms were utilised by the students as a sociocultural enabler, helping them to transcend some of the sociocultural challenges. However, for some participants, the language barriers, the gender segregation culture and the technology expertise persisted as intervening challenges even in the enabling e-learning 2.0 environment. The theoretical model developed in this study contributes to our understanding of international students' experiences with, and attitudes towards an e-learning 2.0 environment and its role in their cultural and educational adaptation in a new setting.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Omar Mayan

Date: 24/06/2019

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A very special word of thanks goes to my mother, who has been great over the years and for always showing how proud she is of me. I also want to express my deep gratitude to my spouse, kids and all family members for the support, patience and love they have given me throughout the years that I have spent working on this study.

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Contributions

Conference

- Mayan, O., Sheard, J., Carbone, A. (2014). Understanding Saudi Arabian students' engagement in e-learning 2.0 in Australian Higher Education. Australian Computer Society, Inc. Paper accepted at the Thirty-Seventh Australasian Computer Science Conference, ACSC 2014, Auckland, New Zealand, January 2014. Conferences in Research and Practice in Information Technology, Vol. 147.

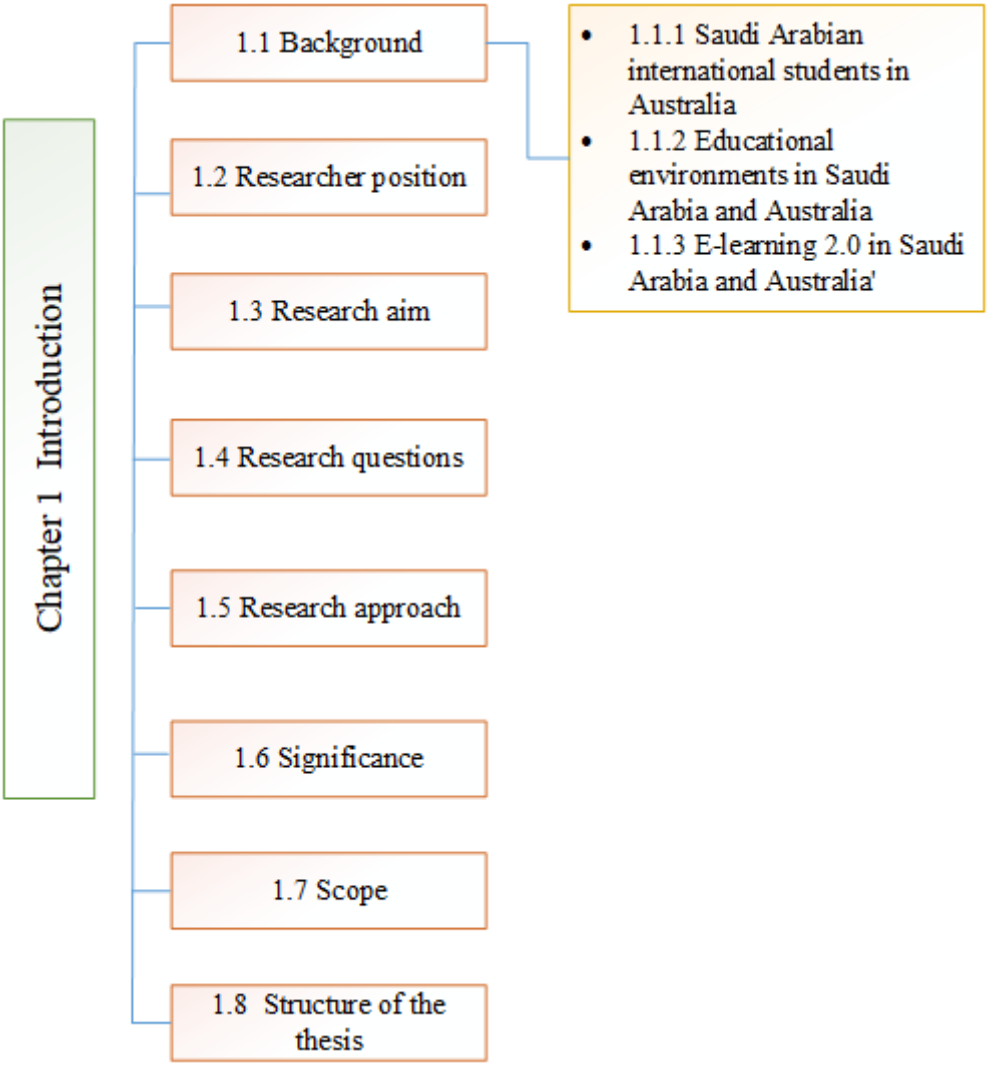
Presentations and Seminars

- Mayan, O. (2013). How e-learning 2.0 can best be Used for Students from Diverse Cultural Background. A poster displayed at the 15th Australasian Computing Education Conference ACE2013 Doctoral Consortium, January 29th, 2013.
- Mayan, O. (2013). Middle Eastern Students: Culture & Educational Context. Invited presentation, representing Monash College at The University Quadrella 2013 Conference, 5 Nov 2013, Monash College, Foundation Year & English Centre, City Campus. Melbourne, Australia.
- Mayan, O. (2013). International Students' engagement in e-learning 2.0 in Australian Higher Education. Paper presented at the Melbourne Computer Education Conventicle, 12 November 2013. Deakin University.
- Mayan, O. (2013). Understanding Students' Experiences with and Attitudes towards e-learning 2.0 in Australian Higher Education. Paper presented at the Doctoral Consortium (DC) for the 16th Australasian Computing Education Conference (ACE 2014), Auckland, New Zealand at the Auckland University of Technology in conjunction with Australian Computer Science Week (ACSW), January 20th, 201

Chapter 1
Introduction

This chapter presents an introduction to the study, containing six sections, as shown in Figure 1. The area of exploration is presented in section one, with the researcher position introduced in section two. Following section two, the aims, questions, approach, significance, and the scope of the study are introduced in the following five sections, respectively. The last section presents the structure of this thesis.

Figure 1 Map of Chapter 1



1.1 Background

Education is one of the essential needs of people in society. It is through education, particularly higher education, that people can define their purpose in their community. However, it is not always the case that the higher education needs of an individual can be satisfied by institutions located locally (R. Smith & Khawaja, 2011). Indeed, in most cases, people need to travel beyond their communities so that they can study at universities that offer the degree programs they are interested in. In some cases, the students need to travel beyond their country's borders and seek education in foreign lands. When doing so, these students are referred to as 'international students.'

In 2015, the number of higher education international students who chose to study abroad had reached nearly five million (K. Benson, 2015). These international students seek educational opportunities in other countries often because the field that they are interested in is not as well-developed in their own countries (R. Smith & Khawaja, 2011). However, in moving away from their homeland, these students may face some challenges. One of these challenges includes needing to learn a new language, as is the case with Middle Eastern, Asian (Orth, 2015), African, and perhaps some European students seeking to study in a western or westernised university (Hendrickson, Rosen, & Aune, 2011; Orth, 2015). Furthermore, international students need to cope in a setting where they are far away from their home, social networks, friends and family members (Hendrickson et al., 2011).

International students usually enter an environment where everything around them is different (Williams & Johnson, 2011). International students not only need to know how to speak a new language but also how to speak the language in the context of a local culture with which they are not familiar. International students may find aspects of their culture challenged, even ridiculed in the new settings that they are in (Williams & Johnson, 2011). Such experiences may be considerably challenging, especially for people who have firmly developed their identities around their cultural heritage (Williams & Johnson, 2011).

International students may also face a change in educational and learning environments. In the current digital age, many developed countries are using *e-learning 2.0* (Bhuasiri, Xaymoungkhoun, Zo, Rho, & Ciganek, 2012). E-learning 2.0 is a shift in the focus of using online learning resources from delivering knowledge to students, to enable students to build knowledge on their own (Downes, 2007). Students from the Middle East or Asia may not have experienced this type of learning environment before. Educational institutions from these regions tend to be teacher-centric and non-participatory (Mahrous

& Ahmed, 2010; Tubaishat, El-Qawasmeh, & Bhatti, 2006). Such a cultural and educational paradigm shift may well be challenging for international students. This investigation explores these challenges in an attempt to provide international students with methods or strategies to overcome them.

The present study focuses on one particular group of international students studying in Australia. These are Saudi Arabian international students. I have chosen this group as I am a Saudi Arabian student myself, and I have experienced some of these challenges personally. My study aims to explore the experiences, attitudes, challenges and opportunities that these students face in Australia. In the next section, I introduce Saudi Arabian international students in Australia as the subject of the study, and the reasons behind choosing them, and some of their motivations for choosing Australia as an education destination.

1.1.1 Saudi Arabian international students in Australia

Australia is a primary destination for Saudi Arabian students (Australian Department of Education and Training, 2016) for a number of reasons, including a high quality higher education ranking (Times Higher Education, 2018), the drive by the Australian government to encourage investment in higher education and attracting international students (Group of Eight Australia, 2018), its safe and open environment (Ahmed Alhazmi, 2013; Orth, 2015) and its affordability of living costs and tuition fees (A. Usher & Medow, 2010). At the same time, Australia is considered to be progressive in terms of its application of new technologies in its teaching and learning systems (Flexible Learning Advisory Group, 2013).

There are many Saudi Arabian students studying in Australia. In 2015, the Saudi Arabian Cultural Mission in Australia reported that 7339 Saudi Arabian students received a full scholarship under the King Abdullah Scholarship Program KASP (Saudi Arabian Cultural Mission in Australia, 2015). Accordingly, exploring the experiences of Saudi Arabian students might benefit future Saudi students intending to relocate to Australia to study. Such an exploratory study could be used as a stepping-stone to studying other groups across the country.

1.1.2 Educational environments in Saudi Arabia and Australia

The educational system in Saudi Arabia is designed to be gender segregated (Ahmed Alhazmi, 2013; Almunajjed, 1997). The educational environment in Saudi Arabia is teacher-centric and a non-participatory system, and not advanced in using online learning (Mirza & Al-Abdulkareem, 2011). The teachers have authority in making decisions regarding educational materials, teaching methods and exams, and Saudi Arabian schools and higher education institutions have been slow in establishing online learning infrastructures (Mirza & Al-Abdulkareem, 2011).

The Australian education system, unlike the Saudi Arabian system, embraces a mixed gender environment, is student-centric and relies heavily on e-learning. Apart from some single gender high schools, all university education is co-educational (Breen, 2002). The learning environment is participatory and democratic, where students and teachers have rights. This can be a big challenge for Saudi Arabian international students who come to Australia with a significantly different educational background.

A key difference between the Australian and Saudi Arabian educational systems is the Australian advances in e-learning. So far, there are two generations of e-learning referred to as e-learning 1.0 and e-learning 2.0 (Kesim & Agaoglu, 2015; O. Schneider, 2018). The main feature of e-learning 1.0 is to create content and deliver it to learners using technology (Martin Ebner, 2007). E-learning 2.0 involves the use of e-learning 1.0 plus Web 2.0 tools where learners are enabled to contribute content and share knowledge (Martin Ebner, 2007). There are other specific differences between e-learning 1.0 and e-learning 2.0 (Karrer, 2007). These are explained in Chapter 3.

Australian universities have been developing their e-learning systems since the late ’90s (Marshall, 2011) and have come to accept and integrate changes brought about by the development of e-learning 2.0 into those systems (Kirkwood, 2010). As such, as mentioned earlier, e-learning 2.0 is a key difference between Saudi Arabian and Australian learning environments. This study focuses on e-learning 2.0 as a significant theme in the exploration of students’ experiences.

1.1.3 E-learning 2.0 in Saudi Arabia and Australia

The development of e-learning 2.0 in Saudi Arabia has been relatively slow compared to western countries (Al-Shehri, 2010). However, progress has been made since 2005, during

which a National Centre for e-learning and Distance Learning (NCeL) was established and e-units or departments set-up in almost every university (Al-Shehri, 2010; Saudi Ministry of Education, 2017c). Still, these developments in e-learning seem to be focused on e-learning 1.0 rather than e-learning 2.0. That is, e-learning platforms have been developed to enable universities to offer online courses and empower faculties to produce online learning content (Saudi Ministry of Education, 2017c).

Few studies have provided evidence of e-learning 2.0 being used within the Saudi Arabian higher education settings (Borau, Ullrich, Feng, & Shen, 2009). Al-Asmari in (2005) recommended that Saudi Arabia should improve Internet access and services at its universities in order to provide the appropriate infrastructure for students and teachers to engage in e-learning. However, studies on the possible utility of Web 2.0 tools in teaching and learning in Saudi Arabian higher education settings could not be found. The current teaching and learning culture in Saudi Arabian schools still tends to be teacher-centred, which is in line with the e-learning 1.0 platform but not e-learning 2.0 environments (Alshahrani & Ally, 2016). Nevertheless, as noted by one source (Commini, 2016), the shift by Saudi higher education members to embracing the learner-centricity model is occurring, but slowly.

On the other hand, e-learning 2.0 is used extensively in the Australian education and training system (Hunter, 2009; Loh, Wong, Quazi, & Kingshott, 2016). Hunter's (2009) survey of the Australian higher education system showed that Web 2.0 resources are used extensively in Australia. The survey showed a growing trend in the formal application of such resources in academe, and that students and researchers in higher education used wikis, blogs, and other Web 2.0 technologies in developing project and research proposals (Hunter, 2009). Another survey (2011) by the Australian Flexible Learning Framework, focused on the current status of e-learning and e-learning 2.0, showed that more than 40 per cent of the students who participated in the survey had experienced e-learning 2.0 (Australian Flexible Learning Framework, 2011). In an early study, Anderson, Pates and Summer (2016) examined lessons learned in one Australian higher education institution's efforts to incorporate Web 2.0 tools into their curricula. Consistent with similar studies by Karunasena, Deng et al. (2013) and Loh et al. (2016), Anderson, Pates and Summer (2016) found that e-learning 2.0 provided various means of flexibility in the delivery and development of learning content among students.

As such, Saudi Arabia, by contrast, appears to be less progressive in terms of using e-learning 2.0 as part of their instructional programs. The education in the country, from

primary to tertiary levels, has mostly remained traditional and teacher-centred, contrary to developments in Australia (Al-Shehri, 2010). Again, this is a significant difference between the educational systems, which can be a big challenge for Saudi Arabian international students.

1.2 Researcher position in the project

There are many Saudi Arabian students studying in Australia. In 2005, a royal decree issued by the Custodian of the Two Holy Mosques, King Abdullah bin Abdul Aziz established a nationwide scholarship program offering Saudi citizens opportunities to study abroad. The main objective of the program was to educate Saudi Arabian citizens, enabling them to access superior knowledge in various disciplines at top international universities, and then use their successes to contribute to the development of Saudi Arabia (Saudi Ministry of Education, 2018). According to the Saudi Ministry of Education (2018), this program was also planned to enable Saudi Arabian citizens to participate in cross-cultural and educational exchanges in order to increase their external exposure and to culturally reinforce their dialogue with other cultures. In response to this ambitious goal, thousands of Saudi students sought opportunities to experience and study in leading international higher education systems around the world, including Australia (Group of Eight Australia, 2018) (see Chapter 4 for more information). Such a large scholarship program has drawn the attention of specialists, researchers and the curiosity of academics to learn about the cross-cultural experiences of Saudi Arabian students (Alghamdi, 2017; Alsahafi & Shin, 2017; Bajamal, 2017).

Generally, international students encounter sociocultural and educational challenges but also experience many benefits. International students come from different cultural backgrounds, and they hold their individual identities (Midgley, 2010). With the case of Saudi Arabian students, compared to other international students, it can be argued that this particular group of students are unique. First, as previously stated, this particular group are sponsored by the government to study abroad. This means that they have a scholarship to cover all their course/living-related fees whilst studying overseas. In addition to the financial support, Saudi students have access to various academic and guidance services provided by the Saudi Arabian Cultural Mission SACM at the host countries (Saudi Arabian Cultural Mission in Australia, 2019). As such, Saudi scholarship students probably have fewer problems than their international peers from other countries, such as

with accommodation and course fees, health and family care, schooling and wellbeing. However, there is a condition that the students have to go home after they finish studying.

Second, Saudi Arabian students come from one of the world's most conservative and gender-segregated environments. Moreover, they have experienced a segregated education system which has plays a significant role in firmly developing their identities around their strict cultural heritage. Accordingly, these students can have severe challenges in adjusting to an extremely different educational and cultural environment.

As will be discussed in the context of this study (in chapter 2), gender segregation is not the only cultural division between the students' home and the host culture. There are also other cultural differences and values that have influenced the structure of Saudi Arabian society, such as the different perspective towards freedom and propriety (Geert Hofstede, 2012b; I. Hofstede, 2017). Therefore, this research makes use of Hofstede's (2001) theory of cultural dimensions to determine and understand the cultural differences between the students' home and host culture. In light of the above, moving from such a conservative environment into a free and gender-mixed setting can be a difficult transition.

As a Saudi Arabian student myself, I share the same cultural and educational background with the research participants, and I believe that I have been through similar experiences. I was born in Saudi Arabia; the Arabic language is my mother tongue. I grew up in an Islamic country, a very conservative, religious, largely collectivist and male-oriented community. However, while religion is reflected in everyday life, including the educational settings, people in Saudi Arabia differ in their practices of Islam as a life pillar.

Upon my arrival in Australia, I found myself required to engage and co-exist in a gender-mixed learning environment, and, as such, in my early years of study in Australia, 2008 and 2009, I found it challenging to cope with the Australian co-education environment. More specifically, there were many female teachers, and I did not feel comfortable interacting with female students. By way of illustration, in some situations, I felt uneasy communicating with female students and sometimes, I tried to avoid adding their phone numbers in my mobile. I also tried to avoid initiating or engaging in discussions with female students because contacting foreign women is a prohibited action according to 'sharia' (Islamic rules).

Ibn Abbas (May Allah be pleased with them) said: the Messenger of Allah [Peace be upon him] (PBUH) said, "No one of you should meet a woman in privacy unless she is

accompanied by a Mahram (i.e., a relative within the prohibited degrees). [Narrated by Al-Bukhari and Muslim]" (Imam Nawawi, 2014, p. 463).

I was also concerned that performing such an action could damage my reputation. I did not want to be accused of being bold or audacious according to 'sharia'.

In the educational context, I graduated from a single-gender, teacher-centric and non-participatory secondary school environment, where teachers typically have authority in making all decisions regarding educational matters. In 2000, I graduated with a bachelor's degree from a completely segregated and a non-participatory Islamic university. The teaching and learning methods in the university almost depended on indoctrination and memorisation. So, I was expected to memorise course materials, or whatever was stated by lecturers for the exam. I graduated from a university with a Master's degree, from a very traditional education system where I did not even have an email address.

In Australia, however, I found the learning environment extremely different from the one I had experienced in the Saudi Arabian environment. The teaching and learning methods in the Australian education system were also very different from my prior educational experience. In Australia, I was asked to contribute to the learning process, and the opinions of teachers and the students for both genders have equal value. I found it challenging, and I was not sure how to behave in many situations. The dominant Saudi Arabian segregation culture has influenced many aspects of my actions in Australian educational experience, even in the online settings. I started using e-learning 2.0 straight away when I started studying English in Australia. Although I considered myself a user of web 2.0 tools, such as Google tools, Facebook and Twitter, these were used for personal and not for educational purposes. However, I faced some challenges in this new learning environment, since it is built on principles of gender equality, openness and liberty, which conflict with my cultural upbringing. In e-learning 2.0, for example, I found that I need the necessary skills for managing knowledge, such as creating online learning content and sharing it with others.

Some benefits of using e-learning 2.0 helped me overcome some of the challenges that I faced in this new learning environment. For instance, at a time when I was unwilling to communicate directly with the opposite gender (specifically in the presence of my Saudi colleagues), I used social media tools as an alternative to face-to-face communication. By doing so, I was able to overcome the cultural embarrassment that I had always felt during direct contact with female colleagues in the classroom. Using technology as part of e-learning 2.0 played a critical role in facilitating my learning during my PhD candidature. By way of illustration, I was able to meet with my supervisors, even in the event of their

travel when we were in three different countries. I was in Saudi Arabia visiting my family, Professor Carbone was in Australia, and Associate Professor Sheard was in Sweden attending a conference.

My transition to studying in Australian has meant that I had to adapt to the Australian culture, a new mode of teaching and learning, new values, and adjust to different patterns of life, respecting new rules, regulations, and practising them (Ingold, 1994; Keith, 2019; Young Yun Kim & Gudykunst, 1988). Adapting to the Australian context was challenging, particularly the mixed gender environment, which posed some cultural and educational challenges for me. Managing challenges that contradict my sociocultural values as a Muslim was an embedded part of my life in Australia.

This study is motivated by my own experiences and the challenges and opportunities that I encountered in the Australian cultural and educational environment. It is also motivated by the growing number of Saudi Arabian students who chose to pursue their education in Australia. The study aims to explore and understand how these students react to this new cultural and educational environment, given their cultural background. In particular, how their cultural background influences their attitudes towards and use of e-learning 2.0 resources.

1.3 Research aim

This study aims to understand the Saudi Arabian students' attitudes and experiences with e-learning 2.0. It also aims to investigate the opportunities and challenges that emerge from the students' experiences and attitudes and the influence of culture on these. Furthermore, the study also considers how Saudi Arabian students' gender affects their attitudes and experiences and subsequently, the opportunities and challenges that originate from them.

1.4 Research questions

1. What are Saudi Arabian students' experiences of e-learning 2.0 in the Australian higher education environment?

2. What challenges and opportunities emerge from these experiences?

3. What is the role of culture in shaping Saudi Arabian students' experiences with e-learning 2.0 in the Australian higher education environment?

1.5 Research approach

Since the phenomenon being investigated in this study is broad, and the constructs to be investigated (experiences, opportunities and challenges) are qualitative in nature, a qualitative research design was selected for this study. The primary source of qualitative data for this project was semi-structured interviews. This method of data collection was selected because it can provide some control over the significance of the expected answers to the research questions. Grounded Theory (GT) was used as an approach to formulating a theoretical understanding of participants' experiences.

1.6 Significance

No studies were found that have explored Saudi Arabian students' experiences and attitudes towards e-learning 2.0 in the Australian context. The data from the Australian Department of Education shows that there were 520,737 full-fee paying international students in 2017 (Australian Department of Education and Training, 2017). This shows Australian Higher Education institutions are a popular educational destination for many international students from different cultural and educational backgrounds. Accordingly, a question can be raised, how well are Australian universities prepared culturally and academically for such a large number of international students? The present study may provide some answers to this question. The study can be beneficial for both educators and higher education institutions in Australia who cater for international students, particularly Saudi Arabian students, and especially for those who teach classes utilising e-learning 2.0 resources. At the same time, the research can be useful to the higher education institutions in Australia in providing them with a clearer understanding of the educational and cultural challenges faced by Saudi Arabian international students, as well as other similar international students who choose to study in Australian. The value of this work is also highlighted by Mitchell (2005, p. 32) who proposes that with the new international paradigm of inclusive education, where it is recognised that people from an international culture are introduced into a new educational system, educators within that system must be capable of modifying the system to fit such international students' diverse needs.

Thus, this study may be considered as one of the first studies to address this area and aims to contribute to the body of knowledge by:

- Extending our understanding of how Saudi Arabian students experience and adapt to the Australian educational environment.

- Extending knowledge and understanding of how e-learning 2.0, as a new learning environment, can best be used for students from diverse cultural backgrounds.

- Providing useful insights into Saudi Arabian students studying in Australia, highlighting their experiences and gaining a clearer picture of what is happening to these students studying in Australia using e-learning 2.0 environment.

- Providing an enhanced understanding of the experience and integrating technology into education in both the Australian and Saudi Arabian context. More specifically, the findings can be connected to the theory of connectivism, which is at the core of the theoretical framework of this study.

- Suggesting clear paths that can be tested in future research. If the theories explored throughout this study can be validated, then relevant policies can be drafted both at the level of Australian universities and at the level of the Saudi Arabian Ministry of Education to improve the experiences of Saudi Arabian students who decide to study in Australia. These can assist in preparing students to study in Australia, so that cultural and educational challenges.

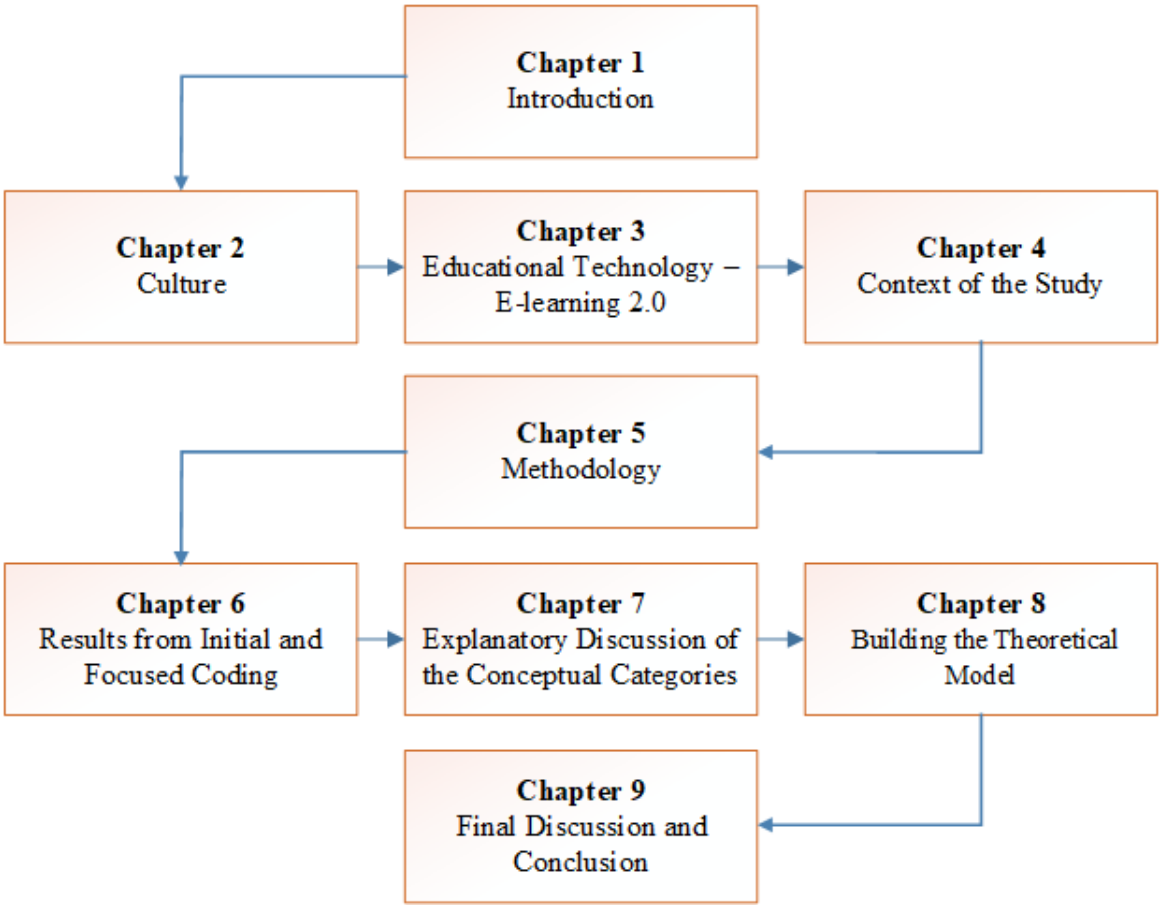
1.7 Scope

As a Saudi Arabian citizen who has spent, to date, over seven years studying in Australia, including the English academic preparation, I have recognised apparent differences between the Australian and Saudi Arabian cultural and educational environments. During this time I have experienced many opportunities and challenges. In order to get a broader understanding of the challenges and opportunities and to help prepare students, whether they are from Saudi Arabia or other similar countries, this study was designed to focus on Saudi Arabian international students, both males and females, studying in Australia. Mainly, the present study focused on those enrolled in higher education programs in Australian higher education institutions.

1.8 Structure of the thesis

The thesis consists of nine chapters, as illustrated below in Figure 2.

Figure 2 Structure of the thesis



Chapter 1 gives an introduction to the study, the researcher position in the project and the details of the research proposal, including the aim and the research questions, the research approach, the significance and scope.

Chapter 2 covers the first concept in this research: culture and its relevance and definition in the context of this study. The chapter also introduces the theoretical perspective that is interrelated to the first concept concerning the study – culture.

Chapter 3 covers the education and technology theoretical perspectives related to the study. The chapter also proceeds to explore the second concept relating to this research – e-learning 2.0.

Chapter 4 clarifies the context of the study. The chapter presents the state of education in Saudi Arabia, where Saudi Arabian students as the subject of the study come from, and describes the Saudi students' community in the Australian environment.

Chapter 5 explains how the study was conducted. Firstly the chapter provides reasons for choosing the research paradigm, approach and method. The chapter also describes the data-gathering tools, the sample of the study and the inclusion criteria of selecting the participants, and defines the data analysis techniques.

Chapter 6 presents and explains the results from the first two stages: the initial coding stage and the focused and categorising stage.

Chapter 7 provides an explanatory discussion of three conceptual categories and their related sub-categories and properties that emerged from the focused and categorising coding stage. The chapter also highlights key theoretical concepts that are used to develop the study's theoretical model.

Chapter 8 presents the study's theoretical model. Firstly, the key theoretical concepts and their related aspects and properties are described. Secondly, the interconnections between the key theoretical concepts are highlighted. The chapter then introduces the study's theoretical model that seeks to contribute knowledge about the experiences of Saudi Arabians with e-learning 2.0 while studying in the Australian higher education environment.

Chapter 9 provides a final discussion to evaluate the developed theoretical model from the previous chapter. The chapter addresses the three research questions and ends with a conclusion and recommendations.

Chapter 2
Culture

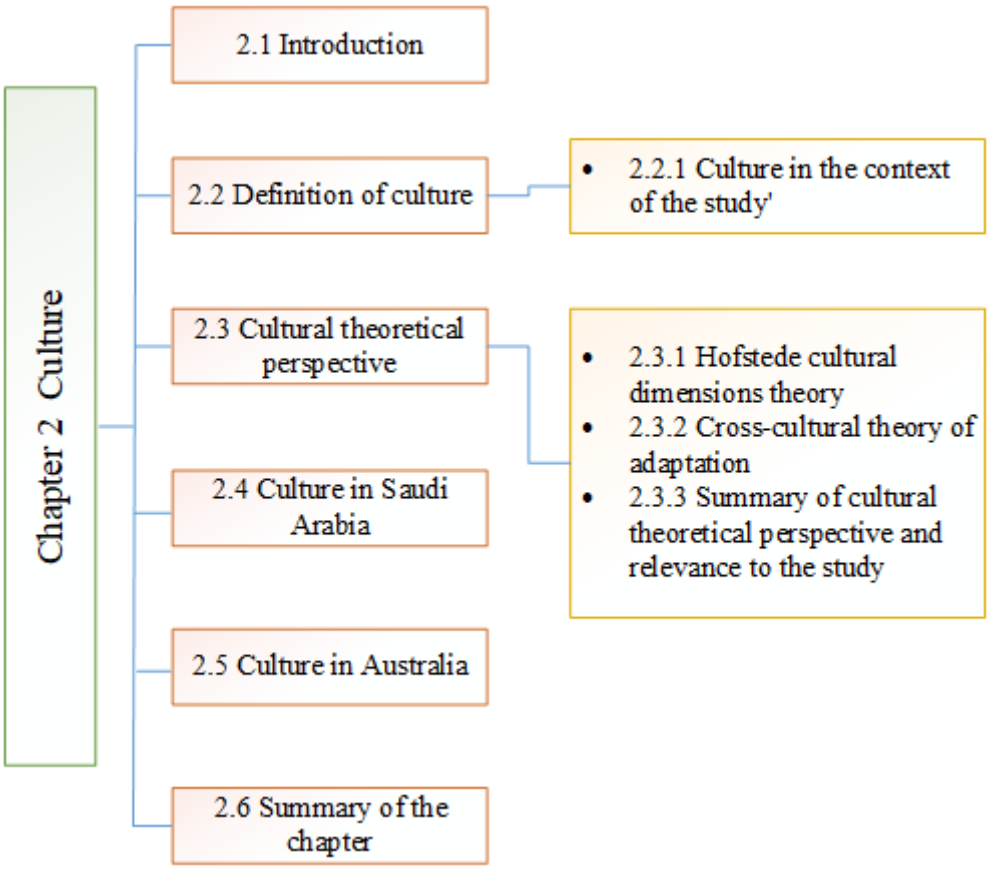
2.1 Introduction

The previous chapter presented an introduction to this study, including the aims and research questions, along with the study's significance and scope. As introduced in Chapter 1, there are three main open research questions. These questions were identified to develop an understanding of Saudi Arabian students' experiences with e-learning 2.0 in the Australian education system. The questions also explore the opportunities and challenges that emerge from these experiences. In addition, the study aims to explore the role of the students' cultural background in their experiences in an e-learning 2.0 environment. The research questions are:

- What are Saudi Arabian students' experiences of e-learning 2.0 in the Australian higher education environment?
- What challenges and opportunities emerge from these experiences?
- What is the role of culture in shaping Saudi Arabian students' experiences with e-learning 2.0 in the Australian higher education environment?

The above three research questions show that the explored phenomenon in this study involves two key concepts: culture and education technology, specifically e-learning 2.0. The questions also show that these key concepts are applied in the Australian higher education context involving Saudi Arabian students. The study context, including Saudi Arabian students, is described in Chapter 4. This chapter introduces the first key concept: culture. The chapter also presents the cultural theoretical perspective related to this study.

Figure 3 Map of Chapter 2



As presented in Figure 3, the chapter involves six sections. The section following this covers the first key concept: culture and its definition in the context of the study. In the third section, two cultural theories informing this research are introduced, in addition to a summary of the cultural perspective and its relevance to the study. The two theories are 1) Hofstede cultural dimensions theory and 2) Cross-cultural theory of adaptation. The cultural theoretical perspective is used as a 'lens' to look at the explored phenomena. The cultural perspective helps in understanding the challenges entailed in introducing people from one culture into an environment with a different culture. The fourth and fifth sections introduce Saudi Arabian and Australian cultural norms, specifically focusing on gender roles, freedom and propriety as essential elements of cultural difference. Section six provides a summary to the whole chapter.

2.2 Definition of culture

Over the past century, the term 'culture' has been defined in many different ways (Blumenthal, 1940). Tylor provided one of the oldest definitions in his book *Primitive Cultures* (1871). According to Tylor (1871, p. 4) "culture is that complex whole which includes knowledge, belief, art, morals, law, customs, and other capabilities and habits acquired by man as a member of society". Bashkow (2004) also broadly defines culture as a collection of values, perceptions, goals, attitudes, traditions, beliefs, and practices that enable the identification of a specific group of people. Hofstede & Hofstede (2005, p. 4) defined the concept culture as:

"The collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values".

Hofstede's definition includes the shared values, beliefs and sociocultural behaviours that are acquired in early childhood and transmitted through generations. As will be explained in the cultural theoretical perspective section, through this definition, Hofstede & Hofstede (2005) conceptualised culture as consisting of six polarised dimensions and used them to describe a specific culture. Each dimension is measurable from low to high and different groups of people fall under different levels along that spectrum. Hofstede & Hofstede's (2005) definition of culture has been used in a number of studies, including those conducted by Dennehy (2015), Cronje (2011), Arenas-Gaitan et al. (2011), Tapanes, et al., (2009). Another study by Strother (2003) bore similarities to this study in that it investigated blended and online learning environments and how the cultural background of the learners affected their perspectives about the use of these environments.

2.2.1 Culture in the context of the study

While culture is an ambiguous, broad and complex concept, the definition of culture used in the context of this study is drawn from Hofstede & Hofstede's (2005) definition of the term culture, as reviewed in the previous section. Two reasons for adopting the definition by Hofstede in this study are the popularity of the Hofstede definition and the relevance to this research. As for the first reason, Hofstede's definition has been commonly used in many studies in many research fields, including education (Dennehy, 2015), and, as mentioned earlier, the Hofstede's definition of culture was adopted in a number of studies that also investigate how culture affects people in new learning settings. As for the second reason,

concerning understanding cultures and people, Hofstede has made a comprehensive comparison between countries, which includes Australia and Saudi Arabia. Hofstede's comparison study is focused on aspects that related to this research, such as describing the collectively held cultural values of Saudi Arabia and Australia. Under Hofstede's national cultural dimensions, gender roles, freedom and propriety are described. Gender roles, for example, is a key aspect and important element as it shows the contrast between the home cultural background of Saudi Arabian students and their host environment (Ahmed Alhazmi & Nyland, 2013). The cultural characteristics of Saudi Arabia, such as gender segregation culture, may play a role in shaping the Saudi students' reactions towards the Australian culture, particularly in the Australian higher education environment.

In this study, Hofstede & Hofstede's (2005; 2001) national cultural dimensions are used to understand the cultural differences between the home cultural background of Saudi Arabian students and their host environment. The next section presents the cultural theoretical perspective of this study, starting with Hofstede's cultural dimensions theory.

2.3 Cultural theoretical perspective

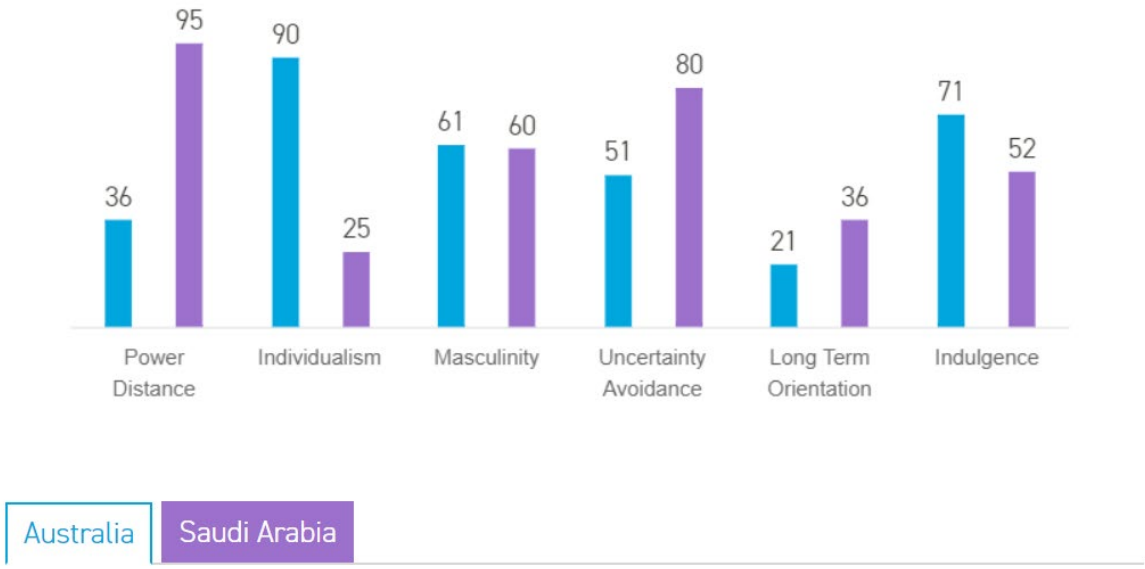
This section presents the cultural theoretical perspective. The cultural theoretical perspective assists in establishing the challenges entailed in introducing people from one culture into an environment with a different culture, the process of assimilating a new culture, and ways in which cultural differences can be interpreted. The cultural, theoretical perspective is guided by two theories: Hofstede's cultural definitions theory as seen in Hofstede's works (Geert Hofstede, 1984; G Hofstede, 1984; G Hofstede & Hofstede, 2005; 2001), and the cross-cultural theory of adaptation which draws on the works of Kim (2010) and Bennett (2004). Each of these theories is introduced in detail in the following subsections.

2.3.1 Hofstede's cultural dimensions theory

In original work in 1968 and 1972, Hofstede identified four cultural dimensions that can be used to describe a specific culture: 'power distance,' 'individualism versus collectivism,' 'masculinity versus femininity,' and 'uncertainty avoidance' (G. H. Hofstede & Hofstede, 2001). In addition to these four dimensions, Hofstede and Bond added a fifth dimension in 1988, 'long-term versus short-term orientation' (Michael & Geert, 2010), and later a sixth dimension; 'indulgence versus restraint' from another survey in 2010 (Geert Hofstede, 2011).

Hofstede quantitatively surveyed over 100,000 people in 93 different countries, including Saudi Arabia and Australia, to measure and describe their national cultural differences (Geert Hofstede, 2011). In the context of this study, it is essential to understand the cultural differences between the Saudi Arabian students' cultural background and the host cultural environment of Australia. The study also seeks to understand the role of

Figure 4 Cultural differences between Saudi Arabia and Australia, Hofstede 2017



culture in Saudi Arabian students' experiences with e-learning 2.0 in the Australian higher education environment. In the next subsections, the six Hofstede cultural dimensions are described and discussed. The cultural differences between Saudi Arabia and Australia, based on Hofstede's cultural dimensions, are shown in Figure 4.

- ***Power distance***

According to Hofstede (2011), the power distance dimension describes the extent to which those who are less influential in society accept their position in society. Australia scores (36) on this dimension, as shown in Figure 4, which means that the Australians relate to one another as equals regardless of sociopolitical status (Geert Hofstede, 2007). According to I. Hofstede (2017), leaders in Australia are considered as public servants who have just as many rights as their followers and who should utilise their authority only for the good of the public. On the other hand, when this dimension is high, as the case with the Saudi Arabia which scores (95) on this dimension, as shown in Figure 4, it means that people in Saudi society do not resist the domination of those that lead the society. Those who are in power, such as leaders, ministers and perhaps instructors can utilise their authority and forward policies and laws with little to no opposition from their subordinates, even if these laws

negatively affect these subordinates. The subordinates accept that it is the right of their leaders to lead, and it is their responsibility to follow (I. Hofstede, 2017).

In the context of this study, the Saudi Arabian students' perceptions of power distance might influence their online learning experiences. Specifically, their perspective of power distance may influence their engagement with their teachers, whom they might find intimidating, and instead, they might seek help from their peers or other people online.

- ***Individualism versus collectivism***

The individualism dimension is described in Hofstede (2011) as the level of interdependence or integration that people within a society possess. When individualism is high, it means that society is less integrated, and there is a higher importance placed on individual achievements and rights. Australia scores 90 on this dimension, as shown in Figure 4, which means that people in Australia are considered to be largely responsible only for themselves and their immediate family (I. Hofstede, 2017). In contrast, when individualism is low, as is the case with Saudi Arabia which scores 25 on this dimension, then the Saudi society is considered to be a collectivist society and more integrated with one another (I. Hofstede, 2017). According to I. Hofstede (2017), people in Saudi Arabia are considered as important life-long members of specific groups, such as families or communities, and have inherent responsibilities to these groups. The well-being of the group in Saudi Arabia takes precedence over its individual members.

Saudi Arabia's heritage in tribal tradition goes back hundreds of years. Hofstede views the Saudi community as being largely collectivist (I. Hofstede, 2017). That is, Saudis typically value their cultural heritage, ethnicity, extended family tribe, and the nuclear family as the basis of the social structure (Almunajjed, 1997). Men take on the duties and responsibilities of their family with great care and seriousness. A family as a unit provides collective support to individuals when they are in need. As such, people in Saudi Arabia are expected to conform to the norms of the community rather than embracing individualism and liberty as in western culture.

In the context of this study, individualism/collectivism might affect Saudi students' online preference and achievement. Saudi Arabian students' inherent collectivist performance might induce them, for example, to engage in an online cooperative workgroup which leads to higher learning productivity and achievement through cooperative effort. However, as discussed by Hofstede (1986, p. 312), students with a

collectivist characteristic are expected "to learn how to do", which means Saudi students may only participate in such cooperative groups "when called upon personally" by the instructors.

Understanding Saudi Arabian students' background may help to understand their responses concerning their experiences in Australian e-learning 2.0 environment. Specifically, it helps in understanding the strategies used by the students to engage and adopt the new educational context of Australia, given their inherent characteristics and collectivist performance.

- ***Masculinity versus femininity***

The masculinity versus femininity dimension is related to gender roles, not as an individual characteristic, but societally. That is the extent to which emotional roles are defined within the community (Geert Hofstede, 2011). Masculine roles include being competitive, assertive, materialistic, and ambitious, while feminine roles are being nurtured, caring, compassionate, and modest (Geert Hofstede, 2011). When this dimension is high, it means that there is a stronger emphasis on masculine roles as well as on the importance of the male gender over the female gender. On the other hand, when the dimension is low, that shows less emphasis on masculine roles and greater equality between males and females in society (Geert Hofstede, 2011). In other words, if the community gives women more significant roles in control areas and senior leadership, this means that the society embraces femininity "softer." However, if a society does not give women the necessary roles in control areas, that is a male-dominated community "rigour" (Geert Hofstede, 2011).

As shown in Figure 4, the Australian and Saudi Arabian cultures score 61 and 60 on this dimension, respectively (I. Hofstede, 2017). However, according to Doumato (1992) and Human Rights Watch (2011), Saudi Arabian females generally have less liberty than males. That is, in Saudi Arabia, women cannot travel independently without Mahram (an adult relative male) or work or go to school without the husband's consent. They are expected to play roles related to maintaining the household and the family while males play the role of breadwinner (Almunajjed, 1997). This is different from Australia, although both cultures scored similarly on this dimension (I. Hofstede, 2017). Australia, like the West in general, is a place where gender equality and liberty for all are celebrated (Broderick, 2008). Given this situation, such social values that are common to Saudi Arabian students may be considerably challenging, particularly when they engage in an Australian e-learning 2.0

environment, which is built on principles of openness, independence and gender equal opportunities.

- ***Uncertainty avoidance***

According to Hofstede (2011), the uncertainty avoidance dimension describes the tolerance of society for risk and change. Societies that scored high on this dimension are very resistant to change. As shown in Figure 4, Saudi Arabia scores 80 on this dimension, which is very high compared to Australia's very intermediate score of 51. Scoring high means that society tends to minimise uncertainty by either rejecting change as merely unacceptable or slowly and carefully approaching change to ensure that there is a minimal negative impact (I. Hofstede, 2017). According to Hofstede (2017), a country which has high uncertainty, such as Saudi Arabia, is considered a very traditional or conservative society. On the other hand, cultures that score intermediate or low on the uncertainty avoidance dimension, such as Australia, tend to embrace change as it occurs. They are open to the benefits of these changes and are much less suspicious about the impact that such may have on altering the traditions and practices in their communities.

According to Olaniran (2007, p. 449), cultural aspects, including values, perceptions, goals, attitudes, traditions, beliefs, practices and other socially acquired behaviours, can significantly impact online learning. This is due to increasing uncertainty in some learners' cultural background (Olaniran, 2007). From an educational viewpoint, students who come from a highly conservative and traditional culture may tend to avoid adventure in terms of making learning decisions when dealing with uncertainty cases. Olaniran (2007) points out some challenges include the feeling of being lost during an online discussion and feeling isolated from other students or their tutors.

- ***Long-term versus short-term orientation***

The long-term versus short-term orientation dimension considers the time horizon that is perceived by members of the society (G. H. Hofstede & Hofstede, 2001). The dimension represents how societies have to preserve some links to the past while challenging those of the present or the future. For those societies that have a long-term orientation, the perceptive of people's actions are geared towards the future (G. H. Hofstede & Hofstede, 2001). People are pragmatic and are willing to forego immediate gratification for greater rewards in the future. Contrary to this, those who have short-term orientation are focused on the values of the present and the past. They are normative societies interested primarily in

maintaining the stability of the status quo, in fulfilling their immediate obligations and protecting their traditions. As appears in Figure 4, both Australia and Saudi Arabia scored low on this dimension, with 21 for Australia and 36 for Saudi Arabia, and therefore have normative cultures (I. Hofstede, 2017).

The normative nature of Saudi Arabian students may lead them to focus on the value of the new learning settings and seek immediate achievement as a result of their experience with e-learning 2.0 environment (Wright, 2014). For example, Saudi Arabian students may perceive the use of Web 2.0 tools for learning through online synchronous interaction tools (such as working together using Facebook, Skype, WhatsApp or chat rooms) as beneficial and appreciate the ability to achieve immediate feedback. At the same time their short-term orientation, which also promotes them to pay enormous respect to their traditions, may lead to some challenges in adapting to Australian culture, on the one hand, and the adjustment to study a new educational model on the other.

- ***Indulgence versus restraint***

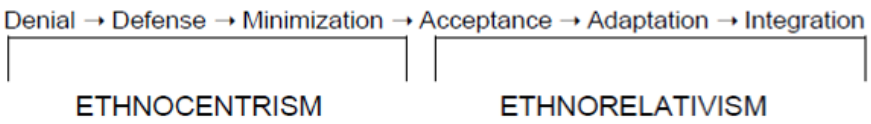
The indulgence dimension of Hofstede (2011) describes the extent to which a culture permits people the freedom of speech, relaxation and enjoyment. In contrast, restraint describes the extent to which a culture controls people's enjoyment by employing strict social norms. As shown in Figure 4, Australia scores 71 on indulgence dimension, which is a high score compared to Saudi Arabia's average score of 52. According to (Geert Hofstede, 2007) cultures can be defined as indulgent, as is the case with Australia, or restrained, based on the relative control imposed by society (Geert Hofstede, 2011).

In an educational context, a relaxed learning structure built on indulgence principles, such as freedom of speech, may ease the relationship between learners and teachers (Gómez-Rey, Barbera, & Fernández-Navarro, 2016). Saudi students may feel more confident when dealing with their lecturers, and some of them may build a friendly relationship with the teachers rather than an ordinary relationship. Principles such as equality, liberty along with the student's rights offered by the Australian higher education environment, may also help the Saudi Arabian students to feel more comfortable and relaxed during their study and adjustment to the new educational model. However, the students are also expected to face some challenges, particularly in coping with such new educational and learning environments, since it is built on such unaccustomed cultural and educational principles.

2.3.2 Cross-cultural theory of adaptation

Another important theory for this study is the cross-cultural theory of adaptation. According to Kim (2001, 2010), each person who switches to a new cultural environment needs to undergo a process of establishing a mutual acceptance relationship with the host environment. This adaptation is tied to the human tendency to find some form of internal balance when challenged with adverse conditions (Young Yun Kim, 2010). Central to this theory is the ethnocentric stages of development, which are illustrated in Figure 5.

Figure 5 Ethnocentric stages of development by Bennett, (2004)



According to Bennett (2004), there are six stages in the adaptation. The first stage is denial, in which the person is not able to recognise cultural differences. In this stage, the person is unaware of the existence of other cultures and treats his or her own culture as the only proper way of living. This is followed by the defence stage, in which the person acknowledges the existence of other cultures, but considers his or her own culture as still superior to these others. People in this stage may be compelled to explain why their way of doing things or looking at a situation is better than those of the people in their host environment. Following this is the stage of minimisation, during which a person realises the difficulty of defending each cultural practice that he or she has relative to those possessed by others, and observes the necessity of getting along with other people in the environment. Thus, the person moves on to focus on similarities with other people in the environment rather than their differences.

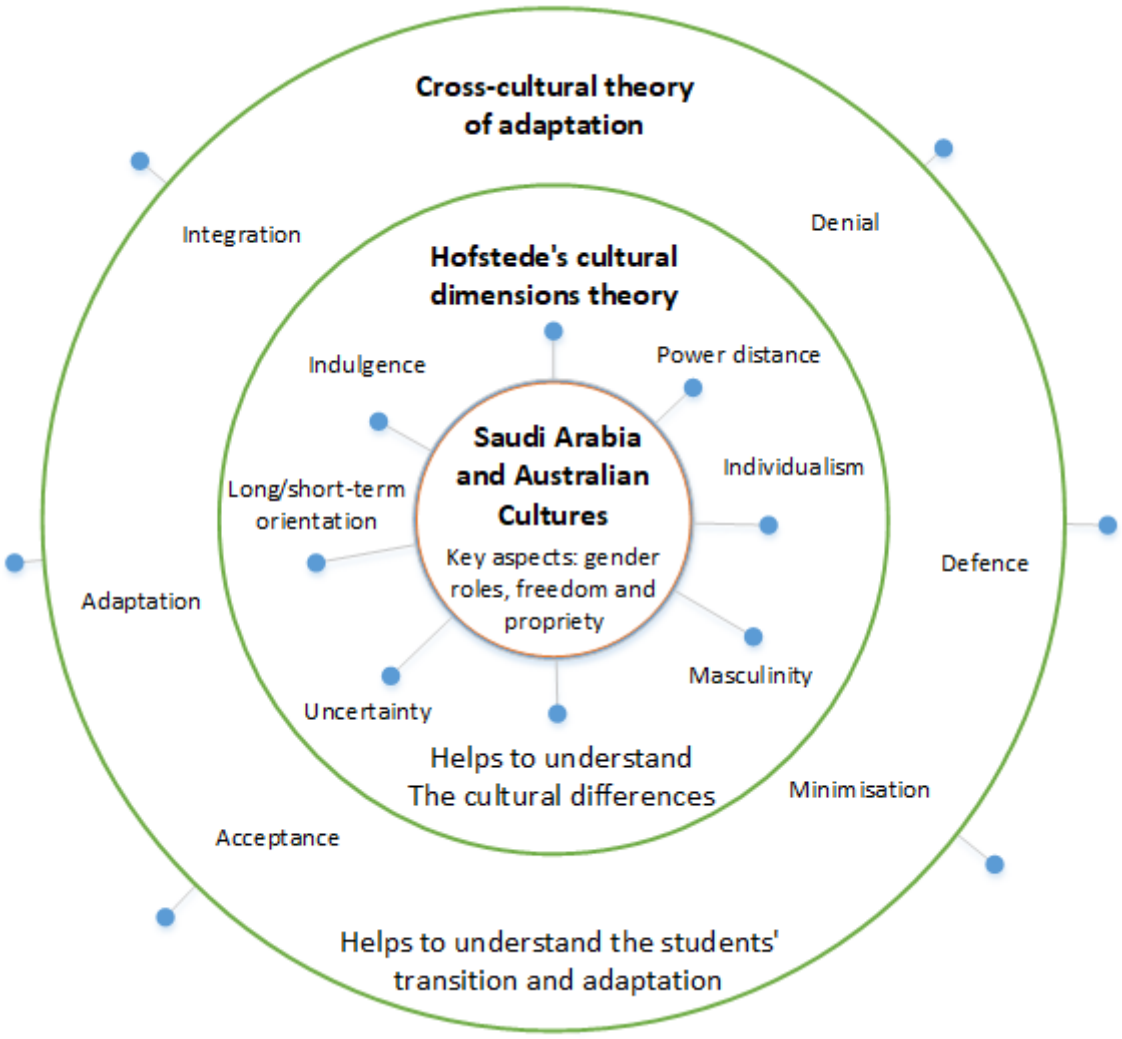
During these first three stages, the person is considered to be in a state of ethnocentrism. That is, he or she maintains the superior value of his or her cultural norms relative to those in the host environment. Even during the minimisation stage, the person does not admit the relativity of cultural norms but instead hopes to synthesise all of the norms that he or she experienced within one broad perspective that is still focused on normative beliefs. Following the minimisation is the acceptance stage, in which the person accepts the idea that the host culture is very different from his or her own culture, but that this is not necessarily bad. Following this is the stage of adaptation, in which people begin

to consciously adapt their behaviours to suit the norms of the host environment better. Finally, there is integration, wherein the cultural norms of the person are changed such that they are now a mix of his or her original cultural views and the cultural views of the host environment. According to Bennett (2004), during these final three stages, the person is considered to be in a state of ethnorelativism. The cultural identity of the person is retained, but it adds to itself the aspects of other cultures that the person has encountered.

2.3.3 Summary of cultural theoretical perspective and relevance to the study

Figure 6 illustrates the values of the two theories discussed in the previous subsections of the present study. Figure 6 shows Hofstede's theory of cultural dimensions through which the cultural differences between the host and home countries are understood. Hofstede's (2001) theory of cultural dimensions represents knowledge that supports the model of intercultural communication (Schröder, 2000).

Figure 6 Cultural theoretical perspective



According to Schröder (2000), productive intercultural communication is one of the primary mediums for helping to understand international students' actions and interactions while in their classroom. Hofstede's (2001) theory of cultural dimensions could be useful for this research in different ways. Hofstede's model can assist a researcher in understanding the Saudi international students' experiences, actions, interactions and behaviours in different contexts. It can help to show areas of similarity or difference between Saudi students' culture and their host culture. Particularly, Hofstede's (2001) model could be useful when attempting to understand, interpret or attribute particular incidents of interactions in the data. For example, when attempting to understand the students' engagement with their teachers, whom they might find intimidating while operating in an Australian learning environment, I could compare the Power Distance Index (PDI) scores between Australia and Saudi Arabia. The Australian score on PDI is low (36) in comparison to Saudi Arabia (95). Given the relatively significant difference in PDI scores between the two cultures, I could refer to the characteristics of low and high PDI cultures described in Hofstede (2001) to understand what this variation could imply, as presented in Chapter 7.

Notwithstanding the popularity of Hofstede's (2001) theory of cultural dimensions, it has its limitations. Several academics have criticised Hofstede's work, claiming that Hofstede never studied culture (Baskerville, 2003), surveys are not appropriate instruments for measuring cultural differences (Ailon, 2009), nations are not the suitable units for studying cultures (McSweeney, 2002), out-dated data has been used (M. Jones, 2007), one company approach cannot possibly provide information that represents an entire culture (Gooderham & Nordhaug, 2003; Schwartz, 1999). Although most of the common criticisms were approached and addressed by Hofstede (2002), Hewling (2005) and Macfadyen (2005) argue that a person's cultural identity cannot be used to either predict or define their values or cultural norms. Hewling (2005) and Macfadyen (2005) support their argument by stating that Hofstede (2001), himself, obviously pointed out that people's values and their behavioural performance cannot be predicted through their national cultural norms.

In addition to the previous limitations in using the Hofstede's (2001) model of cultural dimensions, Teekens (2000, p. 30) also warms academics who interact with a group of international students to 'try to avoid thinking in stereotypes'. In fact, Hofstede, himself, asserts that:

"What is unfounded in any case is the application of stereotype information about a group to any individual member of that group. The valid part of a stereotype is a statistical

statement about a group, not a prediction of the properties of particular individuals. Stereotypes are at best half-truths" (G. H. Hofstede & Hofstede, 2001, p. 14).

Hofstede's (2001) theory is useful for gaining an understanding of the expectations of differences between the culture of Saudi Arabian students, and the culture of the Australian environment where they are engaged in higher education studies. However, a researcher should be aware of the limitations when utilising Hofstede's theory of cultural dimensions or any cultural theories to determine and understand the cultural differences among individuals from two or more countries.

From previous discussion and understanding of using Hofstede's (2001) theory of cultural dimensions in the context of this study, the cross-cultural theory of adaptation may then be used to help to understand the experiences of Saudi Arabian students in the transition that they make within the Australian higher education environment. According to Kim and Gudykunst (1988) adaptation into new context involves the entire process of adjusting and trying to fit within a new, unfamiliar cultural environment. For the Saudi Arabian students, it is not only a new, unfamiliar cultural environment; it is also involving relocating to a different educational and learning setting. The data gathered from the study's respondents may be viewed through the lens of the adaptation's theory to better understand the students' adaptation into the Australian cultural and educational environment.

2.4 Culture in Saudi Arabia

This section introduces the Kingdom of Saudi Arabia (KSA) and some of its cultural norms. A key aspect is gender roles, especially in relation to the concepts of freedom and propriety. These cultural elements are essential as they show the contrast between the home cultural and educational background of Saudi Arabian students and their host environment (Ahmed Alhazmi & Nyland, 2013).

Saudi Arabia is the largest economy in the Arab world and North Africa. King Abdul Aziz Al Saud founded the Kingdom of Saudi Arabia in 1932, and his family has led it since then. While conducting this research, King Abdullah bin Abdulaziz passed away and was succeeded by his younger brother King Salman bin Abdulaziz Al Saud (British Broadcasting Corporation (BBC), 2015). At present Saudi Arabia covers around 2.24 million square kilometres of the area of the Arabian Peninsula (Worldatlas, 2019). It is located in the heart of the Middle East and encircled by several Arab countries, including Qatar, the United Arab Emirates, and Oman on the east, Kuwait, Iraq, and Jordan from the

north, and Yemen in the south. From the west, the country is bordered by the Red Sea, which is shared by Sudan and Egypt (Worldatlas, 2019). The population of Saudi Arabia was estimated to be 34.14 million in 2018 (Global Media Insight, 2019).

Saudi Arabia is the birthplace of Islam and has the premier two holy cities for Muslims: Makkah Al-Mukkaramah and Al-Madinah Al-Munawwarah. Makkah was the birthplace of the Prophet Muhammad – peace be upon him – (PBUH), and Al-Madinah Al-Munawwarah is where His mosque and tomb are located. Makkah or Mecca and Al-Madinah are also the destination for Muslims to perform *Hajj and Umra,* the Islamic pilgrimage, which makes Saudi Arabia a host to millions of Muslims every year (Saudi Ministry of Haj and Umra, 2017). To understand Saudi Arabia and its sociocultural environment (1932 to present), it is necessary to highlight some of its past historical events which played a significant role in forming current Saudi Arabia. As such, I provide a historical overview of the establishment of Saudi Arabia.

Just before the establishment of Saudi Arabia as a state, about (84) years ago, there was no ‘Saudi Arabian society’ or ‘Saudi Arabian culture’. The historical story of the establishment of Saudi Arabia shows that there were two political movements known as ‘The First Saudi State’ (1744 – 1818), and ‘The Second Saudi State’ (1824 – 1891) (Saudi National Portal, 2019). During the first state, a political and religious union was established between Imam Muhammad Ibn Saud (the grandfather of the Saudi royal family) and Sheikh Muhammad Ibn Abdul-Wahhab (a religious scholar, and the grandfather of Saudi Arabian Mufti) to start a socio-religious reform movement.

According to Al-Rasheed (2002), in the 18th century, the Arabian Peninsula was poor, weak, politically unstable, and Shirk (polytheism) and 'Bid'ah' (religious fads) were widespread. The ‘Ottoman Islamic Caliphate’ governed the Arabian Peninsula. At that time (during the first state), Sheikh Muhammad Ibn Abdul-Wahhab took it upon himself to start an Islamic renewal call, known in Islamic literature as ‘Da`wah’. Imam Muhammad Ibn Saud, as a ruler of Diriyah’s Emirate (the name of first Saudi state), gave his full protection to Ibn Abdul-Wahhab and supported his new call. This unity between the two leaders, Ibn Saud and Ibn Abdul-Wahhab led to an early forming of the cultural norms of Saudi Arabian Islamic society, known in Islamic literature as ‘Ummat al-Islām’ (Nation of Islam) (Al-Rasheed, 2002). Both leaders declared that the community must return to the pure Islam based on the principles of ‘Sharia’ (Islamic law) according to the understanding of the ‘righteous Salaf’, the first three generations of Muslim scholars (Al-Rasheed, 2002). As a result of the alliance and agreement between the two imams, the First Saudi State became

politically and religiously based on Quran and 'Sunnah/Hadith' (the recorded sayings and practise) of the Prophet Mohammad (Saudi National Portal, 2019). However, in 1818, after many battles, the First Saudi State was ended by Ottoman troops, which invaded the Arabian Peninsula under the command of Mohammed Ali Pasha, governor of Egypt (Saudi National Portal, 2019).

The Second Saudi State' started in 1824. Less than two years after the end of the First Saudi State, leaders of Al Saud managed to restore Diriyah's Emirate (the Saudi State) by relying on their strong alliances with many tribes and leaders in 'Najd' (the central region of the Arab peninsula) and nearby regions but moved its capital to Riyadh, the current capital city of Saudi Arabia. The ruler of the second Saudi state, Imam Turki bin Abdullah bin Mohammed Ibn Saud, continued with the same Islamic principles of the First Saudi State and provided his full support to Ibn Abdul-Wahhab's Da`wah, particularly with the application of Islamic law (Sharia) in all aspects of life (Saudi National Portal, 2019). However, a dispute among the Al Saud family as to who should become a ruler led to the fall of the second Saudi State in 1891 (Wynbrandt, 2010).

These two early attempts of establishing the Saudi state smoothed the ground for King Abdul-Aziz Al Saud (the great-grandson of Imam Mohammed Ibn Saudi) to a third attempt to restore his forebears' legacy in Riyadh. On January 15th 1902, King Abdul-Aziz Al Saud returned with resolute determination to regain the sovereignty of Riyadh, and he succeeded (Saudi National Portal, 2019). After 30 years of effort and hard work, on September, 19th 1932, King Abdul-Aziz Al Saud issued a royal decree announcing the unification of most the Arabian Peninsula under the name of 'The Kingdom of Saudi Arabia' based on the principals of Quran and the Sunnah (Saudi National Portal, 2019).

The first two attempts of establishing the Saudi state witnessed the rise of a new Islamic revival in the Arabic peninsula, which is known in the historical literature as 'Sheikh Mohammed Ibn Abdul-Wahhab's 'Da`wah'. The Islamic renewal 'Da`wah' is differently labelled in historical literature, such as 'Salafism' (derived from the word "Salaf", which refers to the early righteous), 'Ahl-al-tawhid' (people of monotheism), 'Ikhwan Najd' (brotherhood movement) and 'Wahhabism' (derived from the name Abdul Wahhab). The term 'Wahhabism', like the terms "Buddhism" and "Christian," carries a sense of glorification or deification of the individual it refers to. However, 'Wahhabism' sometimes is used to negatively judge or evaluate the preacher Muhammad ibn Abd al Wahhab's Da'wah by its 'enemies' (Al-Hefdhy, 1995). However, in this study context, the use of the term 'Wahhabism' is limited to a descriptive purpose with no intention to

evaluate or label the revivalist movement, but rather to be consistent with the body of literature. These historical events provide an overview of the roots of Saudi Arabia and its relationship with the revivalist movement, which are essential to understanding the Saudi social, cultural, and political context as will be explained next.

There is a close link between the initial two Saudi States and revivalist movement of Wahhabi (Otterbeck, 2012). According to Rich and MacQueen (2017), the revivalist movement of Wahhabi has been integral to the Saudi Arabian domination of the whole Arabian Peninsula and to its regime's success. All Saudi Arabia's official institutions, including religious, educational, and judicial institutions, adopt the Islamic approach based on Wahhabi ideology. Thus, it is a key concept, which has played a vital role in shaping contemporary Saudi Arabia and its cultural traditions, such as the genders segregation, which has been 'cultured' and influenced all aspects of life during the spread of the Wahhabi ideological discourse (Blanchard, 2008). To avoid turning the focus of the chapter too much on the Saudi historical background, the following is a description of some of the current Saudi Arabian cultural traditions and practices.

In Saudi Arabia, gender segregation exists in many public locations and gatherings, as well as in terms of the roles that people play in the community. In Saudi Arabia, females cannot travel independently without Mahram (an adult relative male); they cannot work or go to school without the husband's consent. Females must also wear the hijab (headscarf) so as not to expose their hair. Doumato (1992) and Alhazmi (2013) discuss the relevance of gender role in Saudi Arabian culture. According to Doumato (1992), women in Saudi Arabia are not considered inferior to males. Instead, there is merely apparent and absolute segregation of gender roles, wherein males are expected to serve as protectors and providers while women are expected to serve as nurturers. Zubaida (2001) explained that this cultural position bears many political, legal, and social consequences. Until June 2018, women in Saudi Arabia were not licensed to drive by themselves because driving is seen as a masculine activity. Mamdani (2002) argued how these matters are drawn from Islamic law, in which gender segregation and the maintenance of women's honour are central aspects. However, a royal decree was announced on September 26, 2017, that Saudi women would be allowed to drive by June 2018 (Gaouette & Labott, 2017).

In Saudi Arabia, public disclosure of affection is also prohibited, even for married couples. This norm can be seen as a way of protecting women's chastity. The Committee for the Promotion of Virtue and the Prevention of Vice (CPVPV) was established in 1940 as a Saudi Arabia government agency employing religious police. The Committee,

informally known and referred to as “Al-Hai’a” (the commission) is tasked with ensuring that all Islamic law (Sharia) is applied, and the Saudi's sociocultural norms, such as proper dress and gender segregation, are met. Nevertheless, the Saudi cultural norms, especially those related to gender roles in Saudi society, are apparently accepted and supported by Saudi Arabian people, particularly by females (Ambah, 2006; Butters, 2009; Moaddel, 2006; Zoepf, 2010).

A good Muslim woman is seen as someone who does everything necessary in order to prevent the men around her, aside from her husband if she has one, from desiring her physically (Mamdani, 2002). As such, women who wear revealing clothing are generally seen as bad women. Similarly, women who talk provocatively to men are likewise seen as bad women (Mamdani, 2002). Saudi Arabian men are thus raised to think that women who flirt with a man will flirt with all men, and so are unfit to be a person’s wife (Mamdani, 2002).

All this information has been provided to reflect on the problem that is investigated in this research. According to Alhazmi and Nyland (2013), these gender roles and liberty cultural norms significantly contribute to shaping Saudi Arabians’ cultural identity. However, as discussed earlier, there is extensive evidence that Saudi Arabian women support the existing Saudi cultural norms, especially those related to gender roles and segregation in Saudi society, but within acceptable boundaries (Ambah, 2006; Butters, 2009; Hiel, 2007; Moaddel, 2006; Zoepf, 2010). According to Zoepf (2010), Saudi Arabian women accept and value the uniqueness of Saudi Arabian culture, particularly in its treatment of gender, but simply wish to be afforded liberties that relate to convenience and financial freedom. Similarly, Saleh (2006) and Moaddel (2006), both find that many Saudi Arabian women believe in keeping chaste and reject Western ideologies of sexual liberation.

While this section introduces Saudi Arabia and some of its cultural background, the next section provides a description of Australia and its culture as a host environment to Saudi Arabian students.

2.5 Culture in Australia

Modern Australia began when Governor Arthur Phillip established the first European settlement at Sydney Cove in 1788 (Department of Foreign Affairs and Trade, 2012). The cultural environment has been influenced by its diverse population, climate,

geographies, and even by the world's oldest cultural traditions of the Aboriginal and Torres Strait Islander peoples, which makes today's Australia culture genuinely unique and diverse in many ways (The Digital Transformation Agency, 2017).

As an international student, I lived for over seven years in Australia. It is still unclear to me what it means to be 'Australian' or how to describe it, whether in terms of history, religions, languages, foods, lifestyles or personal circumstances. Research studies, such as those of Kabir (2017); Phillips and Smith (2000); Zevallos (2005) concluded that people would subjectively define the Australian cultural identity in different ways. For example, from a Middle Eastern woman's perspective, Australian culture might mean freedom, equity and equality for women, enjoying the dress, humanity, having your own home, right to practice one's religion. Whereas from the perspective of an urban white-collar, an Australian identity might mean an obligation, a fair go, mateship, tolerance, a family orientation, volunteering, and a relaxed and straightforward easy-going lifestyle (Phillips & Smith, 2000). Zevallos (2005) noted that an Australian cultural identity could not be defined without the Australian traditions with emphasising on multiculturalism. Zevallos (2005) found that some of her participants believed that Australia did not have its own culture. Instead, it could be viewed as a multicultural country. It is arguable that being a former colony of Great Britain, the Australian nation has the challenge to distinguish its own cultural identity from its "mother" culture (Arthur, 2018).

Australian society has changed over time (Dixon, Hart, Bloomsbury, & Dixon, 2018). According to Gilding (1997), just four decades ago, Australian society began to change from a social structure where men play the role of breadwinner, to a model of gender equality. The Human Rights and Equal Opportunities Commission report in (2008) describes Australia as a place where gender equality and liberty for all are celebrated. An excellent example of gender equality and women's empowerment is that the 27th Prime Minister of Australia, Ms Julia Gillard, was a woman.

Some studies (Cassells, Duncan, & Ong, 2017; Keane, Russell, & Smyth, 2017; Watts, 2003) report that occupational gender segregation exists in Australian private and public sector employment, and that this has an effect on gender wage. However, for the past three decades, gender equality has been monitored in Australia, specifically in higher education academia (Winchester & Browning, 2015). As mentioned in Chapter 1, despite some segregated private secondary schools existing in Australia, all Australian universities are co-educational (Breen, 2002).

Australian culture, like other western cultures, embraces individualism and respects the right of all persons to do as they please as long as they do not violate the rights of others (Geert Hofstede, 2012a). According to the Department of Foreign Affairs and Trade DFAT (2012), each person in Australia is likely to maintain certain principles and shared values. "The shared values include:

- Respect for equal worth, dignity and freedom of the individual
- Freedom of speech and association
- Freedom of religion and a secular government
- Support for parliamentary democracy and the rule of law
- Equality under the law
- Equality of men and women
- Equality of opportunity
- Peacefulness
- A spirit of egalitarianism

No one should be disadvantaged based on his or her country of birth, cultural heritage, language, gender or religious belief." (Department of Foreign Affairs and Trade, 2012).

As such, as a multicultural environment, all people living in Australia legally have the right to perform or express their tradition and opinions and to be inclusively involved in Australia's national lifestyle.

2.6 Summary of the chapter

The study aims to understand the Saudi Arabian students' experiences with the e-learning 2.0 environment in the Australian higher education system. One of the research objectives aims to explore the role of the culture in shaping the students' attitudes and experiences in this new educational and cultural settings. This chapter provided a perspective to help understand the cultural context of both the students and their host culture.

The chapter provided an overview of the concept of culture and its definition in the context of this study was introduced. The chapter also introduced the cultural theories that

inform this research. The theories presented, which compose the cultural and theoretical perspective, are 1) Hofstede cultural dimensions and 2) the cross-cultural theory of adaptation. It was explained that the cultural and theoretical perspectives provided in this chapter are used as lenses to look at the explored phenomenon. The cultural perspective helps in understanding the challenges entailed in introducing people from one culture into an environment with a different culture. The chapter also introduced three important cultural aspects: 1) gender roles, 2) freedom and 3) propriety as key elements that show the differences between the Saudi Arabian cultural background and the Australian cultural environment. The chapter reviewed the role of gender and gender segregation in Saudi Arabian society. As stated, the cultural theoretical perspective would assist in learning about the difficulties associated with introducing a large group of international students from a particular culture into a setting with a different culture, and ways in which cultural differences can be understood. From the discussion, it was found that there is a clear and absolute gender role divide in Saudi Arabia, which is drawn from Islamic law. The chapter ends with providing a brief description of Australia and its culture as a host environment to the Saudi Arabian students.

Chapter 3
Educational Technology – E-learning 2.0

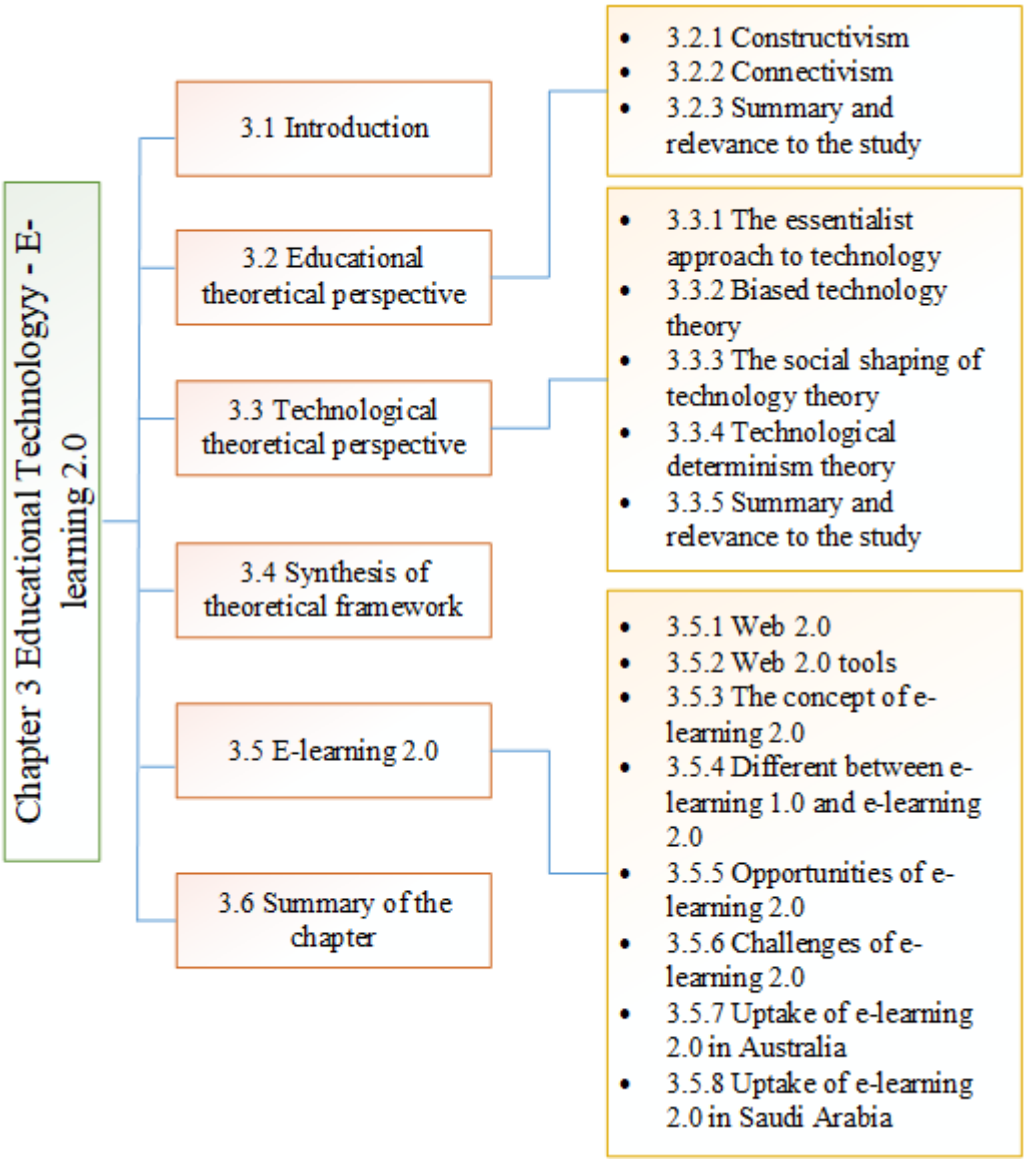
3.1 Introduction

As stated in Chapter 2, the phenomena explored in this study consists of two key concepts: culture and educational technology, specifically e-learning 2.0. In the previous chapter, the key concept of culture, as well as the cultural-theoretical perspective informing this research, were introduced. This chapter focuses on the key concept of e-learning 2.0, as well as introducing the educational and technological theoretical perspectives that are related to this research.

This chapter consists of six sections, as presented in Figure 7 below. The first section is the introduction. The second section introduces two learning theories, which explain the different ways that students learn in a given learning environment. These theories are 1) the constructivism learning theory and 2) the connectivism learning theory. The third section covers four theories that explain the educational technology and the different ways that people and societies experience technologies. These theories are: 1) the essentialist approach to technology, 2) the biased technology theory, 3) the technological determinism theory and 4) the social shaping of technology theory. The fourth section of this chapter provides a synthesis of the three theoretical perspectives. These three theoretical perspectives are the cultural theoretical perspective (presented in Chapter 2), the educational theoretical perspective and the technological theoretical perspective. These three theoretical perspectives compose the study's theoretical framework as a foundation for understanding the phenomenon of interest in the present study. Section five proceeds to explore the concept of e-learning 2.0 and its potential opportunities and challenges as a relatively new learning environment. The section also covers aspects relating to the

development of Web 2.0 tools used for e-learning 2.0 as well as the up-take of e-learning 2.0 in Australia and Saudi Arabia. The last section is a summary of this chapter.

Figure 7 Map of Chapter 3



3.2 Educational theoretical perspective

This section presents education-theoretical perspective. The educational theories present in this section consider the different ways that students learn in a given learning environment. They also provide a basis for understanding how Saudi Arabian students may experience e-learning 2.0 in the Australian higher education environment. The theories also provide insights into the learning opportunities and challenges that Saudi Arabian students face in the new environment. The education-theoretical perspective is guided by two theories as follows: constructivism, which is informed by the work of Dewy (1933, 1998), Vygotsky

(1987) and Piaget (1972), and connectivism as proposed by Siemens (2005). Each of the two theories is introduced in detail in the following subsections.

3.2.1 Constructivism

The broader approach of constructivism is a result of blending the work of Dewey (1933, 1998) and Vygotsky (1987) by Piaget (1972) in developmental psychology (Jennings, Surgenor, & McMahon, 2013). The basic principle of constructivism, according to Piaget (1972), assumes that human beings create meaning through interactions that occur between their experiences and their ideas. Constructivism considers learning to be an act of knowledge creation as opposed to knowledge absorption (Schunk, 2012). Constructivists hold that through the reflection of experiences, people construct knowledge and make sense of the world around them (Harasim, 2009, p. 29). Thus, learning is the process of continuously incorporating the implications of our experiences into what we already know. For this theory of learning, it is assumed that learners must actively seek to construct meaning. Thus, the environment should be prepared in a manner that is conducive to constructing knowledge. Society's ever-increasing reliance on technology has integrated the computer and the Internet into people's lives. As such Collins (1991, p. 30) forwards the idea that technology is responsible for realising the constructivist idea that learning can best occur when society moves away from didactic, lecture-based method of delivering information. Mann (1994, p. 175) expressed the belief that the advent of new technologies has revived interest in constructivist learning. That is, technological innovations have made it possible for learning models where the learner is left to experience and reflect privately upon such experiences. With the Internet and using Web 2.0 tools for learning, students have access to real-life data that they can use in practising concepts and principles.

3.2.2 Connectivism

A relatively new theory of learning, which is regarded by Siemens (2005) as being a strong fit for the emergence of Web 2.0, is referred to as connectivism. While each of the learning theories discussed in the previous section helps explain the learning phenomenon, the best theory for understanding learning in the context of e-learning 2.0 environments is connectivism. According to Siemens (2005), connectivism is the learning theory that fits the digital age best. Connectivism combines some aspects of previous learning theory. As with constructivism, the theory holds that learning does not occur in a vacuum, and the involvement of the environment and the other actors in the environment are vital to the

learning process. From constructivism, the theory also holds the importance of individual independence in the learning process, but that "choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality" (Siemens 2005: 5).

However, what differentiates connectivism from the previous constructivism learning theory is that Siemens argues that learning happens in "nebulous environments of shifting core elements – not entirely under the control of the individual" (Siemens, 2005, p. 5). Knowledge is a construct that is integrated into society and is affected by society's changes, such that any piece of knowledge is continuously evolving based on the diversity of opinions and investigations conducted by the different people in society. According to Siemens (2005), connectivism has eight essential principles:

- First, it holds that knowledge and learning lie within the diversity of opinions that people have. As more people contribute their input, knowledge is further refined.

- Second, learning is a process in which specialised nodes or sources of information are interconnected. As such, in solving a complex problem, people learn important components of the solution from one another, and together develop the best response to the situation.

- The third, learning can also reside in non-human appliances. This means that learning can occur within the data processing operations of machines. These machines learn in a similar way to people by continuously collecting and synthesising information from different sources.

- The fourth principle assumes that what is critical in learning is building the capacity to know, rather than focusing on what is currently known. Since knowledge is dynamic, any piece of present knowledge can be considered out of date or obsolete in the future. What is important, therefore, is to have the capacity to revise this knowledge as the need arises.

- The fifth principle is that facilitating continuous learning requires that connections be nurtured and maintained. That is, learners need to have some means of continuous communication in order for knowledge to continue to be developed. If the media connecting learners are cut, learners would not be able to progress as effectively.

- The sixth principle is that learners must develop the core skills of being able to see connections that lie between concepts, ideas, and fields. It is through this core skill

that learners can synthesise the information that they come in contact with through their networks and make sense of it.

- Seventh, the ultimate purpose of connectivist learning activities is to be able to update the learner with accurate knowledge constantly. That is, the connectivist educator does not assume that a particular piece of knowledge is static and could never be refined or revised. There is always the possibility of change.

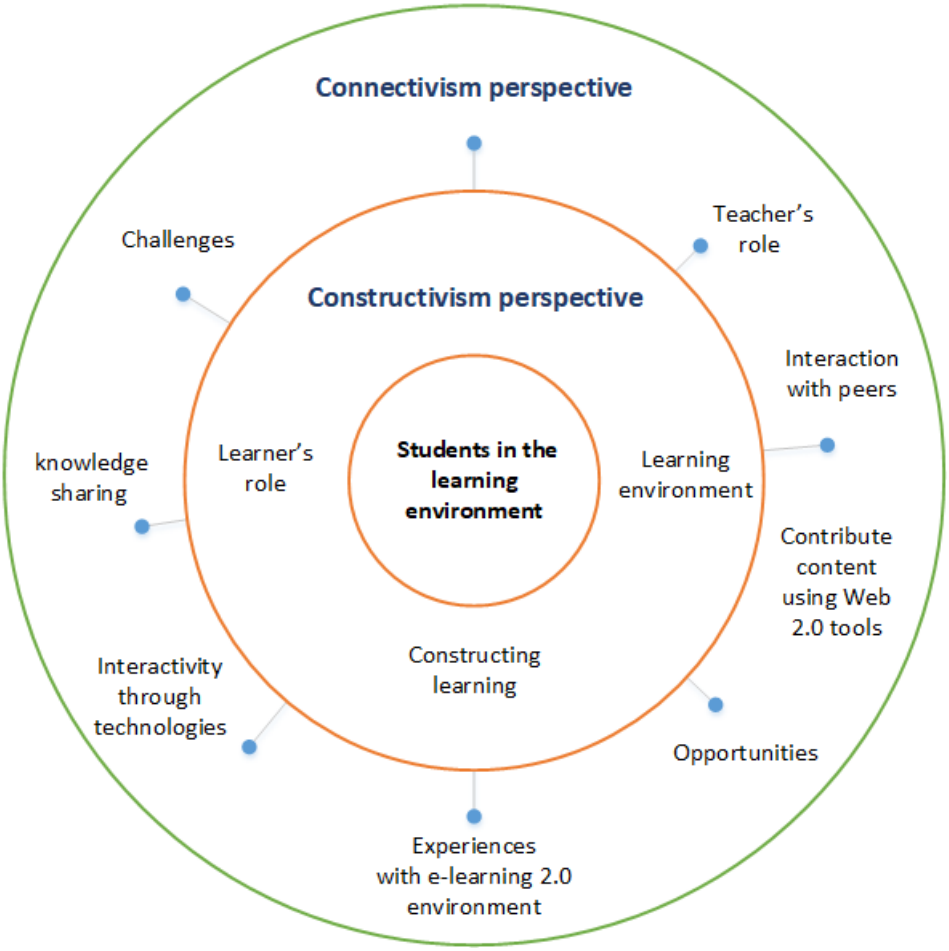
- The last principle is that the choices learners make is a learning process *per se*. With such a wide variety of media to connect to, a learner must develop the ability to choose wisely.

These principles show that to the connectivist educator, it is critical for the learner to be exposed to the community, and to learn as the community learns. Education is treated as a social instead of an individual phenomenon. The relevance of technology in the connectivist theory is primarily in the function that it serves in the development of networks. The Internet has largely made it possible for people all over the world to be connected and to share their knowledge with one another. Within social networks that are enabled by technological resources, people from different locations are "able to foster and maintain knowledge flow" effectively through their interdependence and validation of one another's findings (Siemens, 2005, p. 5). Thus, connectivism traces how knowledge flows from the individual to a small network such as a class, to a more extensive network such as the Internet, where it is verified and further developed, to provide even greater knowledge back to the individual, in a continuous process of learning. This is what makes connectivism the most appropriate theory in e-learning 2.0. In e-learning 2.0, the focus is on the utilisation of Web 2.0 tools to make users active providers instead of just content consumers, and in so doing enable them to learn from one another and build knowledge together. This is highly consistent with the connectivist perspective. This theory is a proper foundation for this study since this study is focused on using Web 2.0 tools for e-learning.

3.2.3 Summary and relevance to the study

The two theories reviewed in the previous sections are constructivism and connectivism learning theories. The relevance of the reviewed theories to the present study is mainly that each of these theories is utilised as lenses to understand the students' use of different Web 2.0 tools for learning in the Australian learning environment. Following, key aspects from each theory used to understand student experiences are explained.

Figure 8 Educational theoretical perspective



The constructivism perspective is relevant to the study in its consideration of the learner's roles in the learning process and the learning environment as key aspects, as shown in Figure 8. The theory assumes that learners must actively interact to build meaning, implying that learning can best occur when moving away from didactic, lecture-based and memorisation methods (Collins, 1991). The two considerations support the idea of shifting the focus from a teacher-centric model and allowing a learner-centric model so students can actively engage in knowledge creation instead of just knowledge reception. However, Saudi Arabian students come from a very different learning environment. As will be discussed in the next chapter, the learning environment in Saudi Arabia is gender-segregated (Ahmed Alhazmi & Nyland, 2013), embracing a teacher-centric and non-participatory system where teachers typically have all authority in making all decisions regarding the educational process (Alnassar & Dow, 2013; Mirza & Al-Abdulkareem, 2011). Their educational background is far different from the Australian learning

environment, which adopts a learner-centric model. As such, it is expected that Saudi Arabian students may face many opportunities from this shift, and also they may face some challenges while engaging with the e-learning 2.0 environment in the Australian higher education system.

The connectivism perspective is relevant to this study in its consideration and support to the key learning aspects of the constructivism learning theory. The connectivist learning theory stresses the importance of the learner's role and the interaction between the learner and the environment. In addition to that, the theory emphasises the interaction between the learners and their teachers in the learning process. Furthermore, the connectivist perspective considers the use of technology as a principle in the students' learning process, specifically the interaction, creating and sharing of knowledge using social network tools. Some of these learning-related interaction aspects are included in Figure 8. As such, the connectivist learning theory is relevant to the study in its consideration of the previous key aspects of the constructivist perspective (learner' role and learning environment) as well as the importance of the teacher's role and the learning interactivity using technology in the learning process and its related learning aspects.

3.3 Technological theoretical perspective

This section presents technological theories that show the ways people may experience technology. The theoretical technology perspective is guided by four theories as follows: the essentialist approach to technology based on Martin (2001), the social shaping of technology theory by Williams and Edge (1996), the theory of technological determinism by Thorstein Veblen's (1921) and the biased technology theory based on (Martin, 2001). These theories are relevant to this study because they outline some of the possible perspectives that Saudi Arabian students may have in entering and studying within the e-learning 2.0 environment in Australia. Each of these theories is discussed in the following subsections.

3.3.1 The essentialist approach to technology

The first theory that is considered is the essentialist approach to technology. According to Martin (2001), this approach involves attaching inherent values to specific technological devices and developing attitudes about such devices based on the values attached. A person or an entire society may attach a positive, negative, or neutral value to a piece of technology. When a positive value is attached, the person or community generally considers the piece

of technology as beneficial to society. As such, their attitude towards the use of technology is high, and they work towards developing the technology further. On the other hand, when a negative value is attached, then the people consider technology as harmful to society. They would suppress the use of such technology and decide against its further development. Attaching a neutral value to a piece of technology means that society considers the benefits and detriments of its use to depend largely on the intentions of those who use it. In such a case, the tendency of people's attitudes is to limit and regulate the use of technology, so that people with the right intentions can only use it for good.

From an educational point of view, it can be considered that free online presentation software such as the PowerPoint tool, launched by Google Inc., has a positive value. This is because it makes the preparation of content for learning much easier and also provides features to enable sharing, editing and modifying the presentation's content by others. On the other hand, computer games may be perceived as having a negative value, from an essentialist approach, because it distracts the learners from their studies and may make them addicted to playing games. The essentialist approach also considers that there are pieces of technology that have a neutral value (Martin, 2001). That is that they have both positive and negative effects on society. From an educational context, this can be said of the internet. While the internet has provided ways through which students can access a wealth of information uploaded from all over the world, it also opens the student to the risk of absorbing erroneous information because of the lack of control over what is placed on the internet for public consumption.

3.3.2 Biased technology theory

The biased technology theory also attaches values to pieces of technology (Martin, 2001). This makes it similar to the essentialist approach to technology. However, unlike the essentialist approach, this theory considers that each piece of technology has a positive value and a negative value, and that importance lies in which areas the innovation can be considered as positively biased or negatively biased (Martin, 2001). As such, it is ultimately in the different uses of particular pieces of technology that its values emerge. The use of a particular item of software may be considered as being positively biased in the context of the business setting, where its use makes the preparation and delivery of crucial corporate information more convenient. For example, considering that Microsoft PowerPoint has an entirely positive impact disregards complaints that the software makes lectures too

impersonal and transforms teachers to nothing more than the presentation's "voices" who read verbatim what is written on the presentation.

On the other hand, games that are considered to be addictive and therefore negative can have educational value, particularly in honing students' independent problem solving, enhancing their analytical skills and in developing social relationships with peers who also play the game. Thus, the theory would consider presentation software to be positively biased towards creating greater organisation and efficiency in preparing content, but negatively biased in terms of motivating students and making classroom interactivity more dynamic. A Massively Multiplayer Online Role-Playing Game (MMORPG), such as Second Life, may be viewed as being negatively biased in terms of focusing student attention on the content, but positively biased in engaging students to interact with their peers.

3.3.3 The social shaping of technology theory

Contrary to the essentialist approach, the social shaping of technology theory does not assume that technology has an inherent value. As developed by Williams and Edge (1996), the theory contends that the emergence of any piece of technology is brought about by societal developments. That is, the society shapes the technologies that come to be. This means that the technology that is developed is born out of some identified human need. Once that need is identified, people develop or utilise existing technologies in order to fill it (MacKenzie & Wajcman, 1999). Under this theory, cellular network technology and social networking websites may be assumed to have come about because of man's inherent need to connect with other people. The success of such sites as Facebook.com is attributed to society's tendency towards building connections among members (Hoffman, 2008).

From an educational point of view, it may be argued that the rise of distance learning technologies, such as those provided by Blackboard Inc. or Desire2Learn, was brought about by the intense demand of society for people with better education, particularly in the context of the workforce (Zdanow, 2011). That is, society has developed in such a way that education has become highly regarded, and technology was developed to enable people who were too busy to attend regular schooling or people who were too far away, to still experience higher education through virtual learning systems. Under the social shaping of technology theory, it can also be argued that the emergence of the e-learning 2.0 system is because of society's need for building a virtual learning environment that simulates the actual learning environment.

3.3.4 Technological determinism theory

A contrast to the social shaping of technology theory is the theory of technological determinism (T Veblen, 1963). The term 'technological determinism' is believed to have been first discussed by the American social scientist, Thorstein Veblen (1857–1929) (Bimber, 1990). While the previous theory proposed that society brought about the developments in technology (Williams & Edge, 1996), technological determinism considers that developments in technology shape the progress of society (Oliver, 2011). That is, instead of society determining the needs on which the basis for developing specific technologies are made, which is the case in social shaping theory, the development of technology is considered to be independent of society's needs. Instead, the theory holds that the success of a person in society depends significantly on that person's ability to maximise the use of existing and emerging technologies (Oliver, 2011).

Implicitly, the theory holds that people who are not able to grasp the application of the technologies that are currently accessible would not be able to compete with their peers who are able to do so. Thus, the technologically adept move forward, while those who are not able to catch up to technological advancements are left behind (Oliver, 2011). For example, with the advent of e-learning 2.0, schools may need a comprehensive change to their conventional teaching and learning strategy in favour of new pedagogical practices based on existing and emerging technologies. Also under this theory, it may be expected that students who are not able to grasp the application of the technologies that are currently accessible, such as utilising the internet for conducting research, would not be able to compete with their peers who are able to do so.

In the context of learning using Web 2.0 tools, it can be inferred from the theory that the ability of students to succeed in the e-learning 2.0 environment depends at least in part on their ability to utilise and manipulate Web 2.0 tools, such as social networking and file-sharing media. It may be contended through this theory that students who are not sufficiently oriented with the use of these tools would be unable to learn as effectively as students who are.

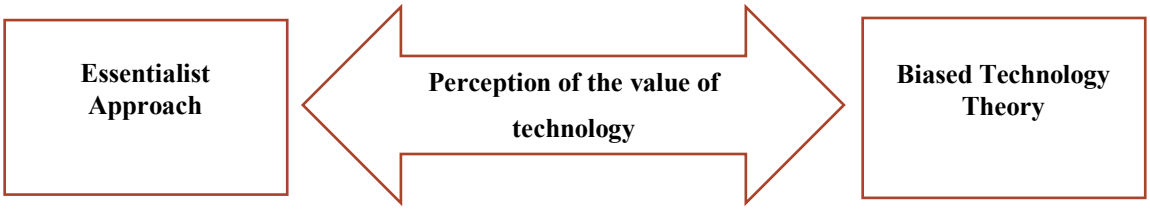
3.3.5 Summary and relevance to the study

The theoretical technology perspective section presented four theories. These are the essentialist approach to technology, the social shaping of technology theory, the theory of technological determinism and the biased technology theory.

The technological theories presented in section 3.3, 'technological theoretical perspective,' cover the possible different ways that people and societies may experience technologies, and combines important theoretical foundations for understanding how particular groups of people experience a specific set of technologies. There are similarities and differences in the approach of each theory. The experience of Saudi Arabian students may be better explained by a combination of the theories discussed, or through an explanation not covered by any of the theories.

The technological perspective is relevant to the study in its consideration to the individuals' need to use the technology and their perception of its value. From the technological perspective discussed, two pairs of alternative assumptions were drawn which might drive the Saudi Arabian students to use the technology, specifically, e-learning 2.0 tools or not. These alternatives are 1) perception of the value of technology per se and 2) driver for using technology. The two alternative assumptions are described below.

Figure 9 First pair of alternatives: perception of the value of technology



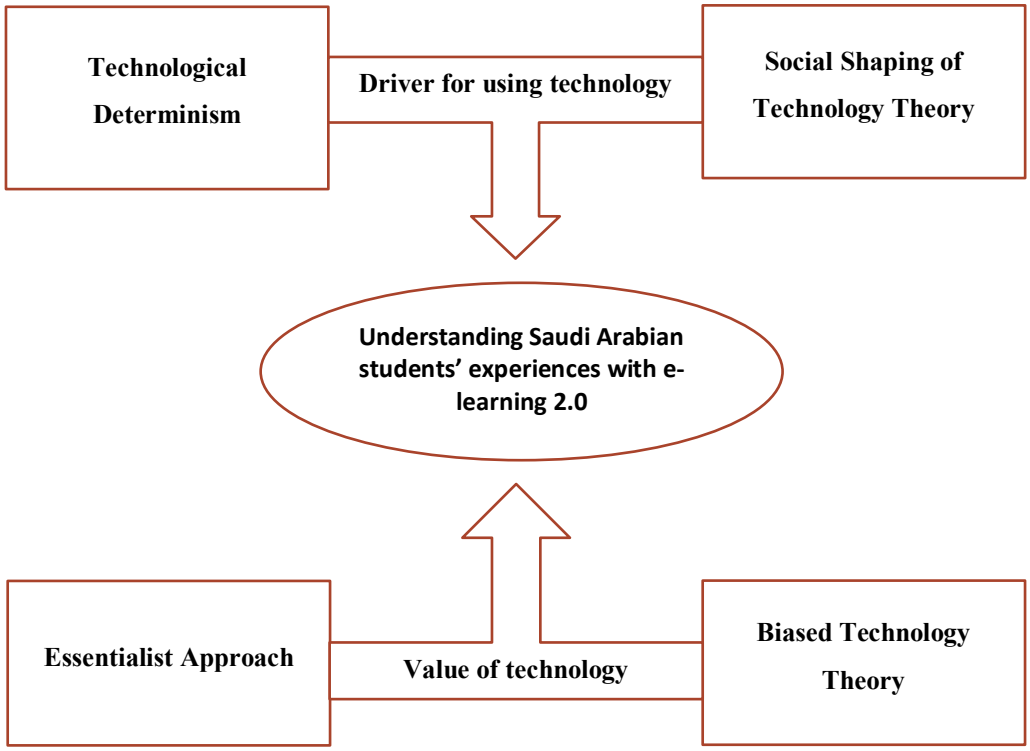
The first pair of alternatives to the students' perceptions of the value of using technology is shown in Figure 9. This pair of alternatives considers whether Saudi Arabian students have a more essentialist approach or a biased technology perspective in considering the value of the technologies that they interacted with in the e-learning 2.0 environment, and thus to use the technologies or otherwise. Saudi Arabian students may believe that the technologies have a definite positive or negative value, or they may believe that the value of the technology is relative to the educational context in which they utilised it.

Figure 10 Second pair of alternatives: driver for using technology

The second pair of alternatives, as shown in Figure 10, concern following technological determinism or social shaping theory. That is, it may be considered whether or not Saudi Arabians feel that the technologies they encountered in e-learning 2.0 helped them address needs that they had prior to entering the environment. In relation to the technological determinism, the students' requirement of using the technology, specifically Web 2.0 tools, may drive them to develop the necessary skills to use the technology for addressing their social or learning needs. Alternatively, following social shaping theory of technology, if a particular learning outcome is required, once students identify what they need to achieve the learning outcomes, they develop or utilise existing technology in order to fill those needs.

As previously mentioned, the relevance of these theories to this study is that they set some foundation and may help explain how Saudi Arabian students experience the technology related to e-learning 2.0. Figure 11 illustrates the relevance of the different theories in the present study. As shown in Figure 11, Saudi Arabian students' experiences with and attitudes towards using e-learning 2.0 may be understood or explained in the two alternatives.

Figure 11 Technology-theoretical framework



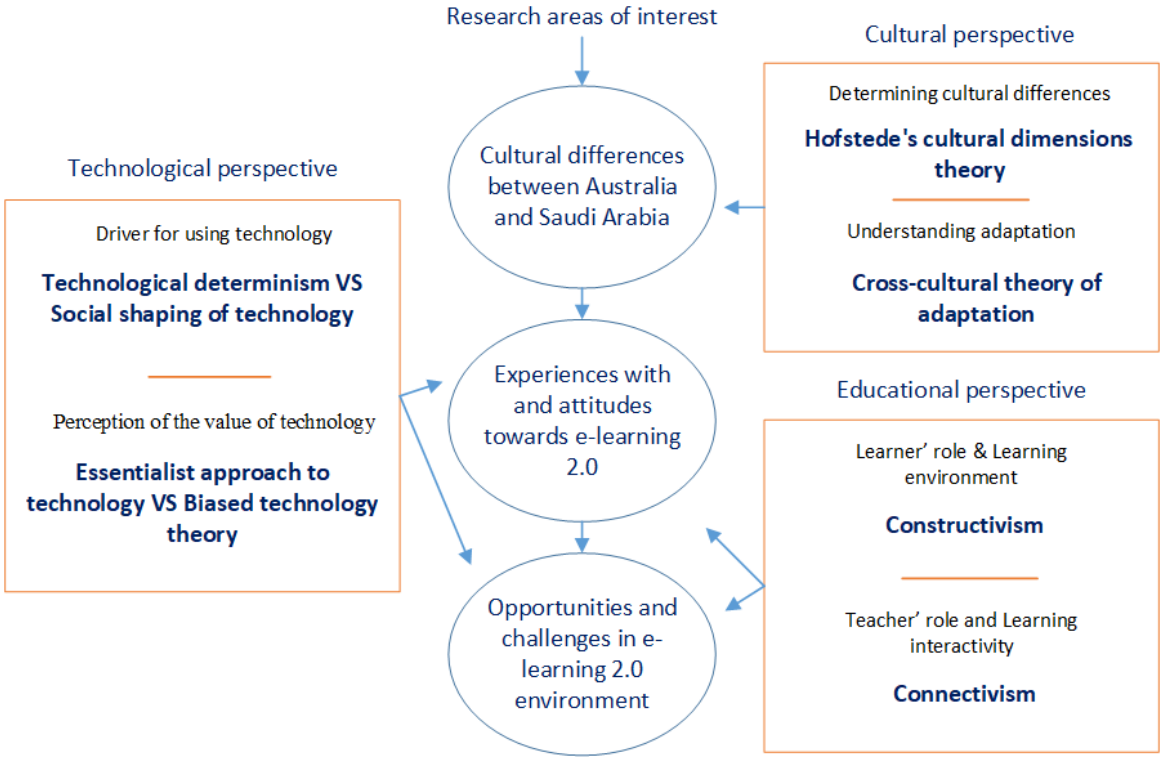
3.4 Synthesis of the theoretical framework

In this chapter, the cultural, educational and technological theoretical perspectives were discussed. The review of these three theoretical perspectives composes the theoretical framework for the study. As explained by Maxwell (2013), a conceptual framework for exploration is:

"a primarily conception or model of what is out there you plan to study, [which can inform,] the actual ideas and beliefs that you hold about the phenomena studied" (p. 39).

The synthesis of the theories discussed in the theoretical framework for informing the present study is illustrated in Figure 12.

Figure 12 Overall theoretical framework



The study's theoretical framework covers three areas of interest. These are determining the cultural differences between Saudi Arabian students and the host environment, exploring Saudi Arabian students' experiences and attitudes towards the new learning environment, and exploring the opportunities and challenges in the e-learning 2.0 settings encountered by Saudi Arabian students. As shown in Figure 12, the theoretical framework of the study is spread across the three areas of interest. Hofstede's cultural dimensions theory and the cross-cultural adaptation theory is directly focused on the first area of interest. However, as the three areas of interest are linked together, the cultural perspective indirectly influences the second area of interest (experiences and attitudes). It also influences the third area of interest (opportunities and challenges) because the students might have different points of view about engaging and using technologies.

The technological perspective is directly focused on the second and third areas of interest, as shown in Figure 12. As explained earlier when discussing the two pairs of alternatives in section 3.3.5, understanding from the technological perspective is polarised between the essentialist approach and the biased technology method, and between technological determinism and social shaping theory.

Figure 12 also shows that the educational perspective is directly focused on the second and third areas of interest. As discussed earlier in the educational perspective section, the learner's role, the teacher's role, the environment and the students' interactivity using Web 2.0 tools, are key aspects when attempting to understand the Saudi Arabian experience with e-learning 2.0. In the three areas of interest, the cultural, technological and educational perspectives are utilised as lenses to help understand the data gathered.

3.5 E-learning 2.0

E-learning 2.0 is a key concept in this exploratory study. The following sections discuss the emergence and development of e-learning 2.0 and the opportunities and challenges of e-learning 2.0. Since the emergence of the concept of e-learning 2.0 is linked with Web 2.0 tools, this section starts with a brief background on these tools. This section concludes by reviewing the phenomenon of e-learning 2.0 in both the Australian context where the study is set and the Saudi Arabian context where the students are coming.

3.5.1 Web 2.0

The first incarnation of Web 1.0 was developed from a project proposed by Berners-Lee and Cailliau (1990). Web 1.0 is characterised by the one-way flow of information from content provider to content consumer through linking users from individual computers to content via typical telephone lines (Lanxon, 2008). By contrast, Web 2.0 is enabled by social media and information sharing services, which allow users to be content sharers, that is, people who both absorb and contribute content to the web (Colomo-Palacios, 2010; Desai, 2010). Web 2.0 is empowered by better internet connectivity than the classic telephone lines and by innovations such as web applications that enable users to share content across the internet better. As explained by Baxter and Connolly (2014), this era considers the internet as a vast, organic consciousness composed of inputs from the collective population of the world who have access to it, making the flow of information less controlled but with greater potential for refinement and verification.

3.5.2 Web 2.0 tools

There are numerous Web 2.0 tools which can be integrated into learning settings (Crook & Harrison, 2008; Karahan & Roehrig, 2016; Lee & McLoughlin, 2011). Some examples of these are blogs and microblogs, which facilitate the discussion of course-related topics (Borau et al., 2009); Wikis which enable individual members of a class to contribute their

own inputs in developing a class-wide knowledge base on course content (Hoewe, Bowe, & Zeldes, 2012; Young & Pérez, 2012); and podcasts, and content sharing tools which enable students to share and engage a wide range of multimedia information relevant to their course content (Krauskopf, Zahn, & Hesse, 2012).

Boyd (2007) proposed that Web 2.0 tools have the capability to support three crucial aspects of learning-centred instruction. These are conversational interaction, social feedback, and social relationships. At the most basic level, Web 2.0 tools can enable those who are directly participating in formal education, the students and their teachers, with a means to keep in contact and to share ideas while at the same time recording them. McLoughlin and Lee (2011) claim that Web 2.0 tools have qualities that contain the greatest potential for enhancing education. The different Web 2.0 tools, such as discussion boards and email conversations, allow for ideas to be recorded as they are expressed, making it easier to track and compare inputs. More than this, the breadth and reach of Web 2.0 tools allow for educational collaboration at the formative level that is much more comprehensive than anything that was previously available (Lee & McLoughlin, 2011). The teacher no longer needs to assume complete responsibility for the delivery of content; students can go out into the world, through Web 2.0 tools, in order to discover and discuss content with other personalities. Social networking tools can be tapped in order to contact key persons who may be able to share input on subject matter that is more current and relevant than anything contained in published textbooks. It can also be used to connect different groups of learners located at vast distances from one another, in order for them to be able to share ideas and to collaborate on achieving shared learning objectives (Lee & McLoughlin, 2011).

The appearance of web 2.0 tools led to the emergence of a new concept in the fields of computer-assisted learning and distance education, that is, of e-learning 2.0. E-learning 2.0 depends on Web 2.0 tools (Downes, 2007; Karrer, 2007; Lee & McLoughlin, 2011), which make possible access to other people as well as access to information (Brown & Adler, 2008, p. 18). The next section introduces the concept of e-learning 2.

3.5.3 The concept of e-learning 2.0

As previously discussed, new technologies, such as Web 2.0 tools have made it possible for the emergence of new learning models such as e-learning 2.0. E-learning 2.0 is a relatively new concept which is based on the idea that Web 2.0 tools, internet services that empower users to create and share online content instead of just receiving them, can be utilised to enhance learning outcomes, address various learning management issues, and

help build a learning community (Downes, 2007; Karahan & Roehrig, 2016; Lee & McLoughlin, 2011). The term e-learning 2.0 was first used by Stephen Downes in 2005 (Elisa, 2013). According to Downes (2007), e-learning 2.0 transfers the focus of using online learning resources from delivering knowledge to students to allowing them to construct their own knowledge. Brown and Adler (2008, p. 19) indicate that one of the most important contributions of e-learning 2.0 is its ability to support social learning. Social learning enables learning to be informal, networked, and electronically supported (Brown & Adler, 2008; Ehlers, 2009).

Since e-learning 2.0 is a relatively modern concept, confusion between the traditional e-learning concept and e-learning 2.0 sometimes may occur, particularly among the learners (Yuen & Yaoyuneyong, 2016). The confusion was made evident after collecting and analysing the data in this research. Therefore, the following section provides a description of the differences between e-learning 1.0 and e-learning 2.0.

3.5.4 Different between e-learning 1.0 and e-learning 2.0

The difference between e-learning 2.0 and its precursors is described more specifically in the work of Karrer (2007). As shown in Table 1, the main components of e-learning 1.0 were Learning Management System (LMS), a software platform which delivers and administers educational courses and general training (ProProfs, 2017), as well as courseware and authoring tools (Karrer, 2007). These components were mostly faculty-oriented and controlled. That is, faculty members would utilise these tools in order to build and administer online courses and assessments.

According to Karrer (2007), there is a mid-way era of e-learning between e-learning 1.0 and e-learning 2.0, which is considered as e-learning 1.3. During the era of e-learning 1.3, content development was made more convenient through rapid authoring tools, but these tools were still built for the use of faculty members (Karrer, 2007). Learning Content Management Systems (LCMS) were developed for creating, developing and managing the content in the learning environment. However, in the LCMS, the focus was on managing curricula, instead of the learners' experience (ProProfs, 2017). According to Karrer (2007), e-learning 1.3 joined the power of the Internet to allow multiple users to collaborate in developing content together in-between classes, in order to come up with more balanced outputs. Furthermore, the content developed in e-learning 1.3 was continuously updated based on feedback. That is, educators were able to refine their materials based on how the materials were received by learners.

Table 1: Evolution to e-learning 2.0 adapted from Karrer (2007)

E-learning 1.0	E-learning 1.3	E-learning 2.0
LMSs Courseware Authoring tools	LCMSs Reference hybrids Rapid authoring tools	Wikis Social networking Bookmarking tools Blogs

Significant changes in theoretical perspective came about when Web 2.0 tools were considered for use in e-learning environments. As previously discussed, the connectivist learning theory stressed the learner's roles and that learning could best occur when students actively interact with the environment and reflect upon their experiences to construct meaning. The connectivist learning theory also emphasised the essentiality of interactivity in the learning process. This interactivity is accomplished through the use of Web 2.0 tools (Siemens & Tittenberger, 2009). In the e-learning 2.0 stage, the focus was shifted on what learners can learn from themselves and from one another, instead of from materials developed by their teachers. The content was developed as classes progressed, and were built from the bottom-up through learner experience and interactivity (Karrer, 2007).

3.5.5 Opportunities of e-learning 2.0

E-learning 2.0 has been used as a mechanism for improving interaction (Arbaugh & Benbunan-Fich, 2007), increasing learning effectiveness (Venkatesh, Croteau, & Rabah, 2014), and enhancing collaborative learning and research experience (Karahan & Roehrig, 2016). According to Faiola and Matei (2010), the affordances of an educational construct are qualities that allow students to perform specific actions. E-learning 2.0, through the use of Web 2.0 resources, has a variety of opportunities for students (Bassani, 2014; Crook & Harrison, 2008; Rahimi, Berg, & Veen, 2015). For example, an e-learning 2.0 environment allows students to develop their own learning content, enabling them to have a more in-depth familiarity with the subject matter (Crook & Harrison, 2008). The student comes to treat the course as much more than just a subject that he or she has to take. E-learning 2.0 also allows the student to take greater control of the learning process and reduces imbalances in the power relationships between students and teachers (Rahimi et al., 2015). E-learning 2.0 broadens the scope of student interactivity and empowers the development of a learning community (Bassani, 2014).

The learning community is one of the essential affordances of e-learning 2.0 environments (Bassani, 2014). According to Bonk et al. (2004), every academic institution should strive to become a learning community – a community whose members are

genuinely and actively engaged in learning together and learn from each other. The vision of e-learning 2.0 is to develop learning communities that span across different continents, and penetrate language and cultural boundaries and endure despite the differences among its members (Bassani, 2014).

Affordances of using an e-learning 2.0 environment can be grouped by potential affordances of using new technologies used for e-learning. For example, Siemens and Tittenberger (2009) outline the potential affordances in six categories:

- Access to extensive resources available on the Internet. The students can use these resources, such as Wikipedia for handling their concerns relating to their research or courses.
- The state of presence or being available online.
- Self-expression, where a learner, for example, can create a virtual avatar, such as in Second Life (an online virtual world) to interact with places, objects or other avatars virtually (Duval, Sharples, & Sutherland, 2017). The learners can also use their Web 2.0 tools profile to represent themselves.
- Creation and sharing of new content and receiving feedback from one another
- Interaction with others, through synchronous tools, such as working together in real-time using a chat room or Skype, or through asynchronous Web 2.0 tools, such as discussion boards or Twitter.
- Aggregation of information and building relationships through social networking sites, such as Facebook or Google Apps (Siemens & Tittenberger, 2009).

3.5.6 Challenges of e-learning 2.0

Based on the descriptions of e-learning 2.0 opportunities provided in the previous section, it is clear that students can potentially gain access to many opportunities through immersion in an e-learning 2.0 environment (Gokah, Gupta, & Ndiweni, 2015). They can gain access to insights from different people across the world – people who are involved in the same fields of study (Zakaria, 2013). In so doing, students are able to gain greater, more comprehensive knowledge in their degree programs (Ehlers, 2009; Gokah et al., 2015; Rosen, 2009). However, the students may also find some challenges when engaging in an e-learning 2.0 environment. Some of these challenges revolve around safety and privacy

(Weippl & Ebner, 2008). As e-learning 2.0 depends on the use of Web 2.0 tools, privacy protection for both the students and teachers needs to be considered. Because most Web 2.0 tools are built and managed by a third party, a security risk may exist. Weippl and Ebner (2008) identified three potential security and privacy risks when using Web 2.0 tools for learning. The first is the difficulty associated with using some complicated tools where potential errors may occur due to a weak design and poor coding. The second is the difficulty in identifying plagiarism in a students' work – content copied and pasted without referring to the resources. The third is relating to the problem of exposing information about the students, including personal details, comments, and discussions conducted by students among each other and between the students and their teachers.

Siemens and Tittenberger (2009) also identify two critical challenges which associated with the growing amount of content created by learners in the e-learning 2.0 environment, especially when learning is being mostly under the control of the learners themselves. The first challenge is concerning the variation between learners in how they will know what they need to know. The second is concerning how learners would make sense of the information that is split and distributed in different Web 2.0 tools and social media channels, compared to the well-organised information such as those found in traditional textbooks (Siemens & Tittenberger, 2009).

The experience of Saudi Arabian students using e-learning 2.0 in the Australian higher education environment can be more challenging than their learning experience in classrooms. The Saudi Arabian students' lack of proficiency in the English language may lead to some challenges in participating in the e-learning 2.0 environment, particularly concerning understanding instructions (Assareh & Bidokht, 2011; Fryer, Bovee, & Nakao, 2014), as well as at the online group working and discussions level. The language barrier was found to be the most prevalent challenge facing international students in foreign higher education settings (Li, Fox, & Almarza, 2007; Littlemore, Chen, Koester, & Barnden, 2011; Marlina, 2009; Preisler, Klitgard, Fabricius, & KlitgÂrd, 2011; Qiu, 2011; Ramachandran, 2011). These studies all indicate that most of the communication issues between international students and other participants were related to the students' language barriers. If the issue of the language barrier is adequately tackled with learners, it will enhance their participation and the learning process, and they may become more productive (Ko & Rossen, 2017). While the language barrier may not be the focus of this study, it is discussed here as one possible challenge that may be affecting how Saudi Arabian students interface with their institution’s e-learning 2.0 system.

The Information Technology (IT) literacy issue can be a challenge facing students. If a learner has poor IT skills, he or she may not be able to fully participate in e-learning and gain the intended content (DiSessa, 2001). As such, students who are not familiar with the use of Web 2.0 tools, for example, can be prevented from getting the full benefits of their institution's e-learning 2.0 systems.

The idea of e-learning 2.0 is constructed on principles such as interactivity, openness, collaboration, flexibility, liberty and gender equality (Grosseck & Malita, 2017; Huang, Hood, & Yoo, 2013). Some of these principles may be in direct contrast with the Saudi students' cultural and educational upbringing. Thus, the students' challenges in using the e-learning 2.0 environment might stretch beyond the educational challenges.

Since the study focuses on understanding the Saudi Arabian students' experiences with e-learning 2.0, and challenges and opportunities that emerge from their experiences in the Australian higher education context, the next section describes the availability and use of e-learning 2.0 in the Australian educational context.

3.5.7 Uptake of e-learning 2.0 in Australia

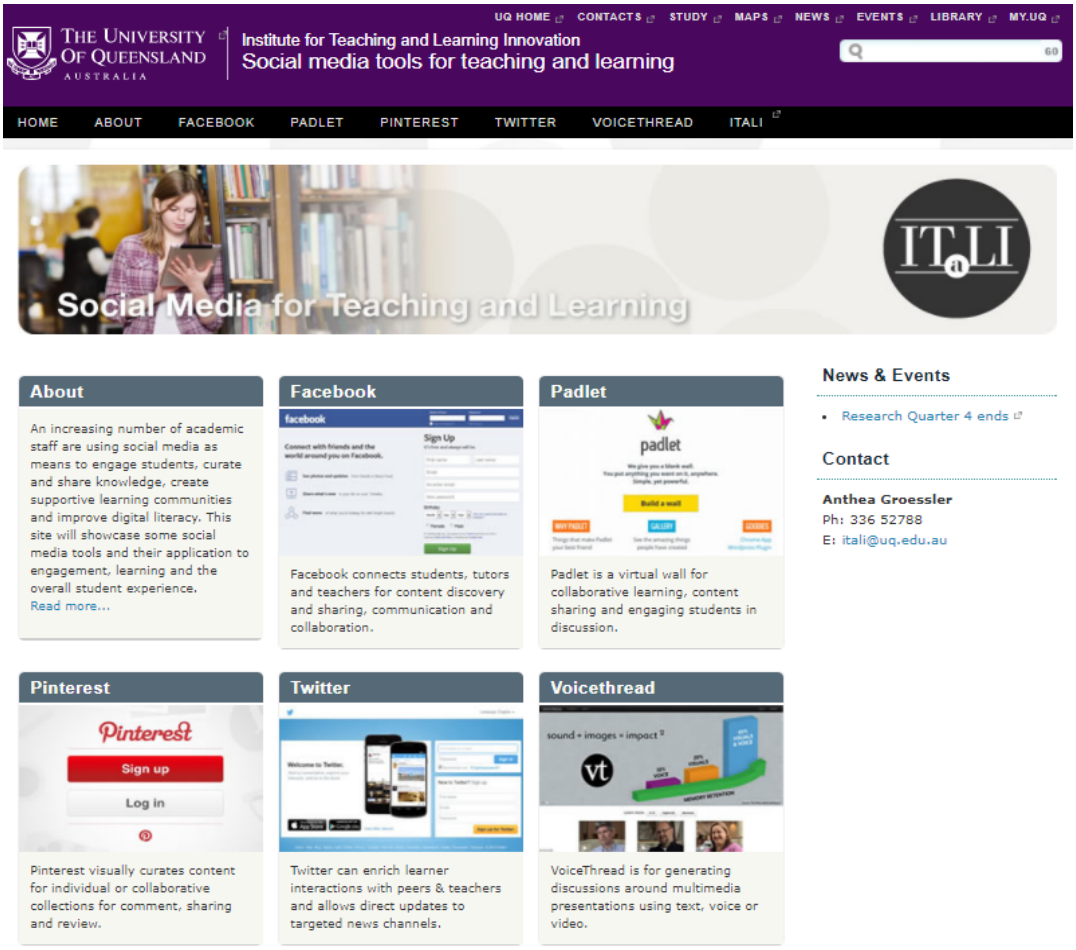
Benson & Samarawickrema (2009) conducted a case study on how two Australian universities made use of Web 2.0 technologies in their e-learning design. In both universities, Benson & Samarawickrema (2009) found that many options were made available to curriculum designers, educators, and researchers to use towards the fulfilment of their responsibilities to students. In particular, the study showed how social networking sites, instant messaging services, and message boards were enabling students and teachers in distance learning programs to have more extensive collaboration.

In 2013, a survey conducted by the Australian Flexible Learning Framework (2013) showed the developments of e-learning 2.0 in Australian education. It was found that over 48 per cent of activity in Australian vocational education and training institutions had made use of e-learning 2.0, an uptake of four per cent from the previous survey conducted in 2011. There were differences across institutions on how to incorporate e-learning 2.0 in their operations and practice. In particular, 57 per cent of institutions had yet to formalise their e-learning 2.0 while 26 per cent claimed to have incorporated it in every aspect of their operations. With regard to teachers, however, the survey found that about 95 per cent of vocational education and training teachers and trainers are competent in the use of e-learning 2.0 technologies and had been using at least one such technology in their regular practice. Also, 65 per cent of teachers claimed to be confident in their use of e-learning 2.0

in their classes, compared to only 54 per cent in the previous survey. At the same time, teachers and trainers were increasing their use of e-learning 2.0 technologies and were participating in training programs in order to further develop their competence in such technologies (Flexible Learning Advisory Group, 2013).

Figure 13 shows an example of the presence of an e-learning 2.0 environment in the Australian higher education context that utilises different social media and Web 2.0 tools, such as microblogs, podcasts, message boards for teaching and learning.

Figure 13 Social media for teaching and learning at Australian higher education



As discussed earlier, the existence of this community in Australia's e-learning 2.0 environment presents many opportunities for students to engage (Akbari, Naderi, Simons, & Pilot, 2016). Students stand to learn much from their engagement in these settings, as they are exposed to a wide diversity of ideas on a specific topic through Web 2.0 tools (Doolan & Gilbert, 2017; Karahan & Roehrig, 2016). As this section has reviewed the status of e-learning 2.0 in Australian higher education, the following section proceeds to review the state of e-learning 2.0 in the Saudi Arabian context.

3.5.8 Uptake of e-learning 2.0 in Saudi Arabia

This section reviews the state of e-learning 2.0 in Saudi Arabian higher education, precisely at the time that the participants in this research were studying in that country. It is worth noting that most of the students who participated in this research came from the age group of 26 to 30 and had experienced Saudi higher education between 2005 and 2011, or before 2012 when this research started. As such, it is relevant to understand the experiences of these students with e-learning 1.0 or e-learning 2.0 prior to engaging in the Australian e-learning 2.0 environment.

The following discussion focuses on showing the state of e-learning 1.0 and 2.0 in Saudi Arabia at the time that these students were studying in Saudi Arabian higher education. This section contains three subsections as follows: the first discusses the status of e-learning 1.0 in Saudi Arabia, the second describes the barriers impeding the development of e-learning 1.0 in Saudi Arabia and the last subsection reviews the status quo of e-learning 2.0 and the possible usage of Web 2.0 tools for e-learning in the Saudi Arabian higher education environment.

- ***Status of e-learning 1.0 in Saudi Arabia***

Many studies have reported that by 2017 the culture of teaching and learning in Saudi Arabian schools was still teacher-centred and based mostly on didactic lecturing and indoctrination models (Alnassar & Dow, 2013; Alqahtani, 2017; Alturki, 2016; Harrison, 2008; L. Smith & Abouammoh, 2013b).

A number of studies have described Saudi Arabian culture as conservative and private (Alebaikan & Troudi, 2010; Glowacki-Dudka & Treff, 2011; Onsman, 2011). As with some other countries in the Middle East, Saudi Arabian culture is strongly influenced by Islam, with many tenets of the religion integrated deeply into the nation's legal and cultural norms (Glowacki-Dudka & Treff, 2011). Onsman (2011a), explained that these tenets tend to limit freedom of speech and public expression in the country, and this logically runs in contrast to the very nature of online communication, which makes information and opinions free for everyone to give and receive. At the time when the participants in this study were conducting their studies in Saudi Arabia, it was reported in the literature that Saudi culture was one of the reasons why Information and Communication Technology ICT in higher education had been slow to progress.

- ***Barriers impeding the development of e-learning in Saudi Arabia***

Alebaikan and Troudi (2010) conducted a study to determine the barriers impeding the development of blended learning systems in Saudi Arabian higher education and found three main challenges. Blended learning is the mixing of e-learning with traditional learning systems. That is, for example, having some of the lesson content discussed in face-to-face classroom settings and assigning tasks that the students can do on e-learning platforms in order to enrich and augment classroom-delivered content (Alebaikan & Troudi, 2010).

First, among these barriers, according to Alebaikan and Troudi (2010), was found to be the incompatibility between the stakeholders' perception of education based on traditional norms, and the idea of online education. This finding is consistent with an earlier study on the value of online degrees in the Middle East, wherein it was found that people in the Middle East generally regarded an online degree as having a lesser value than a traditional degree (Dirani & Yoon, 2009).

Another challenge found in the work of Alebaikan and Troudi (2010) is the lack of knowledge and expertise of Saudi Arabian teachers and course developers on e-learning systems, which was also considered in Al-Kahtani et al. (2006).

The third challenge found by Alebaikan and Troudi (2010) pertained to problems in the attitudes of learners to e-learning, in which Saudi Arabian students while possessing sufficient knowledge of Internet tools, may not be prepared to consider such tools as educational instruments. This challenge was also noted in other studies that investigated students' perception and evaluation of existing e-learning systems in the Middle East (Ozkan & Koseler, 2009; Selim, 2007). According to Selim (2007), this has led to the application of e-learning systems such as Moodle and some other LMSs to be mainly restricted to data storage and transfer, rather than its supposed purpose of fostering constructivist learning.

A review by Al-Asmari and Khan (2014) revealed that the situation in Saudi Arabia has changed in some aspects in the past few years. As discussed by Al-Asmari and Khan (2014), e-learning technologies have been increasingly adopted in institutions there, and this has led to an increase in training provided for teachers so that they would be better equipped to make use of new e-learning tools for their practice. There has reportedly been a massive growth in the sector of distance education in the country, which can only continue in the succeeding years (Ali Al-Asmari & Rabb Khan, 2014). In line with this, concern over the quality of e-learning-based education in the country has also emerged, with studies such

as that conducted by Iqbal et al. (2012). Through satisfaction surveys, Iqbal et al. (2012) found that students in Saudi Arabia were more satisfied with e-learning aspects of their institutions than students from institutions in other countries in the Middle East. This indicates that e-learning is certainly developing in Saudi Arabia, although Iqbal et al. (2012) did not focus specifically on e-learning 2.0.

- ***Status of e-learning 2.0 in Saudi Arabia***

Few studies on the possible utility of Web 2.0 tools for e-learning in Saudi higher education settings could be found. Alzahrani and Woollard (2012), examined the application of Web 2.0 tools in Saudi Arabian universities and found that such application is in its early stages. As explained by Alzahrani and Woollard (2012), Web 2.0 tools were being adopted mainly in order to accommodate the growing student population in Saudi Arabian universities, which is becoming increasingly more challenging to accommodate in traditional classroom settings.

This claim is supported by Parvez and Hussain (2013), who examined the use of web 2.0 tools in Saudi Arabian universities. Examining the web presence of 24 government-controlled universities as well as eight private universities, Parvez and Hussain (2013) took note of the different Web 2.0 applications that were being used at each of them. Results of the study showed that 22 out of 24 of the government universities and all of the eight private universities have Facebook and Twitter accounts. Furthermore, 20 government universities and five private universities made use of YouTube, and 15 state universities used Rich Site Syndication (RSS), a type of web feed, which provides users with frequent updates of online content (G. Jones & Neubert, 2017). Other Web 2.0 tools such as Flicker, Linked In, Blogs/News portals and Tumblr were also used but at a much lower frequency. This study indicates that Web 2.0 tools are presently in use in Saudi Arabian universities, and shows increased engagement with this technology. However, the study did not go into detail on how these tools were being used, particularly regarding e-learning 2.0. In addition, the study was only concerned with determining if the websites of the universities showed the presence of such tools. The need to determine how these tools are being used, as well as the actual experiences of the students using them, thus remains an open question.

A more recent related study by Alblehai (2016) found that traditional teaching methods that are teacher-centric and consist mainly of lectures remain the preferred method of teaching by professors in Saudi Arabian universities. There remains a strong emphasis on traditional teaching, making Web 2.0 tools underutilised despite their presence in this

environment. Alblehai (2016) states that some universities use commercial learning management systems, such as Blackboard or WebCT, and some Arabic-based learning management products, such as Tadarus, have even emerged to cater specifically to the needs of Arabic-speaking students and teachers. However, Alblehai (2016) claims that the actual use of these services by teachers in universities has remained limited. One possible explanation that Alblehai (2016) considered is that these teachers have yet to experience genuine benefits from the use of these services, and may see them as just a hindrance. As such, there remains a need to raise awareness among Saudi Arabian faculty members and students in the broader learning benefits of collaborative interactivity and discussion that can be engaged by using Web 2.0 tools.

3.6 Summary of the chapter

This chapter has contained two main sections. The first section focused on reviewing two theoretical perspectives. These were educational and technological perspectives. The educational perspectives discussed the learning theories that explain how students learn and how technology can facilitate student learning in an educational context. The theories reviewed were constructivism and connectivism. The relevance of the reviewed theories to the present study was explained, as were the key aspects from each theory used to understand student experiences.

As for the technological perspective, four theories were reviewed and discussed. These are the essentialist approach to technology, the social shaping of technology theory, the theory of technological determinism and the biased technology theory. The theories were combined into two potential duality alternatives that may help to explain the Saudi Arabian students' use of the technology used in e-learning 2.0 in Australian higher education environment. The chapter also presents a synthesis of the combined theoretical framework, the cultural, educational and technological perspectives.

The second main section of this chapter discussed the emergence and development of e-learning 2.0 as a relatively new concept in the field of computer-assisted learning, which is based on Web 2.0 tools. This section also reviewed the relevant literature regarding the status of e-learning 2.0 in both contexts: the Saudi Arabian and the Australian context. The review showed that a wide range of Web 2.0 tools is present and in use in the Australian higher education learning environment. On the other hand, the review indicated that most of the Saudi universities take advantage of using some commercial learning management systems, such as Blackboard, and there is also an improvement in the presence of Web 2.0

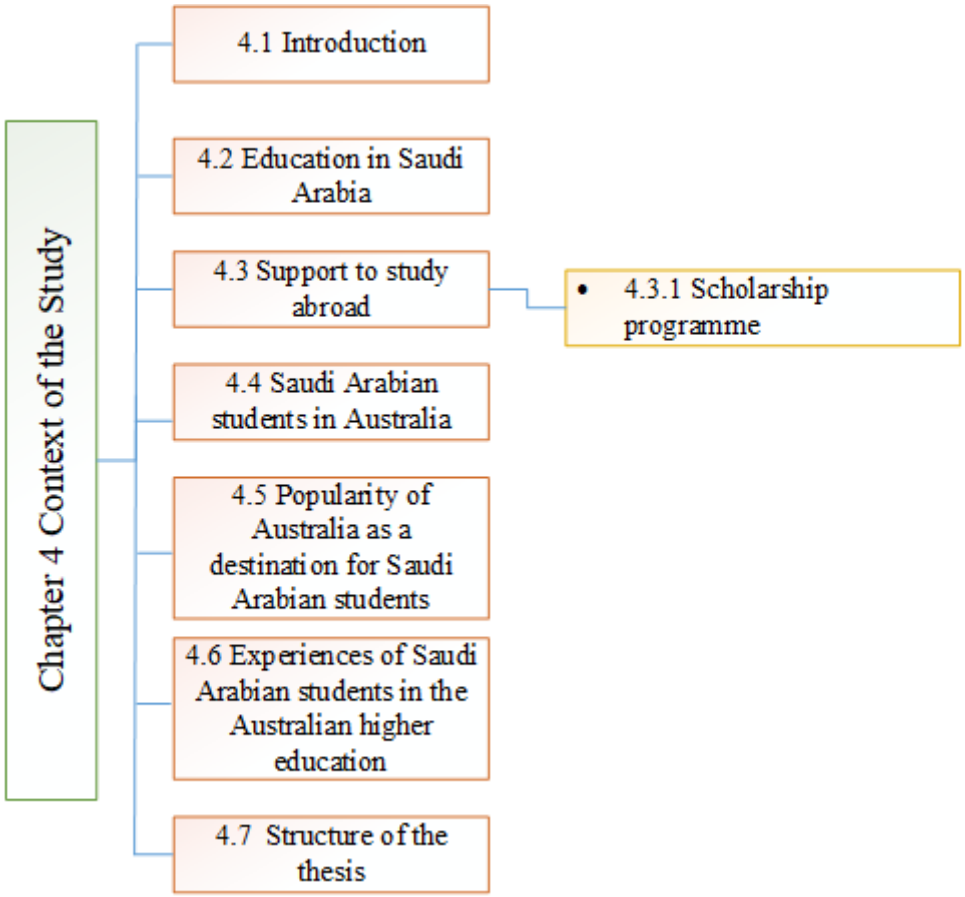
tools in Saudi universities in the last few years. However, details are scarce on the way these learning tools were being used, particularly for e-learning 2.0, and on what are the actual experiences of the Saudi students who use them.

Chapter 4
Context of the Study

4.1 Introduction

In the previous chapter, the educational and technological perspectives, along with the crucial second concept related to this exploratory study, were discussed. In this chapter, the context of the phenomenon under exploration is described. This chapter consists of seven sections, as shown in Figure 14. After this introduction, section two introduces the state of education in Saudi Arabia. Section three describes the external Saudi Arabian scholarship program, while Section four describes the Saudi Arabian students' community in Australia. Section five covers the possible factors behind the popularity of Australia as a study

Figure 14 Map of Chapter 4



destination for Saudi Arabian students. Section six is a review of studies that have explored Saudi Arabian students' experiences in the Australian higher education settings, and finally, a summary of this chapter is given in section seven.

4.2 Education in Saudi Arabia

In 1925, the Directorate of Knowledge was established as the first Educational System in Saudi Arabia (Saudi Ministry of Education, 2017b). In 1951, the Ministry of Knowledge was established as an extension and development of the Directorate of Knowledge to regulate and manage pre-tertiary education policies in Saudi Arabia. At that time, primary, preparatory, and secondary education was only available for males, and tertiary education did not exist (Saudi Ministry of Education, 2017b). Six years later, in 1957, the need to educate Saudi Arabian citizenry rather than sending them to study abroad (Al-Rawaf & Simmons, 1991; Almunajjed, 1997), led to the establishment of the first single Saudi university for males, King Saud University in Riyadh, the capital of Saudi Arabia (King Saud University, 2017). At that time and due to the traditional culture of gender segregation, education for girls was limited to their homes, where a 'sheikh,' a community leader and man respected for his religious education, came to teach them the basics of reading and writing. However, in the late 1950s and early 1960s, the status of women's education had changed (Almunajjed, 1997). In 1960, the first school for girls was established, declaring a starting point of girls' formal pre-tertiary education in Saudi Arabia (Al-Rawaf & Simmons, 1991). By the early 1980s, tertiary education was also available to all Saudi girls (Almunajjed, 1997).

In Saudi Arabia, all students, whether Saudi or non-Saudi citizens, can get primary education free of charge. However, higher education is exclusively available for Saudi citizens. Over the past 50 years, the higher education sector in Saudi Arabia has experienced enormous development, especially in the last 20 years. The number of universities in Saudi Arabia has increased from seven in 1995 to 33 in 2017. Nowadays, Saudi Arabia has 25 public universities and eight private universities, and all are controlled entirely by the Saudi Ministry of Education (Saudi Ministry of Education, 2017a).

Like other educational systems, Saudi higher education faces its own challenges and demands. Alkhazim (2003) proposed that Saudi Arabian higher education faces three challenges: "limitation of places, depletion of resources, and quality measures" Alkhazim (2003, p. 1). Alnassar and Dow (2013) stated that the university learning and teaching style in Saudi Arabia is based largely on didactic lecturing and indoctrination models. L. Smith

and Abouammoh (2013a) identified five major challenges that Saudi Arabian higher education needed to address in order to gain and sustain a 'world-class' reputation. These are:

"the tension between academic vision and cultural norms; the lack of an appropriate governance model for Saudi universities; developing and sustaining international credibility; maximising opportunities and achievements for women in higher education; and the tension between traditional Saudi approaches to teaching, learning and student assessment and the needs of a global knowledge economy" (L. Smith & Abouammoh, 2013b, p. 181).

Smith and Abouammoh (2013b) argue that higher education in Saudi Arabia is still stuck between the desire to develop a high standard educational system, and the desire to maintain the prevailing religious traditions and social norms, which are essentially protected by the people and the government.

Mirza & Al-Abdulkareem (2011) described the educational environment in Saudi Arabia as teacher-centric and non-participatory. That is, teachers have the decision-making authority related to all educational matters. Alamri (2011) argues that the faculty members should shift the focus from teacher-centric to student-centric, allowing for the creation of a student-participatory environment. Apart from the co-educational university, King Abdullah Science Co-ed University opened in 2009, the learning environment within Saudi Arabia schools and higher education system remains gender segregated (Ahmed Alhazmi, 2013).

Saudi Arabian schools and higher education institutions have been considerably slower in establishing their own online learning infrastructures (Mirza & Al-Abdulkareem, 2011). Mirza & Al-Abdulkareem (2011) argue that Saudi Arabia's cultural norms may be one of the reasons that many Saudi students are anxious about the use of technology in the pursuit of learning objectives.

Since 2005, the authorities in Saudi Arabia began openly to admit the need for a new educational policy paradigm (L. Smith & Abouammoh, 2013a). The 11 September 2001 (9/11) terrorist attack was one motivating factor, given the fact that 15 of the 19 terrorists involved in 9/11 were from Saudi Arabia. This event put more pressure on Saudi Arabian authorities to push towards adopting a Western-global educational system, changing the university curricula and supporting Saudi nationals to study abroad (Elyas,

2011). This led to the start of a third stage of the scholarship program in Saudi Arabia. The following section introduces the scholarship program with its three stages.

4.2.1 Support to study abroad

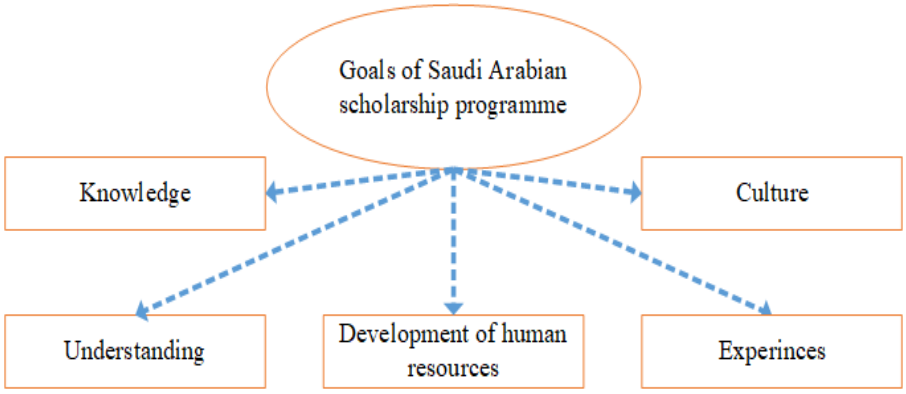
There were three stages of the external scholarship program in Saudi Arabia. The first stage was launched in 1927, during the reign of the founder of Saudi Arabia, King Abdul Aziz Al Saud. In the first year of the program, 14 Saudi students were sent to Egypt for undergraduate study (Al-Duwaihi, 2015). The second phase began in 1947 when possible study destinations were expanded to include some Arabic States as well as Europe and America. Students were encouraged to study Masters and PhDs in different fields. In 2005, the third phase of 'the Custodian of The Two Holy Mosques' Overseas Scholarship Program' began (Saudi Ministry of Education, 2018).

4.2.2 Scholarship program

The KASP is the third stage of Saudi Arabia's educational development plan that has sought to raise higher education achievement among the Saudi Arabian citizenry. As mentioned previously, this stage was started in 2005, and the Ministry of Education in Saudi Arabia manages it (Ministry of Education 2017).

The scholarship program has some key goals. As shown in Figure 15, these are: enabling Saudi Arabian citizens to develop up-to-date knowledge in various fields of study; enabling external societies to understand Saudi Arabia better from contact with its citizens; developing the Saudi Arabian pool of human resources; increasing the exposure of Saudi Arabian citizens to the global environment; and extending friendship to people of other cultures (Alomar, 2010; Saudi Ministry of Education, 2018).

Figure 15 Goals of Saudi Arabian Scholarship Program



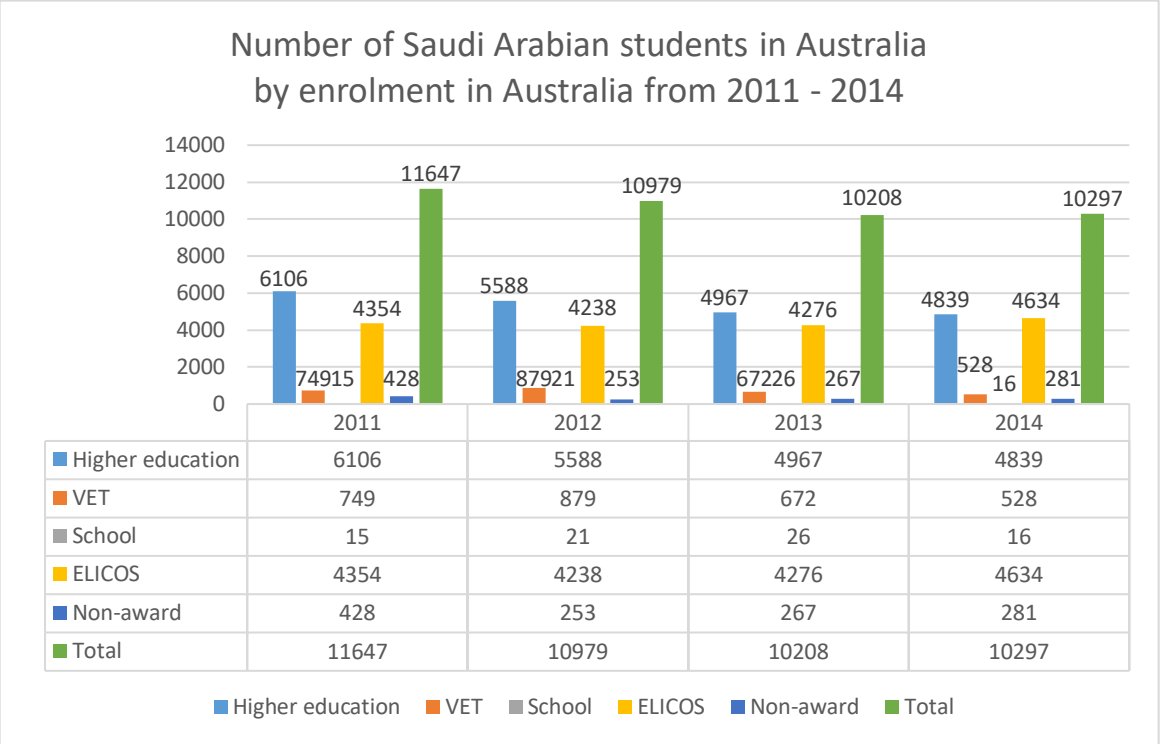
Recently, the Saudi Arabian Ministry of Education decided to change the name of the Scholarship Program from the 'King Abdullah Scholarship Program' to 'the Custodian of the Two Holy Mosques Scholarship Program for External Scholarship,' under the label "Your Job & Scholarship" (Saudi Ministry of Education, 2018). As such, the scholarship program is now commonly titled "Your Job & Scholarship". This means, in the new version of the scholarship program which started in 2016, there is an established direct link between scholarships and job opportunities in specialities needed by the country. Thus, a graduate would no longer need to search for a job opportunity on his or her own effort, as in the past (Saudi Ministry of Education, 2018).

From 2005 to 2018, the scholarship program has provided over 200,000 full scholarships for Saudi Arabian students to study in prestigious higher education institutions around the world (Kent, 2018; Mishrif & Al-Abduljabbar, 2018; Paul, 2016). Among this large number of students, many thousand chose to study in Australia (Kent, 2018), putting Australia among the favourite destinations selected by Saudi Arabian students. This has led to the formation of a Saudi Arabian student community in Australia as will be explained in the following sections.

4.3 Saudi Arabian students in Australia

In 2011, Saudi Arabian students were among the top 10 nationalities by volume of enrolment in Australia (Australian Department of Education and Training, 2011). Between the years 2011 and 2014, based on year-to-date enrolments and analysis by all sectors, the number of Saudi Arabian international students in Australia fluctuated between 11647 in 2011 and 10267 in 2014 (Australian Department of Education and Training, 2011, 2015). Figure 16 presents the number of Saudi Arabian students by year-to-date enrolments, and analysis by sector in Australia dated from 2011 to 2014.

Figure 16 Number of Saudi international students by enrolment from 2011 to 2014

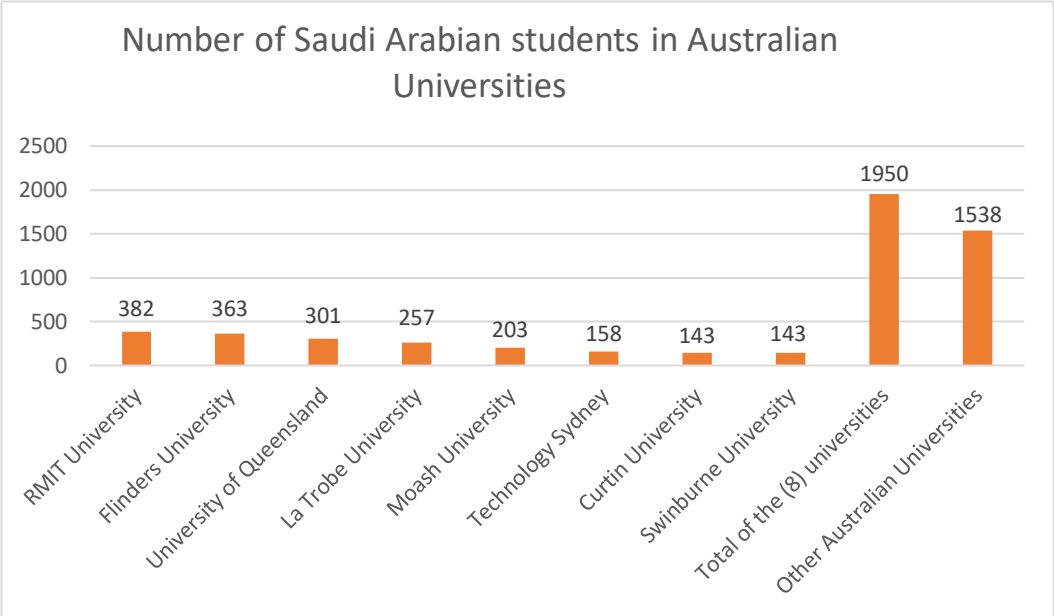


However, as previously mentioned, the most recent yearly report released by the Saudi Arabian Cultural Mission in Australia, in (2015), reported that 7339 of Saudi Arabian students in Australia received a full scholarship under the King Abdullah Scholarship Program (KASP). Of these students, about 29 per cent were females, and the rest were males.

In an updated survey published by the Australian Department of Education and Training, 'Year To Date Enrolments by State/Territory (2016)', Saudi Arabia only appears in the top 10 *ELICOS*, i.e., 'English Language Intensive Courses for Overseas Students'. However, updated data from the Australian Department of Education and Training (2016) revealed that 1487 Saudi Arabian students were enrolled in Australia in 2016, a drop of fewer than 300 students from 2011.

Figure 17 below shows that over 55 per cent (55.90%) of these students were distributed to eight Australian universities, starting with RMIT University passing through Monash University and ending with Swinburne University of Technology (Saudi Arabian Cultural Mission in Australia, 2015). It is noteworthy that the students' distribution shown in Figure 17 did not include the number of students enrolled in English classes or the Foundation Year stage.

Figure 17 Distribution of Saudi students to Australian universities 2015



4.4 Popularity of Australia as a destination for Saudi Arabian students

Australia is reported in the literature as one of the primary destinations of Saudi Arabian students (Australian Department of Education and Training, 2016). A number of possible reasons have been reported for the popularity of Australia as a destination for Saudi Arabian students.

Firstly, there is a relatively high quality of higher education that is perceived to be present in Australia. According to the Times Higher Education's World University Rankings, Australia has captured the third place worldwide for the number of international students after the United States and the United Kingdom (Times Higher Education, 2018). Australia has 43 internationally recognised universities, 40 universities are Australian, two are international, and one is private (Australian Education Network, 2018). Recently, the World University Rankings (2018-2019), reported that six of the top 10 Australian universities had been recorded in the top 1% per cent of universities in the world (Times Higher Education, 2018).

Second, the Australian government has been focused on attracting foreign students into its higher education institutions for decades (Back, Davis, & Olsen, 1996). The country has encouraged Saudi Arabia and other Gulf Cooperation Council (GCC) countries to send more students to Australia in order to benefit from both English language learning and

field-specific studies. There is also the close cooperative relationship between Australia and Saudi Arabia, which has been nurtured for decades (Australian Department of Foreign Affairs and Trad, 2011).

Third, the learning environment is another possible factor for the popularity of Australia as a destination for Saudi Arabian students. Australia is known to be progressive in terms of its application of new technologies in its strategies of teaching and learning systems (Balakrishnan, Teoh, Pourshafie, & Liew, 2017). One area of this application is e-learning 2.0 (Loh et al., 2016). The use of e-learning 2.0 in the Australian education and training system has reached a high recorded level (W. Usher, 2013). As described by Hunter (2009), the majority of people in Australia are already well-versed in the use of Web 2.0 tools as part of everyday life. In addition, there is a growing trend in the formal application of Web 2.0 technologies in the academic sector (Gosper, McKenzie, Pizzica, Malfroy, & Ashford-Rowe, 2014; Hunter, 2009). In particular, many studies have reported that students and researchers in Australian higher education have integrated Facebook, Twitter, wikis, blogs, and other Web 2.0 technologies in developing project and research proposals (Balakrishnan et al., 2017; W. Usher, 2013).

Another set of reasons include sociological and psychological factors. Australia may be considered a safer environment for Saudi Arabians (Ahmed Alhazmi, 2013; Orth, 2015), especially after anti-Arab sentiments increased in the United States and the United Kingdom following the September 11 terrorist attacks (Cohen, 2007). In addition, living costs and tuition fees are more affordable in Australia compared to the United Kingdom, the United States, or Japan (A. Usher & Medow, 2010). Furthermore, Australia has decided to raise the assessment level of Saudi Arabian student visas to level 1 (Bowen, 2011), which is the highest level of Australian visas for students who are on scholarships in the country. This means that Saudi nationals can choose to lodge their applications for student visas online (The Australian Embassy in Saudi Arabia, 2011).

The popularity of Australia regarding its higher education quality, safety, and technology-enabled learning environment has attracted and motivated a large number of international students, including Saudi Arabian students to choose it as a destination for education. However, as will be described in the next section, there have been limited studies exploring the experience of Saudi Arabian students in the Australian context. Notably, studies have not been found that have explored Saudi Arabian students' experiences with e-learning 2.0, and the potential opportunities and challenges that may emerge from their

experiences. As such, one of the primary foci in the present study is to explore and determine these aspects, given the students' cultural and educational background.

4.5 Experiences of Saudi Arabian students in Australian higher education

Despite a large number of Saudi Arabian students studying in Australia, few studies have been found on the experiences and performance of Saudi Arabian students in Australian higher education settings. Midgely (2009) investigated the concerns of Saudi Arabian nursing students who were studying in Australia. Midgely (2009) found that the students were much concerned about the welfare of the families that they left behind, and this may lead Saudi Arabian students to exhibit actions that may be perceived as inappropriate from an Australian perspective, such as answering a telephone call while in class. A Alhazmi and Nyland (2011) explored the experiences of Saudi international students in adjusting to a mixed-gender environment. From interviewing three students, two males and one female, the study found that "mixing gender is the best," indicating that the students came to accept the cultural difference between their home and host countries in the matter of gender segregation.

Another study conducted by Alsahafi and Shin (2017) investigated factors influencing Saudi Arabian students' adjustment during their experiences in Australian universities. One hundred Saudi Arabian students in Sydney were surveyed. The study found that the English language barrier was the main challenge that influenced the students' social adjustment. The study also describes some other secondary factors which may influence the students' adjustment, such as classroom activities, assessment methods, homesickness and loneliness. Unruh and Obeidat (2015) examined language learning adjustments of Saudi Arabian engineering students and found that their lived experiences in a predominantly English speaking country helped significantly in improving their overall communication skills.

Another study Hilal and Denman (2013) examined the perspectives of Saudi Arabians as students in Australia on the extent to which their experiences while studying in the country improved their perspectives about cultural diversity and tolerance. Students believed that their experiences were fruitful in bridging cultural gaps between Saudi Arabia and Australia as well as other similar western cultures. A thesis by Orth (2015) explored the experiences of fourteen first-year Saudi business students living and studying in

Australia. The study paid attention to the notion of intercultural competence and how this may affect Saudi students' overall experiences. It was found that the students had a diversity of experiences, which were regarded as challenging. These challenges were attributed to the expectations of students before moving to Australia. Degrees of intercultural competency were also found to have an influence on the students' experiences. Apart from these three studies, no other studies were found that focused explicitly on the experiences of Saudi Arabian students in Australian higher education settings.

The scarcity of studies in this area indicates that at present, there is limited understanding of the experiences that Saudi Arabians have with the Australian higher education environment. In Australia, the focus of most studies has been on students from India and East Asia (Ahmed Alhazmi & Nyland, 2010; Midgley, 2010). This is simply due to a large number of international students from these areas compared to international students from other regions (A Alhazmi & Nyland, 2011; Midgley, 2010). Shaw (2010, p. 49) and Midgley (2010) attributed this lack of studies on Saudi Arabian students to historical and economic factors. Additionally, most of the previous works had been conducted with a focus on Saudi students' involvement in a new cultural and academic environment from many different perspectives and were found to be scarce.

4.6 Summary of the chapter

This chapter explains the context of the study, including the state of education in Saudi Arabia. The Saudi Arabian scholarship program goals are also explained, and the Saudi students' community in the Australian environment is described. The chapter also discussed the possible factors behind the popularity of Australia as a study target of Saudi Arabian students. These factors include:

- The relatively high quality of higher education that is perceived to be present in Australia.
- Efforts by the Australian government to attract international students into its higher education institutions.
- The Australian learning environment is another possible factor for the popularity of Australia as a destination for Saudi Arabian students.

- Another set of reasons include sociological and psychological factors such as considering Australia as a safer environment for Saudi Arabians, living costs, the affordable tuition fees and the Australian student visa regime.

This chapter, in conclusion, reviews studies that have explored Saudi Arabian student experiences in the Australian higher education environment. Based on the previous review, it was found that no existing studies have been found that explored Saudi Arabian student experiences and attitudes towards e-learning 2.0 in the Australian context. Thus, conducting this study might contribute to the understanding of an area that is not understood well in the literature, particularly exploring the experiences of Saudi Arabian students with e-learning 2.0 in the Australian higher education context.

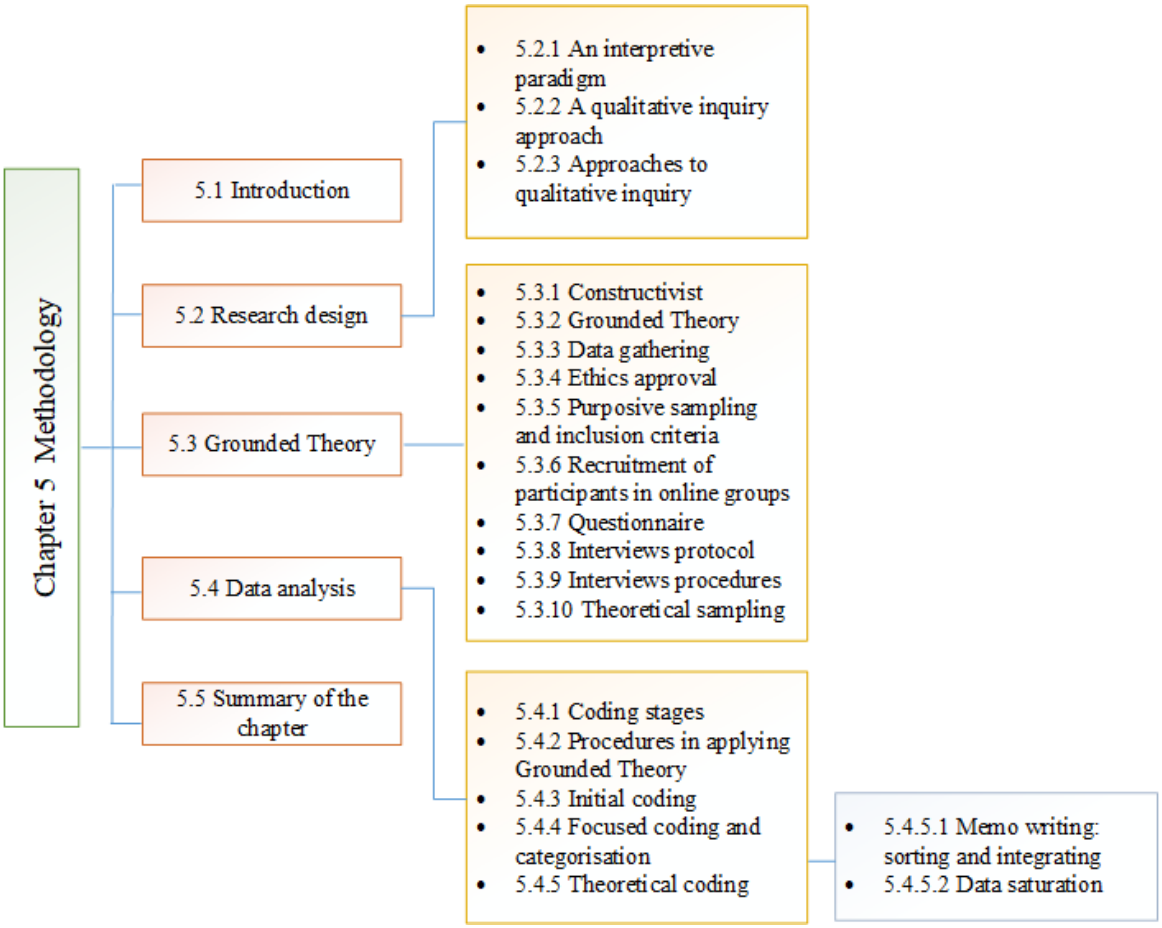
Chapter 5
Methodology

5.1 Introduction

The previous chapter explained the context of the study. This chapter explains how the study was carried out. The study investigates the learning experiences of Saudi Arabian students in the Australian higher education system. It aims to understand the students' experiences with e-learning 2.0. It also aims to investigate the opportunities and challenges that emerge from students' experiences and how Saudi Arabian culture influences these opportunities and challenges. As the aim of the study fits under an interpretive research paradigm, a qualitative approach is adapted to the research using a series of interviews to gather the data and analyse them using the Grounded Theory method.

This chapter consists of five sections, and Figure 18 shows a graphical overview. The first section is the introduction. Section two explains the research paradigm and approach, justifies the selection of the interpretive paradigm and the qualitative approach from other possible paradigms and approaches for conducting this research. Section three describes the use of the Grounded Theory (GT) as the type of qualitative research applied to the study. Section three also describes the research procedure using the Constructivist Grounded Theory approach among three approaches of Grounded Theory. Furthermore, section three explains the criteria for selecting the study sample and the data-gathering instruments used. Section four details the data analysis techniques used to address the research questions. Finally, section five gives a summary of the whole chapter.

Figure 18 Structure of Chapter 5



5.2 Research design

The research design section explains the rationale for adopting a particular research design to conduct this research. Since this study seeks to explore the experiences of Saudi Arabian students within the Australian e-learning environment, the study adopted an interpretive research paradigm and a qualitative approach. This requires asking students about their experiences and attitudes to capture their perspectives and develop meaningful synthesis from these perspectives. The following subsections describe how this study is positioned in an interpretive research paradigm and a qualitative approach.

5.2.1 An interpretive paradigm

As a concept, the interpretive paradigm can be summed up as understanding the subjective world from people's experiences (A. Schneider, 2016). Myers (2013) proposes that access to a person's reality by an interpretive researcher can only be through social constructions such as language, consciousness and shared meanings. When comparing the interpretive

paradigm with the positivist paradigm, the positivist paradigm considers that truth can be found from empirical observations of the phenomenon of interest within a structural approach and controlled environments (Kaboub, 2008). Carson, Gilmore, Perry, and Gronhaug (2001) explain that the positivist paradigm assumes that there is a unique objective truth to any research phenomenon regardless of the researcher's belief or opinion. Researchers in a positivist paradigm conduct their research, so there is a clear division between the participants and the researchers' perspectives, beliefs and personal experience (Carson et al., 2001).

On the other hand, the interpretive researchers enter the research field with prior awareness of the research context but assuming that they might know little about the phenomenon being investigated (Hudson & Ozanne, 1988). Since the phenomenon of interest in this study cannot be contained in a controlled environment and is also tied to the external, social environment with which its intended respondents interact, the interpretive paradigm is more applicable and was selected as the paradigm for the study. As such, the positivist paradigm was not selected as the paradigm for this study.

5.2.2 A qualitative enquiry approach

The qualitative research approach was chosen for this study. Denzin and Lincoln (2005, p. 3) define qualitative research as:

"An interpretive naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them."

Merriam (2009, p. 6) also defines qualitative research as a "social" approach that mainly utilises an interpretive paradigm of truth-seeking. First, this means that the design is applicable to studies that involve people. This is because data gathered from qualitative research are not entirely objective but are dependent on the subjective perspective of the respondent. Second, qualitative research accepts that different people experience the world in different ways. As such, it is a means to find out and to interpret the experiences of the study participants (Merriam, 2009).

The quantitative approach focuses on establishing numerical relationships between definitely measured variables through the use of appropriate statistical tools (Hoy, 2009). While quantitative research can be conducted in any field of study, it is required in

quantitative research for all the variables of interest to be bounded (Hoy, 2009). For example, gender is a variable that is bounded by a fixed number of responses. However, experiences and attitudes, as well as challenges and opportunities in a specific construct, such as in an e-learning 2.0 environment, may not be readily bounded. While it is possible to bind such variables, it may be an arduous process and may not be in fact answering the research questions.

The constructs investigated in the study are asking participants' own experiences of studying in a new learning and cultural environment. The participants' personal experiences are qualitative in nature (Austin & Sutton, 2014). Furthermore, the study aims to determine what is there and what is not. The respondents' own experiences and attitudes are intensely dependent on their individual perspectives. They are subjective and narrative in nature, which fit the qualitative design. Therefore, the qualitative research approach is considered more applicable to the constructs investigated in the study.

5.2.3 Approaches to qualitative inquiry

This section explains selecting the Grounded Theory (GT) approach among other possible qualitative approaches as the type of qualitative research approach applied to the study. Creswell identified five approaches that apply to qualitative inquiry. These are narratives, case studies, ethnographies, phenomenological studies, and grounded theory research. According to Creswell (2007), narrative studies entail extended data gathering from a single or two persons through the collection of their stories that is also the specific focus of the study. Phenomenological studies focus on investigating lived experiences of a particular phenomenon, such as grief and insomnia as different participants experience it. Case studies consider a middle ground between the narrative and the phenomenological strategies, in which it limits its investigation on specific individuals or groups, but also focuses on how such individuals and groups experience a specific phenomenon, as opposed to merely studying them in general. Ethnographic strategies are focused on immersing the researcher into the environment and making the researcher experience the environment with the respondents. In contrast to ethnographic strategies, the Grounded Theory (GT) approach entails having the researchers set aside their experiences, as much as possible, and observe the phenomenon externally, gathering data from the participants' point of view (Creswell, 2007).

In line with having selected a qualitative research design, the GT approach has been selected as the most suitable method to analyse the data gathered for this study. GT is an approach to qualitative data analysis that is used when investigating a phenomenon in which there exists a need to formulate a theoretical understanding of participants' experiences (K Charmaz & Bryant, 2010). The phenomenological strategy may not be appropriate to this research as it is a more descriptive approach (Creswell, 2007; Wertz et al., 2011). Moreover, it is significant in the phenomenological strategy that the researcher understands the shared experiences in the phenomenon of interest to the study, such as in professionalism or an anger phenomenon (Creswell & Poth, 2017; Moustakas, 1994). However, this is not the case of this study, as not much is understood either by the researcher or in the literature about the research phenomenon explored in the study. The narrative strategy is not applicable because the focus of this study is not a single or two persons. By implication from this, the case study strategy is also not applicable.

The ethnographical strategy may apply to this study, as it involves students studying in the education environment. However, participant observation is commonly used in the ethnographic approach as a part of field research. That is, the researcher should be immersed and actively participating in the environment while extensively recording field notes (K. Charmaz, 2006; Trochim, Donnelly, & Arora, 2015). However, in this study, Saudi Arabian females are involved, making it difficult or impossible for the researcher to be actively immersed in female participant observation. As such, this study employs the use of questionnaires and in-depth semi-structured interviews as preferred options for data collection. Furthermore, with regard to the research problem in ethnographic studies, the ethnographer pays attention directly to the literature (Creswell, 2007; Trochim et al., 2015). Again, however, little is understood in the literature about the research phenomenon explored in this study.

5.3 Grounded Theory

There are three types of Grounded Theory approaches: Classic Grounded Theory by Glaser (1992, 1998); the Modern approach by Strauss and Corbin (1990, 1998); and the Refined approach by Charmaz (2006). Barney Glaser and Anselm Strauss originally designed the qualitative research approach of Grounded Theory in 1967 (Glaser, 1978; Glaser & Strauss, 1967, 1977). In 1980, Glaser and Strauss separated. Strauss and Corbin (1990) published their book, *Basics of Qualitative Research Grounded Theory Procedures and Techniques*. Glaser (1992) believed that Strauss and Corbin's book did not extend Grounded Theory,

but created a whole new approach. It is not evident if these two approaches of Grounded Theory are different, or whether they are just presenting a similar idea in slightly different ways (Melia, 1996). Nevertheless, Gibbs (2015) indicates that the main difference between Glaser's Classic approach and Strauss and Corbin's Modern approach is how to generate a theory. That is, Glaser argues that a theory should not be forced to emerge. Instead, it should arise by the constant comparison method. Strauss and Corbin suggested a more prescriptive approach in developing categories to ground a theory.

Recently, Charmaz (2006) has introduced yet another perspective as an alternative to the two main perspectives of Glaser and Strauss and Corbin – the Constructivist Grounded Theory approach (2006). The key difference between Chamaz's version of Grounded Theory approach and the two approaches by Glaser and Strauss and Corbin is that in Charmaz's version, the grounded theorists play a part in constructing the theory. The following section provides justifications for choosing the Refined approach by Charmaz (2006), which built on both the Classic Approach by Glaser (1992, 1998), and the Modern Approach by Strauss and Corbin (1990, 1998). The following section supports that Charmaz's (2006) approach is the most suitable approach to adapt as a strategy for conducting the research and analysing the data.

5.3.1 Constructivist Grounded Theory

Of the three different grounded theory approaches, it was Charmaz's approach that was ultimately applied to the analysis of the data in this study. The selection of Charmaz's approach was made for several reasons. First, the Glaser approach was not suitable for the context of the data gathering frame utilised by this study. As will be explained in the next section, this study made use of two data-gathering instruments: one-on-one, semi-structured interviews and initial questionnaires to gather data from respondents (the data gathering instruments are described later in section 5.3.6 and 5.3.7). The Glaser approach to grounded theory assumes that everything is data (Glaser, 1998). This is not strictly a qualitative approach and encourages gathering data from various sources using various instruments to come up with a universal whole of the environment of interest (Glaser, 1998). This approach cannot be used in this study since access to other sources of data that may be relevant to the research questions (such as, video footage of students using e-learning 2.0 tools or student records and journals written by their teachers about their progress) was not pursued keeping in view the privacy of students. Therefore, using the Glaser approach was not feasible for the study as it asserts that everything is data, but the

study only made use of questioners and semi-structured interviews as joined data gathering tools.

Strauss and Corbin's approach is actually very similar to the Charmaz approach. Both are prescriptive about the different stages involved in grounded theory, and both are suitable to be used when only one or two instruments are utilised in data gathering. What separates the two approaches from one another is their perspective on how the theory should emerge from the data. Strauss and Corbin maintain that in the conduct of the different levels of coding, the theory should emerge on its own with little help on the part of the researcher (Strauss & Corbin, 1998). That is, a researcher cannot draw the theory out of the data so much as the theory draws itself out from the several levels of coding conducted on the data. Charmaz (2006) criticises this view several times, saying that this outlook is positivistic, assuming that there is an underlying objective reality which the researcher merely has to uncover. Charmaz's approach is more in touch with post-modernist thinking, which makes the notion of the researcher's "objectivity" problematic. Charmaz is a constructivist, which means that she believes researchers must acknowledge their own subjectivity and that the researcher plays a part in constructing the theory. This is very important since the phenomenon of subjectivity being investigated in this study is too broad. Also, the constructs investigated; the experiences, attitudes, opportunities and challenges are not a straightforward construct as the case, for example, in the physical phenomena. As such, it is unlikely that the theories that the study is seeking to establish can emerge on their own from the data, without any influence from the researcher. It shall be through the use of theory development as outlined by Charmaz and Bryant (2010) and in Charmaz (2006), which gave the responsibility of holistically making sense of data to the researcher, which the relevant theories could be constructed.

5.3.2 Data gathering

In GT studies researchers usually begin with open questions, meaning that the researchers assume that they might know little about a phenomenon being investigated. The purpose of the open questions is to understand what happens and how participants interact with that phenomenon. GT gives the researcher a tool to answer 'Why' questions through an interpretative sense (Kathy Charmaz, 2013). The research questions used in this study were open. The initial primary research question explains how students react to new learning environments based on their cultural backgrounds. Based on the open research questions presented in Chapter 1, a semi-structured interview instrument was used as a major data-

gathering tool for this study. As explained by Bryant and Charmaz (2007) and Charmaz (2006), semi-structured interviews work best because they provide the researcher with some control over the relevance of the expected answers to the research questions, while at the same time allowing respondents considerable flexibility in answering the questions.

5.3.3 Ethics approval

An initial ethics approval was obtained from the Monash University Human Research Ethics Committee (MUHREC) at the Monash University. The Project Number is CF11/3522 – 2011001867 see Appendix A. The Low-Risk application covers research procedures. A clear step-by-step description of what participants will experience if they choose to take part in the study is provided. The questionnaire (see Appendix F) and the interview protocol (see Appendix E) were provided. Participation was voluntary. Participants could withdraw at any time, and confidentiality was protected. All responses were anonymised before analysis.

5.3.4 Purposive sampling and inclusion criteria

In line with the guidelines provided by Charmaz (2006), and examples of recent applications of grounded theory that used Charmaz's approach, such as those of Sbaraini et al. (2011), Omli & Wiese-Bjornstal (2011) and Thompson et al. (2012), the following steps were undertaken to recruit and select participants for this study. First, purposive snowball sampling was conducted to gather potential respondents to the study. As explained by Charmaz (2006) and reiterated by Sbaraini et al. (2011) and Thompson et al. (2012), the grounded theory approach to data analysis does not generally require the extraction of a probability sample. That is, random sampling need not be conducted. Rather, what should be ensured in the sampling is that the respondents included in the study are those who are of interest to the research. "For initial sampling, you establish sampling criteria for people, cases, situations, and settings before you enter the field" (K. Charmaz, 2006, pp. 100, 124). This was done by establishing significant inclusion criteria, which were that the participant should be Saudi Arabian and should be studying in a university located in Australia. Students at any age, any course and any university level were included in the criteria. In addition to this the sampling also ensured both males and females were adequately represented by the sample. The snowballing element of the sampling technique allowed for the identification of more and appropriate participants once initial respondents

were identified. This is because those initial respondents were asked to refer other potential participants who aligned with the inclusion criteria.

5.3.5 Recruitment of participants in online groups

Two online forms were used for recruiting study participants. An email with the Explanatory Statement (see Appendix C), and the Consent Form (see Appendix D) provided essential details about the study. The email was sent to all Saudi students in a Google group and a Facebook group. Appendix G shows the invitation sent to both groups' members. The Google group, named *Saudi Students in Australia,* was created in 2009 and by 2013 contained about 150 Saudi higher education students. The Facebook group was created in 2011, named *Saudi PhD Students in Australia*, and contained, about 6,500 Saudi Arabian higher education students in October 2017. The two groups were created for Saudi students to support each other in academic and social life, as well as for sharing information about studying PhD in Australia. Each group is managed by five administrators. Permission for recruiting research participants was granted, see Appendix B, by the administrators as required by MUHREC.

5.3.6 Questionnaire

After recruiting and selecting participants based on the inclusion criteria mentioned earlier, an initial questionnaire was sent to gather preliminary information from each respondent. The researcher prepared the initial questionnaire, which contained 13 questions. The first five questions were focused on the participants' demographic information. Questions 6 and 7 were focused on the respondents' awareness and the use of specific Web 2.0 tools in general, such as social networking, podcasts, and videocasting tools. Questions 6, 7 and 8 are focused on the respondents' use of Web 2.0 tools in relation to their studies. Questions 9 and 10 focused on Web 2.0 tools usefulness in relation to the respondents' studies. Question 11 is a multiple select from "click on all that apply" type, concerning specific uses of Web 2.0 tools by the respondents in relation to their courses while studying in Australia. Finally, questions 12 and 13, were focused on respondents' experiences regarding any opportunities or challenges realised by respondents while experiencing Web 2.0 tools for learning.

Information from questionnaires was used to categorise the participants according to different demographic variables, such as gender, age, subject and state. The questionnaire

was also used to collect basic information about the experience of the participants with using Web 2.0 tools technology and e-learning 2.0. As mentioned, the purpose of sending the initial questionnaire was for preparing the primary data collection tool, which was semi-structured interviews, as it is described in the next section.

5.3.7 Interviews protocol

Following the initial questionnaire, one-hour semi-structured interviews were conducted to gather data from the participants. As shown in Appendix E, the interview protocol was also prepared by the researcher. The interview protocol contains four central sets of questions, and each set has sub-questions. The first set of questions focuses on Saudi Arabian higher education students' transition to, and adaptation in the Australian cultural environment. The second set of questions focuses on Saudi Arabian higher education students' transition to, and adaptation in the Australian educational environment. The third set of questions investigates the experiences and attitudes of Saudi Arabian higher education students towards e-learning 2.0 in Australia. This fourth set of questions focuses on the opportunities and challenges that emerge from the students' experiences and attitudes towards e-learning 2.0 in Australian higher education. Semi-structured interviews have been used in many Grounded Theory studies reviewed, such as Omli and Wiese-Bjornstal (2011); Thompson et al. (2012) and Sbaraini et al. (2011). The procedures in the interviews conducted are described next.

5.3.8 Interviews procedures

Respondents were provided with some choices for the medium of the interview, such as meeting in person face to face, phone call, Skype audio call, or any other social media forms of online communication. Thus, they could choose the most accessible and convenient means of communication for them. At the beginning of each interview, the study and the purpose of the interview were explained to the participant. In this declaration, matters of confidentiality were addressed by asking the respondent if he or she had any questions before starting the interview itself. Throughout the interview, questions were politely asked, as was arranged in the interview protocol. However, sometimes a deviation from the prepared questions and their order was needed. At the end of the interview, the respondent was given the opportunity to ask any questions before concluding the interview. Interviews were digitally recorded and transcribed verbatim by the researcher.

5.3.9 Theoretical sampling

Glaser and Strauss (1967, p. 45) defined theoretical sampling as:

"The process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them."

Charmaz (2006) explains that there are two purposes for using or conducting theoretical sampling in Grounded Theory studies. One is to determine what questions to ask during interviews (K Charmaz, 1990). According to Charmaz (2006), theoretical sampling is best used when some concepts have been discovered. The other purpose is to determine whom to sample next. In this study, the participants were recruited directly based on the inclusion criteria described earlier in the 'Purposive Sampling' section. Although theoretical sampling is an important part in conducting Grounded Theory studies, in this research, it was used only as modifying and refining the interview research questions to reveal more about participants' significant experiences and views to gather richer data.

As such, theoretical sampling was used at an early coding stage when some promising concepts emerged, as well as to enrich the emergent focused codes and categories. For example, in the early coding stage, the notional sense of freedom was often mentioned when participants described their experiences in adapting and studying in Australia. Thus, asking about the notion of 'freedom' was later included in the interview questions to explore this experience further.

After conducting the first four interviews and analysing them, some promising themes were started to emerge, such as 'freedom.' Tracing emergent incidents and seeking evidence requires changing or adding specific questions to the interviewers' protocol about particular codes. This analytical procedure had a significant impact on feeding up the focused codes and the categories (K. Charmaz, 2006).

5.3.10 Memo writing: sorting and integrating

A memo in qualitative research is a sentence or a paragraph about what a researcher is thinking or learning while coding, during or after collecting the data (Glaser, 1978). In the advanced theoretical coding stage, Glaser (2005) considers sorting of memos as a critical element. Charmaz (2006, p. 143) suggests the following six steps be followed to sort, compare and integrate a set of memos into a coherent order:

1. *"Sort memos by the title of each category*
2. *Compare categories*
3. *Use your categories—carefully*
4. *Consider how their order reflects the studied experience*
5. *Now think how their order fits the logic of the categories*
6. *Create the best possible balance between the studied experiences,*
7. *your categories and your theoretical statements about them."*

Charmaz (2006) strategy of sorting, comparing and integrating memos was utilised in this study. In this research, writing memos was started at an early stage using NVivo, a qualitative analysis software tool. It provides unique auto coding features, sorting of memos and different options for organising qualitative data. Using NVivo helped to "revisit [the] memos periodically" (Birks & Mills, 2011, p. 129), as well as managing the increase of memos throughout the data analysis.

There are two main types of memo writing; 1) multiple single case-based memos for each interviewee and 2) multiple group case-based memos. An example of a single case-basis memo is shown in Snapshot 1. This memo was written after interviewing I-3-M. Every single case-based memo contained a reflection related to what the researcher learnt from the participant's responses.

Snapshot: 1 Single case-based memo

25 July 2012 - Memo: I-3-M

I-3-M believes that studying in Australia would help him improve his proficiency in the English language. He also discussed how the new environment also challenged many other cultural sensibilities that he brought with him. For example, I-3-M believes that "it is completely different cultures between [them and us]. I mean with Australia people…for example if you want to socialize yourself, you have to drink alcohol, we don't have this in our culture, and our religion, I mean it is 100 per cent prohibited…it's very hard [tough] to socialise yourself in the Australian environment at least you need to have some experience with what they are doing." This student also gave an interesting example: "It was a party…and am not integrated into the party, the music very hard [loud], and all of them are like drunks."

So today, I learnt that the difficulties stretched beyond differences in gender roles and segregation, as he discussed in today's interview, the new environment also challenged many other cultural sensibilities.

26 July 2012 - Memo: I-3-M

Regarding perceived differences between the Australian and the Saudi Arabian educational settings, I think 3-M gives a good description of the differences. He also describes how information was expected to be used in the Saudi Arabian educational system.

These reflections or dissections include questions that come to the researcher's mind while re-examining each participant's responses. Memos were written when listening to recorded interviews multiple times. As suggested by Böhm (2004, p. 271), a researcher should re-examine the data, keeping in mind some theory-generating questions, such as: What is happening? How is this or that action related to other actions? What aspects are addressed or not addressed, and how? How do participants interact? What methods and strategies are used?

Snapshot 2 Group case-based memo

Group case-based memo - I-1-M, I-2-M, I-3-M + I-4-M, on 26 July 2012

I have completed the 4th interview with I-4-M.

Similar evidence to what was described by the three previous respondents, I-1-M, I-2-M and I-3-M, emerged regarding learning through technology.

The three participants, I-1-M, I-2-M and I-3-M, believe that learning through technology allows them to access a range of opportunities relating to their learning and study course.

As described by I-1-M in lines 20 & 41, "We have like a discussing board for each subject, we can discuss with a student or with the teacher if you want. I guess I found it great to work with the group … I can find more information about a subject that I study… help me clearly understand and update the things that I learn…Now I have the ability to find more knowledge."

The similar experience described by I-2-M in line (361), "I came across some website some Saudi using to discuss issues, and I think it is getting better… when I study English, I am confident when I approach these tools. I think I got an advantage by learning English and later engaging social media."

Similar evidence described by I-3-M in line (765) "a lot of academic you know things, information and courses, and training can be found, and I also have another formal group. I mean, we can't say formal[ly] because it is done by my supervisor … for students he is supervising and some teachers in the faculty of statistics, we can interact with each, each other." I-3-M, also in line (828) believes that e-learning 2.0 gives him a great opportunity access a wide his learning and study course, "Now I know everything about E-learning 2.0, for example, now I can get any information through these tools. I can get it easily"(1130)…"I can use Facebook or Twitter. On Facebook there is a lot of specialist groups on specific topics, I can simply subscribe to any group… You may also [be able to] contact directly with experts related to your studies. E-learning 2.0 gave me the opportunity to enter a wide range of databases around the world where they have an account on the media tools."

From these responses, I can see that e-learning 2.0 was acting as a tool that helped students engage in learning and gain significant opportunities during their studies.

I think I need to look more closely to catch more evidence about the idea of using e-learning 2.0 settings in Australia as a tool or technology tool to help the students' self-learning or for their study course purposes.

Also, are there challenges? How about the challenges in engaging?

So far, from interviewing I-1-M, I-2-M, I-3-M and I-4-M some challenges in learning through technology or e-learning 2.0 were identified. Some of the challenges related to the language. There are some challenges related to culture and gender roles.

After conducting a few interviews and reviewing the single case-based memos several times, group case-based memos were created. As shown in Snapshot 2, group case-based memos played an essential role in the higher level of conceptualisation. The group case-based memos were used for conceptualising, comparing and integrating single case-based memos. They were also used for the constant comparison methods in categorisation the themes.

5.3.11 Data saturation

Glaser & Strauss (1977) indicated that the sample size should typically follow the idea of saturation. K. Charmaz (2006, p. 100) explains that the idea of saturation in grounded theory is to "stop when your categories are saturated." According to Charmaz (2006), a sampling of a population will continue to a point until no new data is being gathered. As such, the process of data collection in this research was conducted after data saturation was reached. The constant comparison and the codes derived from the last respondents interviewed under each gender only contributed to existing conceptual categories and no longer led in the development of new ideation.

5.4 Data analysis

This section focuses on the data analysis technique used to address the research questions. According to Charmaz (2006), coding is essential to the development of grounded theory. Charmaz (2006) identifies a three-step coding process in data analysis. These are the initial coding, the focused coding/categorisation and the theoretical coding. Table 2 presents the three stages of coding, as in Charmaz's Grounded Theory perspective.

Table 2 Coding steps as in Charmaz's Grounded Theory

Initial coding	Focused coding/ Categorisation	Theoretical coding
Involves a close reading of the data and remaining open to all possible theoretical data, naming data (Charmaz., 2006, p. 65)	Identifying the most promising codes [the key, the most significant or frequent codes] that would address the research questions. Categorisation involves raising focused codes as "tentative" categories, and then decide which can become conceptual categories through reviewing, revising and seeking out evidence, using constant comparison methods to identify conceptual categories. The constant comparison method involves comparing code with code, data with data and idea with the idea at each level of analytic work.	Specifying possible theoretical relationships between categories developed throughout the focused and categorisation stage (Charmaz., 2006, p. 84)

In the next section, the three coding stages are described, and following that, the procedures of applying Grounded Theory, as adapted from Charmaz (2006), are explained.

5.4.1 Coding stages

During the initial coding phase, the data is broken down into codes, which are terms that are used to name the data (K. Charmaz, 2006). Breaking down the data involves a close reading of the data, with an emphasis on inclusivity towards all possible theoretical implications that the data may point towards (K. Charmaz, 2006). K. Charmaz (2006, p. 65) also emphasises following Glaser's guidelines of using "gerunds" (verbs ending in 'ing') when naming the codes and in memo-writing. The next stage is focused coding.

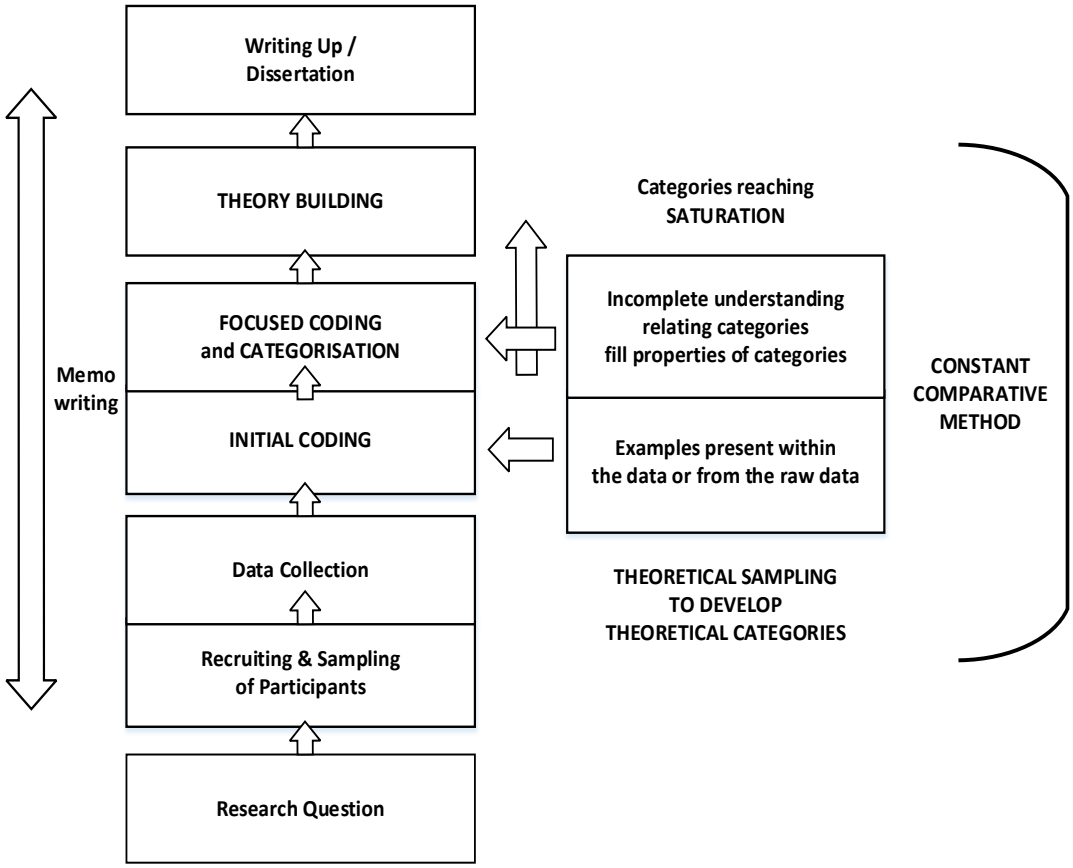
The focused coding stage allows the researcher to identify, categorise, and synthesise large amounts of data (K. Charmaz, 2006). This stage involves using the most significant or frequent initial codes and considers them in different ways by which to draw out specific and more meaningful codes (K. Charmaz, 2006). Focused coding involves refining, renaming or combining similar codes. It also involves categorising the focused codes and identifying conceptual categories, specifying the properties of a category, relating categories to each other and re-assembling the whole data (K. Charmaz, 2006). Following this stage is the theoretical coding stage.

The theoretical coding stage is the last stage of the data analysis; it is the process of making sense of evidence and construction of understanding. Glaser (1978, p. 72) stated that "theoretical coding conceptualises how the substantive codes may relate to each other as [a] hypothesis to be integrated into a theory". K. Charmaz (2006, p. 84) explains that the theoretical coding is a stage where the researcher specifies "possible relationships between [conceptual] categories" developed in the focused coding stage. In this stage of the coding, the researcher adds both critical and reflective elements to the data analysis. The researcher is no longer just looking at the data and sorting it into meaningful categories, but making sense of the data based on what he or she perceives are interconnections from the different categories formed (K. Charmaz, 2006). In other words, in this stage, the researcher acts as the data analysis tool, utilising both critical and reflective reasoning to draw potential relationships out of the data (K. Charmaz, 2006).

5.4.2 Procedures in applying Grounded Theory

The steps in conducting grounded theory in this research are shown in Figure 19.

Figure 19 Steps in doing Grounded Theory taken from (K Charmaz, 2017)



The following sections detail the procedures and steps in conducting the three coding stages in this study.

5.4.3 Initial coding

The initial coding phase began in conjunction with the data collection after conducting the first interview. The data were processed using NVivo and Microsoft Word-based approaches. The procedures conducted in the initial coding phase are covered:

Step 1: The transcripts of each respondent were carefully read and broken down into basic excerpt statements. The following statement shows an example of a basic excerpt statement:

"Gender segregation is still in Saudi Arabia; it is difficult to get rid of the practice of having separate female and male classes" [I-20-F].

The 'I-20' in, I-20-F, means that this statement is provided by the interviewee number (20), and the 'F' means the interviewee was a female participant. From the 20 interviews, a large number of lines of text were transcribed, and a hundred excerpt basic statements were extracted that conveyed single ideas.

Step 2: By remaining as open as possible, a large number of initial codes emerged from the line-by-line initial coding process. Table 3 shows samples of the initial codes which emerged from the line-by-line initial coding process.

Table 3 Example from the line-by-line initial coding process

Basic statements - Raw data	Initial codes generated from the line-by-line coding process
(I-1-M) *"As you know, gender segregation exists in Saud Arabia, especially in studying.*	Gender segregation exists
Maybe, here [in Australia] you find it hard to work with them [females]"	Feeling [difficult] working with the opposite gender
(I-5-F) *"I had to communicate and discuss with different gender, which sometimes, made me feel like embarrassed; it was hard to discuss with boys."*	Feeling embarrassed Feeling [difficult] discussing with the opposite gender
(I-20-F) *Gender segregation is still in Saudi Arabia;*	Gender segregation exists
it is difficult to get rid of the practice of having separate female and male classes. I think it is difficult to change our culture,	System of segregation Feeling difficult to change culture
even our food. We like to buy Saudi products, you know, even if they are so expensive here in Australia."	Like to buy Saudi products/food Believing Saudi food is expensive in Australia

Step 3: Through using the constant comparative method, repetitive and similar initial codes were consolidated and irrelevant codes were eliminated. Table 4 shows a subset of initial codes out of the original list of initial codes that were generated during the line-by-line coding process.

Table 4 Examples of repetitive, identical or similar and eliminated initial codes

Subset of codes out of the full list of line-by-line initial codes	Process of reviewing and continually comparing the codes	Initial code
• Gender segregation exists (1) • Feeling difficult working with the opposite gender (2) • Feeling embarrassed • Feeling difficult discussing with the opposite gender (2) • Gender segregation exists (1) • System of segregation • Feeling difficult to change the culture • Like to buy Saudi products/food (3) × • Believing Saudi products/food are expensive in Australia (3) ×	• Gender segregation culture (1) • Feeling embarrassed • Working with the opposite gender (2) • System of segregation	Segregation

As shown in Table 4, there is an exact repetition of some initial codes, such as the codes tagged the number (1). Though the process of reviewing and comparing, the two codes tagged number (1) were unified, as shown in the second column of Table 4. There is also matching in meaning in some codes, such as the codes tagged number (2) in Table 4. Similarly, these two codes were unified in a new label, as shown in the second column of Table 4. Further, irrelevant codes were eliminated, such as the codes tagged number (3) in Table 4. During the process of reviewing and continually comparing the initial codes, an apparent similarity in meaning among many initial codes was found. For example, the codes tagged numbers (1) and (2), and other codes appeared in the second column of Table 4, revolve around the students' experience of gender-mixed culture considering the influence of their Saudi Arabian gender segregation culture. Therefore, as shown in the third column of Table 4, through the constant comparison method, these codes and other similar initial codes were unified into one initial code as 'segregation.'

Step 4: Multiple passes for reviewing, continually comparing and conceptualising the initial codes were undertaken.

Step 5: Writing memos began at an early stage after the first interview was conducted. Each interview has a single case-based memo, which contains what was learnt from the participant's responses. Further, the memos were used as the primary tool for the constant comparison method. As suggested in Charmaz (2006, p. 10), writing initial memos is vital in moving from the first stage to the next. Memo writing was also used in forming potential categories, and, thus, in preparing the data to the next coding stage as in Charmaz (2006, p. 11).

Step 6: As the focus was only on coding the relevant data, the emergent initial codes were identified as the most promising and frequently repeated conceptual codes. These initial codes are used as properties to represent and describe the emergent conceptual categories. Properties are discussed in the next stage, the focused coding and categorisation.

5.4.4 Focused coding and categorisation

The procedures conducted in the focused coding phase are specified in the following four steps:

Step 1: The initial codes were continuously analysed, reviewed, combined, and in some instances, renamed, to extract specific and more meaningful focused codes. A focused code captures a conceptual meaning of relevant initial codes.

Step 2: By constantly comparing the initial codes, focused codes were developed. Table 5 provides an example of consolidating three initial codes (out of 5) into the focused code 'differences in cultural practices.

Table 5 Example of consolidating (3) initial codes into one focused code

(3) initial codes	(1) focused codes
Sensibility (1) Segregation (2) Risk of reputation damage (3)	Differences in cultural practices

In Table 5, the first initial code, tagged number (1) in the left column, represents cultural sensibility resulting from moving to live in a far different cultural environment from their strict culture. The following initial code, tagged number (2) in the left column, represents the culture of gender roles' reflection and influence on Saudi Arabian students' experiences when dealing with the opposite sex when they were exposed to the Australian mixed cultural environment. The third initial code, tagged number (3), represents the Saudi Arabian students' fear or risk of reputation damage resulted from their cultural interaction with the Australian cultural environment. The three initial codes relate to the cultural differences that the students experienced while studying in the Australian environment. Through the constant comparative method, a focused code was developed as 'differences in cultural practices.' There are two additional initial codes, 'freedom' and 'formality', falling under the focused code 'differences in cultural practices. ' These codes are described in Chapter 6.

Step 2: Categorising the focused codes. According to Bryant and Charmaz (2007), a category is a statement or an idea relevant to the study that can best describe what a set of codes is about. Glasser and Strauss (1967, p. 37) also define a category as "a conceptual element in theory." K. Charmaz (2006, p. 91), defined a conceptual category as a robust abstract that represents thoughts and events in the data in short words, which "reflect what people are doing or what is happening". The conceptual category may contain themes from two or several focused codes (2006, p. 91). Table 6 provides an example of how a conceptual category related to 'culture' is developed.

Table 6 Categorising focused codes

(3) focused codes	Shared idea	Conceptual category
1. Australian environment 2. Differences in cultural practices 3. Readiness to change	Culture	Adaptation to the Australian cultural environment

Similar to the initial coding stage, while engaging in focused coding, multiple passes of reviewing, continually comparing, conceptualising and reassembling the focused codes was conducted to extract the final conceptual categories. The example presented in Table 6 shows how 'culture' emerged as a grouping area. The three focused codes in the left column of Table 6 represent the respondents' experiences with Australian sociocultural values and, the students' readiness to adapt. Therefore, the three focused codes were grouped under the concept of culture.

Step 3: Developing conceptual categories**.** As also shown in Table 6 above, the shared concept of culture was ultimately modified and used to develop the best possible abstract that represents and reflects the respondents' experiences in the Australian cultural environment. As such, the conceptual category of 'adaptation to the Australian cultural environment' was developed. This conceptual category includes 'differences in cultural practices,' which concerns the respondents' reactions and their challenge in adjusting to the Australian environment where males and females were not segregated. The category also represents other related cultural matters from the other focused codes, such as, 'Australian environment,' and 'readiness to change.'

Step 4: Subcategories of the conceptual categories and properties. Each conceptual category is associated with and described by a number of focused codes. These are referred to as subcategories. Additionally, each subcategory is associated with and described by a

number of properties. The terms 'subcategories' and 'properties' are used in the discussion Chapters 7 and 8.

5.4.5 Theory building

The third stage of the analysis is theoretical coding. Charmaz (2006, pp. 63, 83) states that theoretical coding shows "possible relationships between categories." As explained by Charmaz and Bryant (2010), this is the stage where the researcher has some freedom in theorising as long as the theorisation incorporates grounded information drawn from the previous stages. The theoretical coding stage involves three steps:

Step 1: Analysing the conceptual categories for their possible theoretical interconnections.

Carrying out theoretical coding requires a deeper understanding of the notion of the conceptual categories. Chapter 8 covers the last stage of the data analysis, the theoretical coding. Charmaz (2006) explains the process as follows:

"As we proceed, the categories become more theoretical because we engage in successive levels of analysis. Our analytic categories and the relationships we draw between them provide a conceptual handle on the studied experience. Our work culminates in a 'grounded theory,' or an abstract theoretical understanding of the studied experience." (2006, p. 3)

This step involves treating the conceptual categories theoretically, raising them to theoretical concepts, and highlights their aspects and properties. In Chapter 7, the three conceptual categories and their related subcategories and properties are analysed. In Chapter 7, the key theoretical concepts that emerged from the analysis conducted on the conceptual categories are also identified and outlined along with their related aspects and properties.

"For constructivists, theoretical concepts serve as interpretive frames and offer an abstract understanding of relationships. Theoretical concepts subsume lesser categories and by comparison hold more significance, account for more data and often are more evident." (K. Charmaz, 2006, p. 140).

Step 2: Sorting and integrating written memos and diagramming. Charmaz suggests sorting and integrating written memos based on the emerged conceptual categories and shows the possible relationships that combine the work. K. Charmaz (2006, p. 12) also introduces

diagramming as an alternative way used by many grounded theorists to integrate the ideas and to establish the logic of their work.

Step 3: The key theoretical concepts are explained and brought together to form a theoretical model. The model is presented and explained in Chapter 8 and evaluated in Chapter 9.

5.5 Summary of the chapter

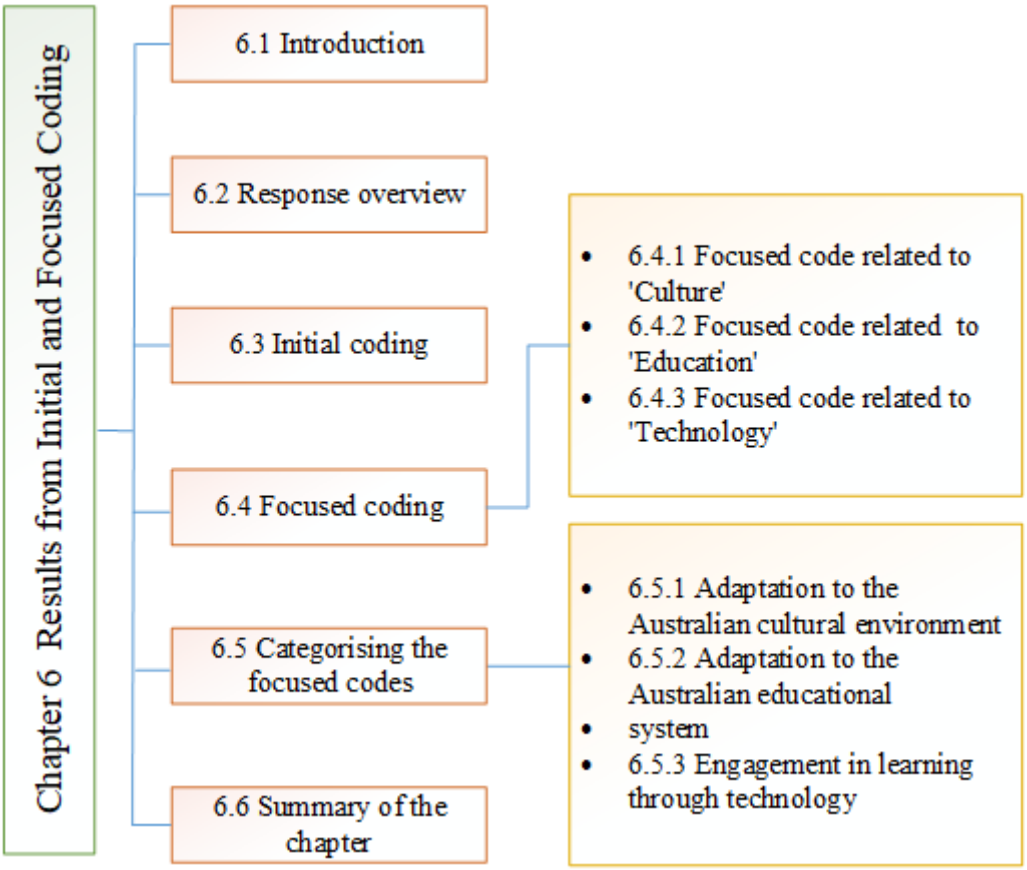
This chapter explained how the study was conducted, firstly providing a rationale for choosing an interpretive paradigm and a qualitative inquiry approach among other possible paradigms and approaches. The data analysis method using Grounded Theory was explained, drawing on actual data gathered from this investigation. The data-gathering instruments used, such as initial questionnaires and semi-structured interviews, were explained. How participants were chosen for the study was explained using the inclusion criteria that the participant must be a Saudi male or female citizen, at any age, and should be studying at an Australia university, in any Australian state, any course, and at any university level. The chapter concluded with a detailed description of the data analysis techniques used. In the following chapter, the results of data analysis are presented and discussed in full.

Chapter 6
Results from Initial and Focused Coding

6.1 Introduction

The previous chapter described how the study was carried out. Samples were used to explain how the three coding steps were conducted. The process in which the codes were reviewed, refined and categorised, was also mapped out. In this chapter, the results from the initial and focused coding of the data analysis are fully presented and explained.

Figure 20 Structure of Chapter 6



The chapter contains six sections, and Figure 20 shows a graphical overview. Section one is an introduction. Section two commences with a description of the interviewee profiles and overview of the interviews conducted. Section three presents the results from the initial coding stage. Section four presents the results from the focused coding, identifying focused codes using three groups: culture, education and technology. The process of categorising the focused codes and the identified conceptual categories derived from the data based on focused codes is presented in section five. Finally, section six concludes this chapter with a summary.

6.2 Response overview

Twenty students were recruited to participate in the study. Their details are summarised in Table 7. The interviewees' ages ranged from 18 to 30 years of age, and there was an equal number of males and females among the respondents. All of the respondents completed their English course in Australia before starting a scientific degree.

Table 7 Descriptive details of participants

Respondent Code	Gender	Age	Year Level	State	Interview medium	Length
I-1	Male	18-25	Studied English 2nd year Bachelor	NSW	Skype	60 minutes
I-2	Male	26-30	Studied English 1st year PhD	QLD	Skype	90 minutes
I-3	Male	26-30	Studied English 2nd year PhD	VIC	Face to face	60 minutes
I-4	Male	26-30	Studied English and Master	VIC	Face to face	60 minutes
I-5	Female	26-30	Studied English and Master	NSW	Skype	60 minutes
I-6	Female	26-30	Studied English and Master	NSW	Skype	60 minutes
I-7	Female	26-30	Studied English and Master	QLD	Skype	55 minutes
I-8	Female	18-25	Studied English and Master	ACT	Skype	60 minutes
I-9	Male	18-25	Studied English 2nd year Bachelor	NSW	Skype	68 minutes
I-10	Male	26-30	Studied English 1st year PhD	SA	Skype	86 minutes
I-11	Male	26-30	Studied English 2nd year PhD	VIC	Face to face	60 minutes
I-12	Male	26-30	Studied English and Master	VIC	Face to face	60 minutes
I-13	Female	26-30	Studied Master 3ed year PhD	NSW	Skype	57 minutes
I-14	Female	26-30	Studied English and Master	QLD	Skype	60 minutes
I-15	Female	26-30	Studied English and Master	TAS	Skype	55 minutes
I-16	Female	18-25	Studied English and Master	SA	Skype	70 minutes
I-17	Male	18-25	Studied English and 3ed year Bachelor	WA	Skype	65 minutes
I-18	Female	26-30	Studied Master and 3ed year PhD	VIC	Skype	60 minutes
I-19	Female	26-30	Studied English and Master	NSW	Skype	55 minutes
I-20	Male	18-25	Studied English and 4th year Bachelor	ACT	Skype	70 minutes

Among these students, six were enrolled at institutions in New South Wales, five were in Victoria, three in Queensland, three were in South Australia, two were in Canberra, and one was enrolled in Western Australia. Most of the respondents were undertaking their Master's degree in Australia, but six were taking their PhDs, and four were taking their Bachelor's degree. This diversity is favourable for capturing the full possible range of experiences. Sixteen of the participants preferred Skype as the medium for the interview, including all of the ten females in the sample. Most of the interviews were completed within the planned time. Two interviews took longer than 70 minutes.

6.3 Initial coding

As mentioned in Chapter 5, the 20 interviews were transcribed into 5000 lines of text and over 800 excerpt basic statements were extracted from the raw data. From these 800 excerpts, 400 codes emerged through the line-by-line coding process. Appendix H shows a large sample of the basic excerpt statements and of codes generated from the line-by-line initial coding process. As also described in the previous chapter, the emerged 400 initial codes constantly were reviewed and consolidated to draw out more specific initial codes. During conceptualising the initial codes, and by focusing on coding the relevant data, and conducting several passes of comparing code with code, data with data, and incidents with incidents, a reduced list of 38 initial codes emerged. These emergent initial codes are shown in Table 8.

Table 8 Emergent (38) initial codes

(38) initial codes	
1. Language variations	21. Writing and conversation fluency
2. Interaction (social interaction)	22. Student support
3. Freedom (lifestyle)	23. Student rights
4. Formality	24. Prior experience in using e-learning 2.0
5. Sensibility	25. Distinction between e-learning 1.0 and 2.0
6. Segregation	26. Use of web tools
7. Risk of reputation damage	27. Using e-learning 2.0 for locating information
8. Curiosity	28. Using e-learning 2.0 for knowledge production
9. Adjustment	29. Using e-learning 2.0 for learning-related interactions
10. Willingness	
11. Acceptance	30. Using e-learning 2.0 for group work and collaborative learning
12. Learning the English language	
13. Scholarship to study a higher degree	31. Peer knowledge and support
14. Student visas	32. Ease of interactivity
15. Family pressure	33. Friendships
16. Security (feeling safe)	34. Saving time and money
17. Awareness (study experience)	35. Technology expertise
18. Using technology	36. Language proficiency challenge
19. Online engagement	37. Confidence
20. Student-teacher relationships	38. Engagement challenge

6.4 Focused coding

As the focus was only on coding the relevant data, the 38 emergent initial codes were identified as the most frequently repeated and relevant initial codes that showed promise in addressing the research questions. As described in Chapter 5, the focused coding phase involves reviewing and comparing the initial codes to develop the focused codes, as well as categorising the focused codes into conceptual categories. As a result of reviewing and constant comparison of the initial codes, nine focused codes were developed as will be explained in the next section.

As explained in Chapter 5, from the continual process of comparing, reviewing, categorising the 38 initial codes, nine focused codes emerged. At the same time, through the continuous process of comparison, three groups of categorisation emerged. These groups of categorisation are culture, education, and technology. The following tables 9, 10 and 11 present the full results of identifying the focused codes. Note that the same order of numbering given to the initial codes presented in Table 8 in the previous section is used in following tables from (9 to 11). The purpose of presenting these three tables is to provide a better understanding of the data coding flow, analysis and explanation in this chapter, and to enhance the discussion later in the coming chapters.

6.4.1 Focused codes related to 'Culture'

Table 9 below shows a map of consolidating eleven initial codes into three focused codes related to culture.

Table 9 Forming three focused codes related to culture

initial codes	Tag	(3) focused codes - (out of 9)
1- Language variations 2- Interaction (social interaction)	(1)	Australian environment
3- Freedom (lifestyle) 4- Formality 5- Sensibility 6- Segregation 7- Risk of reputation damage	(2)	Differences in cultural practices
8- Curiosity 9- Adjustment 10- Willingness 11- Acceptance	(3)	Readiness to change

The first set of the initial codes, tagged number (1) in the left column of Table 9, represents the Saudi Arabian students' statements that describe their experiences when they were exposed to the cultural environment, including language variations and the social life. Although the two initial codes tagged number (1) in Table 9, 'language variations' and 'social interaction' are two different concepts, they revolved around the participants' experiences with the Australian life and its cultural environment. Therefore, they were combined into one focused code; 'Australian environment.'

The second set of the initial codes, tagged number (2) in Table 9, represents some of the participants' statements that describe the differences in cultural practices and the reflection of these cultural differences on their feeling. The codes represent the students' concern of being in a far different cultural environment compared to their strict cultural heritage. These concerns included exposure to the freedom, formality, and cultural sensibility, being influenced by the gender segregation culture and the risk of reputation damage resulting from the students' cultural interaction with the Australian cultural environment. As a result of the constant comparison process, the five initial codes with the data they captured were merged into one focused code; 'differences in cultural practices.'

The last set of the initial codes tagged number (3) in Table 9 represents some of the participants' preparedness to change. They represent the participants' curiosity about Australian culture, their mental preparation before reaching Australia and their experiences in adjusting to the Australian gender integration cultural environment. The set codes also represent some of the participants' opinions regarding their willingness to engage in the gender-mixed cultural environment. The codes also represent the participants' views about the acceptance of the new cultural environment after reaching Australia. The four initial codes share some of the students' perspectives of being ready to accept the new cultural environment. Thus, these initial codes were consolidated into one focused code; 'readiness to change.'

6.4.2 Focused codes related to 'Education'

Table 10 shows the mapping of consolidating twelve initial codes into two focused codes related to education.

Table 10 Forming (2) focused codes related to education

initial codes	Tag	(2) focused codes (out of 9)
12- Learning the English language 13- Scholarship to study a higher degree 14- Student visas 15- Family pressure 16- Security (feeling safe)	(1)	Motivations to study in Australia
17- Awareness (study experience) 18- Using technology 19- Online engagement 20- Students-teachers relationships 21- Writing and conversation fluency 22- Student support 23- Students rights	(2)	New education environment

The first set of the initial codes tagged number (1) in Table 10 represents some of the participants' motivations of selecting Australia to pursue their studies abroad. These motivations include: learning the English language; scholarship to study a higher degree; flexibility of Australian student's visa; family pressure and seeking security. All of the initial codes tagged number (1) revolved around the participants' perspectives of studying in Australia, and thus, they were united under the focused code; 'motivations to study in Australia.'

The second set of initial codes, tagged number (2) in Table 10, represents the respondents' experiences with the Australian educational system. This table maps their initial awareness of the Australian education system and their early experiences within it. The second set of initial codes provides a more accurate reflection on the students' experiences of writing and conversation fluency in the new educational environment. This set of initial codes also discusses the using technology, the student-teacher relationships (including learning activities), some educational constraints, student rights and student support. The seven initial codes with the data they captured were merged to form the focused code 'new education environment.'

6.4.3 Focused codes related to 'Technology'

Table 11, below, shows a mapping of consolidating fifteen initial codes into four focused codes related to technology.

Table 11 Forming (4) focused codes related to technology

initial codes	Tag	(4) focused codes – (out of 9)
24- Prior experience in using e-learning 2.0 25- Distinction between e-learning 1.0 and 2.0 26- Use of web tools	(1)	Knowledge and experience about e-learning 2.0
27- Using e-learning 2.0 for locating information 28- Using e-learning 2.0 for knowledge production 29- Using e-learning 2.0 for learning-related interactions 30- Using e-learning 2.0 for group work and collaborative learning	(2)	Using e-learning 2.0
31- Peer knowledge and support 32- Ease of interactivity 33- Friendships 34- Saving time and money	(3)	Affordances
35- Technology expertise 36- Language proficiency challenge 37- Confidence 38- Engagement challenge	(4)	Challenges

The first set of the initial codes tagged number (1) in Table 11 captures the Saudi Arabian students' previous knowledge and understanding of e-learning 2.0 and the distinction between e-learning 1.0 and e-learning 2.0. It also captures the participants' perspectives and experiences using Web 2.0 tools in Saudi Arabia before and after the engagement in the new learning environment. The three initial codes with the data they captured revolve around the participants' online learning knowledge and experiences with Web 2.0, thus, they were merged to form the focused code: 'knowledge and experience about e-learning 2.0.'

The second set of initial codes, tagged number (2) in Table 11, represent and specify some of the respondents' experiences with using different types of Web 2.0 tools for learning in Australia. Such use of online tools was for locating information, for knowledge production to share information, improving their learning-related interactions by working together as a group, and the improvement of the students' ability to work collaboratively. The students' use of Web 2.0 for learning helped them to be more productive through using these technologies. These initial codes with the data they captured were merged into one focused code: 'using e-learning 2.0.'

The third set of initial codes tagged number (3) in Table 11 captures the respondents' opinions regarding the value of e-learning 2.0. After clarifying the concept of e-learning 2.0 with each participant and its differences to e-learning 1.0, many responses had shown recognition of the affordances of e-learning 2.0. Such affordances were the students' appreciation of peer support and knowledge, and the ease in facilitating both their life and study in Australia. These set of initial codes also describe the students' recognition of affordances of using Web 2.0 for friendship, including personal communication, moving forward, meeting and talking to new friends to develop their ideas better and to share them with these friends. The codes also represent the participants' specific benefits and experiences, such as in helping some students discuss sensitive topics or making some aspects of learning more convenient by saving time and money. This set of initial codes describes the participants' uses of Web 2.0 tools for interacting in a non-face-to-face mode where the students can take advantage of communicating with each other online using Web 2.0 tools. The four initial codes tagged number (3) were merged to form the focused code: 'affordances.' The fourth set of initial codes tagged number (4) in Table 11 captures some challenges that face Saudi Arabian students while using e-learning 2.0 in the Australian educational system. These challenges include students' technology expertise, language proficiency challenge, developing confidence and the students' engagement challenge. Thus, the four initial codes tagged number (4) in Table 12 were combined into one focused code: 'challenges.'

As explained earlier and in Chapter 5, through the constant comparison process and conceptualising the focused codes, three groups of categorisation (shared ideas) emerged. These three groups were used in categorising the identified nine focused codes to develop the conceptual categories. The next section presents the results from categorising the nine focused codes.

6.5 Categorising the focused codes

While engaging in focused coding, multiple passes of reviewing, categorising and reassembling the focused codes were conducted in order to develop the conceptual categories. The nine focused codes were grouped using shared ideas; by culture in the first set of codes tagged number (1), education in the second set tagged number (2), and the last set of focused codes tagged number (3) was combined by technology. These are shown in Table 12.

Table 12 Emergent three groups of categories

(9) focused codes	Tag	Shared ideas
1. Australian environment 2. Differences in cultural practices 3. Readiness to change	(1)	culture
4. Motivations to study in Australia 5. New education environment	(2)	education
6. Knowledge and experience about e-learning 2.0 7. Using e-learning 2.0 8. Affordances 9. Challenges	(3)	technology

The shared ideas were developed into conceptual categories derived from the data based on the focused codes. Table 13 includes the three conceptual categories and their definitions.

Table 13 Conceptual categories

(9) focused codes	Categorised by	Definitions	(3) conceptual categories
1. Australian environment 2. Differences in cultural practices 3. Readiness to change	(1) culture	The respondents' opinions and experiences regarding cultural norms, ways of life, practices or beliefs related to students' choice and adapt to life in Australia. It also describes the different reactions and feelings towards mixing with the opposite gender and the influence of gender segregation culture on both the online and offline environment. Addressing using the English language as part of the cultural environment, including understanding Australian pronunciation, the use of slang, and dealing with academic language. Addressing the students' experiences with the sense of freedom, the students' practices and beliefs while interacting with Australian environments. The category also discusses the differences in cultural practices of students' experience, such as sensibility, segregation and risk of reputation damage and the students' readiness to change.	Adaptation to the Australian cultural environment
4. Motivations to study in Australia 5. New education environment	(2) Education	Saudi students' motivations, opinions, plans and experiences about studying in the Australian educational system they experienced. The students' experiences in adapting the Australian educational environment and the challenges faced them. It also addresses the respondents' educational background reflection on their experiences to the Australian educational system through comparing the two education systems, in term of the learning environment, relationship, learning activities and student rights and support.	Adaptation to the Australian educational system
6. Knowledge and experience about e-learning 2.0 7. Using e-learning 2.0 8. Affordances 9. Challenges	(3) Technology	The respondents' opinions and their experience with e-learning 2.0, including previous knowledge about e-learning 2.0, recognition value and affordances of e-learning 2.0, and the benefits of using e-learning 2.0 to facilitating learning. This category discusses the challenges facing the students' experiences, such as technological, language, confidence and engagement challenge.	Engagement in learning through technology

A definition for each conceptual category is given to show what a category is all about; this also served as a guide when categorising the codes. In the following subsections, the conceptual categories are explained in detail.

6.5.1 Adaptation to the Australian cultural environment

The first developed conceptual category is 'adaptation to the Australian cultural environment.' The three focused combination codes, in the second left entry of Table 13, addresses the students' cultural perspectives related to their experiences in the Australian environment. These focused codes were categorised in the next column, Table 13, tagged number (1) into the shared idea; 'culture.' As frequently stated by the interviewees, the Saudi Arabian cultural background had a strong influence on them:

"When other people visit, the homestay, it was also difficult since there was wine and Muslims do not drink. Others could not understand why we could not celebrate with them" [I-18-F]

The gender mixing and the role that gender segregation culture plays in Saudi Arabian culture was discussed as a challenge by many of the students while interacting in the new cultural environment:

"*[talking to females] something probably is not good for me, as you know, cultural background and religion prohibits mixing between males and females…I had studied with students of Saudi males and females, for females, I do not communicate with them, unfortunately"* [I-4-M].

Saudi Arabian students did show evidence of adapting to the new environment; however, it took some time:

"I have been in Australia for three years… It took me some time to engage… years, and I have learnt [about] different culture and thinking. Now, I became more confident; I can talk about anything, I can discuss with anyone" [I-5-F].

This conceptual category addresses some other aspects of Australian cultural environment, such as the participants' experiences with freedom:

"Here, I can go everywhere by myself, but in Saudi Arabia, I had to ask somebody to take me" [I-19-F], *"I like the equality for everyone, freedom of speech and freedom to do whatever you want without anyone questioning."* [I-17-F].

It also discusses the liberation sense in some students' lives in Australia:

"I can practice my religion anywhere and anytime, I think that makes my life easier," and enhancing their study, "I think freedom of religion in a country that supports you and supports your life can enhance your study" [I-13-M].

Nonetheless, some students faced some specific challenges in their experiences in Australia as a result of the differences between the Australian and Saudi Arabian cultural norms, which led to some concerns. This conceptual category also describes the students' readiness to change and adopt Australian culture.

The conceptual category 'adaptation to the Australian cultural environment' along with the associated subcategories (focused codes), as well as their properties (initial codes) are thoroughly analysed and discussed in Chapters 7 and 8.

6.5.2 Adaptation to the Australian educational system

The second developed conceptual category, shown in Table 13, is 'adaptation to the Australian education system.' The conceptual category comprised of the focused codes representing the respondents' experiences with the educational system they had experienced in Australia, including the motivations to choose to study in Australia, and their awareness of the Australian educational system:

"I decided to go to Australia, first of all, I did have any idea about the training or the system, the education system, social system or the official system" [I-17-F].

To describe the educational challenges which faced them, the respondents compared their experience with the Australian education system with what they had experienced in the Saudi Arabian educational system. The comparisons included using technology, online engagement, student-teacher relationships, the study's language, and the student support and rights.

"In terms of subjects in Saudi Arabia, there is no database for your academic record, [and] thus, there is a lot of paperwork. However, here in Australia, things are very easy since everything is put in a database" [I-18-F].

"The way we used to have like a feeding process system, just learning to feed the mind that's it. Now we do not have to think about that. We memorise the information" [I-17-F].

"The education system there [in Saudi Arabia] is based on the lecturer and based on memorisation. In Australia, the methods of research, qualified teachers, individual learning and many more [are] very different from Saudi Arabia" [I-14-M].

"In Australia, we are doing research and requesting many articles from the librarians, which are amazing since we are able to get all the books. The facilities and very qualified people and material to assist [are] also make [the] one happy." [I-10-M].

Thus, the two focused combination codes were categorised in the next column tagged number (2) into the shared idea: 'education.' The conceptual category 'adaptation to the Australian educational system' along with the associated subcategories, as well as their properties, are thoroughly analysed and discussed in Chapters 7 and 8.

6.5.3 Engagement in learning through technology

The last conceptual category is 'engagement in learning through technology', as shown in Table 13. It concerns the Saudi Arabian students' engagement in e-learning 2.0. The four focused codes in the last left entry of Table 13 are categorised in the next column, tagged number (3), into the shared idea, 'technology.' This developed conceptual category addresses the students' knowledge and experience about e-learning 2.0. Some students were found to have insufficient understanding of e-learning 2.0, such as I-1-M: *"E-learning 2.0, I think, is when you access your university email and the website, But. I'm not really sure, sorry."*

Some respondents provided a more accurate understanding of e-learning 2.0:

"I have heard about the two. E-learning 1.0 is just receiving the information, but e-learning 2.0 involves both receiving the information and trying to give a reply to the information" [I-20-F].

Regardless, all of the students had experienced learning through technology using e-learning 2.0 as they engaged in their studies in Australia:

"In Australia, we encounter e-learning 2.0 in general. It is not only for direct discussion but calendars, websites and using Web 2.0 tools for other research areas." [I-9-M].

For most of the respondents, e-learning 2.0 was experienced and used as a study requirement, for example, for locating information to enhance their learning and understanding course content and for group work:

"Yes, I have some topics that are taught electronically using e-learning 2.0. We have discussion groups, and the teacher gives us assignments in groups. We discuss ideas and share online" [I-15-F].

"We do small groups on Facebook, and we can contact each other easily. We upload material and get to share after one has completed their work" [I-19-F].

"So, all the assignment was done through Google tools, [the] meeting was not at the same time, but since we can work and post what we have, we can alert each other" [I-8-F].

The participants' discovery and recognition of the value/affordance of e-learning 2.0 in Australia and the challenges concerning the use of these tools are also represented in this conceptual category. Similar to the other conceptual categories presented earlier in this section, the 'engagement in learning through technology' conceptual category is associated with a set of focused codes as subcategories that described what the category is representing. The conceptual category, along with the associated subcategories, is thoroughly analysed and discussed in Chapter 7 and 8.

As such, the (9) focused codes had commonalities which were used to rationalise them into three main conceptual categories. The conceptual category of engagement in learning through technology, and the other conceptual categories described earlier in this section, show that Saudi Arabian students faced some opportunities and challenges during their stay and study in Australia.

"If I have not used e-learning 2.0 tools, I would have failed most of my subjects. Because you know most of the master [degree], I would say, 30% in the classes, and 70%, you have to learn yourself. It is more about self-learning. You guide yourself at home. So, what you have to do is to look up [on] the Internet, and what you have to use is e-learning 2.0 tools" [I-8-F].

The statement by I-8-F, and many similar respondents' statements, provide evidence that the students used the e-learning 2.0 environment as an aid tool to help them to overcome some of their challenges, and enable them to engage and adopt the new learning environment, and thus succeed in their study journey in Australia. The students' utilisation of the e-learning 2.0 environment as enabler means is further explained and discussed in Chapter 8 of this report. These three conceptual categories, along with the associated focused codes as subcategories, are summarised in Table 14.

Table 14 Conceptual categories and subcategories

Subcategories	Conceptual Categories
1. Australian environment 2. Differences in cultural practices 3. Readiness to change	Adaptation to the Australian Cultural environment
4. Motivations to study in Australia 5. New education environment	Adaptation to the Australian education system
6. Knowledge and experience about e-learning 2.0 7. Using e-learning 2.0 8. Affordances 9. Challenges	Engagement in learning through technology

6.6 Summary of the chapter

This chapter presents and describes the results from the first and second coding stages, the initial and the focused coding and categorisation stages. Three conceptual categories emerged. These are: 'adaptation to the Australian Cultural environment,' 'adaptation to the Australian education system,' and 'engagement in learning through technology.' Each of the three conceptual categories is associated with a set of focused codes (as subcategories) along with a set of initial codes (as properties.)

With regard to the first conceptual category - Saudi Arabian students' adaptation to the Australian cultural environment - the results revealed that the students' cultural background significantly influenced their adaptation to the Australian cultural environment. The participants struggled in an environment in which gender segregation was not the norm. However, despite these cultural challenges and concerns, the Saudi Arabian students showed a willingness to change and adopt the Australian lifestyle, even if it took a while for some students to adjust.

Insights into the second conceptual category - Saudi Arabian students' adaptation to the Australian education system - revealed that students' were motivated to choose Australia as a study destination. They were motivated to choose Australia because they felt, as an English-speaking country, it would help them to improve their English proficiency. However, some students experienced challenges in this foreign educational environment. These included: use of technology, online engagement, the student-teacher relationships, the English language, and the student support and rights.

The third conceptual category - Saudi Arabian students' engagement in learning through technology in Australia - highlighted that some students had an inadequate understanding of e-learning 2.0. E-learning 2.0 was experienced by most of the participants as a study requirement for group work, locating information and to help them to understand course content.

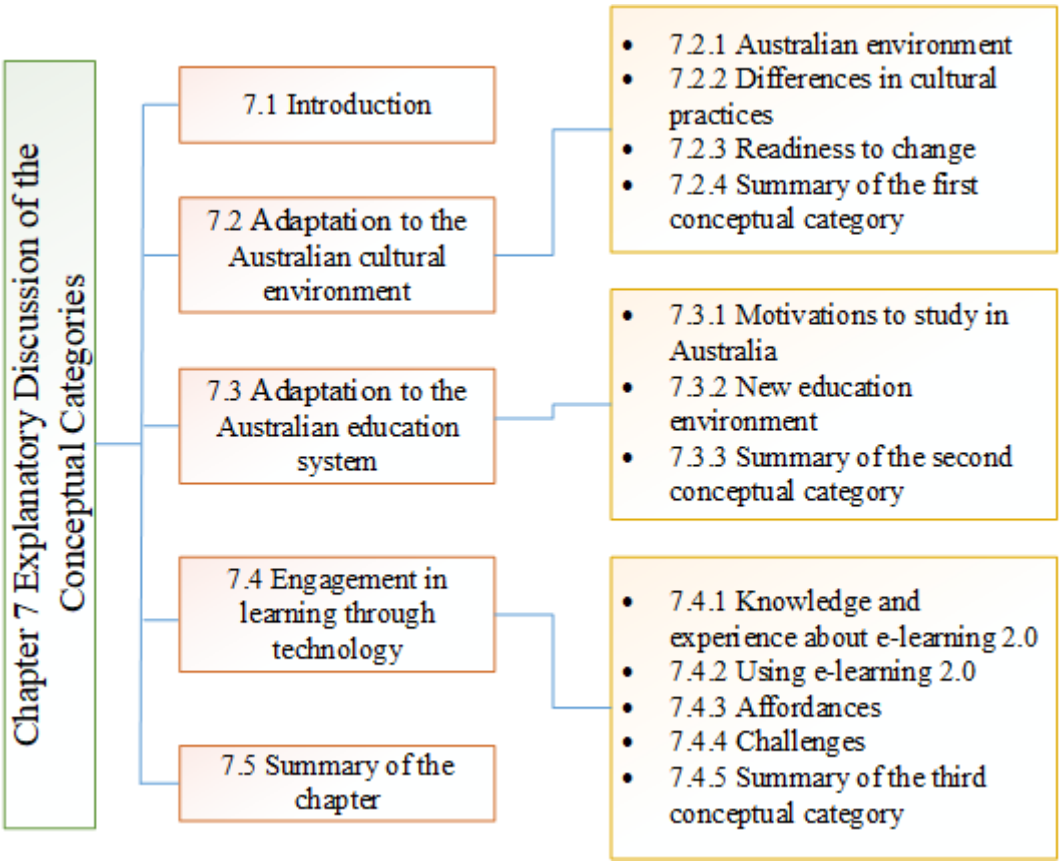
The final arrangement of the conceptual categories carries the subjective nature of all focused codes. These conceptual categories and their associated subcategories, along with their properties presented in this chapter are discussed in detail in the next two chapters.

Chapter 7
Explanatory Discussion of the Conceptual Categories

7.1 Introduction

The previous chapter presented the results from the first and second coding stages. Three conceptual categories emerged, including, 'adaptation to the Australian cultural environment,' 'adaptation to the Australian education system' and 'engagement in learning through technology.' This chapter provides an explanatory discussion of these conceptual categories. The discussion in this chapter is guided by the different theoretical perspectives provided in Chapters 2 and 3. At the beginning of each conceptual category, an illustration figure is provided which combines the conceptual category with its subcategories and properties. A summary is provided at the end of each conceptual category. As explained in chapter 5, key theoretical concepts related to the conceptual categories are highlighted in the summary of each conceptual category. This chapter contains five sections as shown in Figure 21. The first is the introduction. In the following three sections, the three conceptual categories and their subcategories and properties are explained. Section five gives a summary to the whole chapter.

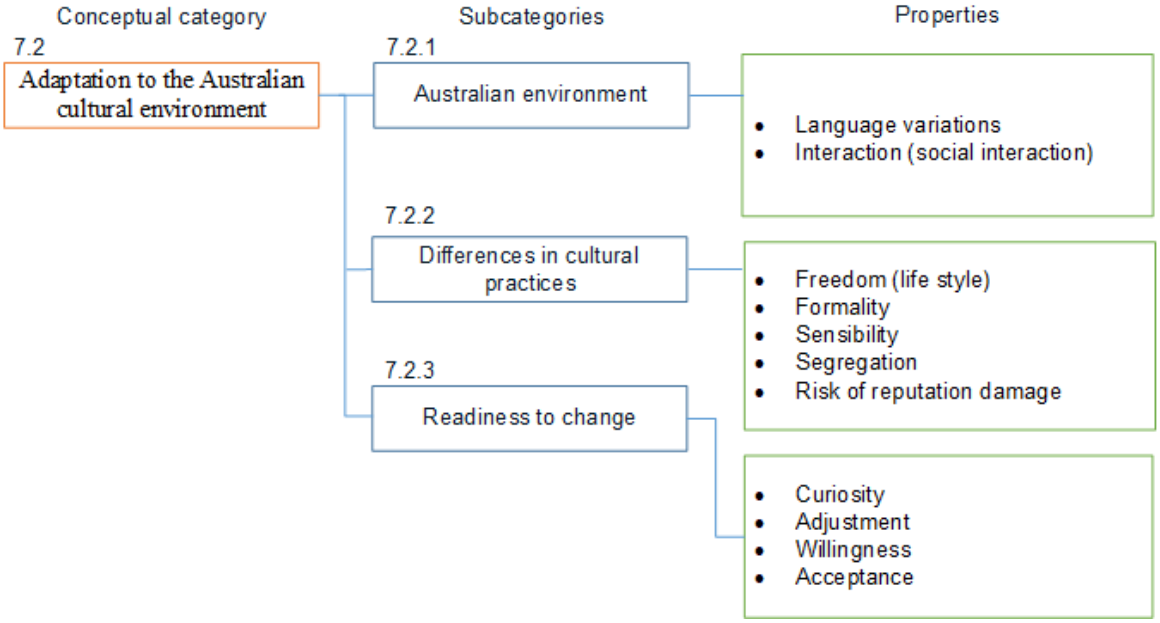
Figure 21 Structure of Chapter 7



7.2 Adaptation to the Australian cultural environment

This conceptual category represents the respondents' opinions and experiences of cultural differences while studying in Australia. The category describes the students' experience with the Australian environment and the challenges that they faced, as well as their readiness to adapt. Figure 22 provides a summary of this conceptual category. Three subcategories are associated with this conceptual category. These are the Australian environment, the differences in cultural practices and readiness to change. A number of properties describe each of these subcategories (see Figure 22).

Figure 22 Adaptation to the Australian cultural environment



7.2.1 Australian environment

The subcategory of 'Australian environment' describes the students' experiences with the Australian cultural environment, such as language variations, how people use the language in Australia, and how Australian people interact socially. This subcategory is described by two properties: language variations and interaction (social interaction).

- ***Language variations***

The property of 'language variations' defines the students' experience with the style of English used in the Australian environment. The Australian style of English pronunciation (accent) was reported as a challenge for Saudi students. Saudi Arabian students are more familiar with the U.S. accent and slang.

"Yes, when I arrived, it was difficult. Some words were hard to understand," [I-20-F], *"When I came here, it was hard to understand what they mean, and sometimes they have different pronunciations"* [1-2-M].

"Yeah, because all we know about the barrier is we are used to the American English rather than the British English….surely it is pretty much British English, but it is a little bit different in terms of the accent, it [is] much Australian accent" [1-7-F].

The respondents expressed difficulty in communicating with Australian students, both in-person and when using Web 2.0 applications:

"Yes, it is a big challenge not only in web 2-0 tools but also in life. When communicating with others in an academic way, English becomes difficult. It becomes difficult to exchange ideas with the natives since there is an academic way to be used" [1-4-M].

- ***Interaction (social interaction)***

This property describes the students' social interaction with the Australian life and cultural environment, in which area some respondents were found to have challenges:

"Actually, Australian life is not too bad, but as you know, there are some differences in Australia, such as culture, food transportation, learning methods, teaching methods and also the process with medical care…The big shock with me in Australia, I do not know in all cities in Australia, or just in my city, people do not care about foreign and international people, and it would be hard to make friend with them" [I-4-M].

I-6-F expressed a similar experience:

"Actually, I haven't fitted into the Australian way of life, you know, it's really different about culture and difficult language, and you know, especially, I live here in …small town, so people here are busy all the time they don't have time to contact with others" [I-6-F].

The respondents also discussed how the new Australian life was very different, as pointed out by I-3-M:

"It is completely different cultures between them and us, I mean with Australia people…for example if you want to socialise yourself, you have to drink alcohol, we do not have this in our culture, and our religion. I mean it is 100% prohibited...It is very hard to socialise yourself in [the] Australian environment, at least you need to have some experience with what they are doing… It was a party…and I am not integrated [into] the party...the music very hard [loud] and all of them [were] like drunks" [I-3-M].

I-1-M expressed a similar perspective:

"I was living in an Australian homestay family which is different from how I used to live in Saudi. So, my whole life is different. Moving from Saudi to Australia is all challenge." [I-1-M].

7.2.2 Differences in cultural practices

This subcategory represents the cultural differences that the students' experienced given their strict cultural heritage. All of the participants discussed that they had encountered cultural differences, as explained by I-1-M:

"I was living [with] an Australian homestay family, which is different from how I used to live in Saudi. So, my whole life is different. Moving from Saudi to Australia is all challenge" [I-1-M].

I-3-M described the differences in culture as "completely different":

"Yeah, there is a lot of challenges man, it is completely different cultures between them and us, I mean with Australia, with Australian people" [I-3-M].

This subcategory describes Saudi Arabian students' comparison between their cultural norms and the host cultural environment. The subcategory of 'differences in cultural practices' describes the students' exposure to five properties of Australian lifestyle: freedom, the degree of formality in Australian society, the sensibility and the students' reputation concerns, given their cultural norms, particularly about the influence of gender segregation culture.

- ***Freedom (lifestyle)***

This property relates to the concept of liberty, one of the Australian shared values that the students experienced while living and studying in the Australian environment. According to the Department of Foreign Affairs and Trade (2012), a person in Australia is likely to maintain shared values such as equality, dignity, and freedom. Saudi Arabian students were exposed to some of these shared values during their stay in Australia. One of the most exciting experiences was their exposure and enjoyment of a sense of freedom:

"The most enjoyable thing was freedom. I do not have to follow anyone, like anyone structure, like just anytime I'd like to go [I] just go, and anytime I'd like to do anything, I just do it, you know, the casualness in Australia made it more fun than Saudi Arabia and the environment enabled people to learn more" [I-5-F].

Some respondents found it difficult to express their feelings about engaging in the freedom of the mixed gender environment:

"You know; it is [a] different culture and different lifestyle. As you know, in Saudi Arabia we have [a unique] lifestyle and gender segregation [are] there, and here [is] freedom, I do not know how to explain, but the culture is different" [I-6-F].

The students' perspectives show that some of the students have come from a highly conservative background, such that their experiences in Australia are daunting, as expressed by I-6-F:

"As you know, in Saudi Arabia, we have special [a unique] lifestyle and here (is) freedom… About me, I do not like it; I prefer to be with my family all [the] time, I do not like freedom. I do not need freedom. I see freedom in a different way, and here maybe because I am a woman I have to do everything by myself …In Saudi Arabia, my family support me, my father, [and] my brother. So, it is really difficult, so I have to carry out all things" [I-6-F].

However, for female participants, the perspective of I-6-F was an isolated case, since most of the perspectives about experiencing freedom were positive.

- ***Formality***

This property refers to the degree of formality in Australian society, such as dress code and gender integration that the students experienced while living and studying in the Australian context.

"As traditional Muslim, I saw many girls who not very formal, and maybe wore somewhat revealing clothing, so sometimes, I feel uncomfortable" [I-4-M].

Some participants explained their feelings are coming from a formal, traditional and conservative environment (I. Hofstede, 2017).

"I came from a formal and completely different culture from Australian culture, and it was a huge challenge for me" [I-1M].

Australia, as described by Hofstede (2011), has an indulgence culture which permits people the freedom of speech, relaxation and enjoyment. Many of the respondents used the comparison between their home and the host environments to express their feeling about a lower degree of formality:

"Here, I can go everywhere by myself, but in Saudi Arabia, I had to ask somebody to take me" [I-19-F], *"I can walk even at midnight alone, but this cannot be happened in my country"* [I-20-F].

The Saudi Arabian culture is known to have a high level of power-distance (I. Hofstede, 2017). Males are higher up the power hierarchy than females (Hiel, 2007; Geert Hofstede, 2012b; Moaddel, 2006; Onsman, 2011). However, most of the Saudi female respondents experienced the feeling of liberation from the removal of restrictions that they had been subjected to in Saudi Arabia:

"In Saudi Arabia, things are very formal, and you have to be careful about what to say and do. Here things are very informal, and you can even hold discussions with your male lecturers. I feel comfortable here to say and do whatever I want" [I-18-F].

On the other hand, only three Saudi male respondents showed the excitement of being in such a liberal environment. Saudi males may feel a loss of authority that had been bestowed upon them in Saudi Arabian society, specifically on deciding what should be culturally accepted and what should be not. I-17-F described some of the Saudi males' reaction to the Australian gender-mixed environment, *"I had Saudi students [males], and they would never shake Saudi female's hands."* Additionally, some of the male respondents pointed out that a limitation in a gender-mixed environment is needed: I-13-M, *"I am suggesting, it is okay to have mixed gender, but with [a] boundary as well."*

The responses show evidence of the cultural description of Saudi Arabia based on various studies which claimed that there were still apparent gender segregation and gender roles in its society (Butters, 2009; Hiel, 2007; Onsman, 2011). The outcomes might be consistent with the discussions of Hiel (2007) and Onsman (2011) which considered that while women in Saudi Arabia respected the culture and saw many of its values, they likewise sought to achieve more rights and become more independent in society. This is reflected by the acceptance that they had for an equal footing of males and females in Australia in terms of personal liberty.

- ***Sensibility***

The cultural 'sensibility' property represents the students' feelings of experiencing some cultural sensitivity, such as the sensitivity of the Islamic veil, and engaging in a sensitive topic while living and studying in the new cultural environment.

Although Australia is a multicultural environment, some respondents believed that some people in Australia might be unprepared for accepting other people's cultural norms and practices, and some have not been very open to cultural differences. For example, I-11-M claimed, *"Some of them [people in Australia] have problems with my wife because*

she covers her face." I-20-F also discussed that *"some culture does not accept the Muslim wears like I wear [a] scarf all the time."* Saudi Arabian students may also consider some of the social actions or practices by people around them in Australia as inappropriate given their religious thought and beliefs. The students also discussed that engaging in sensitive dialogues was a challenge, "*For example, it would be difficult for me to engage the males in some topics due to the culture"* [I-15-F], as well as drinking alcohol:

"When other people visited at the homestay, it was also difficult since there was wine and Muslims do not drink. Others could not understand why we could not celebrate with them" [I-18-F].

Some students have provided examples of sensitive topics that they avoid engaging with for cultural reasons. Health-sensitive topics is an example as was explained by I-15-F, *"There are some topics in my major, health, which are sensitive in my course and would be difficult for me to discuss."* Gay marriage is another example, as explained by I-20-F that, "*for me, to talk about sensitive topics like gay marriage, for me I feel shy to talk about it in public*" [I-15-F].

- ***Segregation***

This property refers to the culturation of gender segregation, particularly when working with the opposite gender in the Australian mixed learning environment. It describes the Saudi Arabian students' level of influence by their gender segregation cultural norm.

The Saudi Arabian students discussed some situations related to gender roles as a challenge, I-5-F, *"Honestly, yes, because when I started my course, I had to communicate and discuss with different gender, which, sometimes, made me feel like embarrassed."*

Some Saudi female students made it clear that while working online together as a group, they do not want a male to speak to them:

"I find some difficulties. Sometimes, girls are shy, and they do not want a boy to speak to her in a group, you know what I mean" [I-16-F].

The segregation culture is discussed as the most prominent cultural challenge and was directly linked to the students' reaction to the gender-mixed environment. Some respondents expressed that they were speechless and could not do anything:

I study in class with men and boys was in language Institute, and I feel like I cannot talk, I cannot do anything because I was not raised to studying like in this environment. I think the most important thing would be [the] culture" [I-5-F].

What was happening around the Saudi students might be difficult for some of the participants to discuss, however, the students did point out that it was a challenge: *"I do not know how to explain it, but you should not communicate with a girl"* [I-1-M]. *"I could not engage lots in some topics; I do not know how I can explain it"* [I-5-F]. These responses are consistent with various studies on Saudi Arabian culture, which have concluded that gender segregation is still a cultural norm, such as (Hiel, 2007; Onsman, 2011; Zoepf, 2010). As explained by Hiel (2007), it is essential for Saudi Arabians to be able to maintain the culture of gender roles, as this is deeply rooted in their social and religious upbringing.

Both males and females were made uneasy by the absence of gender segregation in their new environment. Additionally, these findings can be explained through cross-cultural adaptation theory, which considers how people from one culture are likely to react when they experience a culture that is far different from what they were used to. Consistent with Bennett (2004) stages of adaptation that described in Chapter 2, some of the Saudi Arabian students were found to be defensive of their cultural norms. They considered it a challenge to overcome the feelings of being placed in situations where the people around them do not practice some of their norms, such as gender segregation.

- ***Risk of reputation damage***

Some respondents' were concerned about damaging their reputation, particularly regarding interacting with the opposite gender. Some Saudi Arabian students, both men and women, were worried about the damage to their reputation when talking to members of the other gender, *"I worked in a group with two Saudi girls and two Saudi boys, [and] we do not speak to each other"* [I-16-F]. I-2-M pointed out that due to the:

"strict culture…we like to keep a distance like [when] we get into a discussion, and some [of] like my professionals are always formal in these relationships [with females]. No silly joke" [I-2-M].

I-8-F also expressed her concerns about damaging her reputation:

"I could not participate in [some] topics though was very interesting; if I participate, I am afraid about what Saudi girls who are in my class will talk about me, behind my back, like she had the nerve to talk about this topic in front of everyone" [I-8-F].

Some participants attributed these concerns to the absence of the culture of gender segregation in the Australian environment, such as I-20-F, *"Gender segregation is still in Saudi Arabia, it is difficult to get rid of the practice of having separate female and male classes"*, or to the influenced gender segregation culture:

"We had different sexes in different classes. We have some barriers, and we have to follow our culture, but here in Australia, things are different" [I-12-F].

7.2.3 Readiness to change

The 'readiness to change' subcategory describes Saudi Arabian students' readiness to adapt to the Australian cultural environment. This subcategory is described by three properties, including curiosity, adjustment, willingness and acceptance.

- ***Curiosity***

The 'curiosity' represents the students' interest and desire to know about Australia as a country and to learn about its culture.

Saudi Arabian students' readiness to adapt was first identified from their fascination with Australia and the divergence of its culture from their own. One of the motivations for choosing Australia was based on an interest in the country:

"I know Australia as a beautiful country, and I did not know much about Australia further" [I-5-F]. *"Australia, I think, is a beautiful place. I love Sydney, and I read about it in high school. I generally love Australia as a country because of the multicultural"* [I-7-F].

Another interest was to learn about a new culture:

"I would like to [know] more about Australian people and their culture," [I-5-F]. *"Also, it is good when you learn a good language, and also it is fun when you deal with different people from different culture. I think Australia like a multicultural country you can meet people from different country, you can make friends from different environment"* [I-16-F].

- ***Adjustment***

'Adjustment' property describes the respondents' experiences in adjusting to the Australian environment, where males and females were not segregated. The Saudi Arabian students faced some cultural challenges in their stay in Australia: *"I came from a completely different culture from Australian culture, and it was a huge challenge for me"* [I-1-M], and

the most prominent cultural challenge the students had to deal with was adjusting to a gender-mixed environment:

"I think, the 1st challenge was with mixed gender because in Saudi Arabia we are like completely separate…We didn't allow to talk with another man, who like a strange man, not relative or cousin or brother, and [the] first time, I study in class with men and boys was in [a] language institute, and I felt like I can't talk, I can't do anything because I was not raised to studying like in this environment" [I-5-F].

A similar experience was expressed by I-16-F:

"Yes, I find some difficulties. Sometimes, girls are shy, and they don't want a boy to speak to [them] in a group, you know what I mean" [I-16-F].

Male participants also experienced the challenge of working with the opposite gender:

"But here we talk with them [females] face to face, and sometimes, we have to shake hands, and as you know, this is a bit hard [difficult] for us because of our religion" [I-4-M].

Other respondents described similar expressions, such as:

"Here [in Australia] you find it hard [difficult] to work with females…I found it so hard [difficult], as I have to be careful about my words. That is what I mean" [I-1-M].

The respondents' recognition of cultural differences can be reflected in their concern of changing their cultural norms. They may return to the concept of ethnocentrism (Bennett, 2004), and the collectivist nature of Saudi Arabian culture (I. Hofstede, 2017). As shown from their concern for damaging their reputation discussed earlier, the students deeply value the perspectives of their Saudi Arabian peers, and fear how their actions might affect on their cultural repute, as discussed by both, females and males:

"We have a strict culture for this; sometimes, they will feel this girl is not a good girl when she just put her real name and picture. I was afraid [that] my classmates or men from my country what they will talk about me. I just worried, worried about lots of things" [I-5-F].

"As traditional Muslim, I saw many girls who not very formal, and maybe wore somewhat revealing clothing, so sometimes, I feel uncomfortable in interacting with them directly" [I-4-M].

Thus, some students make choices to minimise the possibility of such adverse effects, *"People, I do not know, most of the time, I do not put them online friends"* [I-18-F]. In doing so, however, it is shown that their learning may be compromised since they are unable to participate actively in discussions for fear of what their peers would think of them. However, some students made it plain that they were deliberately trying to stay away from working with girls, particularly girls from Saudi Arabia:

"I had studied with students of Saudi males and females. For females, I do not communicate with them, unfortunately. Sometimes when we are working as [a] group, when we got distributed by the teacher, I try to avoid working with a girl from Saudi Arabia" [I-4-M].

- ***Willingness***

The property of 'willingness' represents the students' willingness to change their cultural perspectives, particularly regarding the gender-mixed environment.

Although gender mixing was found to be challenging for many respondents, some respondents expressed openness to interact with the opposite gender:

"I like Australia, and I like the equality between genders. The male and female are the same; they can treat them equally, not differently" [I-7-F].

Similarly, I-13-M pointed out that he respected and was willing to accept the gender-mixed environment: *"I respect other people roles. After I came, I was willing to accept, for example, studying with the opposite gender in class."*

However, as discussed previously, there were those who remained influenced by the culture of gender segregation while studying in the Australian environment. I-13-M explained that reacting to studying in a mixed gender environment may vary from one group of students to another, given their cultural backgrounds:

"If you apply this [studying in a mixed gender environment] for other Saudi students, there are many challenges. There are many group backgrounds, many different aspects that need to be taken into consideration some students are not educated, not prepared, and some people, they just don't want to have a mixed gender" [I-13-M].

- ***Acceptance***

Despite differences from their home cultures, some respondents described positive experiences in Australia and readiness to adapt to the Australian cultural environment.

Their readiness to accept and adopt the Australian culture was evidenced. As pointed out by I-16-F, *"Australia is a diverse country but easy to settle in. I found it easy."* Likewise, I-15-F, also explained how *"it was very easy [for her to settle in] because [she] came from Canada and the cultures were almost the same".* The students' responses show evidence that Saudi Arabian students were ready to accept and adapt to the Australian culture:

"I think that the Saudi students come from 13 different regions in Saudi Arabia, and my regions like has an open culture attitude to a different culture from around the world…Also, I think the way how we grow up like we watch lots of American movies, so I think it was easy for me to adapt to Australian culture…We accept other culture, we fit in another culture" [I-2-M].

The above statement by I-2-M shows the readiness of some respondents to accept new cultural perspectives. However, adapting to the new cultural environment might take a long time for some students. I-1-M explained that it took him three years to feel comfortable with the new environment: *"I guess, that after my three years here, am fine with life in Australia. I feel fine and comfortable."*

A similar experience was described by I-5-F:

"I have been in Australia for three years… this feeling [uncomfortable] was a concern only at the beginning. After that, I used to engage in the environment and everything" [I-5-F].

There were other positive experiences with the Australian multiculturalism lifestyle, which also show evidence of acceptance and ease of adapting to life in Australia. The responses discussed show Saudi Arabian higher education students' experiences while interacting with a new culture, including some cultural challenges and the rewards experienced when living in the Australian culture. The students' experiences can likewise be explained using the theory of cross-cultural adaptation explained in Chapter 2. As explained by (Young Yun Kim, 2010), people adapt based on the human tendency to find internal balance when under distress due to situations that deviate from one's cultural norms.

As shown from previous responses' discussion, some of the Saudi Arabian students experienced adversarial conditions concerning their aversion towards Australian values, such as freedom, a lower degree of formality, alcohol intake or studying in a gender-mixed environment. These are shared values and practice for living, studying or socialisation in Australia (Department of Foreign Affairs and Trade, 2012). Based on Bennett (2004), it may be argued that some of the interviewed students may be still in the state of

ethnocentrism, i.e., the first three stages of adaptation, denial, defence and minimisation stages, where they maintain the superiority of their values relative to the contrary values that they discovered in the Australian environment.

7.2.4 Summary of the first conceptual category

The first conceptual category ' adaptation to the Australian cultural environment' discussed the Saudi Arabian students' experiences with the Australian cultural environment, their interaction and challenges while studying in Australia. This conceptual category was described by three subcategories, including Australian environment, differences in cultural practices and readiness to change. Each of these subcategories was discussed under a number of properties.

From the discussion, it was also found that curiosity and willingness contributed to some students' settlement, acceptance and adaptation to the Australian cultural environment. However, the cultural differences between Australia and Saudi Arabia manifested some challenges that the students from Saudi Arabia faced upon starting their studies in Australia. It was found that some of these cultural challenges kept them from making the most of their stay and education in the country. Specifically, from the respondents' statements discussed earlier, adjusting to a gender-mixed environment was found to be the most prominent cultural challenge. Many of the Saudi Arabian students may not have been very open to the idea of immediately communicating with people from the opposite gender face-to-face. They may have considered this as inappropriate, given their religious beliefs. They may also have felt that there was nothing they could learn from such interactions compared to just reading content or talking with people of the same gender as them. However, as will be thoroughly discussed in the last conceptual category, the students' experiences show that they recognise that there were benefits from such interactions where e-learning 2.0 was concerned.

The first conceptual category and its subcategories and properties revolve around the students' cultural adaptation in the Australian environment. Out of the analysis conducted on this conceptual category, **'cultural adaptation'** is identified as a key theoretical concept. This theoretical concept is associated with two theoretical aspects. These are:

- 'Motivations'
- 'Cultural challenges'

Each of these theoretical aspects is described by a number of properties that were discussed under the subcategories associated with this conceptual category.

The properties that describe **'motivations'** (presented in Figure 27 in Chapter 8) are:

- Willingness to adapt
- Curiosity about Australia
- Sense of freedom

The properties that describe **'cultural challenges'** (presented in Figure 28 in Chapter 8) are:

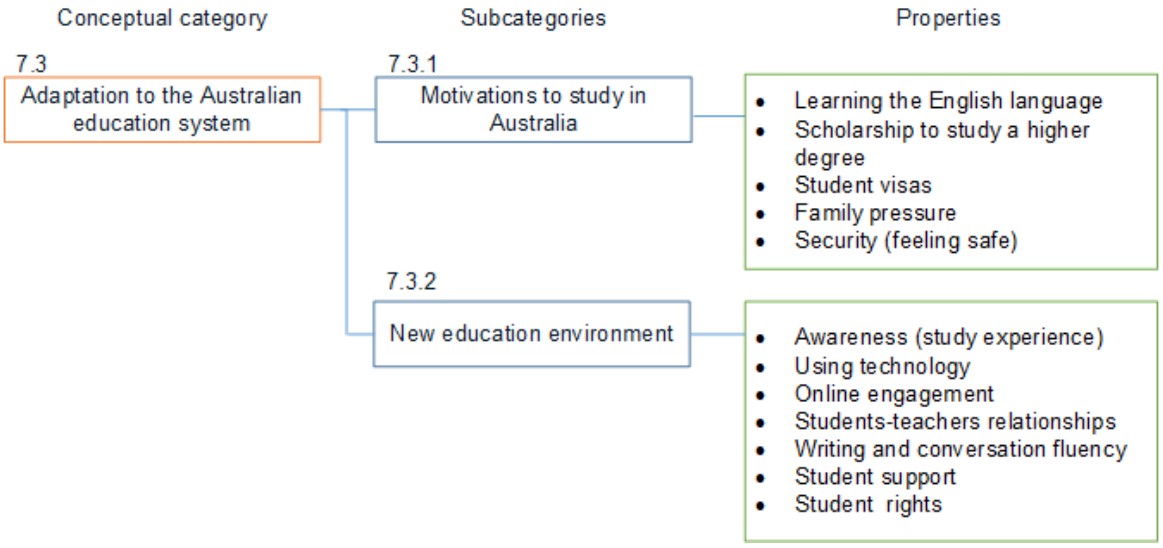
- Influence of gender segregation
- Sensibility
- Risk of reputation damage

These theoretical elements used in constructing the study's theoretical model are presented in Chapter 8. As will be further explained later, regarding the cultural challenges discussed in this conceptual category, e-learning 2.0 was found to be especially socially and culturally useful for the Saudi Arabian students to overcome some of their cultural challenges. However, some challenges were found to persist in some of the students' experiences as will be explained in the last category, and in Chapter 8. The next conceptual category is 'adaptation to the Australian education system' that focuses on the students' experiences with the Australian educational system.

7.3 Adaptation to the Australian education system

The 'adaptation to the Australian education system' conceptual category describes the respondents' opinions and experiences studying under the Australian educational system. The category also describes how the respondents adapted to the Australian education system. Figure 23 provides a summary of this conceptual category.

Figure 23 Adaptation to the Australian education system



This conceptual category is associated with and described by two subcategories, including 'motivations' to study in Australia as a 'new educational environment'. A number of properties describe each of the subcategories (see Figure 23).

7.3.1 Motivations to study in Australia

This category examines the motivations of students towards studying in Australia and choosing the Australian higher education system. The subcategory is described by a number of properties, including learning the English language, availability of a scholarship to study a higher degree, student visas, family pressure and security (feeling safe).

- ***Learning the English language***

Saudi students expressed concern to improve their proficiency in the English language as one of the reasons why they chose to study in Australia as an English native country.

All of the respondents were found to have a range of motivations for selecting Australia as their country of study. One of their motivations was the belief that studying in Australia would help them to improve their proficiency in the English language. As explained by I-5-F, *"I would like to study English and improve my English."* Likewise, I-19-F stated, *"I came and started learning English...Before coming here, I had not done English, so I came here and did it."* Similar responses discussed that studying in an English native country that uses technologies in their teaching was an attraction: I-14-M, *"I liked Australia because using technologies helps you to practice your English very well."*

Hunter (2009) pointed out that the infrastructure of information technology in the education sector of Australia is well-developed, which makes it so attractive to international students to select Australia to improve their English language skills:

"I came [to] Australia because it is a native English country, and I heard that they use lots of technologies for teaching [the] English language in the education system" [I-10-M].

Interlinking e-learning 2.0 with a motivation to study in Australia to learn English more effectively can be drawn from the work of (M Ebner, Lienhardt, Rohs, & Meyer, 2010). M Ebner et al. (2010), found that universities in Australia were increasingly making use of interactive Web 2.0 tools in order to spur interactivity among students. As shown in M Ebner et al. (2010), microblogging was found to be significantly beneficial to students in exposing them to different perspectives from different people and enabling them to develop their English communication skills. Using Web 2.0 tools provides an excellent example of why Saudi Arabian students consider an Australian university as an excellent choice to develop their competence in English. Choosing Australia as a well-developed study destination is consistent with one of the goals of the Saudi Arabian scholarship program, which was to expose Saudi Arabian citizens to the global environment and enable them to gain the tools for effective communication in that environment (Alomar, 2010).

- ***Scholarships to study a higher degree***

The property of 'scholarship to study a higher degree' refers to the students' motivations for choosing the Australian high quality higher education environment. As earlier discussed, Saudi Arabian students had a range of motivations for selecting Australia as the country in which to pursue studies abroad. All of the students selected Australia to study their higher education degree, *"I came to Australia to complete my studies to get [a] master degree to improve myself and to get a good job in future"* [I-6-F]. Wishing to pursue their higher education degree in Australia as they are supported by scholarships to study in a different and good quality educational system was part of these motivations:

"I have a scholarship too… I heard Australia has a good quality education, and because I want to continue my education, so I came to learn English and to [do] my first degree" [I-19-F].

The international reputation of the Australian higher education system compared to other competitive systems was an important motivation in the students' choice, as indicated by I-1-M:

"I got [a] scholarship and had three choices to go…Australia, the UK and the United States of America to further my study, I chose Australian as they have a high-quality education too"[I-1-M].

I-4-M also expressed that the high standard Australian higher education motivated him to choose Australia:

"I wanted to continue my studying because I had a scholarship from my job, and Australia is a very good place with high standard education, I think" [I-4-M].

However, some of the Saudi Arabian students acknowledged that initially, they were unaware of the Australian education system, and some of them knew nothing about the Australian educational environment, as is explained later in this conceptual category.

- ***Student visas***

This property discusses student concerns of getting study visas and considering the students' family needs and how the flexibility of the Australian student visa regime may motivate students to select Australia. The students described that getting Australian students visa is easier than other educational destinations.

"The US government has been so strict with Saudi people who come to [the] USA"…" The USA visa has been hard to get. I have many friends in [the] USA. When they have to renew their visa, they have to go back to Saudi to reapply and do not know whether they will be accepted or not. Some of those students in Australia had changed from [the] USA to Australia" [I-2-M].

For Australia to remain a competitive target for international students, including the Saudi Arabians, the government makes sure that the student visa regime is flexible and straightforward. The Australian Department of Immigration and Citizenship establishes assessment levels to represent the risk posed by candidates. For example, students with Assessment Level 1 (the lowest), such as Saudis, can apply online for e-visa and do not have to go to the embassy (Department of Immigration and Border Protection, 2012).

Some respondents, specifically with regard to admitting a family's particular needs, discussed the ease of getting an Australian student visa:

"Australia would be easier to issues visas for my family, for my mate because I have a daughter with [a] disability and she needs special need [care]" [I-6-F].

The Australian student visa regime was also regarded as less strict by some respondents, such as I-2-M:

"The US government has been so strict with Saudi people who come to [the] USA"..." The USA visa has been hard to get. I have many friends in [the] USA. When they have to renew their visa, they have to go back to Saudi to reapply and do not know whether they will be accepted or not. Some of those students in Australia had changed from [the] USA to Australia" [I-2-M].

As previously mentioned, the Australia authorities raised the assessment level of Saudi Arabian student visas to level 1 (Bowen, 2011), which reflected on the popularity of Australia and its higher education as a good option for Saudi Arabian students to come (The Australian Embassy in Saudi Arabia, 2011).

- ***Family pressure***

The property of 'family pressure' represents the Saudi Arabian students' reliance culturally on their relatives and friends to select where to study overseas.

To some extent, Saudi Arabian students studying in Australia were found to be more careful to choose where to study overseas. Thus, they were motivated to choose Australia by asking their relatives and friends. Some of the respondents selected Australia because they had relatives or friends who were already in the country, which made them more confident to come:

"My relatives live, work and study here in Australia, and they recommended Australia to me" [I-5-F], "I came here because I have a relative here. My sister and my dad and I [felt] comfortable when came and settled down" [I-7-F].

While others did so because of positive recommendations from their family or friends: "*One of my brother's friends who had studied in Australia talked to me about Australia, and I liked it*" [I-1-M].

These responses affirm the inherently collectivist nature of Saudi Arabian society as derived from (I. Hofstede, 2017). Geert Hofstede (2012b) discussed that people in Saudi Arabia value family and relationships actively, and may typically base their decisions on the perspectives of different family members. This is evident from the different quotes shown above, which indicate how students identified Australia as the best location based

on the experiences of the people who are close to them, whom they trust the most to provide advice of such nature.

- ***Security (feeling safe)***

'Security' refers to the students' strategic decision of choosing Australia as a safe and less culturally discriminatory location to study in it.

The respondents were found to be attracted to choose Australia because it is perceived as a multicultural environment, safer and less culturally discriminatory country than other western countries. For example, I-7-F explained:

"Australia also a quiet and safe place, not like [the] USA, I think, [it] is not safe. This is maybe because there [are] many crimes in [the] the USA. Also, I think, there are many people [who] do not like Muslims" [I-7-F].

I-14-M also discussed the issue of the 9/11 terrorist attacks*, "I think you are aware of what happened in September in America. This gave me a good reason to choose Australia,"* I-1-M, "*Ah, you know, issue of September 11th in [the] USA has affected the people."* Similar responses were found from I-2-M**,** *"you know, the September 11, it was a big issue in the US,"* and also by I-3-M,

"Actually, I came here in 2007, and as you know, it was a problem in 9/11. Before students chose to go to other countries, except [the] USA, because, you know, there is a lot of misunderstanding about Islam over there after 9/11" [I-3-M].

As explained by Cohen (2007), there is a considerably lower level of anti-Arab sentiments in Australia than in other western countries, such as the United States or the United Kingdom, following the September 11 terrorist attacks. Although the attacks occurred over a decade ago, its impact on the image of Arabs to the international community, particularly western communities, remain tarnished. Thus, over time, it can be understood how this has also translated into Arabic reservations on selecting the United States or the United Kingdom as study-abroad locations. This has opened up the market for universities in other countries, such as Australia. However, in terms of gender, the motivations were found to be somewhat similar or convergent, with only males pointing out the issue about 9/11 and feeling safe. Further, Saudi Arabian males were found to be more concerned about being discriminated against than females.

7.3.2 New education environment

Saudi Arabian students often used a comparison between the Australian and Saudi Arabian educational models to describe these new educational experiences. Through comparing the two educational system's environment, relationship and learning activities that participants were able to provide a more precise reflection on their experiences in adapting to the Australian educational system.

The subcategory of 'new education environment' defines the students' educational experiences, including their exposure to a new educational system in Australia. This subcategory is defined by a number of properties, including awareness (study experience), using technology, online engagement, student-teacher relationships, writing and conversation fluency, learning activities, student support and student rights.

- ***Awareness***

'Awareness' property refers to the students' knowledge and understanding of the Australian higher education environment and the challenges they faced, given their information or experiences. Some respondents acknowledge that initially, they were unaware of the Australian education system. For example, I-5-F admitted that:

"Honestly, I did not know anything about the Australian education system, as well as I did not know anything about other foreign education systems. I just wanted to try" [I-5-F].

Similarly, 1-17-F stated that:

"I decided to go to Australia, first of all, I did not have any idea about the training or the system, the education system, social system, the official system, maybe, the British systems? I do not have any idea" [1-17-F].

The absence of knowledge about the Australian education system and educational environment may lead some respondents to face some challenges. These challenges found to be revolved around respondents' perceived differences between the Australian and the Saudi Arabian educational system: "*it was very different from Saudi Arabia"* [I-5-F]. One difference pointed out was the *"greater freedom over selection* [of] *subjects,*" and "*the need to go beyond simply memorising lesson content*" [I-5-F]. Regarding how information was expected to be used, I-7-F explains that:

"Here [In Australia] is different, here we use a practical way, but in Saudi Arabia, we use theoretical way [in] teaching and learning" [I-7-F].

Describing the differences between the home and the host educational systems was best described by the respondent I-3-M:

"The thing is, [in Australian Universities] there is no test, no exams for us, it is just an essay, and you know, we have done this in all our lives. I study four years in the first degree, [In Saudi Arabia], we might have summarised thing, and we call it [a] research, but it is not…, it is very challenging… By the way, we learn over there, in Saudi Arabia in my college, in those days, it is just like to keep what the lecture says … in the exam, you have to repeat it again, and that is it… The thing is, we do not have the skills, how to find information, how to use information, and how to present information. Actually, this is the main skills I have learnt here" [I-3-M].

The Australian system of education was indeed very different to what they had been used to. The students were found to carry some educational perspective or expectations barriers, as explained by I-8-M:

"During my bachelors study we used traditional methods, and these subjects or everything we have contact with our teachers and they gave everything to us, and we don't need to use anything just to attend the lecture, and we take our note or some questions, or in some books or one textbook for the subject, that's it" [I-8-M].

As discussed in some studies, (Abu-Zaid, 2010; Elyas & Picard, 2012; Harrison, 2008), both primary and higher education settings in Saudi Arabia remain highly controlled by the teacher. The students may also expect the teacher to provide close guidance and instruction throughout the educational experience:

"We always stack with the books and stuff … we always complain about it, Keep asking them [the Australian lecturers] like "give us a book" "give us a book, but they did not listen to us" [I-2-M].

These are precisely the initial expectations of the Saudi Arabian students in the study, which was contrary to what they encountered during their studies in Australian higher education. Other respondents' comments go back to the issue of gender segregation in which some respondents found the Australian settings supposed reliance on group work to be challenging. As explained by I-2-M:

"For example, what we did in my master degree, [in Australia], we sit together and discuss. These things, if you talk about like Saudi university boys and girls come together that would not work" [1-2-M].

Similarly, I-1-M discussed that *"in Saudi [Arabia], we usually don't have like group study or like presentation group or essay group."* This again shows the difference between the educational systems of the two countries, Australia and Saudi Arabia, which are grounded in their respective cultural norms. In Saudi Arabia, since there are substantial gender segregation principles, collaborative group work, including members of the opposite gender, is non-existent. Since gender segregation is non-existent in the Australian context, group discussion between members of the opposite gender exists as part of the educational experience.

Although the differences between the Australian and the Saudi Arabian educational system were regarded by some respondents as a challenge, evidence of adapting the Australian educational environment was found from many participants' positive experiences. Some respondents discussed that the Australian environment per se makes it easier for them to adapt: as explained by I-13-M, *"a country and an educational environment that support you and support your life can enhance your study."* Similarly, I-17-F noted how *"it is very easy to live in Australia."* I-16-F likewise believed that "*Australia is a diverse country, but easy to settle in. I found it easy."* The same sentiments were found from other respondents, I-14-M, *"I started to organise myself, and after a week, I found everything easy."* I-11-M also described the study life as enjoyable, *"I think it is a good experience for me… Study life is easy. I think it is created to make it enjoyable."* As such, the ease of settling in the country makes it easy and better which helped the participants' adaptation into the Australian educational environment.

- ***Using technology***

This property refers to the students' exposure to the use of information technology in teaching and learning in the Australian learning environment. The use of technologies in teaching English, for example, attracts the Saudi Arabian students to select Australia to improve their English language skills: I-14-M, *"I liked Australia because using technologies helps you to practice your English very well."* As pointed out by Hunter (2009), the infrastructure of using information technology in the education sector of Australia is already well-developed, which is one of the factors that make it so attractive to international students. The participants' experiences indicated that *heavy* use of technology was encountered during their study at the Australian educational system. Some respondent

described the use of technology in teaching and learning as an enjoyable experience, *"I think the most enjoyable thing was using technology in Australian University, using technology in Australia was heavy"* [I-5-F]. Particularly, Web 2.0 tools that power e-learning 2.0 environments:

"I would compare between Australian and Saudi, often the education or learning [environment] is different, they [the Australian universities] use technology more than us, in Saudi we use it, but less than here" [I-7-F].

I-8-F explained the purpose of using technology in the Australian educational environment to establish a connection link between students and teachers: *"Here [in Australia] they use the computers, the internet, and websites to contact all teachers and students at the same time"* [I-8-F]. I-11-M described his experience with e-learning 2.0 environment as an easy and enjoyable experience:

"Here, yes, I use many Web 2.0 tools … I have used many of the e-learning 2.0 tools or social media for my study here in Australia, but in Saudi Arabia, yes they have technology nowadays, but not at my time, I did not use them for education… For me, I enjoy learning by Web 2.0 tools here; I think these technologies made my study easy and enjoyable experience for everyone, I enjoy it" [I-11-M].

The students' responses show a clear image of their experiences with the Australian educational system, mainly its advanced technology-powered setting. As previously pointed out, in Chapter 3, the Australian Flexible Learning Framework (2011) allows students a great deal of independence, as it is based on the constructivism approach to learning (Harasim, 2009). Constructivism holds that learners learn best when empowered to discover and create knowledge on their own independently. From the constructivist point of view, students learn when they are exposed to the environment and allowed to interact with it freely (Schunk, 2012).

- ***Online engagement***

The property of 'online engagement' describes the students' reactions of experiencing and engaging with a new online mixed learning environment, and the influence of the gender segregation culture on their action.

As discussed in the previous conceptual category, the entrenchment to a gender segregation culture was found to influence the Saudi Arabian students' experience. The

students' data also indicated that gender segregation culture influenced how they interacted online. For example, I-1-M explained that there was a challenge in the e-learning 2.0 environment:

"I have [a] challenge with e-learning 2.0 environment, especially if you work with females in the environment…I used to have a group essay, and one of the students was a Saudi female, and I found it hard [difficult] to communicate with her about the essay, because in our culture it is like, ah, it's like, I don't know how to explain it, but you should not communicate with a girl" [I-1-M].

I-1-M, also pointed out that the challenge he faced when working online with females had negatively affected his study:

"You know in Saudi Arabia if you work with females or even ask about something it would be wired…As I said, it [might] be negatively affecting my study." [I-1-M].

Some Saudi students expressed that they cannot overcome the segregated perspective: *"it is difficult to get rid of the practice of having separate female and male classes"* [I-20-F], as the gender segregation principle still exists in Saudi Arabia, particularly in the higher education sector.

- ***Student-teacher relationships***

The property of 'student-teacher relationships' describes how Saudi students view their student relationships with their educators. It represents the students' feelings about some teachers' actions, constraints and attitudes towards their study experience in the Australian education environment. The students also compare student-teacher relationships and learning activities in Saudi Arabia and Australia. From the students' comparisons, various responses indicated that the students faced some educational-related barriers due to their educational background. The Saudi Arabian students came from an educational system that offered far less interactivity, as explained by I-8-F:

"In our country... there is no way to contact the teacher. You send your paper by some guy like your father [or] your brother" [I-8-F].

I-1-M discussed how it looked when a student got into a debate with an instructor:

"In Saudi, sometimes, you cannot debate, you can sure complain though, nothing is impossible, but you have to be worried about it. Because I guess, if the teacher wants to

fail [a student] in Saudi Arabia, it is easy for him, even if you do well on a subject, the teacher can fail you. It is stricter in Saudi Arabia" [I-1-M].

The learning-related activities seemed to be absent in the Saudi educational environment compared to the Australian, with many respondents describing the Saudi Arabian environment as based on lecturing and memorising:

"In Saudi Arabia, I had to take a memorial note and just memorise all information without asking about anything. I do not have to discuss anything. But in Australia, they use things, like a different method" [I-5-F].

Concerning the communication amongst the students and teachers in the Saudi educational environment comparing to Australia, I-18-F explained that:

"The lecturers here respect your opinion but in Saudi Arabia lecturers do not respect student's opinions…Here in Australia, the relationship between the teacher and the students is very easy. If I want to know anything, then I will have it in an hour's time. In Saudi Arabia, when you drop an email, then you will have to wait for two weeks" [I-18-F].

The learning environment was teacher-centred, and there was a considerable psychological distance between the teacher and the learner, especially between female students and male teachers. I-4-M also described the educational environment as greatly controlled by the teachers: "*In my country, especially our University, our teacher has everything or every authority to do everything.*" The teacher-centred model in Saudi educational environment reflects the high-power distance culture of Saudi Arabia compared to the low-power distance culture in Australia as also discussed in (Geert Hofstede, 2012a). On the other hand, some of the Saudi Arabian students narrated specific situations with teachers in Australian settings, such as angriness or accusation. For example, I-5-F discussed that:

"One of my teachers… I just asked her for some help, and she just became angry and told me, this course is very difficult for you, just drop the course and go back to your country." [I-5-F].

However, the experience of I-5-F was narrated in a way that the situation appeared from the student viewpoint and that the perspective of the teacher could be very different. As discussed in the case studies conducted by R. Benson and Samarawickrema (2009), Australian universities implementing e-learning 2.0 typically expect students to have at least a basic understanding of the use of specific Web 2.0 tools. As such, from the

constructivist viewpoint (Harasim, 2009), it is expected that the students need to take an active part in constructing their understanding independently. Similar to the constructivist theory viewpoint (Harasim, 2009) and Dewey (1902) in pragmatic theory believed that it was essential for students to take an active part in reflecting upon their learning and constructing meaning from their experiences independently. Admittedly, the context of the situation described by I-5-F was not derived in detail, and so it may be that the teacher was attempting to instil a sense of independence in I-5-F instead of firmly admonishing her for asking for help.

In another case narrated by I-6-F, one of her teachers accused her of not writing her assignments. So, in order to prove the lecturer was wrong, she retook her test without a dictionary and received high marks:

"My lecture…said: you never ever write your assignment…But, I wrote it and spent [a] long time when I wrote it, and she said: never ever…, she judged me on my English speaking… I said can we do an exam again, then she said you will not going to bring your dictionary, I did the exam, and I got high marks, and I know she was wrong… I am planning to complain; I will do something because she really make[s] me feel stress [for] about two weeks. Some lectures do not respect that and do not consider the differences" [I-6-F].

This experience, narrated by I-6-F seemed to be an individual case. However, it was noted that the student knew and understood her rights as a student studying in Australia. As she explained later during the interview: *"Yes, here in Australia, you can feel free as a student, you really feel that you have rights."* Some respondents also claimed that discrimination might happen. For example, I-4-M claimed that:

"Sometimes, trust me, there is some discrimination with us, with international students and also sometimes with us as Saudi students. Unfortunately, we got the same problem in my country or here in Australia; however, in different ways" [I-4-M].

I-19-F also believed that *"At the university, the lecturer does not like Arabian students. She made Arabian students fail like my friend failed three times."* However, it is uncertain whether these negative experiences by these respondents were brought about by studying in the Australian settings, or by being in a graduate studies settings. That is, many of the requirements, greater course selection freedom, increased group work, emphasis on essays, research, and so on, are characteristics of graduate studies in general rather than of an educational system in a specific country.

However, there were many experiences from other respondents that characterise the lecturers in the Australian educational environment positively. As expressed by, I-13-M:

"I think dealing with lecturers and tutors in Australia are very easy. So, you email them, and they respond easily, as long as you want something to discuss with them" [I-13-M].

I-18-F, also gratefully spoke about her professors:

"The professors were also of great help. If I did not know anything, I used to visit the learning centre or the student service, and you get to know everything you do not know" [I-18-F].

I-16-F experienced a sense of friendship when dealing with Australian teachers and felt confident:

"In Australia, they teach us like our friend. In my diploma, the teacher was like our friend. If you did not understand anything, they assist you, when you are doing a presentation, they assist you, teaching you assignments. They have positive comments which give you the confidence" [I-16-F].

Similarly, I-10-M positively described the Australian teachers as respectable, understandable and willing to help:

"The teachers here are very helpful, kind, respect people, respect change and they really understand the student's needs. They have the right to ask any questions that they have even in the teacher's office, and they are willing to respond" [I-10-M].

Many other positive experiences show evidence that the Australian teachers were very accommodating and helpful to Saudi Arabian higher education students, thereby contributed to their success in adapting to the Australian educational environment.

- ***Writing and conversation fluency***

The property of 'writing and conversation fluency' represents the students' experiences with using the English language in the Australian educational context, particularly when communicating via e-learning 2.0 using writing.

Most of the participants explained that in order to interact with other students using e-learning 2.0, they needed to write in English. However, they were often reluctant to communicate because of the fear that their English would not be good enough, for example:

"Yes, English is my first challenge,..., I cannot explain it [in] English in a really good way,… when I write on [message] board, I cannot prove my English, and no one will correct my grammar, so I really feel stressed and depressed" [I-6-F].

The writing challenge was found to prohibit students from using e-learning 2.0 more effectively. As further explained by I-6-F, the English language as the primary challenge causing her frustration and hesitation to engage in online discussion:

"When I write on [message] board… I really feel frustrated. I have lots to say, lots of information. So, [the] difficult language is the main reason I am challenged as an international student" [I-6-F].

The respondents' inadequacies in using the English language may arise from the students' lack of confidence in using the English language, which can influence their full engagement in the use of e-learning 2.0 environment (Qiu, 2011). Contribution to a conversation was also found as a challenge, particularly when starting a conversation or a discussion via e-learning 2.0 or engaging in an existing discussion using writing.

Initiating an active discussion or conversation often begins by asking related questions to a specific topic. However, difficulties can arise from a variety of factors, such as understanding problems, grammar uncertainties or the absence of topic-specific vocabularies (Marlina, 2009; Preisler et al., 2011; Qiu, 2011). The participants in this study expressed concerns in initiating a discussion.

"Sometimes, I got also worried about my English writing because when you write English, especially to Australian people, you worried to make some mistakes or to say some things you should not say or something like that" [I-1-M].

I-1-M also expressed that he did not want to look silly or to say something irrelevant:

"Sometimes, I find it hard to decide, especially [on] the discussion board in our university website, I find it hard to start for any subject I want to talk about… I got worried about like if it might be silly or not good to start it" [I-1-M].

I-5-F also discussed that she "*didn't prefer to start the discussion."*

"I did not know where I should start; it was very difficult for me. Language and also different knowledge…I would just wait when my teacher would post some questions, I would wait for someone to answer it, and just to follow him or her to answer" [I-5-F].

The difficulty in initiating a discussion was evidenced by many participants, specifically in the learning environment, as described by I-5-F:

"I do not know when can I start my question, and how can I start it, I always worried about my language, always worried my grammar, and what I should do in different situations" [I-5-F].

Several other students expressed similar statements to I-5-F, such as I-19-F, "*Sometimes, when I want to write, I google and search about what I want to write, since this is not my first language,*" and I-8-F found it challenging to start a discussion: *"Also, one problem was the language, you know. For me, it was hard [difficult] to start everything like in perfect."*

The students found contributing to an existing conversation in English easier. Many Saudi Arabian students that participated in this study expressed that contributing to an existing discussion using e-learning 2.0 tools was much more comfortable. As explained by I-1-M, *"I guess it is easier to give your question or comment or to give your idea on an existing discussion than to initiate one."* Other students also expressed a similar feeling, such as:

"For me, I prefer to participate with my classmate in an already opened discussion, it is easier than to start, and I feel it is easier to do so online through Web 2.0. For example, on Facebook, I can prove my grammar before participating, you know" [I-17-F].

"For me, it is ok because it [was] easier in that Facebook group. I can make mistakes, because I want to learn, using the technology, I feel so if I did anything wrong, I do not mind" [I-2-M].

E-learning 2.0 enables the students to reduce their concerns about writing in English. It helped the students and provided them with the opportunity to interact at a pace where they could compose and express their thoughts in English more productively than in face-to-face conversations.

- ***Student support***

This property refers to the students' experiences of support available for students in the Australian system. The Saudi Arabian students made a comparison between Saudi Arabian and Australian systems. The students favoured the Australian environment, considering it as having a better support system and resources for students. The support system and study resources are best described by I-13-M:

"In Australia, you can find lots of personality and resources that can support, for example when you go to a library looking for a book, and you cannot find it easily, you can find a specialised person [librarian], so you can ask if you have [an] assignment. Also, you can easily find information in the library,…the support system, the electronic resources in Australia is much better than Saudi Arabia, the difference is, in my Saudi university where I studied, there were no resources like I have in Australia, as well as there is no person who supports you" [I-13-M].

- ***Student rights***

The 'student rights' property refers to such things as contractual obligations and consumer learning and teaching rights. Student rights manage student freedoms and allow them to use the educational facilities and regulate their rights to complain. The respondents compared their available rights between the two educational systems, Saudi Arabia and Australia. This may begin with the feeling that the student has rights: as expressed by I-6-F:

"Yes, here in Australia, you can feel free as a student you feel really that you have rights, you can go to [the] toilet without asking for permission or drink coffee, but in Saudi Arabia, you cannot do that" [I-6-F].

I-17-F further explained that in Australia, the students have the right to speak:

"We have the right to speak up and think [that] they [the teachers] could be wrong; we have the right to speak…The first time I knew that [the] students [have] rights [was] in the Australian university, and the lecturer or the academic staff do not have the full power of the university like we used to have back in my country. In Saudi Arabia, we did not know anything about rights as students" [I-17-F].

Many other respondents expressed and supported the above responses regarding student rights, such as I-13-M:

"In Saudi [Arabia], I think you need to remain silent if you have arguments that are against your lecturer. Here, [in Australia], I think, there are many policies, as such as the university has, you know your rights, you know the policy, the standards, so you do not have any problem" [I-13-M].

However, for some respondents, it was difficult for them to understand their rights in the Australian educational system, although these respondents were convinced that they have rights, as discussed by I-2-M:

"The terms of the due process or procedure, we have it in Australia, but I guess, it [is] very hard for students to understand. You need to refer to someone with legal expertise to make it aware [of] students…We have it, [student rights], in Saudi Arabia, but the way of delivering it to the consumer student is poor" [I-2-M].

Similarly, this feeling by I-2-M was supported by I-3-M, but he invoked it to that missing his orientation:

"Because we do not know a lot of things, a lot of Saudi do not understand their rights. When I arrived, I missed the orientation week; I do not know what my rights are" [I-3-M].

These comparisons show that respondents perceive that they have rights and a support system. The comparisons also show that the students recognise the teachers in Australia as being more open to communication and more supportive than the teachers in Saudi Arabia, further reflecting differences in the academic cultures of the two educational systems. As discussed in Geert Hofstede (2012a), in Australian organisations, superiors are accessible to their subordinates, and the subordinates are relied upon and consulted with respect to various matters regarding operations. Translated to the university settings, professors in Australia are available for students to interact with, and they are focused on involving students in their learning.

On the other hand, the high-power distance culture in Saudi Arabia places barriers between students and teachers, preventing interaction and promoting a situation where the student is just expected to listen and learn from the teachers. The contrast between these two settings is the cause of the distress that some of the students in the study experienced, as shown from the quotes above. The impacts that these educational differences have had in the learning experiences of the Saudi Arabian students are consistent with the study of Icbay and Kocayoruk (2011), which found that differences between the host and home academic culture affect students' learning in foreign countries.

7.3.3 Summary of the second conceptual category

The second conceptual category 'adaptation to the Australian education system' discussed the Saudi Arabian students' experiences with the Australian the educational system, the

students' attraction to study in Australia, as well as the challenges which faced them. The conceptual category was described by two subcategories: motivations to study in Australia and the new educational environment. From the third conceptual category, the challenges that were encountered by the Saudi Arabian students in adapting to the educational environment were identified.

Saudi Arabian students were found to carry some educational pre-perspectives to education which influenced the students' adaptation to the Australian educational environment. That is, many of the students found it challenging to get rid of their educational perspectives to adopt the Australian educational system. The category also describes some of the opportunities, specifically the availability of e-learning 2.0 environment, which plays a significant role in getting these students to engage and adapt to the Australian educational system.

The second conceptual category and its subcategories and properties revolve around the students' educational adaptation in the Australian environment. Out of the analysis conducted on this conceptual category, **'educational adaptation'** is identified as a key theoretical concept. This theoretical concept is associated with three theoretical aspects. These are:

- Opportunities
- Educational challenges
- Language challenges

Each of these theoretical aspects is described by a number of properties that were discussed under the subcategories associated with the conceptual category.

The properties that describe **'opportunities'** (presented in Figure 30 in Chapter 8) are:

- Studying in a high-quality higher education
- Less formal educational environment
- Students support and students rights
- Embedded use of IT - e-learning 2.0 environment

The properties that describe **'educational challenges'** (presented in Figure 31 in Chapter 8) are:

- Absence of the segregated system
- Method of teaching and learning
- Using less technology in Saudi higher education
- Absence of the interaction (less interactivity model)
- Teacher-centred model (teachers' authority)

- Absence of the student's rights.

The properties that describe **'language challenges'** (presented in Figure 32 in Chapter 8) are:

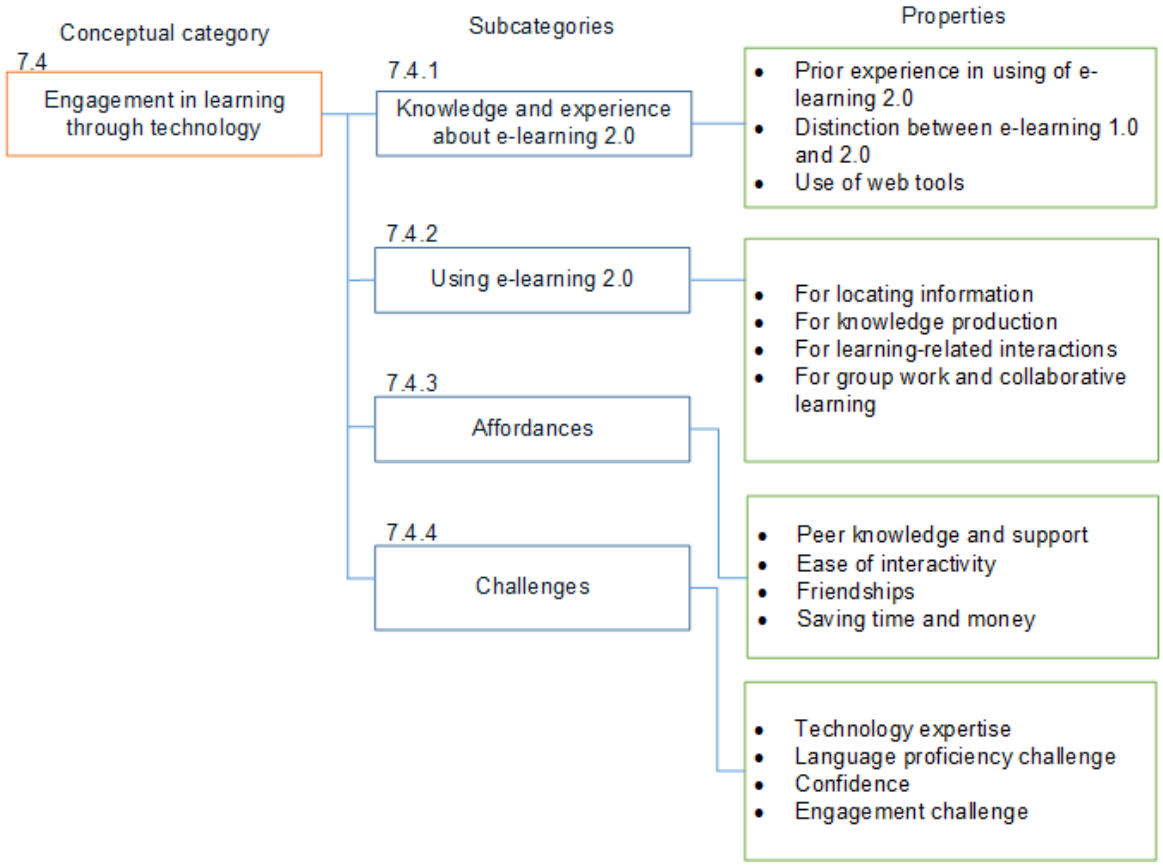
- Writing fluency
- English background
- Time spent on learning English
- Lack of English proficiency

These theoretical elements used in constructing the study's theoretical model are presented in Chapter 8. The students' experiences with e-learning 2.0 environment are thoroughly discussed in the following conceptual category, engagement in learning through technology.

7.4 Engagement in learning through technology

'Engagement in learning through technology' conceptual category describes the respondents' opinions and their experiences about the interactions with technology and e-learning 2.0, including previous knowledge about e-learning 2.0.

Figure 24 Engagement in learning through technology



Four subcategories describe this conceptual category. These are knowledge and experience about e-learning 2.0, using e-learning 2.0, affordances and challenges. A number of properties describe each of the subcategories (see Figure 24).

7.4.1 Knowledge and experience about e-learning 2.0

This subcategory describes the participants' background with e-learning 2.0 for education before going to Australia. This subcategory describes a number of properties, including prior experience, the distinction between e-learning 1.0 and 2.0 and the use of web tools.

- ***Prior experience in use of e-learning 2.0***

This subcategory assesses the students' background with the use of e-learning 2.0 for education before going to Australia. The data indicated that there were bright contrasts between Saudi Arabian higher education students' experiences with e-learning 2.0 in Saudi Arabia and Australia. Some of the respondents did make use of Web 2.0 tools prior to going to Australia: "*Facebook…I think this is the only thing I used to use when [I] was in Saudi Arabia before I came to Australia*" [I-5-F].

"In Saudi Arabia, some of them [Web 2.0 were] used, only [to] figure them out, and also to communicate with friends, on an informal basis, but for education, No" [I-4-M].

However, none of the Saudi Arabian students claimed to have used Web 2.0 tools in Saudi Arabia for academic purposes. As explained by I-1-M: "*I have never used e-learning 2.0 in Saudi Arabia, I just remember that I get to the university website two times maybe,"* it was clear that e-learning 2.0 was non-existent in the basic education level for the respondents.

"No, actually. Because I came early 2006 and by that time they [staff at Saudi universities] had discussed things like this [to use Web 2.0 tools for education] but I had not experienced using online learning or Web 2.0" [I-2-M].

Similarly, I-5-F explained that she *"never experienced this [e-learning 2.0] in Saudi Arabia in higher education." I-12-M also pointed out that:*

"Only in Australia, I started using the internet as one of my references to get helpful articles on my report. I also used Google for my research. I also used email to connect with the teacher but not in Saudi Arabia" [I-12-M].

The data collected in this study was based on the students' personal experiences, which is consistent with the premise of this study based on reviewed literature on e-learning in Saudi Arabia that did not focus on the utilisation of Web 2.0 tools (Ali Al-Asmari & Rabb Khan, 2014; Al-Shehri, 2010; Alblehai, 2016; Harrison, 2008). That is, at least at the time of collecting the data for this research between 2012 and 2014, as found in literature, e-learning in Saudi Arabian institutions has not reached the level of e-learning 2.0.

- ***Distinction between e-learning 1.0 and 2.0***

The property of 'distinction between e-learning 1.0 and 2.0' refers to the students' understanding of the concept of e-learning and the differences between e-learning 1.0 and e-learning 2.0. Some of the students were found to be able to grasp the fundamental concept of e-learning, such as, I-3-M, "*I think e-learning is using anything electronically…using technology in education in learning whatever this technology,*" and I-6-F, "*I think it's about using technology to teach students as much as you can as a teacher.*" However, other students seemed to have less accurate notions of the concept, such as I-1-M, "*I guess is when we use the university email,*" I-8-F, "*e-learning, you learn something from a distance,"* and I-4-M, *"e-learning, in general, is wherever and whenever."* As shown from the responses, the students' definitions of e-learning are all about how technology can help them learn from the teacher better, instead of learning from one another. On the other hand, some of the respondents were able to provide uncertain assumptions or perceptions of what e-learning 2.0 is, such as:

"I have heard about it, is it the social network that facilitates learning?" [I-10-M], *"Am not sure about the definition about it, but the thing is, I think, it is like Facebook and like Twitter, and YouTube and bloggers and all these things, which is like not formal things"* [I-3-M].

However, only two respondents may show, to some extent, explicit understanding of what e-learning 2.0 is:

"E-learning 2.0 is about media sharing, things like Facebook, Twitter, YouTube and Wikipedia, and this is what I use"… "E-learning 2.0 involves receiving information. I think it is similar to using blackboard." [I-20-F].

There was some confusion found between respondents understanding of e-learning 1.0 and e-learning 2.0:

I-2-M, "I can't make any assumptions, because sometimes, I got confused," I-3-M, "Am not sure about the definition," I-5-F, "Actually, I'm not sure, could you explain it to me."

Nevertheless, some students assume that any use of learning technology referred to e-learning 2.0, such as:

"I think it [is] using technology in learning and teaching. Is it right?"[I-6-F], *"e-learning and e-learning 2.0 are the same, I think,"*[I-19-F], *"I may have experienced e-learning [in Saudi Arabia], but not 2.0, I am not sure, because I may use some of the DVDs that I ask the teacher to give to me, but I have never used these tools before"* [I-8-F].

In contrast, other Saudi students actually did have the idea of what e-learning 2.0 is. However, they attributed their ideas to e-learning in general instead of e-learning 2.0, specifically. For example, when asked about their idea regarding e-learning 1.0, I-2-M pointed out that:

"I think it how to share information with other," but when asked about e-learning 2.0, he said, *"I cannot make any assumptions [about what e-learning 2.0 means] because sometimes, I got confused"* [I-2-M]. Similarly, I-5-F explained e-learning 1.0 as *"to use the internet or wireless technology or like [using] new devices to gain new knowledge or share some information on something new," but about e-learning 2.0, she said, "*Actually, I am not sure, could you explain it to me.*"*

As such, these responses further show that students' formal understanding of e-learning 2.0 and understanding its role in their studies in Australia may be quite limited. This is consistent with the literature on the underdeveloped nature of e-learning and e-learning 2.0 in Saudi Arabia, specifically between the years 2002 and 2012, when the participants were studying in Saudi Arabia (Ali Al-Asmari & Rabb Khan, 2014; Al-Shehri, 2010; Alblehai, 2016). This ambiguity about the concept of e-learning may also reflect the findings from Alblehai (2016) and Harrison (2008). Both studies discussed that traditional teacher-centric teaching methods are still the preferred method of teaching in Saudi Arabian universities. Despite the presence of Web 2.0 tools in Saudi Arabia, the educational environment in Saudi Arabian educational institutions is still focused on e-learning 1.0 concerns; which is the use of technology to augment traditional classroom teaching (Alblehai, 2016).

- ***Use of Web 2.0 tools***

This property refers to the students' use of different types of Web 2.0 tools for learning in both the Saudi Arabia and Australia contexts.

In the context of Saudi Arabia, it was clear from the responses of the students that they have interacted with some learning tools, as pointed out by I-4-M, *"Some Saudi universities are using e-learning 1.0. It has been useful for Saudi students there"* and that there are Web technologies that exist in the country. In Saudi Arabia, e-learning systems are being used in higher education, alongside traditional teaching in what is referred to as blended learning (Alebaikan & Troudi, 2010).

However, Saudi Arabian culture is highly conservative, and this has led the Saudi government to be sceptical of the internet and to limit its penetration in the country (Al-Kahtani et al., 2006). Since the Web 2.0 technologies that are used to carry out e-learning 2.0 rely mainly on the internet, curtailing the internet limits the exposure of Saudi Arabians as well as Saudi Arabian institutions to Web 2.0 technologies and correspondingly to the idea of e-learning 2.0. This may also explain why e-learning 2.0 is not a clear concept to the Saudi Arabian students who participated in this study.

In the context of Australia, most of the Saudi Arabian students pointed out that their first experience with learning through the Web 2.0 tools occurred in Australia, such as I-5-F, *"so, in Australia I think, I started using e-learning 2.0 with my university."* I-2-M, also described his early experience using Web 2.0 tools for learning as a course requirement during his study at his Australian university:

"I had an experience with the e-learning 2.0 in my master degree, here in Australia; it was required for some subjects. We worked like in groups, and everyone knows his or her task, but we had to deal with some Web 2.0 tools first, like choosing a tool and setup, you know, then we worked, and of course we helped each other" [I-2-M].

Although some students have used web 2.0 before arriving in Australia, their actual users of Web 2.0 tools for learning purposes started in Australia:

"I used Facebook from Saudi Arabia until now, I use it occasionally for fun and talk to friends. But, when I came to Australia, I started using Web 2.0 tools for study. They really helped to improve my interactions, as sometimes I feel shy, but also now, I am using them every day, and even using WhatsApp for study too" [I-20-F].

Even though all the respondents indicated that they had experienced using technologies during their study in Australia, some students experienced more usage than others. For example, I-4-M described that:

"The [Web 2.0] tools used here in Australia to learn during my studies of the Master. Many of Web 2.0 tools I used in my studies, for example, Google Documents, Wiki, EdModo [a social learning system], SanDiego [Social Networking website], Facebook and Twitter all are used for learning here in Australia" [I-4-M]. Similarly, I-2-M explained that he used, *"things like Facebook, Twitter, Blogger and those other online courses [tutorials] to facilitate [his] study"* [I-2-M].

As will be described in the following subcategory, Web 2.0 tools were used for finding course-related information, creating, sharing, discussing, listening and watching online learning content:

"Mostly, I have used…like Twitter, Facebook, YouTube and sometimes, I use Hictu [a service for video microbloggers] to create and share videos…I started [to] use all [of] them here in Australia" [I-1-M].

A summary of the Web 2.0 tools used by the respondents in Australia and those that they used in e-learning 2.0 activities is provided in table 15.

Table 15 Different types of Web 2.0 used in Australia for learning

Main Web 2.0	**Tools Used for E-learning 2.0**	**Dominated**	**Dominantly mentioned**
Social network	SanDiego, Facebook	Facebook	All respondents
Microblogging	Tumblr**,** Twitter, Hictu	Twitter	I-1, I-2, I-4, I-5, I-7, I-8 I-1, I-12, I-16, I-19
Media sharing	YouTube, Broadcast	YouTube	All respondents
Google Apps	Google Docs, Blogger, Google group, Google Search Engine, Google translator.	Google translator	I-2, I-4, I-6, I-11, I-12, I-14, I-15, I-20
		Google Docs	I-4, I-6, I-8
Online group Mailer	Google groups, Facebook groups, University email groups	Facebook groups	I-1, I-2, I-3, I-4, I-5, I-8 I-14, I-15, I-16, I-17
Blogs	Blogger.com	Blogger	I-2, I-3
Page editing	Wiki.com, Wikipedia	Wiki.com	I-2, I-4, I-5, I-6, I-7, I-18, I-20,
Forums	Message Board	Message Board	I-1, I-6, I-7, I-8
LMSs/ VLEs	Jusur, Blackboard, Moodle, EdModo	Blackboard	I-1, I-6, I-7, I-8 I-14, I-16, I-20
Online call	Skype Meeting	Skype	I-8 I-14, I-15, I-16, I-17

Table 15 firstly shows that students have a variety of experiences with e-learning 2.0 in Australia. These included the use of such Web 2.0 tools as Facebook, Tumblr, Twitter, Hictu, YouTube, SanDiego, Broadcast, Google Docs, Blogger, Google group, Google Search Engine, Google translator, Google groups, University email groups, Blogger.com, Wiki.com, Message Board, Blackboard, Moodle and EdModo. The data shows that there was evidently a wide range of Web 2.0 tools that the respondents were exposed to, highlighting a stark difference between the Saudi Arabian and Australian educational settings.

Second, Saudi Arabian students generally had positive attitudes about their competence in utilising Web 2.0 tools for e-learning 2.0. However, some expressed scepticism about the utilisation of some tools, such as social networking sites for e-learning 2.0. These responses and many other statements that will be discussed later in this chapter show that Saudi Arabian students experienced a heavy use of e-learning 2.0, whether for self-informed learning or as course requirements, in the Australia higher education environment.

7.4.2 Using e-learning 2.0

The subcategory of 'using e-learning 2.0' describes the participants' experience of using Web 2.0 tools for learning. This subcategory describes a number of properties. These are: using e-learning 2.0 for locating information, for knowledge production to share information, for learning-related interactions and for engaging in group work and collaborative learning.

- ***For locating information***

The property of 'locating information' describes the students' experience of using e-learning 2.0 tools as a source of information to enhance the students' course understanding. All of the participants seemed to be exposed considerably to Web 2.0 tools for learning in their academic work in Australia. These tools were used to locate course-related information:

"I used YouTube because most of the lecturers give us all the time YouTube [links], they would give us links to open in a download software to use it at home, so most of these tools I use them here" [I-8-F].

Locating information to enhance course understanding through the use of e-learning 2.0 tools was best described by I-5 M:

"E-learning 2.0 was helping me access a lot of things relating to my study and help me also to understand my course and lecture content…I can get [an] update [to] what happen[ed] in my university from their account in Facebook and Twitter, and also I can enter in my university website, I can enter to [the] library, I can listen to [an] online lecture in my faculty even from Saudi Arabia. It is [a] great sources of information" [I-5-F].

Web 2.0 tools are used extensively for e-learning 2.0 in Australian educational environment, which led them to develop a greater understanding of their educational courses.

- ***For knowledge production for sharing information***

The property of 'knowledge production for sharing information' describes the students' experience in being more knowledge-productive through using the technology of Web 2.0 tools to share knowledge with others. The students' use of Web 2.0 tools for learning empowered them to be more productive through using these technologies. Through the ease of locating information, accessing the online tutorials, or using Web 2.0 tools for communication, the students become better learners:

"It does not matter what Web 2.0 you use or where to find the information. Here, I learn that everyone is looking for ways to become productive in his study, through these tools you can easily find and gather information and build your idea and share it with other" [I-11-M].

The technology was also considered as an avenue through which some students were able to develop their competence in the English language, as stated by I-14-M, "*Yes it helps you to practice your English very well,*" and I-10-M, "*Research, education and sourcing English material.*"

- ***For learning-related interactions***

The property of 'learning-related interactions' refers to improving the students' interacting in learning with peers, including different genders using e-learning 2.0. The students' learning-related interaction with the opposite gender, for example, had improved through e-learning 2.0 environment:

"I find that e-learning 2.0 is easier, If, for example, I do not like to meet a woman due to many reasons, maybe professionally, with e-learning 2.0, it is easier than to meet women face to face" [I-11-M].

Saudi students seemed to utilise their online study group through e-learning 2.0 environment as a cultural enabler. They used it to test how interacting with the other gender works, and they also recognised that interacting with both genders should be the same:

"I started talking with other gender using e-learning 2.0 tools, particularly in online learning groups, I think the way of your talking with men is similar when you talk with women if we have [the] exception of the culture, I mean the other person culture" [I-13-M].

This feeling of breaking cultural inhibitions was found to be accurate, not only for interacting with people of the opposite gender but with interactions in general:

"Sometimes, some other people are difficult to engage in normal life, but it is easy to engage them online, so this is another helpful way" [I-12-M].

Likewise, the feeling of breaking the engagement challenge was also clarified by I-19-F:

"We do small groups on Facebook, and we can contact each other easily. We upload material and get to share after one has completed their work" [I-19-F].

Saudi Arabian students discussed how different Web 2.0 tools served them in acquiring more information through interaction, as discussed by I-17-F and I-18-F:

"Twitter is a social thing; I give it some time to find out what is going on. I found some useful information related to my area of study" [I-17-F].

"At the university, we have a Facebook group with some of my friends. We get to discuss areas that we do not understand. We use it both for studying and enjoying ourselves; I also use Google [tools] for my group assignments" [I-18-F].

- ***For engaging in group work and collaborative learning***

This property describes the respondents' experience in working together as a group and in working collaboratively using Web 2.0 tools. The online environment helped the students to improve their ability in their study subjects. For example, I-2-M described:

"In my master degree, I experienced a project was a requirement for masters to go the Wiki websites where you can build your own website and share it with a group. We share as four students. We did another group meeting and decided on which tools to use before we start using the wiki. We were three boys and one girl" [I-2-M].

A similar experience was narrated by I-3-M:

"Of course, my supervisor and his supervisor group and other postgraduate students in my faculty. We have a Facebook group, and sometimes we discuss something very serious about statistics, and we come up with decision making" [I-3-M].

The respondents' experience was that using Web 2.0 tools helped them work collaboratively, as expressed by I-5-F that the use of e-learning 2.0 improved her *"ability to work collaboratively"* I-5-F further explained:

"I do not have to go to meet my group [at] the university, I just sit in my room and discuss and share everything with them. Also, I think it was very interesting [exciting] for me" [I-5-F].

I-15-F described another experience:

"I have some topics that are taught electronically using e-learning 2.0. We have [online] discussion groups and the teacher gives us assignments in [the] groups. We discuss ideas and share online" [I-15-F].

For most of the Saudi Arabian students, using web 2.0 tools for learning played a role in improving and honing their collaborative skills:

"I am also working with a team in our university, for the TV at the university; we have a lot of meeting through Web 2.0 applications. Web 2.0 tools really ease improving my skills, my collaborative work with mates, we meet online, you know" [I-4-M].

As such, substantial evidence of interactive learning through the use of technology was found from the students' responses, which supports the Siemens (2005) connectivist perspective. As explained in Chapter 3, the focus of e-learning 2.0 is on utilising Web 2.0 tools for making the learners providers instead of just receivers, which enables them to learn from one another and build knowledge together.

Despite the participants' diverse experiences within the e-learning 2.0 environment, most of the Saudi students' utilisation of it was brought about by their intense needs:

"If I have not used e-learning 2.0 tools, I would have failed most of my subjects. Because, you know, most of the masters, I would say 30% in the classes, and 70% you have to learn yourself" [I-8-F].

As discussed above by the respondent I-8-F, and in other participants' responses, e-learning 2.0 supported them to become more independent in learning. Saudi Arabian participants expressed many benefits that have made them better learners and their experiences in Australia using e-learning 2.0 have transformed them into self-learners. The discussion of Saudi Arabian responses can be understood further from the social shaping theory of technology point of view discussed in Chapter 3, whereby developing or utilising a piece of technology is considered to be independent of people's needs. As discussed by Williams and Edge (1996), once the people's needs are identified, people develop or utilise an existing developed technology to fill those needs.

As discussed in Chapter 3 at the second pair of alternatives, section (3.3.5), the Australian advanced learning environment that they were exposed to, has driven them to utilise this new e-learning 2.0 settings as a social and learning enabler. In other words, the students found that in order to achieve the learning outcomes required by their universities along with their social needs, they utilise e-learning 2.0 technology to fill those needs. These findings are consistent with the work of Boyd (2007), who asserts that Web 2.0 tools are essential in addressing three significant aspects of learner-based instruction. These are supporting internal interaction, supporting external social feedback and supporting social relationship building. The findings discussed above indicate that e-learning 2.0 serves as a learning enabler which Saudi Arabian students utilised to help them engage and adapt their new learning environment by facilitating conversational interactivity among peers and between the students and their teachers. Thus, it supports the first aspect, i.e. internal dialogical interaction, of the learner-based instruction model. At the same time, e-learning 2.0 enabled the Saudi Arabian students to explore more of the world around them, and interact with other people who are relevant to their studies, which also supports the second and the third aspects, i.e., external exposure and social relationship building of the learner-based instruction model.

Additionally, Saudi Arabians' development as students in an e-learning 2.0 environment can also be explained by connectivism. As described by Siemens (2005), connectivism considers learning as a phenomenon that does not occur in a vacuum but rather involves different aspects of the environment where the learner is situated and the people that the learner interacts with. In Saudi Arabia, the students did not have access to an environment that promotes the use of Web 2.0 tools for learning. They did use Web 2.0 tools for learning in the Australian environment, and this resulted in them engaging in the e-learning 2.0 system that the environment offers to them.

7.4.3 Affordances

Despite limitations in the respondents' initial knowledge about using Web 2.0 tools and awareness of e-learning 2.0, the students were able to extensively describe their increased use of Web 2.0 tools in the Australian context as well as their e-learning 2.0 experiences. However, once the concept of e-learning 2.0 and its differences to e-learning 1.0 was clarified for each participant during the interviews, participants were able to describe their e-learning 2.0 experiences and its affordances more accurately. For example, I-10-M stated, "*E-learning 2.0 is facilitating student learning by using electronic technology.*" I-12-M also pointed out the significance of e-learning 2.0:

"E-learning 2.0 is a very important part of gaining a university degree. It is the 21st century and technology is part of life nowadays. One cannot do without it" [I-12-M].

Similarly, I-17-F explained the value of e-learning 2.0 for her study:

"I am learning through these technologies, like Wikipedia, Google Scholar, and many Web 2.0 tools…I often visit even Twitter, Facebook and other tools, all the time are used for my profession [study]" [I-17-F].

The subcategory of affordances describes the participants' recognition of the value and affordances of e-learning 2.0, including knowledge sharing and peer support learning, ease of interactivities in facilitating students' learning, friendships and saving in time and money.

- ***Peer knowledge and support***

This property represents the participants' recognition of the value of e-learning 2.0 through their appreciation of the peer support and knowledge sharing that they experienced in Australia contexts. Experiencing the peer support and knowledge sharing is more directly evidenced in the following excerpt statements:

"as I told it made my life easy because I can discuss and meet friends and make a group discussion and all of this from home, I do not have to go to the university or anywhere else; just from my home with my laptop, I can save lots of time" [I-5-F].

"The benefits were tangible to me, like in using Facebook, for example, Twitter and microblogging you understand more and learn how to develop your ideas, get help from classmates by sharing and communicating with them" [I-9-M].

I-20-F added:

"Some [of] my friends in America, U.K, Egypt and Saudi Arabia, by these tools we can share our knowledge and the newest thing in the field. It is the easiest way to learn" [I-20-F].

The benefits of using e-learning 2.0 tools were more than merely reading content or communicating with others; they also empowered some students' learning skills in knowledge building, as explained by I-15-F:

"I feel the benefits [of] using the e-learning 2.0. It has improved my reading, writing and feed my knowledge. This greatly increases my experiences in social and study since I feel like I am in real-life situations" [I-15-F].

These responses show students' awareness of e-learning 2.0 as a different dimension of learning and imply the students' recognition of its value.

- ***Ease of interactivity***

This property describes one of the benefits of e-learning 2.0, the easy way they could interact with others that assisted and facilitated their study, and some aspects of their life in Australia. For example, I-13-M stated that e-learning 2.0 has made his education more comfortable and improved his interactions with others, *"I think, it has made my life easier, my study easier and my communication better."* I-18-F also described how e-learning 2.0 helps in easing interaction with peers and in managing her time and study:

"It is easier to discuss with my friends online than face to face, I think, using e-learning 2.0 helps me in different ways…It also save time and money, since if I [want to] go to the university, I have to have [a] bus ticket, and I will also spend a lot of time. When I am home, then, it is easy to comment, read and do everything else" [I-18-F].

A specific advantage of using e-learning 2.0 tools was that the students could communicate with each other online using Web 2.0 tools without seeing each other face-to-face. This advantage of the non-face-to-face mode using Web 2.0 tools for learning, as described by I-10-M, helped in reducing the feeling of being influenced by some of the Saudi's cultural norms, such as the cultural norm of gender segregation:

"We can share books ideas and focus on the arguments without limitation or control from face to face or culture" [I-10-M].

Many students expressed the feeling of breaking some of the cultural barriers:

"E-learning 2.0 is easier. For example, I do not like to meet a woman due to many reasons, with e-learning 2.0, it is easier than to meet women face to face" [I-11-M].

Similarly, some female Saudi students found that communicating in non-face-to-face mode was helpful:

"Face to face, you cannot talk to the Australian students, but in the wikis, you are able to engage. Like, I am shy when speaking in front people, in e-learning 2.0, I am not shy, and it does help me because we do not meet face to face. I participate in the web 2.0 tools more than in the class" [I-15-F].

However, in the non-face-to-face mode, a misunderstanding may arise:

"Sometimes, you have difficulties to work in [the] online discussion group. I mean you have difficulties because you are not facing the one you are talking with" [I-1-M].

However, since the communication is must be conducted in English, it is not unusual a misunderstanding may happen because of the lack of English skills. These statements show the changes that the students began to experience as they stayed longer in the Australian environment, and made use of Web 2.0 technologies both about interacting with new people for learning or their other personal needs. Easing the students' interactivity can likewise be explained by 'technological determinism theory' since the Australian environment has widely available Web 2.0 tools. As described at the second pair of alternatives, "driver for using technology" in Chapter 3, the students may felt that the e-learning 2.0 environment helped them to address needs that they had prior to entering the environment. Their study requirement of using the technology, specifically Web 2.0 tools, may drive them to develop the skills to use the e-learning tools to address their social or learning needs.

Many of the Saudi students interviewed expressed that using e-learning 2.0 made aspects of their education in Australia easier to understand. I-1-M argued that:

"With Web 2.0 tools, you can present your opinion and see other people opinion about what I am studying to help you understand your course" [I-1-M].

I-13-M added that using e-learning 2.0 tools contributes to his study life and makes it easier for convincing other people during discussions:

"Because I am always participating in dialogue and discussion, I think the e-learning 2.0 makes our lives and study easier for meeting and convincing other people, and having people to decide quickly" [I-13-M].

These responses show that e-learning 2.0 environment provides the Saudi Arabian higher education students with useful ways to ease into the Australian educational environment. The respondents, through their experiences, claimed that e-learning 2.0 enabled them to overcome some of the barriers they faced with interacting with people in face to face mode and eased their transition into the Australian educational environment.

- ***Friendships***

This property describes the students' experience of using Web 2.0 tools for personal contact and making friends.

Notably, the respondents described a considerably increased use of Web 2.0 tools in Australia. These tools also were used as a means of communication with family and friends in Australia and Saudi Arabia:

"Usually, I use them [Web 2.0] to keep in touch with friends, share information with people I know. For example, sharing pictures with friends I know, and keep touch family in Saudi" [I-1-M].

Similarly, I-3-M described that Web 2.0 tools used *"in the angle of a social network with family, with friends."* I-5-F explained that *"now, you know, I can connect with friends back home, as well and say hi to my family, it is great,"* and I-9-M indicated that *"In Australia I use Facebook to communicate with friends back home, to try and distract myself from getting homesick."*

The data indicated that many of the Saudi students move forward to socialise themselves using Web 2.0 tools. For example, I-1-M pointed out *"Web 2.0 is good if you [are] looking for new friends."* I-2-M explained he is *"using [web 2.0 tools] in daily life. Here in Australia, we use [them] for making friends with a different nationality."*

"I have many new friends; I can talk to them any time, I can discuss and meet friends and make a group [of] discussion and all of this from home" [I-4-M].

Likewise, I-7-F explained that she uses Twitter to meet new friends:

"You can also tweet with new people you can explain the ideas in it, and you can see about their thinking, talk to friends something like that" [I-7-F].

One advantage commonly expressed was that e-learning 2.0 tools empowered the students to develop their ideas better and share them with their friends:

"The benefits were tangible to me. In using Facebook, for example, Twitter and microblogging, you understand more and learn how to develop your ideas, get help from classmates by sharing and communicating with them" [I-9-M].

Regardless of the cultural and educational obstacles discussed in previous conceptual categories, e-learning 2.0 was used as a means to enable the students to bypass some of their challenges, and to expand their social networks and build rapport with their classmates as friends in the new educational environment:

"Yes, it does help in social life. It is more flexible with [finding] information. It is an additional way of learning" [I-17-F].

Similarly, I-18-F confirmed: *"It [e-learning 2.0] has helped me make many friends through Facebook and Twitter. We are able to talk and share ideas."*

- ***Saving time and money***

The property of 'saving time and money' describes how e-learning 2.0 tools helped some students to make many aspects of learning more convenient. Different responses referred to the usage of these Web 2.0 tools as much cheaper than using the phone:

"I find it [using Web 2.0 tools] very fun and helpful when you can contact with them all the day and send messages, and you know, it is also much cheaper than [an] another way like by phone" [I-3-M].

Others considered that e-learning 2.0 made merely some aspects of learning more efficient and affordable:

"E-learning saves me money and time since I do not have to go to school all the time. I do not have to pay [a] bus ticket since my university is far away" [I-19-F].

I-3-M also described the benefit of using e-learning 2.0 as a lifelong of learning at a zero cost:

"Facebook and it is very cheap without any cost…it also lifelong of learning, for example, if I talk about YouTube, you can learn anything at any time at zero cost" [I-3-M].

As such, the negligible cost of e-learning 2.0 attracted the students to utilise technology in an educational environment that is far different from their own. Through e-learning 2.0, students were able to engage with the new learning environment while saving their time and money.

7.4.4 Challenges

This subcategory describes the challenges faced by students in adapting to a different culture, a new education system, new language and a new learning environment that made heavy use of Information Technology (IT). This subcategory describes a number of properties, including technology expertise, language proficiency challenge, confidence and engagement challenge.

- ***Technology expertise***

The property of 'technology expertise' represents the students' reflections on their level of experience and proficiency in using technology. Some students discussed the newness of the e-learning 2.0 environment as a challenge. The students described that it might require spending some time to learn how to use some Web 2.0 tools for learning:

"Wiki website was great… I had no experience in this but my colleague they helped, this was my first experience. I tried to spend [the] time to be familiar with the site as it was my first time" [I-2-M].

I-13-M also discussed the familiarity with IT as a challenge:

"I think [the] difficulty was concerning virtual classroom, concerning IT, there was [a] difficulty, the IT difficulty was for those people who were using virtual classes" [I-13-M].

I-15-F pointed out that having enough knowledge to participate in e-learning 2.0 environment was a need, but it was new for them:

"In using online learning tools, like online discussion, I found lots of challenges, because it was something new for me…I do not know how I can use this technology" [I-15-F].

I-3-F clarified that the difficulty with IT depends on the choice that the student makes:

"It depends [on] which choice in these things [Web 2.0 tools]. For example in YouTube, it is easy to listen because you just receive the information and choose the information in YouTube, but when it comes to sending information or some working in groups or participating in online groups, there [are] some challenges, like inefficiency in using technology" [I-3-F].

However, there were also some respondents who negatively evaluated the use of Web 2.0 tools for learning. For example, some students expressed their reservation about the usefulness of using technologies:

"I do not like Facebook. I have one, I created two years ago just to find out what it is about, but I think it is useless for me" [I-7-F].

I-7-F also stated that sometimes using Web 2.0 tools could be time-consuming and complained that students do not have time for each other:

"Sometimes, there is no time to seat [on] a blackboard or using some Web 2.0 tools, because we have many courses to do at the same time. Moreover, we have lots of work, and we also have to write our assignments" [I-7-F].

The above opinion by I-7-F might be interpreted by the biased technology theory, as explained in the first pair of alternatives to the students' perceptions of using the technology presented in Chapter 3. The biased technology theory considers that each piece of technology has a positive value and a negative value, and it is ultimately in the diverse uses of it that its values can be considered as positively biased or negatively biased (Martin, 2001). Thus, as expressed by some other respondents, Facebook, as a piece of technology, has been used actually as a technological enabler to share and develop ideas:

"At the university, we have a Facebook group with some of my friends. We get to discuss areas that we do not understand. We use it both for studying and enjoying ourselves" [I-18-F].

As such, the students' experience with using the technology was found to influence some students' ability to use e-learning 2.0 tools in the Australian environment.

- ***Language proficiency challenge***

'Language proficiency challenge' represents the students' reflections on their level of proficiency in the English language. While some of the respondents believe their English

level was high enough when they started university studies, most also emphasised difficulty with the language, as explained by I-5-F, *"I think the most important challenge was with language"* and by I-2-M:

"I think to come to Australia without any English background or any like ability to speak or write, I think, is the major challenge for any Saudi students" [I-2-M].

These reported challenges with the English language are consistent with various other studies on English language learning among Saudi Arabian students (Abdellah, 2013; McMullen, 2009; Wedell & Alshumaimeri, 2014). For example, Abdellah (2013) discussed how the inherent differences in the phonetics of the two languages significantly contribute to Arab students' inability to develop competence in the English language as fast as some other second language learners.

Some students' evaluated the adequacy of time allotted for learning English and discussed their English background and the need for more time to spend on learning English:

"I studied [the] English language at my country, but here, I have to study and use English everywhere, and in short time, and I think, it is hard for me and everyone who comes to study the second language in short time" [I-3-M].

Similarly, I-9-M was not happy with his own English and that one year of studying English was not enough for him:

"I do not think my English was fine, although I study [studied] for one year, and I sat for [the] English exam and passed. I met the requirements, but even after four years [Bachelor], am not happy with my English" [I-9-M].

The next section discusses the students' self-confidence with using the English language in the e-learning 2.0 environment.

- ***Confidence***

The property of 'confidence' describes the students' self-confidence in their proficiency in using the English language in the study context. Many respondents expressed hesitation and shyness in writing in English online, which led to a lack of confidence and the experience of inhibition:

"Sure sometimes, I concern and hesitate writing in English in those forums, [online learning tools], because it is not my mother language, as you know" [I-4-M].

While the language may pose a challenge, the e-learning 2.0 environment may also be considered as a potential solution to this challenge. Some respondents described using e-learning 2.0 as a tool to practice their English:

"In Saudi Arabia, I have not used Web 2.0 in the university. In Australia, I used PalTalk, a chatting Web 2.0 tool; there is a section of learning English called practice your English," [I-6-F], and improving their English:

"I was not confident in my English, but with the help, I got from the group [online group], it was a great experience, and I liked it" [I-2-M].

I-20-F, also pointed out that online communication using Web 2.0 tools was better than face to face, which gives her more confidence to participate:

"I feel like [a] shy, but it is better than face to face communication even if my writing is the worst, my focus is on the idea, not the grammar" [I-20-F].

Saudi Arabian students hesitated to engage in e-learning 2.0 opportunities (such as sharing knowledge) because of their challenge with the English language. Tayebinik and Puteh (2012) discuss that confidence in an individual's abilities is an essential driver of e-learning engagement. If students are not confident for whatever reason, such as believing that their English fluency is not good enough to interact using Web 2.0 tools for learning, then the probability of learning from such engagement is diminished. Several authors have reported on international students' challenge with the English language (Li et al., 2007; Littlemore et al., 2011; Marlina, 2009; Preisler et al., 2011; Qiu, 2011; Ramachandran, 2011). These studies discussed that international students generally have difficulty in adjusting to a new environment with a focal point of adjustment being the local language.

- ***Engagement challenge***

The property of 'engagement challenge' describes the students' reflections on their experience, and the challenge faced while engaging in the e-learning 2.0 environment. Although many responses pointed to challenges related to English writing while engaging in e-learning 2.0, evidence was found that the absence of gender segregation in Australian learning environment also persisted as a challenge. Furthermore, the segregation culture was found to influence the way Saudi Arabian students interacted among each another, as well as in their online learning-related interactions. For example, I-2-M pointed out that he preferred to not communicate with girls from the same nationality, *"I had studied with students of Saudi males and females; for females, [and] I do not communicate with them,*

unfortunately." The student (I-2-M) explained that as it is, *"something probably is not good for me, as you know, cultural background and religion prohibited mixing between males and females."* He also explained:

"Because, as you know, my dear, our culture, as well as they may also do respect us as Saudis with the same nationality, so they do not want to communicate with us" [I-2-M].

Saudi Arabian females share similar sensations resulting from the influence of voluntary gender segregation culture among the Saudi Arabian students. For instance, I-8-F did not accept the idea of having Saudi male students as online friends, and she explained that it is because of the culture:

"But, if they are Saudi guys, most of the time, I would say 99%, I do not accept their online friendship because in our cultural background we should not be like friends you know…I sometimes add my photos, and to them, that is not acceptable. So, I have those who have a different background with me. All my friends are not Saudi guys, other guys that fine with me" [I-8-F].

When the respondent I-8-F asked to be more specific about her concerns, she expressed that:

"With Saudis, I could not use my opinion to explain, they act, or some of them, as observers for the actions of Saudi girls" [I-8-F].

Other female students also believed that Saudi guys might be influenced by families and traditional beliefs. For example, I-7-F stated, *"I do not know why,"* and explained:

"Maybe they [Saudi male students] have some idea, or traditional belief, [or], their parents maybe talk to them about not to talk to any Saudi girl, and this not from our religion" [I-7-F].

As will be explained in the last conceptual category 'engagement in learning through technology,' the culturation of gender segregation had a significant effect on the Saudi Arabian students and influenced even their strategies of adaptation to the Australian educational environment.

7.4.5 Summary of the third conceptual category

The third and last conceptual category 'engagement in learning through technology' described the participants' experiences and opinions on their engagement in learning through technology using e-learning 2.0. The conceptual category discussed the students' previous knowledge about e-learning 2.0, and the opportunities and challenges emerging from the students' experiences of interacting in the new e-learning 2.0 environment. This category associated with and described by four subcategories, including knowledge and experience about e-learning 2.0, using e-learning 2.0, the affordance of e-learning 2.0, challenges. A number of properties describe each of the subcategories.

The third conceptual category, and its subcategories and properties, revolves around the students' engagement in learning using technology in the Australian educational environment. Out of the analysis conducted on this conceptual category, **'technological engagement'** is identified as a key theoretical concept. This theoretical concept is associated with two theoretical aspects. These are:

- Opportunities in engaging e-learning 2.0
- Challenges in engaging e-learning 2.0

Each of these theoretical aspects is described by a number of properties that were discussed under the subcategories associated with the conceptual category.

The theoretical aspect of **'opportunities in engaging e-learning 2.0'** is described by two theoretical elements. These are: 'learning benefits' and 'sociocultural benefits' (presented in Figure 34 in Chapter 8). Each of these theoretical elements is described by a number of properties, as follows:

- **Learning benefits**
  - Enabling online interaction
  - Enabling working collaboratively
  - Appreciating peer perspectives
  - Moving away from the teacher-centric model towards the student-centric model
  - Facilitating learning
  - Locating information to enhance course understanding
  - Saving time and money
  - Reducing writing concern
- **Sociocultural benefits**
  - Reducing the sense of cultural differences

- Diminishing the segregation cultural perspective
- Feeling culturally safe
- Improving contribution to sensitive topics

The properties that describe **'challenges in engaging e-learning 2.0'** (illustrated in Figure 37 in Chapter 8) are:

- Absence of the segregated system
- Method of teaching and learning
- Using less technology in Saudi higher education
- Absence of the interaction (less interactivity model)
- Teacher-centred model (teachers' authority)
- Absence of the student's rights.

The properties that describe **'language challenges'** (presented in Figure 32 in Chapter 8) are:

- Language proficiency challenge
- Technology expertise
- Gender segregation culture

These theoretical elements used in constructing the study's theoretical model are presented in Chapter 8.

From the third conceptual category, it was found that Saudi Arabian students utilised the benefits from e-learning 2.0 environment as an enabler. The category supports that the students' are using e-learning 2.0 environment as a learning enabler and as a sociocultural enabler in a way that reduces their concerns and issues. However, some challenges continued. The students' utilisations of e-learning 2.0 environment as learning and sociocultural enablers will be further explained in the next chapter.

7.5 Summary of the chapter

In this chapter, three conceptual categories and their related subcategories and properties were presented and discussed. These are: 'adaptation to the Australian cultural environment', 'adaptation to the Australian education system' and 'engagement in learning through technology.' The results discussed above indicate that Saudi Arabian students encountered some challenges and opportunities during their stay and study in the Australian environment. The explanatory discussion of the conceptual categories also presented that e-learning 2.0 serves as a learning enabler that helped the Saudi Arabian students settle and engage in their new learning environment. E-learning 2.0 environment also served the

students as a sociocultural enabling tool to help the Saudi Arabian students overcome some of their cultural challenges.

In this chapter, the three conceptual categories and their related subcategories and properties were explained. Summary of each conceptual category was provided. At the summary of each conceptual category, a key theoretical concept, along with its related theoretical elements, was outlined. From the three conceptual categories, three key theoretical concepts along with their associated aspects and properties were identified. These are: 'cultural adaptation,' 'educational adaptation' and 'technological engagement'. These theoretical concepts and their related theoretical elements were generated from the analyses of conceptual categories and their related subcategories and properties. However, some of the original components of the conceptual categories were theoretically renamed for the purpose of theory building, i.e. to construct a substantive understanding of the students' experiences with e-learning 2.0 in Australian higher education.

As described in Chapter 5, this is the step where the conceptual categories are theoretically treated, raising them into theoretical concepts and highlight their related aspects and properties. These theoretical concepts support the development of the study's theoretical model. The following chapter presents the final stage of the data analysis, and the theoretical model is presented.

Chapter 8
Building the Theoretical Model

8.1 Introduction

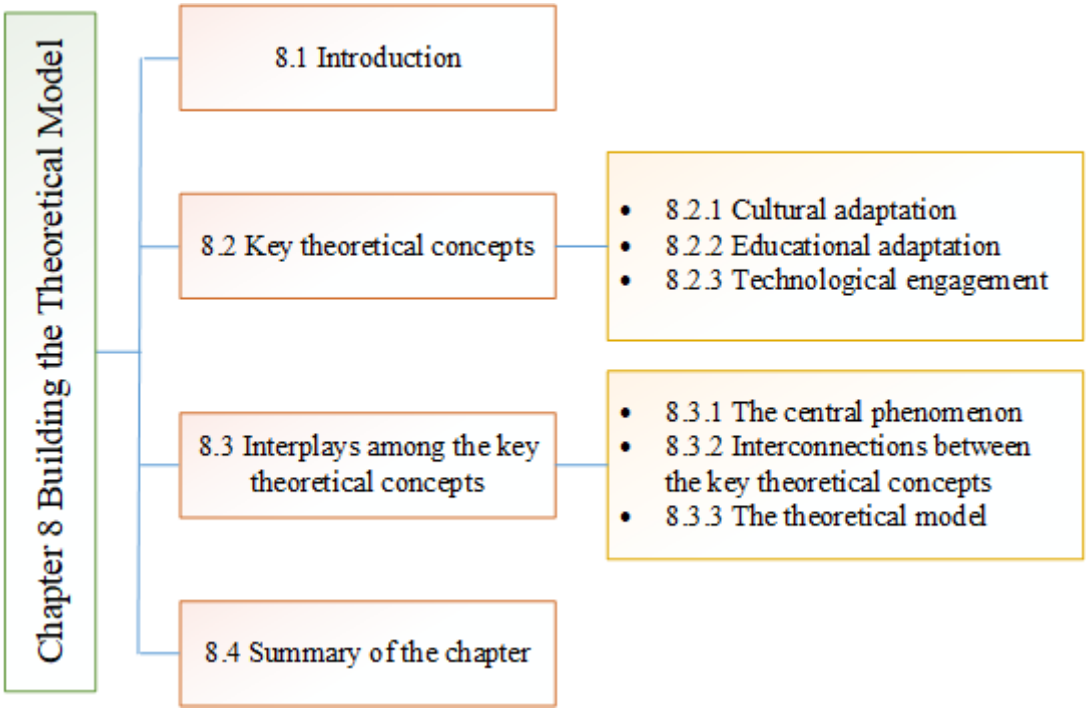
In the previous chapter, the three developed conceptual categories were presented and thoroughly discussed. These conceptual categories were ‘adaptation to the Australian cultural environment’, ‘adaptation to the Australian education system’ and ‘engagement in learning through technology.’ This chapter presents the final stage of the data analysis, the theoretical coding stage.

First, three key theoretical concepts related to the conceptual categories along with their subcategories and properties are brought together to form a theoretical model. These three theoretical concepts are cultural adaptation, educational adaptation and technological engagement. These three key theoretical concepts are explained in separate sections. For simplicity of displaying the relationships, diagrams are used to visually display the components of the key theoretical concepts and their related aspects. Also and for more clarity, the components of the diagrams are also tagged with the section number for easy reference.

Second, the interplay drawn between the key theoretical concepts is highlighted. The second section also presents the theoretical model developed. The theoretical model aims visually to link the three key theoretical concepts together with their related theoretical aspects and properties. The model also aims to present a substantive understanding of the students' experience with e-learning 2.0 in Australian higher education. The model seeks to contribute understanding of Saudi Arabian student experiences with e-learning 2.0 while studying in Australian higher education.

This chapter comprises four main sections, as shown in Figure 25. The first section is an introduction.

Figure 25 Map of Chapter 8



The second section highlights the key theoretical concepts from each conceptual category, which were used to develop the study's theoretical model presented in this chapter. The third section presents and describes the interplay among the three key theoretical concepts. The third section also presents the theoretical model of the study. Finally, section four provides a summary of this chapter.

8.2 Key theoretical concepts

The following sections highlight the key theoretical concepts from each conceptual category, which were outlined in the previous chapter. The key theoretical concepts are used to develop the theoretical model presented in this chapter. These are: 'cultural adaptation', 'educational adaptation' and 'technological engagement.' These theoretical concepts came out of the analysis conducted on the conceptual categories and their related subcategories and properties in Chapter 7. The key theoretical concepts and their related properties were also outlined under the summaries of each conceptual category in Chapter 7.

8.2.1 Cultural adaptation

The first key theoretical concept, 'cultural adaptation', is related to the conceptual category 'adaptation to the Australian cultural environment' and its related subcategories and properties. This theoretical concept represents the students' adaptation to the Australian cultural environment. It represents the motivations that helped the students' settling into the Australian environment. The theoretical concept also represents the challenges faced by students to adapt to the Australian culture (see the diagram presented in Figure 26).

Figure 26 Cultural adaptation theoretical diagram

8.2.1.1 Motivations

'Motivations' are aspects associated with the first key theoretical concept of cultural adaptation. Although the Saudi students faced some challenges during their stay and study in Australia, the data indicates three motivations that helped the students and stimulated them to fit and adapt to the Australian cultural life. The model presented in Figure 27 includes the motivations in the centre surrounded by related properties. These properties are willingness to adapt, curiosity about Australia and the sense of freedom. The following statements highlight aspects which relate to each property.

Figure 27 Properties associated with motivations

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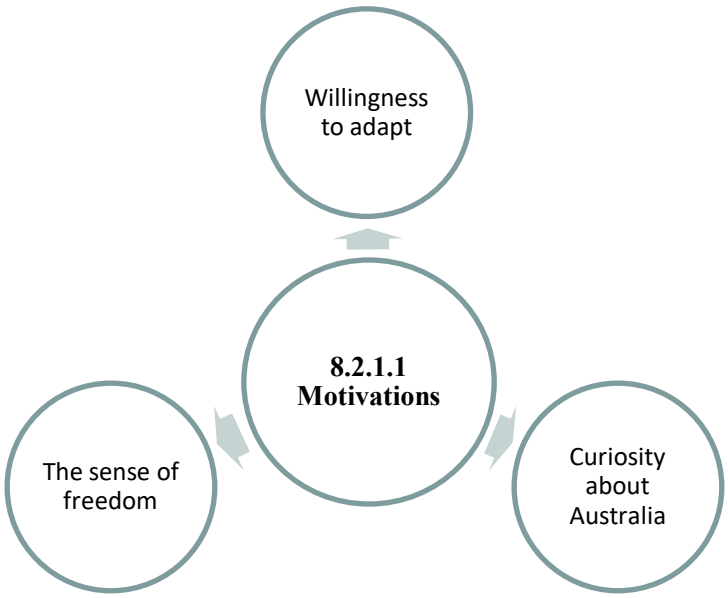


- **Willingness to adapt**

'Willingness to adapt' property represents some students' openness on:

  - the shared cultural values agreed upon by the Australian people, such as gender equality value
  - respect and willingness to interact with the opposite gender despite their cultural background
  - accepting the gender integration environment

- **Curiosity about Australia**

The 'curiosity' property represents that many respondents were:

  - motivated to know and learn more about the Australian culture which encouraged some respondents to accept and adopt Australian culture
  - interested in the country and to learn about its multicultural aspects which encouraged some respondents to accept and adopt Australian culture
  - fascinated with Australia and its culture which helped in preparing them to settle in the new cultural environment

- **The sense of freedom**

'The sense of freedom' represents that many respondents were found to:

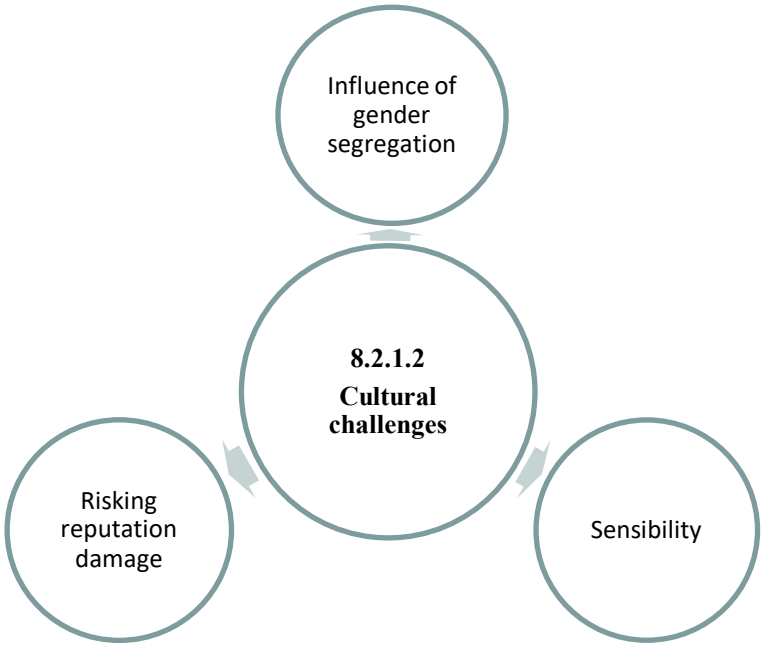
  - enjoy the exposure to Australian shared values such as freedom, equality and dignity

- enjoy being free to speak, free to ask, free to go and free to do whatever they want without anyone questioning
- enjoy the principle of freedom in the educational context and have a positive experience of their participation in the educational process

8.2.1.2 Cultural challenges

From the first conceptual category, it was found that Saudi Arabian students faced some cultural challenges in their stay in the Australian context. This section highlights these cultural challenges, indicated by the data, which were encountered by the Saudi students during their study journey in Australia (see Figure 28).

Figure 28 Properties associated with cultural challenges



The model presented in Figure 28 includes the cultural challenges in the centre, surrounded by related properties. These are the influence of gender segregation, sensibility and risk of reputation damage. The following statements highlight aspects related to each property.

- **Influence of gender segregation**

Students expressed that shifting from Saudi Arabia to Australia was challenging and the cultural differences make it difficult for them to adapt:

- adjusting to the Australian gender integration cultural environment was found to be the most prominent cultural challenge
- feeling unable to speak up and unable to do anything

- embedded for some of the Saudi Arabian students even during the online learning-related interactions using e-learning 2.0

- **Sensibility**

'Sensibility' represents the students' feelings of experiencing some cultural sensibilities, including:

- discussion of sensitive topics, especially related to gender or male topics, health, gay marriage or society-related matters
- the sensitivity of dress code, such as the Islamic veil

- **Risk of reputation damage**

'Risk of reputation damage' represents the students' seriousness when it comes to their reputation. Both Saudi Arabian men and women were found:

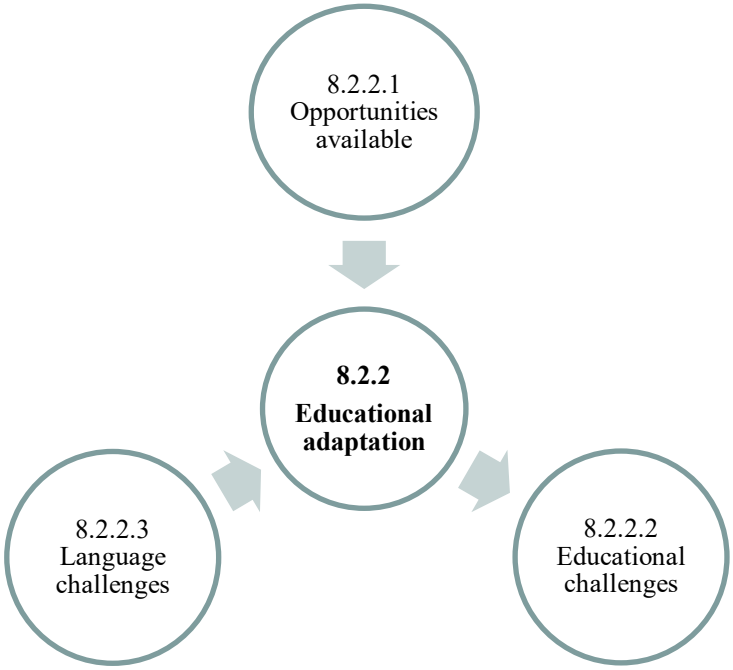
- to be afraid that other Saudi national peers might talk behind their back, even if the topic was exciting, the students prefer not to address some topics
- to feel uncomfortable in interacting directly with the other gender and prefer to discuss educational matters with classmates over the internet
- to be hindered from participating in some learning-related interactions

8.2.2 Educational adaptation

The second key theoretical concept, 'educational adaptation', is related to the conceptual category 'adaptation to the Australian education system,' and to its related subcategories and properties. The diagram presented in Figure 29 shows three main aspects related to the key theoretical concept of 'educational adaptation'. These are the opportunities, language challenges and educational challenges.

This section is divided into three subsections. The first subsection highlights statements related to the opportunities offered in the Australian higher education system, particularly the availability of e-learning 2.0 environment, which played a role in helping these students to engage and adapt. The second subsection highlights statements related to the educational challenges encountered by the students in adapting to the Australian educational system. The last subsection highlights statements related to the language challenges encountered by the students using the English language while studying and using the e-learning 2.0 in Australia environment.

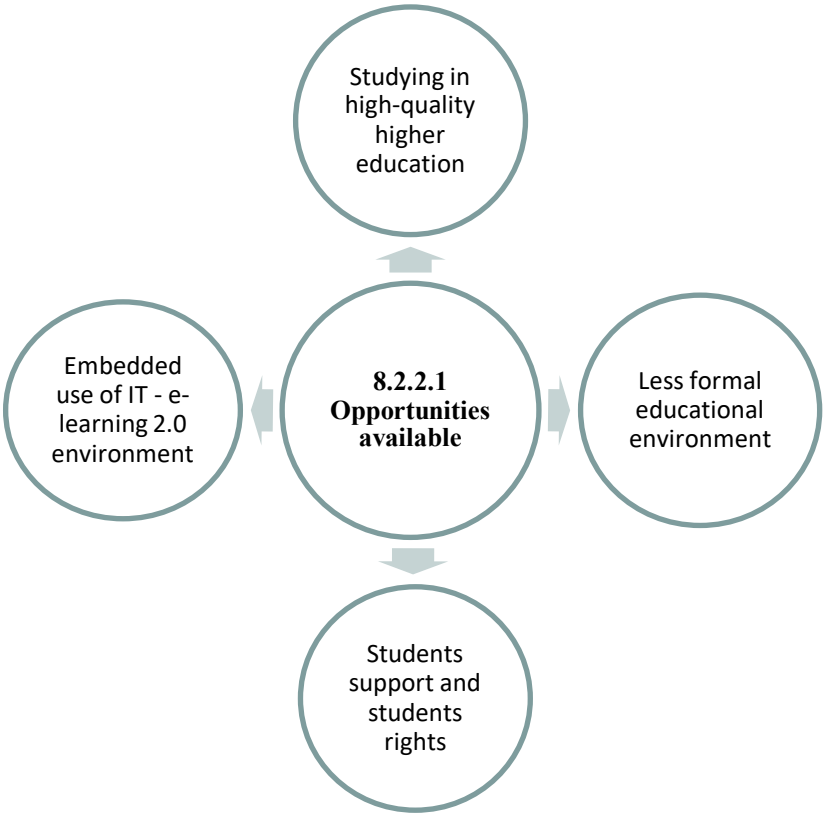
Figure 29 Educational adaptation theoretical diagram



8.2.2.1 Opportunities available

This section highlights the aspect of 'opportunities available' for the students, which is the first aspect of the second key theoretical concept, 'educational adaptation' (see the diagram presented in Figure 29). 'Opportunities available' refers to the affordances and facilities available in the education system that the students selected and experienced. The data indicated that the of the opportunities available, most important was the availability of e-learning 2.0 environment, which played a role in helping Saudi Arabian students to engage and adopt the educational environment. The model presented in Figure 30 includes the opportunities provided by the Australian education system in the centre, surrounded by properties related. These properties are: studying in high-quality higher education, less formal educational environment, students' support and students' rights and embedded use of IT - e-learning 2.0 environment. The following statements highlight aspects which relate to each property to describe the opportunities available.

Figure 30 Properties associated with opportunities available



- **Studying in high-quality higher education**

'Studying in high-quality higher education' represents the students' selection of Australia as their high standard higher education environment. The data indicated:

  - the students were *"lucky"* (as they expressed) to be studying in a high-quality higher education environment: *"I think I am lucky, to choose Australia, it has a high quality higher education"* [I-17-F]
  - the Australian environment per se made it easier for them to adapt
  - positive experience with the opportunities available in the education environment

- **Less formal educational environment**

'Less formal educational environment' represents the students' experiences with the casual and friendly educational environment provided by the Australian educational system. The data indicated:

  - student descriptions of the casual environment and the friendly faculty members as a significant feature provided by the educational system
  - Australian lecturers were great assistance, not considered as distant figures that cannot be reached

- preferably, the students regard the teachers in Australian higher education as learning facilitators, very helpful, kind, they respect people, and understand the student's needs

- **Student support and student rights**

'Student support and student rights' are two properties which were combined as one property related to the 'opportunities available' aspect. It represents the students' experiences with Australian regulations that position the students with their supports and rights while studying in the higher education system. The students expressed:

- the support system and study resources in the Australian education system are better compared to the those available in the Saudi Arabian education system
- they have rights and were free to practice them
- student support and student rights play a role in assisting the students during their study in Australia

- **Embedded use of IT – e-learning 2.0 environment**

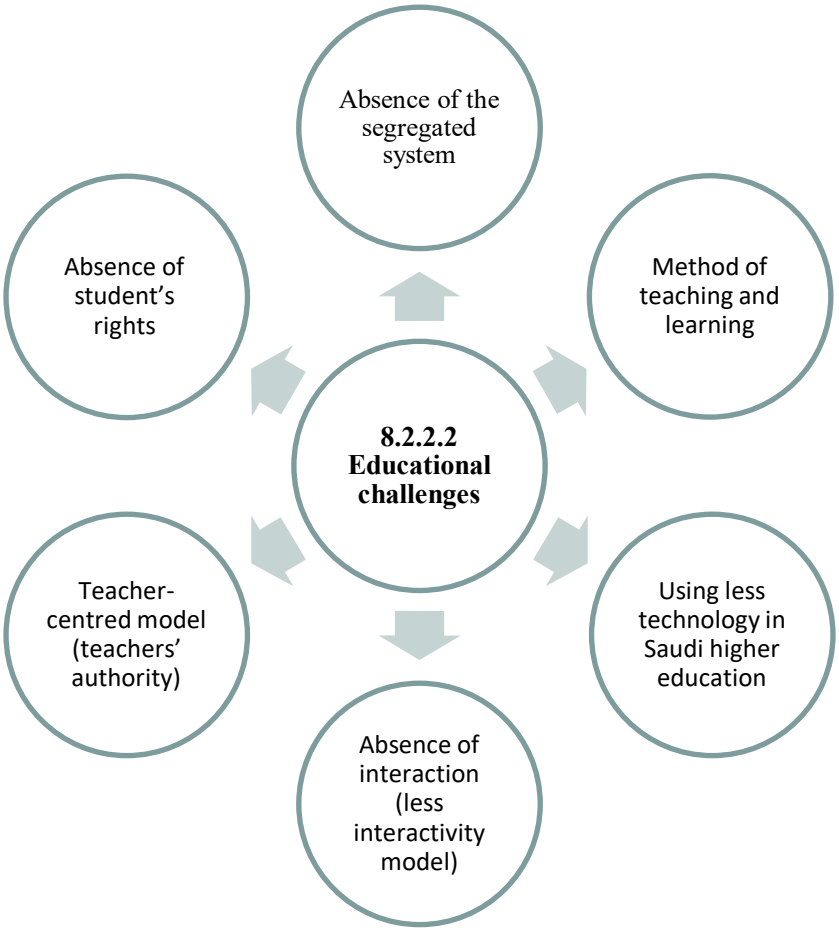
'Embedded use of IT - e-learning 2.0 environment' refers to the availability of information technology, specifically the e-learning 2.0 environment, while studying in the Australian higher education system. The participants described:

- engaging with information technology, notably allowing for Web 2.0 tools to power e-learning 2.0 environment to facilitate their learning
- participation at a very advanced level of technology to facilitate exchanging of information and knowledge
- use of e-learning 2.0 technologies to bypass some of their educational challenges, such as the absence of the segregated system, lacking interactivity, teacher centeredness, indoctrination and memorisation

8.2.2.2 Educational challenges

'Educational challenges' represents the challenges encountered by Saudi Arabian students while adapting to the Australian educational system. It also represents the students' perspectives to education which were regarded as challenges.

Figure 31 Properties associated with educational challenges



The diagram presented in Figure 31 includes the educational challenges in the centre surrounded by related properties. These properties are the absence of the segregated system, method of teaching and learning, using less technology in the Saudi higher education, the absence of the interaction (less interactivity model), teacher-centred model (teachers' authority) and absence of the student's rights. The following statements highlight aspects which relate to each property.

- **Absence of the segregated system**

'Absence of the segregated system' was often raised when the students compared their Saudi Arabian educational background with the Australian learning and educational environment. The students' expressed:

  - studying with boys and girls in the same class was a challenge
  - it is completely different from the segregated educational system in Saudi Arabia
  - the gender-integrated system is something that has been obligated by Islamic law and the Islamic legal system

- **Method of teaching and learning**

This property represents the challenge faced by students related to differences in the way of learning and teaching in the Australian educational system. Some students expressed:

  - studying through group work and assay group was a challenge
  - conducting research as independent learners was challenging and very different from their Saudi Arabian education system
  - they used to rely on lecture-based and memorisation methods (just had to memorise the given information)

- **Using less technology in Saudi Arabian higher education**

This property represents the students' experience of using less technology while studying in Saudi Arabian higher education. Some students were found to be:

  - unfamiliar with studying through lack of technology in the Saudi Arabian higher education system
  - questioning the usefulness of using more technology for education
  - negatively biased towards using Web 2.0 tools for learning (as will be explained in the last key theoretical concept)

- **Absence of interaction (less interactivity model)**

This property represents the absence of the interaction between Saudi students and their lecturers in Saudi Arabia as prior educational experience. The students were found to have:

  - difficulty talking with lecturers and exploring their opinions
  - difficulty getting rid of their educational perspective from the less interactivity model
  - a psychological distance between the teachers and the learners in the Saudi education system, such as not being able to see the teacher which made it hard to follow up with them

- **Teacher-centred model (teachers' authority)**

This property represents the students' experience with teachers' authority and power relationships in the Saudi Arabian education system as an educational challenge. Most of the students described:

  - the lecturers in Saudi Arabia are in control of all the aspects of learning and teaching process
  - the students in Saudi Arabia are best to remain silent if they have arguments against their lecturer and in no way can discuss or appeal to review marks
  - the universities' administration also supports teachers' full authority

- **Absence of student's rights**

This property describes the respondents' perceived perspective of student's rights in an educational institution. The respondents claimed that in Saudi Arabia:

  - they do not have rights as university students in Saudi Arabian higher education
  - they were unable to complain because it was not a good practice to do at the Saudi Arabian higher education system *"If you complain you [might] lose your future"* [I-4-M]
  - they could not complain because of the risk of losing their study's seats

8.2.2.3 Language challenges

This section highlights the language challenges encountered by Saudi Arabian students. The aspect of language challenges is the second element associated with the key theoretical concept, 'educational adaptation' (see the diagram presented in Figure 29). The students' experience with the English language while studying in Australia and in using the e-learning 2.0 environment was discussed across the three conceptual categories. In the first conceptual category, it was described as one of the properties related to the subcategories of 'Australian environment' under 'language variations.' It was also discussed as one of the new educational environment properties under 'writing and conversation fluency' needs, and as a challenge under 'language proficiency' in the last conceptual category. The language challenge then highlighted as a theme related to the key theoretical concept 'educational adaptation.'

The model presented in Figure 32 includes the language challenge in the centre, surrounded by related properties. These are writing fluency, English background adequacy

of time allotted for learning English and not enough learning at the English language institute.

Figure 32 Properties associated with language challenge

The following statements highlight aspects that relate to each property to describe language challenges.

- **Writing fluency**

'Writing fluency' refers to the respondents' concerns about their English ability, particularly their writing skills. Most of the respondents were found to be:

  - conscious about their writing skills and mostly hesitant about interacting because of fear that their English would not be good enough
  - afraid to write something in an online discussion group because people, such as other students and the academic staff, will read what they wrote
  - challenged by interacting online without proofreading their comments

- **English background**

The 'English background' property represents the participants' interpretation of their English language inefficiency. The students relate their English language inefficiency to their English background as they need:

  - to study basic English in Saudi Arabia
  - to pass an IELTS test before going to Australia
  - a robust English background before being able to participate in e-learning 2.0 activities, such as the ability to speak and write

- **Time spent on learning English**

'Time spent on learning English' refers to the adequacy of time allotted for learning English. Some participants relate their English language inefficiency to the adequacy of time allotted for learning English as not enough. The students claimed:

  - their English was weak when they started their degrees
  - it was difficult for them to study the second language in a short time, i.e. to spend one year studying English was not enough
  - they need at least over three years to be able to write 100% research or to speak without mistakes,

- **Lack of English proficiency**

Some participants also indicated that their study at the English language institutes was not enough, which led to a lack of English proficiency. The students claimed:

  - learning everything about the English at the language institute was insufficient as the academic study is entirely different
  - their weakness in English skills may influence their engagement in the learning environment
  - they were unable to participate in the learning environment as the proficiency in English is one of the prerequisites to be able to learn in the Australian settings

8.2.3 Technological engagement

The final key theoretical concept is 'technological engagement.' The technological engagement theoretical concept is mostly related to the conceptual category 'engagement in learning through technology' and to its related subcategories and properties. The theoretical concept describes the opportunities (learning and sociocultural benefits) the

students gained from engaging with the technology, particularly with e-learning 2.0. Furthermore, this theoretical concept represents the challenges persisting for some students that influenced their adaptation to the Australian educational environment.

Figure 33 Technological engagement theoretical diagram

The model presented in Figure 33 includes two associated aspects to describe the theoretical concept of 'technological engagement. These two aspects are opportunities in engaging e-learning 2.0 in the right hand, and challenges in engaging e-learning 2.0, in the left.

8.2.3.1 Opportunities in engaging e-learning 2.0

This section highlights the opportunities (benefits) from engaging with e-learning 2.0 that the students use to help them in adapting to the new educational environment, given their educational and cultural challenges. Two theoretical aspects describing the opportunities in engaging e-learning 2.0 are: 'learning benefits' and 'sociocultural benefits' (see Figure 34).

Figure 34 Opportunities in engaging e-learning 2.0

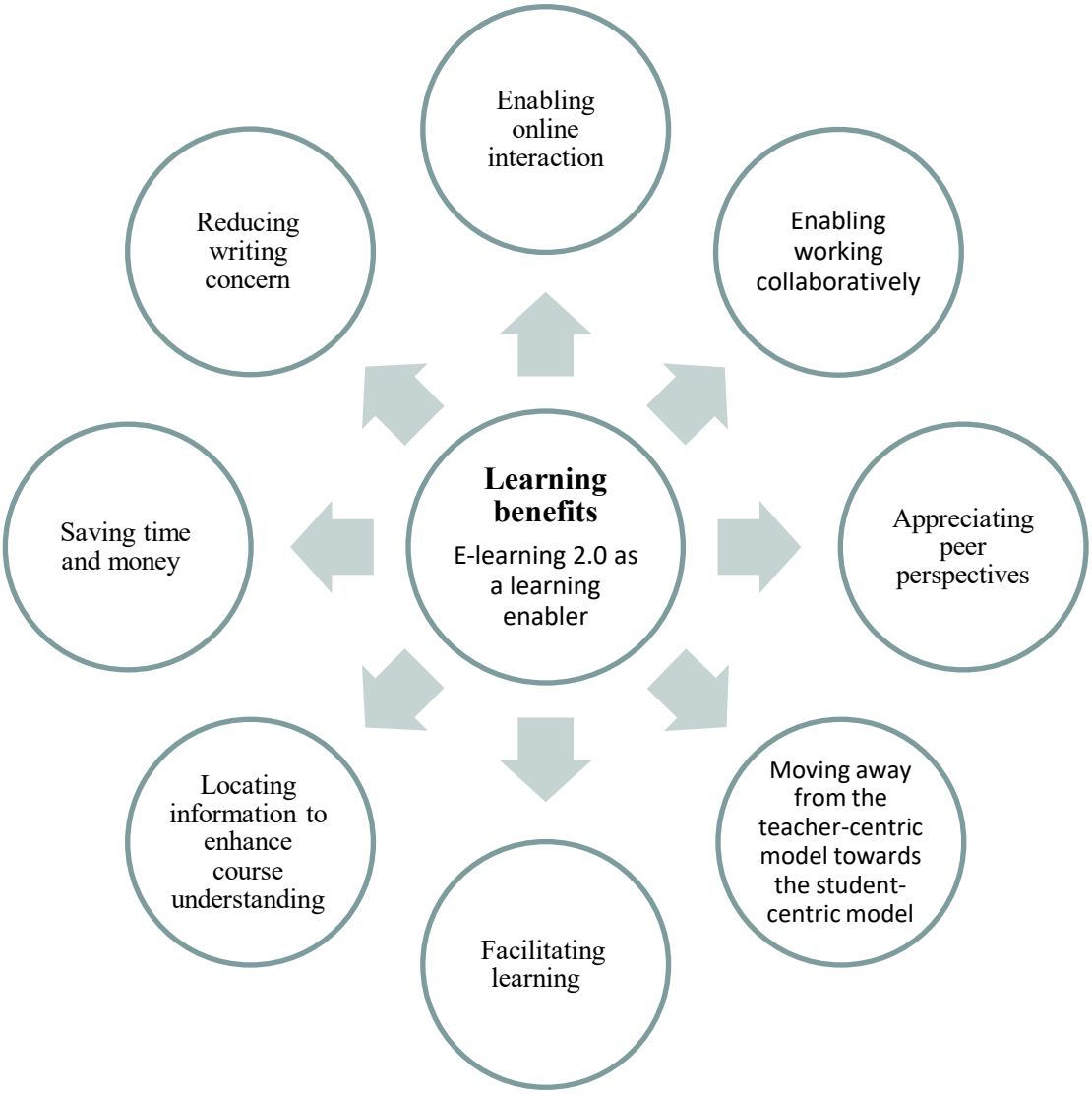
The learning and sociocultural benefits were discussed previously in Chapter 7, under the third conceptual category 'engagement in learning through technology.' However, as mentioned earlier, some of them were theoretically renamed to build a substantive understanding of the students' experiences with e-learning 2.0 in the Australian higher education.

❖ **Learning benefits**

'Learning benefits' refers to the instructional advantages generated by using e-learning 2.0 environment, which was utilised by Saudi Arabian students as a learning enabler to facilitate their learning as well as to overcome the educational challenges. The data analysis indicated that the advantages of e-learning 2.0 environment helped the Saudi Arabian students as an enabler environment for their learning and had them positively engaged with and adopting the Australian higher education environment.

Figure 35 presents eight learning benefits of using e-learning 2.0 tools. The following subsections provide statements to describe each of these learning benefits.

Figure 35 Learning benefits



- ***Enabling online interaction***

'Enabling online interaction' refers to the students' benefits of using e-learning 2.0 to interact with peers and teachers. Most of the respondents expressed that e-learning 2.0 enabled them:

  - to discuss different life matters and study-related matters with their classmates
  - to interact online, not only with their peers but also with lecturers and other people
  - to use web 2.0 tools as a means of meeting their need to interact with others

- ***Enabling working collaboratively***

This property describes the students' experience with the benefits of using e-learning 2.0 to work collaboratively in groups. Most of the respondents expressed learning through Web 2.0 tools helped them to:

  - improve their ability to work with peers to discuss study-related subjects
  - ease their ability to communicate with people around them with and work collaboratively
  - improve their ability to create and upload materials which empowered them to exchange them with others

- ***Appreciating peer perspectives***

'Appreciating peer perspectives' refers to the advantage of using e-learning 2.0 environment for appreciating their peer perspectives and opinions in their learning-related interactions. Most of the respondents described that by using Web 2.0 tools for learning, they found that:

  - the ideas of their peers, whether from the same or opposite gender, can be exciting and may be useful in augmenting their understanding of learning content
  - through online interactions, they started to test out interacting with other students and began to see that such group interactivity was good and contributes positively to their studies
  - using Web 2.0 tools such as Facebook and Twitter allowed them to capture many useful points of view, different opinions by different people simultaneously

- ***Moving away from the teacher-centric model towards the student-centric model***

This benefit represents the advantage of using e-learning 2.0 environment for the students to become more independent learners. E-learning 2.0 allowed for moving away from the Saudi Arabian teacher-centric model towards the Australian student-centric model, where the learner is the focus of the learning and teaching process (Breen, 2002). The data indicated that through the opportunity of learning through e-learning 2.0, the respondents were enabled:

  - to move away from the idea of the teacher-centric Saudi Arabian classroom
  - described their experiences with e-learning as 'self-learning' [I-8-M]

- to interact with their teachers more openly, to adapt more towards the highly independent nature of Australian educational settings and to guide their learning by themselves at home

- ***Facilitating learning***

'Facilitating learning' describes the benefit of utilising e-learning 2.0 in making the students' process of learning more manageable and helping their learning experience in different ways. For example, all of the respondents explained that e-learning 2.0 helped:

- to express themselves more effectively using web 2.0 tools
- significantly in gaining the university degree "*One cannot do without it"* [I-12-M]
- in facilitating learning-related interactivity among peers and between the students and their teachers

- ***Locating information to enhance course understanding***

'Locating information to enhance course understanding' is a benefit which refers to using the tools of e-learning 2.0 environment as information sources for study purposes. The respondents described that part of their utilisation of e-learning 2.0 tools was for:

- finding subject-related information
- conducting online research and finding answers to their questions using online groups
- enhancing understanding of their study-related contents using Hashtag on Twitter or YouTube, for example, not only for coursework students, such as bachelor and master's students but also for PhD students who are doing research

- ***Saving time and money***

'Saving time and money' refers to the negligible cost of using e-learning 2.0, which helped to save their money and time. For example, some students expressed:

- Web 2.0 tools as much cheaper than using the phone
- without e-learning 2.0 tools they might spend much time *"walking in the library with so many books"* [I-10-M]
- without e-learning 2.0 tools they might have to spend more money to buy bus or train tickets, especially for those living far away from their campus

- ***Reducing writing concern***

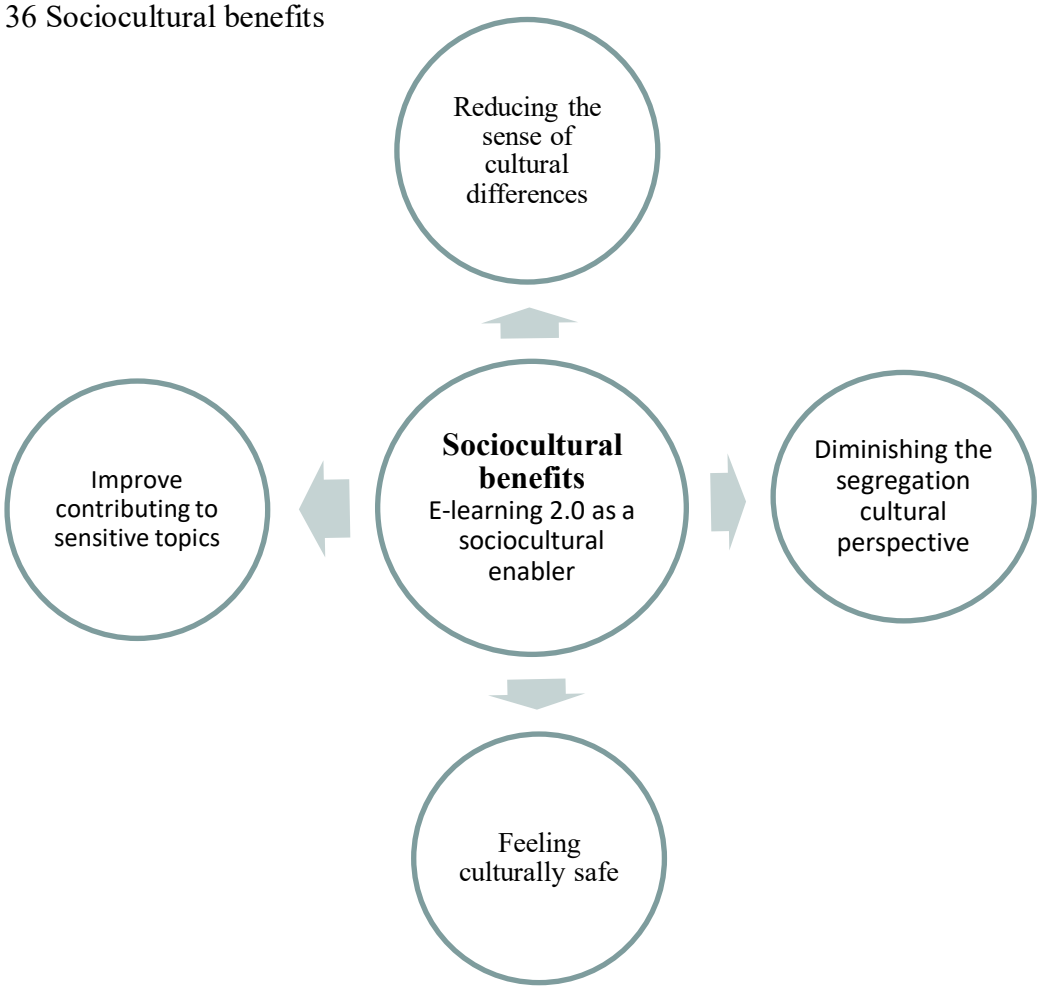
'Reducing writing concern' represents an improvement in the students' self-confidence of writing while using e-learning 2.0 tools in English in an online study context. The data indicated that utilising e-learning 2.0 environment enabled some students:

- to communicate in English and gave them space and time to edit their writing and even their comments on social media
- to structure their ideas in the English language
- to refine their English sentences for more effective communication in different learning situations

❖ Sociocultural benefits

'Sociocultural benefits' refer to the cultural and social life advantages generated by Saudi Arabian students using e-learning 2.0 environment, as a sociocultural enabler.

Figure 36 Sociocultural benefits



The data analysis indicated that utilising e-learning 2.0 was not just for academic purposes, but also for sociocultural purposes to overcome some of their cultural challenges. The sociocultural benefits of utilising of e-learning 2.0 tools are represented in Figure 36. The following subsections provide statements describing each of these sociocultural benefits.

- ***Reducing the sense of cultural differences***

'The sense of cultural differences' refers to the perception of being influenced by some of the Saudi's cultural norms, such as the gender segregation culture. The feeling of cultural difference, as described by participants, was reduced through using e-learning 2.0 environment for study or socialising (friendship) with others. Most of the respondents explained:

  - the cultural difference that they felt during the face-to-face interactions mode was reduced through the use of e-learning 2.0 tools, mainly when interacting with the opposite gender
  - cultural differences hindered participation in face-to-face interactions mode, generally for females, "*but this was solved online"* [I-10-M]
  - with using e-learning 2.0 tools, they can engage, share, discuss and *"focus on the arguments without limit, or [being] controlled by [the] face-to-face [mode] or culture"* [I-10-M]

- ***Diminishing the segregation cultural perspective***

'Diminishing the segregation cultural perspective' is another sociocultural advantage of using e-learning 2.0 tools for networking with the opposite gender, overcoming problems of the gender segregation culture. Most of the respondents explained:

  - the gender segregation cultural perspective, to some extent, was diminished
  - interaction with the other gender was much easier given the challenge of gender segregation culture
  - e-learning 2.0 environment was utilised as a communication avenue for both males or females

- ***Feeling culturally safe***

'Feeling culturally safe' is a sociocultural benefit of utilising e-learning 2.0 environment by the students to overcome some of the cultural challenges, such as cultural sensibility and

risk of reputation damage. These cultural challenges were discussed in the first key theoretical concept, 'cultural adaptation,' under (8.2.1.2) section. The data indicated:

- instead of being afraid of damaging their reputation in the class, the students felt they were in a safe environment by using e-learning 2.0 tools
- e-learning 2.0 environment enabled them to take steps out of their Saudi cultural sensibility by engaging in a sensitive topic discussion
- most of the respondents expressed the benefit of using e-learning 2.0 as a sociocultural tool to "*participate and say whatever [he or she] wants to say without gender getting involved"* [I-10-M]

- ***Improve contributing to sensitive topics***

'Improving contributions to sensitive topics' is also a sociocultural benefit of using e-learning 2.0 environment to overcome some of the cultural challenges. Through the sociocultural benefit of e-learning 2.0 as an enabler environment:

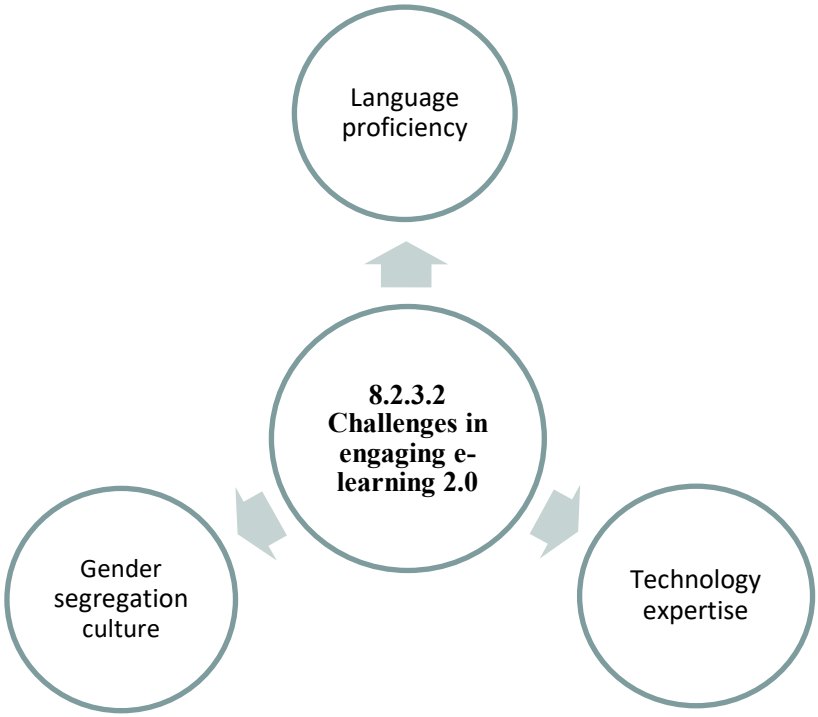
- the students found it much easier to engage more effectively with the Australian educational settings and with the people around it
- the students can participate, share content, explain, as "*e-learning 2.0 doesn't care about male or female"* [I-8-F]
- the respondents admitted that it was difficult at first to deal with the opposite gender online, however, through the sociocultural benefit of e-learning 2.0 environment things become normal to them

8.2.3.2 Challenges in engaging e-learning 2.0

This section highlights the persistent challenges for some students in engaging with e-learning 2.0. Three theoretical aspects associated and described the challenges in engaging e-learning 2.0. These are: 'language proficiency,' 'technology expertise' and 'gender segregation culture.' These challenges were discussed previously in Chapter 7, under the third conceptual category 'engagement in learning through technology.' The challenges of 'gender segregation culture,' 'language proficiency,' and 'technology expertise' are illustrated in Figure 37 and explained next

Language proficiency

Figure 37 Challenges in engaging e-learning 2.0



'Language proficiency' represents the first persistent challenge which influenced the students' engagement in the e-learning 2.0 environment. Despite the benefits that the e-learning 2.0 environment provides to most of the students, the students' English language proficiency appeared as an intervening challenge:

- Although the students were aware that using e-learning 2.0 typically required them to write in order to interact with other students, generally they were concerned about engaging with others in writing
- many of the students felt cautious about their writing and were *"very careful"* when it comes to participating in online fora and the Web 2.0 tools [I-3-M]
- The students' English insufficiency prevented them from participating online because they *"cannot proof [their] English, and no one will correct [their] grammar"* [I-6-F]

❖ **Technology expertise**

'Technology expertise' refers to the students' level of experience with using technologies. As discussed in the third conceptual category in Chapter 7, Saudi Arabian students faced

some challenges while engaging in their new learning environment. Unfamiliarity with using technologies was found to be:

- attributed to the newness of the e-learning 2.0 environment which hindered or constrained some of the students from getting the most benefits out of the environment for learning and sociocultural means
- attributed to the choices of Web 2.0 tools that students make, either for sending or receiving information
- attributed to the students' reservation about the usefulness of using technologies or not having enough confidence to participate in e-learning 2.0 opportunities as it was something new to them

The students may need to better first familiarise themselves with using technologies so they can realise the full potential of e-learning 2.0 enabler's benefits.

❖ **Gender segregation culture**

The 'gender segregation culture' refers to the influence of gender segregation culture on Saudi Arabian students and the role that gender plays in Saudi Arabian culture. As discussed in the second conceptual category, the segregation culture was found to be the most dominant cultural characteristic that challenged the ability of Saudi Arabian students to interact effectively in the e-learning 2.0 environment:

- Saudi students want to avoid contact with the opposite gender, notably among the Saudis themselves, *"We like to keep a distance ... no silly jokes, because, we always like to look good"* [I-2-M] and some Saudi men want their pictures to appear friendly in front of Saudi women
- Some students have the desire for mutual respect among genders of the Saudi Arabian people
- The students believe that mixing men and women is a matter that is culturally and religiously settled

While it was shown that e-learning 2.0 has different learning and sociocultural benefits that introduced the students to online interaction and prepared for more active offline interaction, various statements indicate that the culturation of gender segregation among Saudi Arabian students persisted even in this enabling environment. The challenge posed by the students' cultural perspective of gender segregation seeps as an intervening barrier into the e-learning 2.0 environment benefits provided by the Australian educational system.

8.3 Interplay among the key theoretical concepts

The previous section highlighted the key theoretical concepts drawn from the conceptual categories, which are used to develop the theoretical model. These are cultural adaptation, educational adaptation and technological engagement. The theoretical concepts specified the opportunities and challenges indicated by data analysis. This section describes the interplay between the key theoretical concepts. In this section, the key theoretical concepts are used to present the constructed understanding of the students' experience with e-learning 2.0 in Australian higher education. Prior to describing the interplay drawn between the key theoretical concepts, the section begins by describing the central research phenomenon.

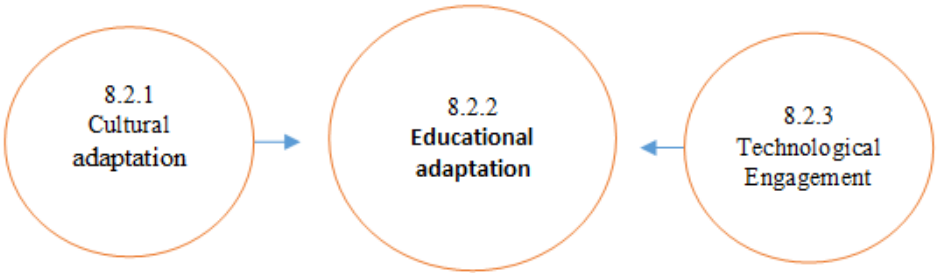
8.3.1 The central phenomenon

The study focuses on exploring and understanding the students' experience with e-learning 2.0 in Australian higher education, given the challenges and opportunities that the students encountered during their studies. The data gathering and analysis throughout this research started in July 2012 and continued for over four years. By the time of writing this report, most likely many of the participants would have successfully graduated, if not all of them. The data indicated that all of the participants encountered some challenges and opportunities while studying in the Australian higher education system. It is from the participants' adaptation to the Australian education system that the students' experiences, specifically with e-learning 2.0, can be understood. In other words, exploring the participants' educational adaptation may better tell what was happening, what strategies the students used to adapt and how e-learning 2.0 as a new learning environment was experienced. As such, the theoretical concept of 'educational adaptation' was selected as the central phenomenon. The diagram presented in Figure 38 shows the theoretical concept 'educational adaptation' in the central position, and the other two key theoretical concepts were related to it.

8.3.2 Interconnections between the key theoretical concepts

There are interconnections between the three theoretical concepts. The key theoretical concepts presented at the beginning of this chapter are cultural adaptation, educational adaptation and technological engagement.

Figure 38 Relating key theoretical concepts to the central phenomenon

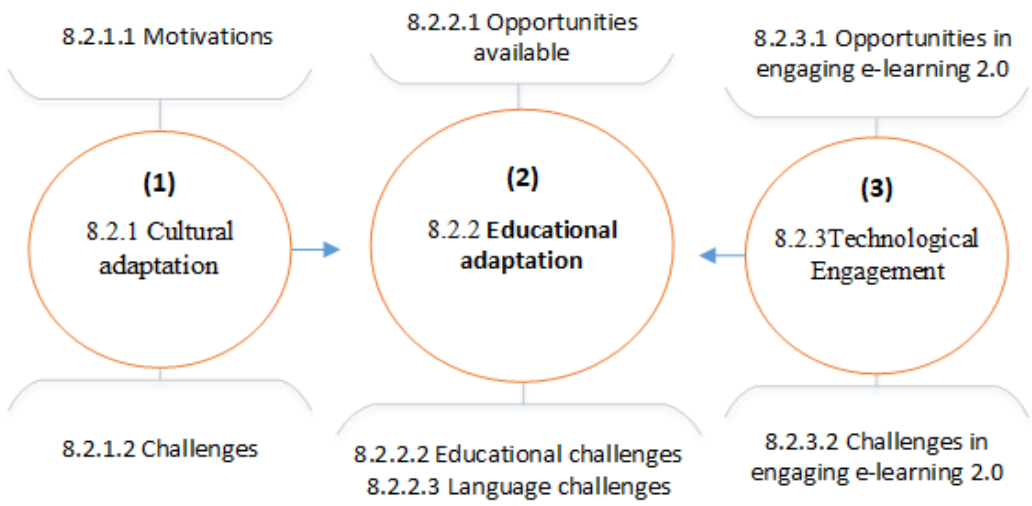


These theoretical concepts specified the opportunities and challenges indicated by the conceptual categories and were used to construct the theoretical model to understand the students' experience in Australia, focusing on the use of e-learning 2.0. Figure 39 summarises the interconnections among these theoretical concepts and their indicators. The theoretical elements in Figure 39 are tagged with the section number for easy reference.

Given the Australian cultural and educational context that the Saudi Arabian students were exposed to, along with the students' cultural and educational background, the students encountered some cultural and educational challenges. The cultural challenges include the influence of gender segregation, the sensibility of discussing sensitive topics in the educational context and risk of reputation damage, which were described under the first key theoretical concept of 'cultural adaptation', section (8.2.1.2), represented in the circle tagged number (1) in Figure 39. The students also reported that there were some motivations that had helped them to adapt to Australian cultural life. These motivations were described in section (8.2.1.1) as another aspect of the first key theoretical concept.

Saudi Arabian students also faced some educational challenges, which described another aspect of the second key theoretical concept of 'educational adaptation' tagged number (2) in Figure 39. These challenges, such as the language proficiency challenge and method of teaching and learning, were described in section (8.2.2.2 and 8.2.2.3) tagged number (2) in Figure 39.

Figure 39 Interconnections among the key theoretical concepts



On the other side, there were opportunities available for the students in the Australian higher education system, such as student support and embedded use of IT, which were described under section (8.2.2.1) tagged number (2) in Figure 39. The students reported that the facilities available in the Australian education system helped them to engage and to adopt the educational environment. The students' adaptation to the educational system was where the interaction with the new environment occurred. Furthermore, Saudi Arabian students were exposed to technological benefits, specifically the exposure to the benefits provided by the Australian e-learning 2.0 higher education environment. .These benefits were identified as learning benefits and sociocultural benefits, which were specified in section (8.2.3.1) under the third key theoretical concept of technological engagement tagged number (3) in Figure 39.

Each of the key theoretical concepts, tagged number (1, 2 and 3) in Figure 39, can stand alone as they describe a range of the challenges and opportunities experienced by the students during their study in Australia. However, these key theoretical concepts had a direct influence on the students' adaptation to the Australian educational system. The Saudi Arabian students chose to study in a new environment with a culture so different from their own. Likewise, they decided to study in a very different educational system. Through the exposure to e-learning 2.0 as an opportunity, the students were able to navigate through these cultural and educational challenges. That is, the students were able to recognise the

benefits that they could gain from the more open and interactive e-learning 2.0 settings offered in the Australian education environment.

The interplay among the theoretical concepts, as shown in Figure 39, occurred during the process of adaptation represented in the central key theoretical concept tagged number (2). As discussed under the theoretical concept of 'technological engagement,' section (8.2.3.1) tagged number (3) in Figure 39, the students utilised the benefits of e-learning 2.0 environment as a way to overcome some of their cultural and educational challenges. However, some challenges, which were discussed in section (8.2.3.2) under the third key theoretical concepts tagged number (2) in Figure 39, were found to have persisted as intervening challenges that influenced the students' adaptation. The language proficiency, technology expertise and the segregation culture were found to prevent some of the students from making the most out of the e-learning 2.0 benefits.

Through relating the key theoretical concepts to each other and relating them to the chosen central theoretical concept of 'educational adaptation,' tagged number (2) in Figure 39, the students' experiences with e-learning 2.0 can be understood. The following section provides an understanding of the role that the e-learning 2.0 environment played in the students' educational and cultural adaptation.

8.3.2.1 Understanding the students' experience with e-learning 2.0

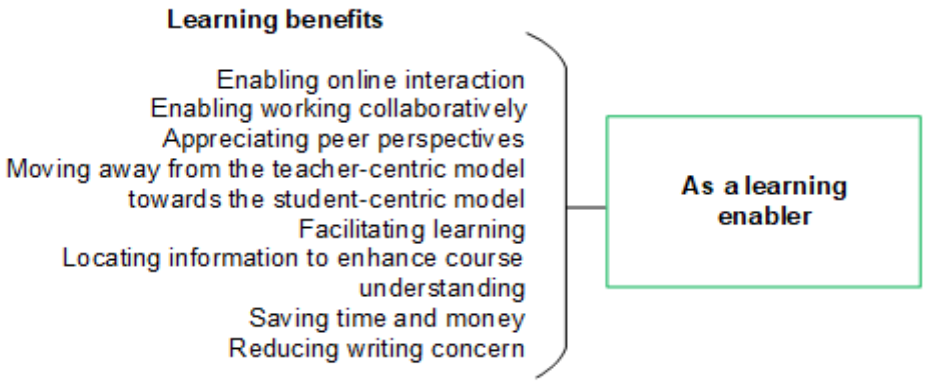
The opportunities and challenges specified and discussed at the key theoretical concepts sections of this chapter indicated that the benefits provided by Australian higher education's e-learning 2.0 environment helped the students to make the engagement and adaptation accrue. The next two subsections describe the roles that the e-learning 2.0 environment played in the students' educational and cultural adaptation. The students' experience with e-learning 2.0 while adapting to the Australian educational context includes utilising the benefits provided by the online environment as a 'learning enabler' and as a 'sociocultural enabler.'

❖ E-learning 2.0 as a 'learning enabler'

The data analysis indicated that students utilised the benefits provided by the use of e-learning 2.0 environment as a 'learning enabler' means. This aspect of utilising e-learning 2.0 by the students as a 'learning enabler' was first discussed in Chapter 7, and specified in section (7.4.5) 'summary of the third conceptual category,' and then explained in section (8.3) 'technological engagement'.

In particular, the students' utilisation of e-learning 2.0 environment as a 'learning enabler' means they use the environment to facilitate their learning and to overcome some of the educational challenges discussed in the second key theoretical concept, 'educational adaptation', as well as to reduce the students' writing concerns. The learning benefits of utilising the e-learning 2.0 environment as a learning enabler are summarised in Figure 40. These learning benefits were described in full under section (8.2.3.1) of this chapter.

Figure 40 E-learning 2.0 as a learning enabler



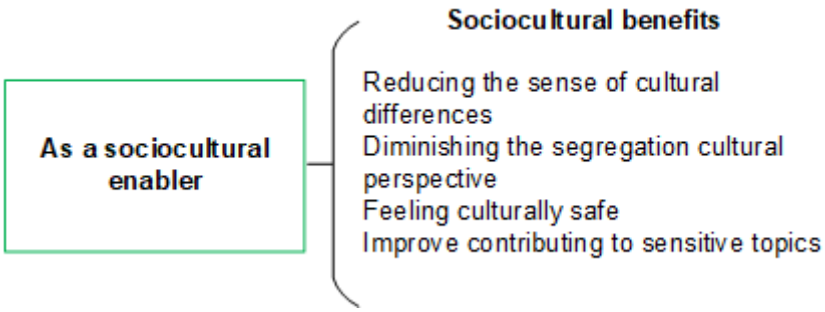
By utilising e-learning 2.0 as a learning enabler, the students were able to engage with the new learning environment despite their educational perspectives as challenges.

❖ **E-learning 2.0 as a 'sociocultural enabler'**

The other aspect which emerged from the interplay between the conceptual categories is that e-learning 2.0 was found to be utilised by Saudi Arabian students not just as a learning enabler, but also as a sociocultural enabler. This aspect of utilisation e-learning 2.0 was also introduced in the discussion of Chapter 7 and specified in section (7.4.5), and then explained in section (8.3). This second role sums up the benefits provided by e-learning 2.0 opportunities to overcome some of the cultural challenges faced by the students in a way that reduces their concerns about culture-related issues, which were highlighted under the first key theoretical concept, 'cultural adaptation.'

The sociocultural benefits of utilising the e-learning 2.0 environment as a sociocultural enabler are summarised in Figure 41. The sociocultural benefits were described in full under section (8.2.3.1) of this chapter.

Figure 41 E-learning 2.0 as a sociocultural enabler



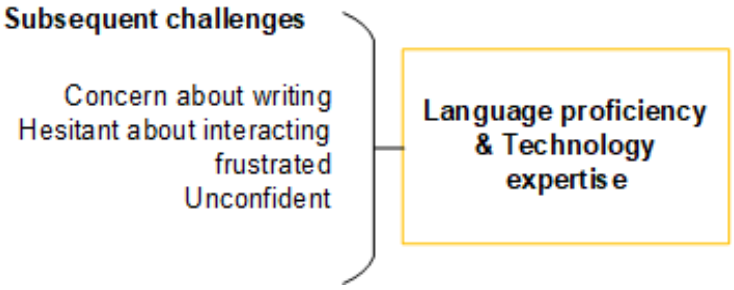
By utilising e-learning 2.0 as a sociocultural enabler the students, rather than being exposed to traditional classrooms where they are expected to interact with members of the opposite gender face-to-face, were allowed to interact comfortably with people from other genders online. Thus, using e-learning 2.0 platforms made the gender issue less relevant.

❖ **Challenges to e-learning 2.0 as learning and sociocultural enablers**

Although Saudi Arabian students utilised e-learning 2.0 environment as an enabler to help them overcome some of the obstacles encountered, the challenges mentioned earlier in section (8.2.3.2) intervened for some students.

As explained in section (8.2.3.2), the language proficiency, the technology expertise, and the gender segregation culture appeared to influence and restrain some of the students from effectively utilising the e-learning 2.0 environment as a learning and sociocultural enabler. The language proficiency and technology expertise, along with the subsequent challenges, are illustrated in Figure 42.

Figure 42 Language and Technology challenges

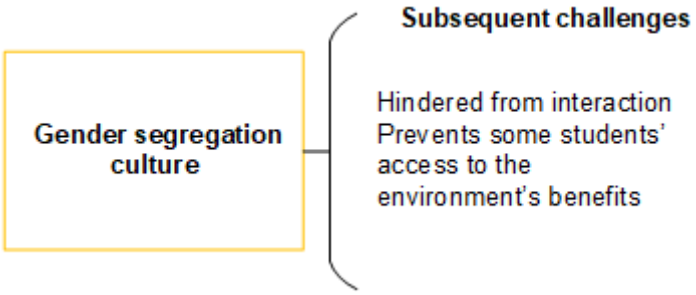


The English insufficiency prevented some of the students from making the most out of the e-learning 2.0 benefits and prevented some students from effective use of e-learning 2.0. Several statements discussed in the third conceptual category in Chapter 7 indicated that

the students' insufficiency of using the English language was the first challenge and some participants emphasised that a strong English background is needed before being able to participate in e-learning 2.0 activities. The English language proficiency, specifically the writing skill, was found to significantly influence the students' communication even in the enabler e-learning 2.0 environment. Likewise, the students' technology expertise was found to hinder some of the students from making the most benefit out of utilising the e-learning 2.0 environment as enabler means.

On the other side, gender segregation and the role that gender plays in Saudi Arabian students' culture, discussed in the second conceptual category, was found to be the most dominant cultural characteristic that challenged the ability of Saudi Arabian students to interact effectively in the e-learning 2.0 environment. The challenge of gender segregation culture, along with the subsequent challenges, are illustrated in Figure 43 and explained next.

Figure 43 Challenge of gender segregation culture



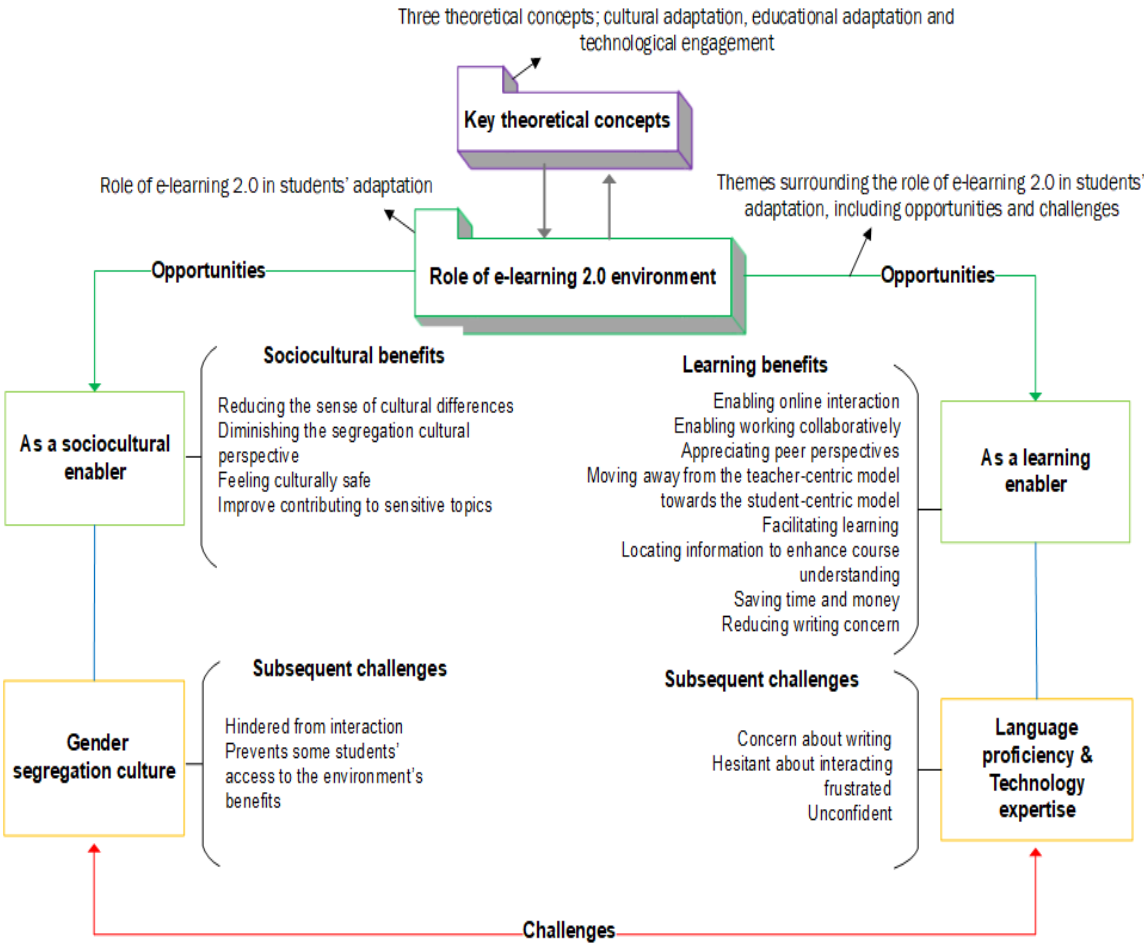
While it was shown that e-learning 2.0 acts as a learning and a sociocultural enabler that introduces students to online interaction in preparation for more active offline interaction, various statements show that specifically, the culturation of gender segregation among Saudi Arabian students persisted even in this enabling environment.

8.3.3 The theoretical model

The students' experiences of utilising the benefits of e-learning 2.0 as learning and sociocultural enabler environment culminate to the theoretical model shown in Figure 44. The theoretical model presented in Figure 44 synthesises the benefits provided by e-learning 2.0 environment which were utilised by students in their adaptation along with the challenges persisted, which were presented in Figures (40, 41, 42 and 43) in the previous section.

The theoretical model presented in Figure 44 shows that the e-learning 2.0 environment was an essential element in preparing students to learn in the Australian educational environment. The benefits of e-learning 2.0 were found across the three key theoretical concepts drawn from the conceptual categories. The students were able to make a better transition from their Saudi Arabian perspectives of education to the educational system in Australia, as well as to reduce the students' concerns about cultural-related issues.

Figure 44 Synthesis the role of e-learning 2.0 opportunities in students' adaptation



However, the developed theoretical model also indicated that some challenges persisted for a few students even during their utilisation of e-learning 2.0 as enabler means. Some of the students were found not to be able to do the same and continued having difficulties with adjusting to the new environment. These difficulties were found to be specifically interrelated:

1. to their English language proficiency discussed across the three key theoretical concepts.

2. to technology expertise discussed in the third key theoretical concept of 'technological engagement.'

3. the culture of gender segregation related to the first key theoretical concepts of 'cultural adaptation.'

Based on the data gathered, the reasons why some of the students seem to succeed through the help of e-learning 2.0 settings while some do not can be imputed to these three factors, which would explain the variance in the experiences of the students.

8.4 Summary of the chapter

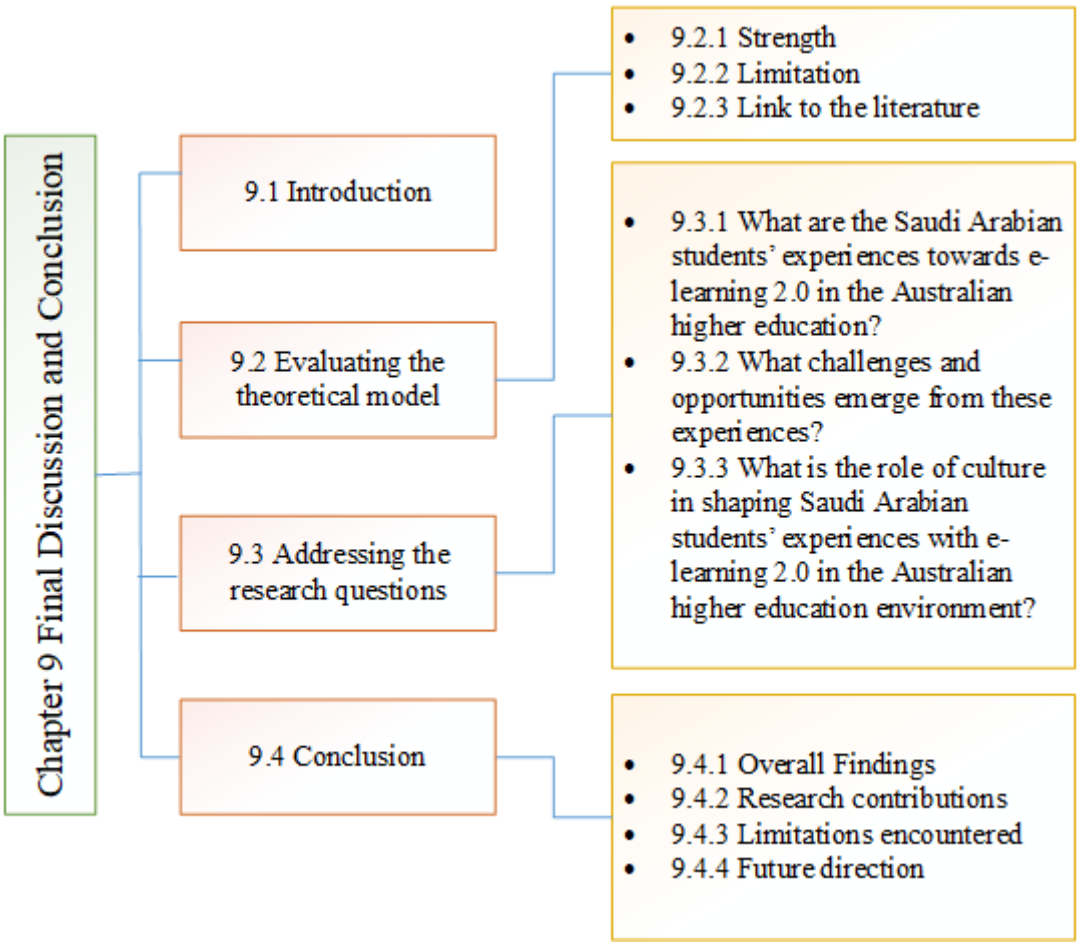
This chapter highlighted the key theoretical concepts from the conceptual categories and described the interplay between them. The justification for choosing the conceptual category of the students' educational adaptation to the Australian education system as the central phenomenon was given. Additionally, the theoretical model devolved for this research was presented and explained in this chapter. The chapter supported that the understanding which was developed is grounded on the codes drawn from the data, indicating that e-learning 2.0 is a significant element in Saudi Arabian students' adaptation to the Australian educational environment. Saudi Arabian students came to Australia with a set of educational and cultural perspectives that were likely incompatible with the Australian setting. Through e-learning 2.0, the perspectives of some of these students were found to be changed, and they could well adopt the Australian settings. However, some challenges persisted. In the following chapter, the developed theoretical model is evaluated, and the three research questions are addressed. The next chapter ends with a conclusion along with some recommendations.

Chapter 9
Final Discussion and Conclusion

9.1 Introduction

In the previous chapter, a theoretical model of the role of e-learning 2.0 opportunities in students' adaptation was presented. This model was developed from the key theoretical concepts of 'adaptation to the Australian cultural environment', 'adaptation to the Australian education system' and 'engagement in learning through technology' and their interactions. The model is the outcome of the qualitative study using a Grounded Theory approach using semi-structured interviews as the primary source of data. The model provides a way to conceptualise the Saudi Arabian students' experiences with e-learning 2.0 in the Australian higher education system and is the main contribution of this research. The aim of this chapter is to present an evaluation of the theoretical model and to address the research questions as presented in Chapter (1). As shown in Figure 45 below, the chapter consists of four sections. The first section is the introduction. The second section presents an evaluation of the theoretical model presented in the previous chapter, concerning its strength, limitation and linking the model to the existing literature. The third section addresses the three research questions. Finally, this chapter ends with a conclusion which includes overall findings, the research contributions, the limitations encountered and the future direction.

Figure 45 Map of Chapter 9



9.2 Evaluating the theoretical model

The theoretical model developed in the previous chapter has both its strengths and limitations. The following two sections provide a final discussion to evaluate the theoretical model developed from the previous chapter and link the model to the existing literature.

9.2.1 Strength

One of the model's strengths is that it is solely grounded on the perspectives of the Saudi Arabian students who experienced the Australian educational system. Each of the theoretical constructs developed in the previous chapter, such as e-learning 2.0 as a learning enabler and e-learning 2.0 sociocultural enabler, were solely based on the findings that were drawn from the multi-stage coding. Each of the inferences and interpretations that were drawn in the theoretical model can be traced back to the group of codes supporting it, thereby establishing the model as a genuine product of grounded theory analysis.

Another of the model's strengths is that it provides reasons behind the difficulties that Saudi Arabian students face in the Australian higher education system.

9.2.2 Limitation

One limitation that might be raised is that the theoretical model explores the students' experiences in the Australian higher education system only from their perspective. The model cannot detach from the subjective nature of these perspectives. Of course, this is a natural concern in the conduct of qualitative studies (Jana, 1993). However, it may be explored better if the research had included more objective sources of data, such as the transcripts of the students' conversations through the social network tools, to examine the evidence of interaction with their teachers and classmates in e-learning 2.0 environments. However, it is possible to argue that, first, Saudi Arabian students are best positioned to judge their own experiences and, second, that accessing the students and teachers' Web 2.0 accounts was not pursued because of the privacy consideration.

9.2.3 Linked to the literature

Although the theoretical model developed was solely based on the findings drawn from the multi-stage coding, some aspects of the model can be linked to the existing literature, as was done in the explanatory discussion of the conceptual categories in Chapter 7. For example, the limited exposure to e-learning 2.0 in Saudi Arabia among Saudi students who participated in the study is consistent with the literature. Some studies have discussed how e-learning in Saudi Arabia is relatively new, and that at the time when the participants experienced Saudi Arabian higher education system, e-learning 2.0 opportunities was not thoroughly explored (Alebaikan & Troudi, 2010; Selim, 2007). While there were some studies that showed evidence of Web 2.0 applications currently in place in Saudi Arabian universities, such as the works of Alblehai (2016), Alzahrani and Woollard (2012) and Ali Al-Asmari and Rabb Khan (2014), these studies were not able to show how prevalent the use of Web 2.0 for e-learning activities has become there. These studies might support the experiences of some Saudi Arabian students in the study, who were found in this study to have been using Web 2.0 tools even prior to coming to Australia. However, this was mainly for personal communication purposes and not for supporting their formal or informal education activities. For Saudi Arabian higher education students participated in this study,

e-learning 2.0 in Australia is a new experience, and their experience of e-learning 2.0 activities has led to some realisations, such as the usefulness of Web 2.0 tools for learning.

As mentioned earlier, the theoretical model developed is also consistent with the work of Boyd (2007), regarding the expectations of using Web 2.0 tools for higher education. As discussed in Boyd (2007), Web 2.0 tools are essential for addressing three crucial aspects of learner-based instruction, internal interaction, external exposure, and social relationship building. As indicated in Chapter 8, the aspect of e-learning 2.0 as a learning enabler may be consistent with the first and the second aspects of the learner-based instruction's model proposed by Boyd (2007), i.e. internal interaction and external exposure. Utilising e-learning 2.0 as a learning enabler helped the Saudi Arabian students to address some of their prior educational perspectives and enabled them to interact online, not only internally with their instructors, but also with one another, as well as externally with other people around the world.

Additionally, evidence was found that the enabling role of e-learning 2.0 helped Saudi Arabian students in facilitating their learning experiences in different ways. E-learning 2.0 enabled them to express themselves during their learning-related interactions more effectively. The environment gave them the ability to work collaboratively. It also played as a source of information to enhance their course understanding, and last but not least, to get them to become better learners.

The notion of utilising e-learning 2.0 as a sociocultural enabler may be consistent with the second aspect (external exposure), and the third aspect (social relationship building) of the learner-based instruction model proposed by Boyd (2007). E-learning 2.0 as a sociocultural enabler enabled Saudi Arabian students to overcome some of their sociocultural perspective barriers and interact with other people relevant to their studies. In addition, social media help students build friendships. E-learning 2.0 as a sociocultural enabler empowered Saudi Arabian students to communicate with members of the opposite gender, reducing some of their cultural challenges, as explained earlier; thereby enhancing their interactions with other people in their classes as well as across social networks.

9.3 Addressing the research questions

Three overall aims have led this research as posed in Chapter (1). The first aim was to understand the Saudi Arabian students' experiences and attitudes towards e-learning 2.0 in

Australian educational environment. The second aim was to investigate the opportunities and challenges that emerge from the students' experiences and attitudes and the influence of culture on these. The third aim was to explore the influences of the students' cultural background on their attitudes and experiences and subsequently, the opportunities and challenges that originate from them. Three questions were developed to achieve the study's aims and the findings reported in this dissertation are now discussed in terms of these questions.

9.3.1 What are the Saudi Arabian students' experiences towards e-learning 2.0 in the Australian higher education?

It was found that Saudi Arabian higher education students had to engage with e-learning 2.0 as part of the Australian educational system. The data indicated that Saudi students used many Web 2.0 tools, such as Facebook, Twitter and YouTube. Evidence for using such tools for e-learning 2.0 in Australia was presented in Chapter 7. The students were found to have diverse, but mostly positive experiences when using technology, particularly using Web 2.0 tools for learning in Australia. The participants also described their interactions with e-learning 2.0 as a positive experience. Saudi Arabian students used the e-learning 2.0 environment in order to interact with classmates and teachers to participate in various academic activities, whereas most of the participants did not encounter e-learning 2.0 in Saudi Arabian universities.

Although some of the respondents did make use of Web 2.0 tools prior to arriving in Australia, none claimed to have used Web 2.0 tools for academic purposes in Saudi Arabia. In Australia, the Web 2.0 tools were used for learning and independent study. Saudi Arabian students also found the educational atmosphere in general, including the e-learning 2.0 settings, to be much less formal than they were used to in Saudi Arabia.

Furthermore, they found that some cultural conventions, such as gender segregation in their home country, did not exist in the Australian higher education environment. Instead, they found that male and female students were expected to interact with one another in class and e-learning 2.0 platforms. Most of the participants expressed that the gender-mixed educational environment was found to be challenging, but with the help of e-learning 2.0 enabler environments, *"it became normal"* for many of them.

Saudi Arabian students came to a country with a different culture and a new educational system; some of them had a difficult time making the transition, and some felt uncomfortable with the new cultural norms. Their attitudes towards what they found in the new educational environment in the Australian settings were, likewise, diverse. Some of the students felt nervous about the requisite interaction in the classes that they enrolled in, since this level of interaction was not expected of them in their classes in Saudi Arabia. Some of the students considered the less formal structure to be a challenge. Instead, they asked for affordances that they have been used to, such as being given a textbook that all of the lessons are based on. Some of the students narrated experiences in Australia, where they were admonished by their teachers for being too dependent on them, as was discussed in Chapter 7.

On the other hand, some students were found to embrace the change. They also acknowledged the e-learning 2.0 sociocultural enabler settings, which enabled them to engage in Australian life and explore areas of knowledge more extensively. The students also appreciated the greater interactivity that the new settings allowed, and considered interactions with their peers and teachers to be very fruitful for their learning.

9.3.2 What challenges and opportunities emerge from these experiences?

The study found that Saudi Arabian students faced some challenges related to culture, education, language and technology practices.

- **Challenges related to culture**

In the online environment, specifically the e-learning 2.0 setting, the Saudi Arabian students were expected to engage in online conversation, to debate topics and share ideas around different subjects. The challenge for some of the Saudi Arabian students was that they came from a culture where gender segregation exists. Even though the students found it easier to talk to different genders online, some students felt uneasy. The findings show evidence of the lingering effect of the dominant Saudi Arabian segregation culture on the students' experiences with e-learning 2.0. Some of the students felt uneasy about speaking with students from the opposite gender online and tried to avoid any communication even in the enabling e-learning 2.0 environment. The gender segregation cultural norm has a significant impact, influencing some Saudi Arabian students' access to the benefits from the e-learning 2.0 environment.

- **Challenges related to education**

Saudi Arabian students found the teaching and learning methods in the Australian education system very different from their prior educational experiences, and many of them considered these differences as a challenge. For example, the students were surprised at the lack of reliable guidance from educators about completing their lessons at the university.

The students were expecting to memorise materials for tests, but this was not the case. Instead, the educational model was highly interactive and student-centric and focused on enabling students to discover knowledge on their own. As such, it was challenging for some students to adapt to the new way of teaching and learning that they experienced in Saudi Arabia. The education-related challenges were discussed in full in Chapters 7 and 8.

- **Challenges related to technology**

The data indicated that Saudi Arabian students' previous experiences with the use of technology tools were mainly for delivering content to them. However, e-learning 2.0 required the students to have the necessary skills to use the Web 2.0 tools for learning in the Australian context. These skills included knowledge of accessing, opening accounts, creating online learning content and sharing it with others. Some participants found difficulties in mastering Web 2.0 tools for learning, such as how to set up an account on Wiki to participate in an online group work discussion or create YouTube content to share with others. Technology expertise was discussed as one of the present challenges in the study's theoretical model. The technology-related challenges were discussed in full in Chapters 7 and 8.

- **Challenges related to the language**

With e-learning 2.0, the students have to share ideas, so they have to be proficient in written communication. The students found the dominance of English as the language of communication in the Australian e-learning 2.0 environment to be daunting, particularly for those who did not have a firm grasp of the language. They believed that their written English language inefficiency made them hesitant in communicating with other students and with the teacher online, and feared that they would be criticised for their inability to use the language properly. The challenges related to studying in the English language were discussed in full in Chapter 7 and theoretically highlighted in the first section of Chapter 8.

❖ **Opportunities**

Saudi Arabian students were engaged in the e-learning 2.0 environment. The learning environment provides accessible learning affordances (benefits) not only to Saudi Arabian students but to all higher education students in Australia. Students, through e-learning 2.0 resources, have a variety of learning benefits (see Chapter 8). These learning benefits were utilised by Saudi Arabian students to help them cope with the challenges that they encountered in their new study environment.

First, it was found that e-learning 2.0 acts as a learning enabler for the students. Through this environment, the students were able to access the Australian education system and engage in learning-related interactivities. For example, Saudi Arabians were able to work together as a group, work collaboratively, and become independent learners, and productive learners. Through e-learning 2.0 environment, the students were able to express themselves in English so they would be better prepared in interacting in face to face educational settings. They were also able to compose their thoughts better in English through e-learning 2.0 settings since the interactions did not need to happen in real-time, they could take their time in constructing their sentences before posting them for their classmates to read.

Second, e-learning 2.0 served as a sociocultural enabler for Saudi students to overcome some of their culture-related challenges. As described in the theoretical model developed through e-learning 2.0 interfaces, the students were provided with the opportunity to break some of their cultural challenges. For example, they were able to interact with members of the opposite gender without having to talk with them face-to-face. Doing so made it easier for Saudi Arabian students to handle some of the discomforts that they felt in learning-related interactions due to cultural challenges. The learning opportunities provided by e-learning 2.0 environment were discussed in full in Chapter 7 and explained at the theoretical model in Chapter 8.

9.3.3 What is the role of culture in shaping Saudi Arabian students' experiences with e-learning 2.0 in the Australian higher education environment?

The culture of Saudi Arabian students was a critical factor in determining how they perceived the Australian higher education system. The Saudi Arabian students come from a religiously and culturally conservative society with a strong gender segregation cultural

practice. Even when these students leave their country, their cultural background is embedded in their values and beliefs. Their Saudi Arabian background influenced how they reacted to Australian settings, and the effects of their cultural background lingered as they began to adapt to the environment. The students were certainly surprised by some of the Australian cultural characteristics. Some of the students found it very difficult moving to a different culture, specifically with regard to the absence of gender segregation in Australian society. As maintained in addressing the first question, the students also discussed the differences in the two educational systems, in terms of the student-centeredness approach to education.

The study showed that the culture of international students profoundly affected the way that they were able to adapt to a new setting, such as the challenge with the English language and adjusting to Australian gender integration culture. This conforms to research studies that focused on cultural issues facing international students during study abroad. Those studies include (A Alhazmi & Nyland, 2011) which indicated that the students' transition to a coeducational environment has impacted on their study experience, particularly in their ability of communication. Morita (2009) also suggested that differences in culture, gender and language have greatly influenced an international student and limited his participation both in and outside the classroom. Shaw (2010) suggested that the students' resilience and intercultural ability had helped the participants to cope with different sociocultural challenges, such as the absence of negotiation and gender differences. Pan and Wong (2011) concluded that it is more challenging for international students from China to adapt to a country with considerable cultural differences, such as Australia. However, the findings from this study showed how Saudi Arabian higher education students reacted to their cultural challenges, specifically, utilising e-learning environment to adapt to the Australian settings.

9.4 Conclusion

9.4.1 Overall findings

This study was able to find that students from Saudi Arabia who engage in higher education studies in Australia face some challenges in adapting to the Australian higher education environment. There were some cultural challenges, such as struggling with cultural differences and cultural sensibility. The absence of gender segregation in Australian society was one of the cultural challenges, particularly in how Saudi Arabia and Australia see gender roles in their respective societies, which make it challenging for Saudi Arabian students to settle into the Australian environment. The absence of gender segregation in Australia makes Saudi Arabian students uneasy and negatively influences their ability to interact in Australian classrooms effectively. The influence of gender segregation might lead to a growth of sensitivity risk towards damaging a student's reputation over the issue of interaction with the opposite gender.

Other challenges discovered in this study were some language barriers, as part of the culture and education environment. The level of students' experience with using technology was also found to be a challenge. The data indicated that some Saudi Arabians were not very proficient in the use of English as a foreign language and had some difficulty engaging in technology. Proficiency in English and skills in using the technology are very relevant elements for a full engagement into the Australian educational system, which predominantly uses such mediums of instruction. Furthermore, the Saudi Arabian students were not used to learning environments that were student-centred which required considerable independence on their part. They were used to the educational culture in Saudi Arabia, where it was teacher-centric, whereby the teacher directly gives content for the student to learn. Since this is not the case in Australia, some of the students were found to have a difficult time finding sufficient direction in their studies.

However, it was found that the e-learning 2.0 environment that the students were introduced to in the Australian higher education system assisted them to cope up with some of the challenges they faced. The e-learning 2.0 platforms, where they were able to interact with their classmates and teachers remotely, served as a learning enabler, which has a dual influence. First, it served as means for Saudi students to bypass some of their Saudi Arabian perspectives of education barriers, to prepare them for the physical classroom by getting

them to interact with their classmates, teachers and other people around them. Second, e-learning 2.0 environment served as a learning facilitator; it provided students with enough time to compose their thoughts and express themselves in English when communicating through asynchronous modes of interaction in different platforms. The students were also introduced to a much wider source of knowledge through e-learning 2.0. They accepted that learning does not need to be didactic and directly from the teacher. Instead, there are so many sources of information available, which they can explore and share. Through affordances provided in e-learning 2.0 platforms, the students realised the potential of interactions with classmates and other people to lead to fruitful learning experiences.

At the same time, e-learning 2.0 platforms served as a sociocultural enabler to overcome some of the cultural challenges faced by Saudi Arabian students. E-learning 2.0 environment help Saudi students to reduce the influence of their segregation perspective and prepare them for the physical classroom by getting them to interact with classmates of the opposite gender without having to talk to them in person. Additionally, it helped the students in improving their contribution to sensitive topics as well as providing a culturally safe feeling. Despite the benefits of the e-learning 2.0 enabled environment, as explained in the theoretical model, there were still some challenges continued. For some of the students, the issues with language, the gender segregation perspective and the level of familiarities with using technologies lingered even in the e-learning 2.0 settings and may have hindered some of them from being able to take full advantage of the e-learning 2.0 enabling environment in the Australian university.

9.4.2 Research contributions

The research provides existing knowledge with some theoretical and practical contributions.

9.4.2.1 Theoretical contributions

The present study contributes to the existing knowledge around international students' experiences with e-learning 2.0 environment. This includes:

First, as yet no studies have been found that explored Saudi Arabian students' experiences towards e-learning 2.0 in the Australian context; the study provides an understanding of how Saudi Arabian students experience e-learning 2.0 in Australian higher education environment.

Second, the study provides an understanding of how Saudi Arabian higher education students adapt to the Australian educational environment, giving their cultural and educational background. Students were not familiar with the Australian cultural and educational environment and were not yet prepared to depart from their cultural norms. However, the Australian learning environment per se, which the students were exposed to, drove them to utilise the new learning settings. E-learning 2.0 was utilised as a means where these students could overcome some of the cultural and educational challenges they faced. This finding contributes to an understanding that such online learning settings in Australia played a significant role in helping such international students adapt to the new educational environment and feel more competent in their studies.

Third, the research builds a theoretical model. The theoretical model conceptualises the cultural and educational challenges encountered by Saudi Arabian international students, along with the learning opportunities used to engage in their new learning environment and adapt to the Australian higher education system. The model contributes understanding about the Saudi Arabian students' experiences with e-learning 2.0 while studying in Australia. The theoretical model developed in this study can potentially be applied to understand other similar international students' experiences with e-learning 2.0 who choose to study in Australia.

Fourth, the study introduces a new understanding of the concept of e-learning 2.0 and its impact on education. The e-learning 2.0 concept is initially understood in the literature as shifting in the focus of using online learning resources from delivering knowledge to students, enabling students to build knowledge on their own using Web 2.0 tools (Downes, 2007). It has been used as a tool for solving many problems at various levels of education (M Ebner et al., 2010; Karrer, 2007; Rosen, 2009). In contrast, what is significant and different in this study is that the impact of e-learning 2.0 was found not to be purely academic. It does not just introduce new ways for students to learn, such as sending and reserving knowledge (Karrer, 2007), learning through interaction (Arbaugh & Benbunan-Fich, 2007), or collaborative learning (Karahan & Roehrig, 2016). The findings from this study provide evidence that e-learning 2.0 gave international students opportunities to overcome cultural barriers and ease their adaptation to their new study environment.

The results indicated that Saudi Arabian higher education students face some educational and cultural challenges while studying in the Australian higher education environment. Furthermore, there were opportunities in the new learning environment. One

of these opportunities in the Australian higher education system is e-learning 2.0. The study found that this environment was utilised by Saudi Arabian international students as a learning enabler to overcome some of their educational challenges, as well as to facilitate their learning activities. At the same time, e-learning 2.0 was utilised as a sociocultural enabler to overcome some of the students' cultural challenges to help their adaptation into the Australian educational environment. The understanding of the students' experiences with e-learning 2.0 was detailed in Chapter 8.

9.4.2.2 Practical contributions

This study provides useful insights to Saudi Arabian students, highlighting their experiences and providing a more precise theoretical picture of what was happening to these students studying in Australian universities that offer e-learning 2.0 environments. As such, the findings of this study may serve to benefit the Saudi Arabian educational system, having shown the challenges that students are facing when they are introduced to the Australian system. This study may serve to inform the Saudi Ministry of Education on the importance of developing its own e-learning 2.0 infrastructure as well as introducing student-centred educational systems into the Saudi Arabian education system. This could help their students become more independent and thereby more capable of handling themselves in educational settings such as that in Australia.

9.4.3 Limitations encountered

There was a limitation related to the objective validity of the information gathered from the respondents through interviews. In qualitative research, the primary source of information is typically the subjective inputs of people who have experienced the phenomena of interest. However, there is a range of motivations, such as feeling embarrassed, feeling insecure, difficulties expressing feelings, getting emotional, and the novelty of the situation or perhaps the proficiency in using English. These motivations can prevent the participants from providing an accurate account of the phenomena.

Another limitation to this study is that while the theoretical model developed in this research could provide a grounded understanding of how Saudi Arabian students experience the Australian educational system and what e-learning 2.0 in Australia can offer to students, there was a variance in the experience of such students. That is, while some of the Saudi Arabian students were able to benefit from the affordances provided through e-

learning 2.0 environment significantly, others were not as successful. Nonetheless, the variance in the experience of such students can only be answered through the collected data available. Accordingly, in the context of the study, the reasons as to why some of the students seem to succeed with the help of e-learning 2.0 enabler environments while some do not, can be attributed to the three persistent factors raised and discussed by the students themselves. These are (i) the English language proficiency, (ii) technology expertise and (iii) the gender segregation culture. These three factors may explain the variance in the experiences of the students. The three factors were included in the theoretical model developed and were explained and discussed in details in Chapters 7 and 8.

The last limitation to this study was that it was able to address the proposed research questions from only the perspectives of the Saudi Arabian students, whereas the perspectives of the students' teachers or their Australian classmates could have been useful. These perspectives were not explored in the study, despite the potential richness of their contributions. However, in so doing, such perspectives may take the research into different directions. Including their Australian classmates' perspectives may change the direction of a study in that instead of focusing on one particular group with a single educational and cultural background, the study might be forced on dual backgrounds, or perhaps to cross-cultural study.

9.4.4 Future direction

The present study contributes to the growing body of literature on international students' experiences, using e-learning 2.0 in western cultural and educational environments. In particular, it contributes to our understanding of Saudi Arabian students studying in Australia. The study provides valuable insights into the opportunities and challenges of educational technology and the role that cultural background can play in shaping experiences of and attitudes towards e-learning 2.0. However, like many educational studies, the investigation has revealed more questions than answers (French, 2012). As such, based on the inferences drawn from this study, some areas can be explored for future research.

As the findings of this study were only drawn from a qualitative approach, a broader study could be conducted involving a larger number of Saudi Arabian students studying in Australia, which would be more representative of this population of interest. A survey instrument could be developed from the results of this study and administered to a new

sample to enable the generalisation of understanding of Saudi Arabian students' experiences. Whereas this study focused on the perspective of the students, another study could be conducted focusing on the perspectives of faculty members who use e-learning 2.0 platforms in their classes.

As stated, this study provides insights that could inform the Ministry of Education in Saudi Arabia about the value of developing its own e-learning 2.0 infrastructure. In addition, a study focusing on the utility of e-learning 2.0 in Saudi Arabian higher education environments could also be useful in bridging the gap between Saudi Arabian and Australian higher education settings. This would provide an opportunity to minimise the challenges that future Saudi Arabian students studying in Australia might face. Within the same context, additional exploration of the experiences and challenges of Saudi Arabian students studying in other institutions in Europe, America and elsewhere is needed. Such studies could be valuable for the Saudi Ministry of Education to gain a better understanding of the effectiveness of sending its citizens across the globe and how best to prepare them for the experiences and challenges they may face.

Finally, it would be interesting to explore whether other international students from different cultural backgrounds experience similar benefits and challenges when studying in Australia. Do the same Saudi Arabian students' experiences and challenges apply to students from different cultural backgrounds? Such interpretive research studies could include multiple methods of data gathering, such as interviews, field observation, and focus groups.

Appendix A

Ethics approval by MUHREC

MONASH University

Monash University Human Research Ethics Committee (MUHREC)
Research Office

Human Ethics Certificate of Approval

Date:	**31 January 2012**
Project Number:	**CF11/3522 – 2011001867**
Project Title:	**Saudi Arabian Students' Experiences of E-learning 2.0 in Australia**
Chief Investigator:	**Dr Judy Sheard**
Approved:	**From: 31 January 2012 To: 31 January 2017**

Terms of approval

1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, and a copy forwarded to MUHREC before any data collection can occur at the specified organisation. **Failure to provide permission letters to MUHREC before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research**.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number.
6. **Amendments to the approved project (including changes in personnel):** Requires the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

Professor Ben Canny
Chair, MUHREC

cc: Assoc Prof Angela Carbone, Mr Omar Myan

Postal – Monash University, Vic 3800, Australia
Building 3E, Room 111, Clayton Campus, Wellington Road, Clayton
Telephone +61 3 9905 5490 Facsimile +61 3 9905 3831
Email muhrec@monash.edu www.monash.edu/research/ethics/human/index/html
ABN 12 377 614 012 CRICOS Provider #00008C

Appendix B
Permission by Online Group's Administrators

Appendix: Permission Email

Permission email Sent by the Researcher:
From: Omar Mayan <ohmay1@student.monash.edu>
Date: Tue, 24 Jan 2012 18:50:57 +1100
To: "Bandar A. Suliman" <bandar.suliman@monash.edu>, <ar_kqasmi@yahoo.com>, <khalid.alzabran@gmail.com>, وادي العنزي<wadibarrak@hotmail.com>
Cc: Judithe Sheard <Judy.Sheard@monash.edu>, "Angela Carbone (Adm)" <angela.carbone@monash.edu>
Subject: Request a Permission for PhD Data Collection

Dear administrators at the Facebook Group "Saudi Arabian PhD Students in Australia" and the Google Group "Saudi Arabian Students in Australia",

I hope this email finds you very well ...

My name in Omar Mayan, and I am about to start the data collection for my PhD research.

So, I would like to ask your permission for recruiting research participants through your fora, the Facebook Group "Saudi Arabian PhD Students in Australia" and the Google Group "Saudi Students in Australia" to an approximately 10-15 minutes questionnaire and a 45-60 minutes interview, at a time of their convenience to talk about their experiences of using E-learning 2.0 in Australian universities sitting.

The research involves identifying Saudi Arabian higher education students who have recently studied or are studying with E-learning 2.0 in Australian universities. Participants will be asked to complete a short questionnaire first, in order to provide basic background information about their familiarity with Web 2.0 tools, and E-learning in general, and in their learning process in particular. Then, they will be asked to participate in a 45-60 minutes interview regarding their experiences with E-learning 2.0 in Saudi Arabia, and Australia. Interviews can be conducted either via face to face or online via Skype without video.

I am very excited to be commencing this work and would be so happy to provide any further information of the project should you need them.

If you decide to give your consent, please reply to this email.

Thank you very much.

Kindest Regards,
Omar Mayan

OMAR HASAN MAYAN
INFORMATION TECHNOLOGY
COMPUTING EDUCATION, E-LEARNING
FACULTY OF INFORMATION TECHNOLOGY
MONASH UNIVERSITY, MELBOURNE, VIC, AUSTRALIA
Mail: ohmay1@student.monash.edu
M:+61412694679

From: **Bandar Suliman** (bandar.suliman@monash.edu)

Sent: Tuesday, 24 January 2012 7:59:33 PM
To: Omar Mayan (ohmay1@student.monash.edu); ar_kqasmi@yahoo.com; khalid.alzabran@gmail.com; وادي العنزي (wadibarrak@hotmail.com)
Cc: Judithe Sheard (Judy.Sheard@monash.edu); Angela Carbone (Adm) (angela.carbone@monash.edu)

Hi Omar,

Thank you for your email. It would give me a great pleasure to consent and offer my assistance in circulating your survey to as many members in the groups as possible. The social network groups were formed to facilitate such educational communication between Saudi students and this research is the best example.

Please don't hesitate to let me know if your require further assistance, and all the best in your research.

Kind Regards,

Bandar A. Suliman, BMSc, MClinSc (Hons)
Medical Laboratory Scientist, MT(ASCP)CM, LIBMS
Centre for Cancer Research
Monash Institute of Medical Research
27-31 Wright Street, Clayton, VIC 3168
www.monshinstitute.org

T: 03 9594 7120
F: 03 9594 7252
M: 0487 405 251
www.bandars.com

From: **khalid.shahrani2@gmail.com** on behalf of **Khalid Alzabran** (khalid.alzabran@gmail.com)
Sent: Tuesday, 24 January 2012 5:54:19 PM
To: Omar Mayan (ohmay1@student.monash.edu)
Cc: Judithe Sheard (Judy.Sheard@monash.edu) ; Angela Carbone (Adm) (angela.carbone@monash.edu)

Dear Omar,
I, Khalid Alzabran, one of the administrators of Facebook Group "Saudi Arabian PhD Students in Australia" and the Google Group "Saudi Arabian Students in Australia" give you, Omar Mayan, the permission to recruit participants through the above mentioned fora.

Best regards,
Khalid Alzabran

Permissions given by the groups' administrators as follow:

From: **KHALAF AL-QASMI** (ar_kqasmi@yahoo.com)
Sent: Tuesday, 24 January 2012 9:03:14 PM
To: Omar Mayan (ohmay1@student.monash.edu); bandar.suliman@monash.edu (bandar.suliman@monash.edu); khalid.alzabran@gmail.com (khalid.alzabran@gmail.com); wadibarrak@hotmail.com (wadibarrak@hotmail.com)
Cc: Judithe Sheard (Judy.Sheard@monash.edu); Angela Carbone (Adm) (angela.carbone@monash.edu)

Dear Omar,
As an administrator in the Facebook Group "Saudi Arabian PhD Students in Australia and the Google Group "Saudis Students in Australia", I give my permission to you for recruiting research participants and collect the needed data for your research through our groups.

Please don't hesitate to inform me if you need any further assistance, and all the best in your research.

Khalaf Alqasmi

From: **Wadi B. Alonazi** (wadibarrak@hotmail.com)
Sent: Tuesday, 24 January 2012 8:05:22 PM
To: Omar Mayan (ohmay1@student.monash.edu)
Cc: bandar.suliman@monash.edu (bandar.suliman@monash.edu); ar_kqasmi@yahoo.com (ar_kqasmi@yahoo.com); khalid.alzabran@gmail.com (khalid.alzabran@gmail.com); Judithe Sheard (Judy.Sheard@monash.edu); Angela Carbone (Adm) (angela.carbone@monash.edu)

Dear Omar,

As an administrator in both groups, we are very happy to participate in this study.

Best regards
Wadi B. Alonazi
Lecturer in King Saud University & Ph. D. (candidate) in Monash University
1/270 Frentree Gully Road
Notting Hill Vi# 3160
Wadi.alonazi@monash.edu

Appendix C

Explanatory Statement

00/00/2012

Title:

Saudi Arabian Students' Experiences of E-learning 2.0 in Australian Higher Education

This information sheet is for you to keep.

My name is Omar Mayan, and I am conducting a research project with A/Prof. Judy Sheard, The Head of School, Caulfield School of Information Technology, Monash University and Associate Professor Angela Carbone, The Associate Director Office Pro-Vice-Chancellor (Learning and Teaching) at Monash University.

You are invited to participate in a study of Saudi Arabian Students' Experiences of E-learning 2.0 in Australia. The study aims to discover the opportunities and challenges faced by Saudi Arabian tertiary education students in Australia in experiencing E-learning 2.0. In addition to this, how does Saudi Arabian students' gender affect these opportunities and challenges?

Possible benefits
Your participation in this research will contribute to our knowledge of Saudi Arabian students' experience of E-learning 2.0. This research could benefit Saudi Arabian students who are studying in Australia and elsewhere, as well as other students who are foreign to Australia, through gaining a more in-depth understanding about the opportunities and challenges of E-learning 2.0. Furthermore, it may help educators in tertiary education institutions in Australia in accommodating the needs of Saudi Arabian students, given the culture of gender segregation in Saudi Arabia.

What does the research involve?
The research involves identifying Saudi Arabian higher education students who hold the Saudi Arabian nationality and have recently studied or are studying with E-learning 2.0 in Australian universities. Participants will be asked to complete a short questionnaire first. This is in order to provide necessary background information about their familiarity with Web 2.0 tools, and E-learning in general, and on their learning process in particular. Then, they will be asked to participate in an individual interview regarding their experiences with E-learning 2.0 in Saudi Arabia and Australia. Interviews can be conducted either via face to face or online via Skype without video.

How much time will the research take?
The amount of time required for the interviews will last approximately 45-60 minutes. As for the questionnaire is expected to last approximately for 10-15 minutes. For your convenience, the interview and questionnaire questions will be sent to you via email a week before the interview date.

Inconvenience/discomfort
No inconvenience or discomfort is anticipated.

Can I withdraw from the research?
Being in this study is voluntary, and you are under no obligation to consent to participation. However, if you do consent to participate, you may withdraw from further participation at any stage. Withdrawal will not incur any penalty for any reason.

Confidentiality
The name of the educational institution where you've studied or are still studying in and your participation will not be revealed in any publications that arise from this research.

Storage of data
Storage of the data collected will adhere to the University regulations and kept on university premises in a computer-password protected for 5 years. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report unless they consent to their role being revealed in the thesis/future publications.

Results

If you would like to be informed of the aggregate research finding, please contact the student researcher: Omar Mayan via following Email: ohmay1@student.monash.edu . The findings are accessible for five years.

If you decide to participate, you will be sent a Consent Form in order to be signed. A signed Consent Form must be returned to the researcher via email before the interview can be conducted.

If you would like to contact the researchers about any aspect of this study, please contact the Chief Investigator:	If you have a complaint concerning the manner in which *Saudi Arabian Students' Experiences of E-learning 2.0 in Australia* is being conducted, please contact:
A/Prof. Judy Sheard Head of School, Caulfield School of Information Technology Monash University Email: Judy.Sheard@monash.edu Ph. Number: +61 3 99037201 Fax Number: +61 3 99031077	Executive Officer Monash University Human Research Ethics Committee (MUHREC) Building 3e Room 111 Research Office Monash University VIC 3800 Tel: +61 3 9905 2052 Fax: +61 3 9905 3831 Email: muhrec@monash.edu

Thank you.

Researcher name:

Omar Mayan

Appendix D

Consent Form

00/00/2012

Title:

Saudi Arabian Students' Experiences of E-learning 2.0 in Australian Higher Education

I agree to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I will keep for my records. I understand that agreeing to take part means that:

I agree to be interviewed by the researcher and complete a questionnaire about:
Saudi Arabian Students' Experiences of E-learning 2.0 in Australia ☐ Yes ☐ No

I agree to allow the interview to be audio-taped ☐ Yes ☐ No

I agree to make myself available for a further interview if required ☐ Yes ☐ No

and
I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

and
I understand that any data that the researcher collects from the questionnaire and the interview for use in reports or published findings will not, under any circumstances, contain individual names.

and
I understand that I will be given a transcript of data concerning me for my approval before it is included in the write up of the research.

and
I understand that any information I provide is confidential and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party.

and
I understand that data from the questionnaire /interview /transcript/audiotape will be kept in secure storage and access to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

Name

Signature Date

Appendix E

Interview Protocol

Introductory declaration:

G'day. I am Omar Mayan.

Thank you for agreeing to participate in my study, entitled "Understanding Saudi Arabian Students' Experiences with and Attitudes towards E-learning 2.0 in Australian Higher Education."

The purpose of this interview is to understand the process of your transition and adaptation to Australian higher education environment, your experiences with and attitudes towards E-learning 2.0. In addition, this interview will explore the role that culture plays in shaping your attitudes towards E-learning 2.0.

You have expressed your willingness to participate in this study. As outlined in the explanatory statement, your participation in this study will remain entirely confidential. Only I will be aware of your identity, and I am bound by my agreement with you not to give away what I know about you to anyone. Results from this study will not contain any information that can identify you.

This interview is expected to last approximately 60 to 90 minutes.

Do you have any questions before we begin? (Wait for a response and address any questions) May we begin? (Wait for response).

Well, now, I would like to ask you a series of questions, so please, feel free to ask me to explain any part of a question that you do not understand or you unfamiliar with.

(The first set of questions is focused on Saudi Arabian students' transition to an adaptation in Australian cultural)

1.) Why did you come to Australia?
2.) How do you think you have fitted into the Australian way of life?
3.) Have there been any challenges?
4.) What have things been easy?

(The second set of questions is focused on Saudi Arabian students' transition to an adaptation in Australian educational environment)

5.) How do you think you have fitted into the Australian university?
6.) What ways is it different from your university in Saudi Arabia?
7.) Have there been any challenges?
8.) What have things been easy? (enjoyable)
9.) How would you describe the relationship between student and with their teacher in term of authority in the Australian higher education settings?
10.) Is this different from Saudi Arabia? Please explain.

(The third set of questions investigates the experiences and attitudes of Saudi Arabian higher education students in Australia, towards E-learning 2.0)

In this section, I am getting at your experiences with various social (Web 2.0 type) technologies. Such as Blogs (e.g., Blogger.com) and Wikis (e.g., Wikipedia Wikis) Social networking (Facebook, multiply, Twitter) Social bookmarking (e.g. De.licio-us, Diigo) Photo publishing (e.g., Flickr), Media sharing audio, or video (e.g. YouTube).

11.) From the survey, you indicated that you had experienced in the following (particular Web 2.0 tools) could you detail where these were used (in Australia or Saudi Arabia)?
Why these tools were used and for what purpose?

(E-learning 2.0 is the use of Web 2.0 tools (mentioned above) in facilitating learning)

12.) In your time as a student in Saudi Arabia, did you have any experiences of E-learning 2.0?
13.) Kindly tell me more about this?
14.) In your time as a student in Australia, have you experienced E-learning 2.0?
15.) Kindly tell me more about this?
16.) How did you work together as a group using web 2.0 technology in term of sharing and exchanging ideas, helping each other, communication and working collaboratively?
17.) How did any decision making happen in term of initiating an initial discussion or contributing to an existing discussion?

(This fourth set of questions focuses on the opportunities and challenges that emerge from the students' experiences and attitudes towards e-learning 2.0)

Now let's proceed to how you feel about E-learning 2.0.

18.) Have there been any benefits of using E-learning 2.0 in Australia?
19.) Please elaborate on this?
20.) What difficulties or challenges did you have in engaging in E-learning 2.0 activities?
21.) Please elaborate on this?

(Questions 22-26, relate to the influence that gender play in student contribution to an online forum using web 2.0 technology)

22.) In your university courses using social networks or another web 2.0 learning tool, do you have friends from different nationalities?
23.) What nationalities?
28.) As a Saudi student, did you find any challenges when you experience using e-learning 2.0 environment?
24.) Has the gender mix attracted or deterred you from using e-learning 2.0 environment?
25.) Please tell me about this?
26.) How do you think this issue influence your ability to make use of Web 2.0 tools specifically for educational purposes (such as, when working in a group, sharing, exchanging ideas or helping each other collaboratively)?

Closing:

Those are all of the questions that I have for you. Do you have any questions before we end this interview? (Wait for a response and address any questions). Thank you very much for your participation.

Appendix F
Questionnaire

Dear respondent,

Thank you very much for your consent to participate in this study.
Below you will find the questionnaire Related to the study.
Your answers to this questionnaire will be linked to the interview questions.

Regards,
Omar Mayan

Here are the questions:

1.) What is your given name?
2.) What is your gender? Male or Female
3.) What is your age?
4.) Where are you studying?
5.) What is your major?
6.) Are you aware of what these Web 2.0 tools are?
(Please choose only that you have knowledge about it)
Wikis, Blogs, Message boards, Social Networking (Facebook, Multiply, etc.)
Podcasts, Videocasting (Youtube, etc.) and Microblogging (Twitter, Plurk, etc.)
7.) How often do you use the following Web 2.0 tools?
(Please select the most appropriate)
Always (daily) - Often (once a week) - Sometimes (once a month) - Rarely(less than twice per year) - Never (don't use)
8.) How often do you use the following Web 2.0 tools in relation to your studies?
(Please select the most appropriate)
Always (daily) - Often (once a week) - Sometimes (once a month) - Rarely(less than twice per year) - Never (don't use)
9.) How useful do you believe Web 2.0 tools are in your studies?
10.) How helpful do you believe Web 2.0 tools are in your life as a foreigner in an Australian university?
Very Not useful - Not useful - Neutral - useful - very useful - I do not know
11.) Please click on all that apply
Options:
I have blogged about a subject-related topic in order to develop my understanding of the content.
I have gathered information from a wiki.
I have participated in lesson-related online discussion groups. (Message boards)
I have used social networking sites to get in contact with people who may have something to contribute to a lesson I am learning about.
I have listened to podcasts related to a lesson.
I have created my own podcast to express my ideas about a lesson.
I have watched videos on video casting sites that are related to a lesson.
I have created videos related to the lesson and uploaded them to video casting sites.
I have tweeted about lessons in my subjects.
I have discussed topics related to my lessons in tweets.

12.) How effective the opportunities that you were able to realise from experiencing E-learning 2.0 in an Australian university?
13.) How would you describe your experience with E-learning 2.0 in the Australian system as a student? (In terms of the ease of adjustment or difficulty) Thank you!

Appendix G

Invitation Sent to the Participants

- **Omar Mayan**
- **Saudi Arabian PhD Students in Australia**
- **Home**

Invitation!

G'day everyone, My name is Omar Mayan, and I am conducting a PhD research project with A/Prof. Judy Sheard, The Head of School, Caulfield School of Information Technology, Monash University and Associate Professor Angela Carbone, The Associate Director Office Pro-Vice-Chancellor (Learning and Teaching) at Monash University.

You are invited to participate in a study of "Understanding Saudi Arabian Students' Experiences with E-learning 2.0 in Australian Higher Education."
When people from one country enter and live in another country, they need to undergo a process of cross-cultural adaptation that may depend on how different their home and host cultures are. The study considers how this process of adaptation affects people's learning in a new environment. Specifically, E-learning 2.0 is a relatively new concept in the fields of computer-assisted learning and distance education. It is based on the idea that Web 2.0 tools, internet services that empower users to create and share online content instead of just receiving them, can be utilised to enhance learning outcomes, address various learning management issues, and help build a learning community.

Focused on the themes of culture and e-learning 2.0, the aim of the study is to understand the roles that the Saudi Arabian cultural norms play in the Saudi students' attitudes and experiences within at the Australian E-learning 2.0 higher education environments. Furthermore, this study seeks to investigate the opportunities and challenges that emerge from students' experiences and attitudes and how culture influences these variables.

For further information about the project, please refer to the Explanatory Statement on the below link:
https://docs.google.com/open?id=0B3PnAqbz_rZGc1lLd1hTWGNJamM
Interviews can be conducted either via face to face, phone or any of communication means through the Internet, such as via Skype or Win Live Messenger without video.
If you decide to participate, you may contact me via the following Email: ohmay1@student.monash.edu.
Then you will be sent the related documents, including the "Consent Form" in order to be signed and Questionnaire before the interview can be conducted.

Thank you!

The student researcher
Omar Mayan

Like · · Unfollow Post · Share · 16 July 2012 at 21:25

Hamdi A. Alruwaithi, Abdullah Al-Saleh, Musleh Alsulami and 2 others like this.

Appendix H

A sample of the analysed data

(Large sample from the complete list of the 800 basic excerpt statements along with a large sample from the 400 initial codes)

Basic excerpt statements	Codes emerged from line-by-line initial coding propose
Students discussed through comparison the relationship between students and teachers in Saudi Arabia and Australia, including the use of first name instead of academic titles, approachability of hard work, ability to discuss directly with teachers, the right to complain and appeal, lecturers' casual dress, friendliness, and the ability and inability of female students to even see their male lectures in class: • (1-M) "Okay, I think in my opinion, the teachers are friendlier with students. They are easy going and you can debate with them or to complain to them"(L:68).."In Saudi sometimes you cannot debate, you can sure complain though nothing is impossible. But you have to be worried about it, because, I guess, if the teacher wont to fail in Saudi Arabia it is easy for him, even if you do well on a subject, the teacher can fail you. It's more stark in Saudi Arabia"(L:71-74) • (2-M) "my attitude about Australia first ,I think the good here is everything has been regulated, the code of teachers have been indicated as well as for student"(L:323)…" the outline, we have it in Saudi Arabia, but the way of delivering it to the consumer the student is poor"(L:333-334) • (3-M) "actually like, you know, when I came, I still remember, when I came in the first semester in 2008, I was astonished because the teacher or the lecturer in the class, he wear casual clothes and he call himself by the first name without doctor and he is very like down to earth he don't like I mean, he just like appreciate whatever you say,.."(L:644-647)…"the relationship is casual " (L:648) "And also they are approachable"(L:649).."they are respected" (L:650)…"the thing is, the thing is the teacher here looks for you as a partner"(L:651)…"So the relationship is very casual and it's very helpful am satisfied with that" (L:656-657)…", in Saudi Arabia, …, I will say the culture or the intercourse in the university over there, the doctor have like, you have to call him by his title, Doctor. Because if you call him by first name this is disrespectful and if you don't respect him it might be like this is a very serious problem" (L:662-666)…"For the culture also, the doctor we look for him as very high you have to call him by the first title and the thing is not negotiable…But the thing is, it is not all of them …, but am talking about the culture in general"(L:667-668).." • (4-M)"In my country especially our Uni our teacher has everything or every authority to do everything. He can give you a bad mark or maybe the day before the exam because he has all the authority. Some teachers after lectures they say go withdraw this subject because it's impossible to pass it"(L:1044-1046)…"I remember after I finished my exams I know I did well but I was surprised with the mark and no way to discuss or appeal to fix this mark or to ask your teacher. I'm not allowed to do that because this is not a good thing in our system at Unis. If you complain you can lose your future. Really,"(L:1049-1052)…"At Uni administration they don't trust us because they say our teacher has full authority about everything"(L:1052-1053)…" It's different a little bit not more. You can discuss anything with your teacher but also if they give a mark and you went to any teacher they don't agree with you"(L:1058-1059)…" For example, I got a not good mark in an assignment and I went to my teacher to discuss …, but she said I can't do anything with you all that out of my hands, go to sub-dean and you can appeal …,it's my right, and she said just go, just try!"(L:1059-1062)…" Sometimes, trust me. There is some discrimination' • (5-F)"In Saudi Arabia I have to just call them by their title" (L:57)…"In every situation I have to respect them, but like in Australia I don't have to call my teacher like teacher or professor or doctor but in S.A. I never called anyone of my teachers only by their names"(L:65-68)…"The relationship between and student-teacher relationships in Australia was much better than in Saudi Arabia"(L:121)…"as I told you about how I can deal with my teachers I can	➢ Finding Aussie teachers friendlier and easy going and debatable ➢ Comparing relationship between students and educators ➢ Comparing Saudi teachers authority - can fail students, even if doing well in class ➢ Comparing regulations of relationship between students and educators in S.A. and Australia ➢ Astonishing by educational atmosphere - much less formal ➢ Wearing casual clothes ➢ relationship is casual, approachable and respectable staff ➢ Looking at students as a partner ➢ Comparing relationship S.A. - much more formal ➢ Calling by title - not negotiable ➢ Culturally, seeing doctor in very high destination - power distance ➢ Comparing relationship S.A. - much more formal ➢ Comparing Saudi teachers authority ➢ Teachers have all the authority ➢ Comparing educational background ➢ Way to discuss or appeal ➢ Less interactivity ➢ Complaining means losing future ➢ Comparing teachers interactivity ➢ Influencing by educational background ➢ Feeling there is discrimination ➢ Comparing teachers' relationship between S.A. and Australia ➢ In Australia was much better than in Saudi Arabia

call them by their name, I can call and talk and discuss with them about any difficulty I find it, also the relationship between me and my coordinator; I can talk with them directly if I find any problem"(L:222-225)…"In Australian University if I had any concern about one of my subject mark or result I can claim any time and they can remark it again, but here in Saudi Arabia, I think they wouldn't accept if I just claimed"(L:131)	➢ Comparing teachers' relationship between S.A. and Australia ➢ I can claim any time ➢ Experiencing that in Australia students have right
• (6-F)"when I came here I was surprised how they call the lecturer by their name,.."(L:412)…"I feel it remove the barrier between the teacher and the student"(L:415).."the lecturer does not come to show how important they but to teach"(L:418).." But the problem is that teacher who used her power to make me cry for two week and, I never ever feel like this way. She use her power to try to make me fail. I don't know why"(L:420)…"In Saudi Arabia it is not a strong relationship like here. We feel like we are in kids school"(L:423)	➢ Surprising by removing the barrier between teachers and the students ➢ Comparing, feeling like as they were in kids school in Saudi Arabia
• (7-F)"I think you can make a good relationship between students and they become like friends, and it is easy"(L:673).."You can discuss with the teachers free, they will accept you and listen to what you are saying. They will not treat with you just like a student, they are not arrogant"(L:685).."you can discuss with the teachers free, they will accept you and listens to what you are saying. they will not treat with you just like a student, They are not arrogant." (L:686-687)…"In Saudi Arabia, some of them treat badly with us because they have the "Dr" big titles before their names"(L:689)	➢ Feeling good about the relationship between students and teachers ➢ Being able to discuss freely ➢ Finding teacher not arrogant in Australian ➢ Comparing their Saudi Arabian perspective of education ➢ Comparing leaking interactivity with teachers in Saudi Arabia
• (8-F)"The most important thing that we said was that here you see the teachers and we can explain our ideas to them. When you can't see the teacher it's hard to follow up with them"(L:839-840)…"In our country we would go for a whole semester without seeing the teacher. There is no way to contact the teacher. You send your paper by some guy like your father, your brother but here it different but easy"(L:840-842)…"when I was in Saudi Arabia there is one subject, I tried to understand which was really hard but since I cannot see the teacher…,and does not talk to us through the MIC, unless if he has something really important"(L:856),	➢ Far less interactivity ➢ Psychological distance between the teacher and the learner ➢ Feeling really hard to understand subject, since cannot see the teacher ➢ Understanding the student's needs
• (9-M) The lecturers in Saudi Arabia are in control of all the aspects of the course. The instructors dominate everything including teaching and assessment. " (L:81) • (10-M) "The teachers here are very helpful, kind, respect people, respect change and they really understand the student's needs. They have the right to ask any questions that they have even in the teacher's office and they are willing to respond. " (L: 75); Teachers and students are one and the same thing in the institution. There is a policy where students are supposed be assisted in knowing everything. " (L:117)	➢ Students have right to ask any questions ➢ Comparing the assessment system between Saudi Arabia and Australia ➢ Remaining silence if you have arguments against your lecturers ➢ Comparing ways of teaching in Australia and support ➢ Feeling confidence about the teachers assist and support
• (13-M) "The system in Saudi is different in assessment also different on how to talk with the lecturers and how to explore your opinions. In Saudi I think you need to remain silence if you have arguments that are against your lecturer. " (L: 107); I think dealing with lectures and tutors in Australia are very easy. So you email them and they respond easily as long as you want something to discuss with them.(L:112) • (16-F) " In Australia they teach us like our friend. In my diploma the teacher was like our friend. If you didn't understand anything they assist you, when you are doing a presentation they assist you, teaching you assignments. They have positive comments which give you the confidence. " (L:141)	➢ Feeling good about the great help provided professors in Australian education environment ➢ Comparing the teaching environment and the degree of communication between Saudi Arabia and AUS lecturers
• (18-F) "The professors were also of great help. If I didn't know anything I used to visit the learning Centre or the student service and you get to know everything you don't know. (L: 81); "The lecturers here respect your opinion, but in Saudi Arabia lecturers do not respect student's opinions. " (L: 92);" Here in Australia the relationship between the teacher and students is very easy. If I want to know anything then I will have it in an hour's time. In Saudi Arabia when you drop an e mail then you will have to wait for two weeks. " (L:98) • (19-F) "Here its different the teachers are very friendly and you can get to talk to them about the assignment .You can e-mail them and they will get back to you immediately. In my country the teachers will not give you emails, so that you cannot communicate to them. (L: 119);"A male teacher are more kindly to me .I can make a joke with them, and it is fine not like in Saudi	➢ Comparing ability of communication with teachers between Saudi and Australian environments ➢ Evaluating the less interactivity the teaching environment in Saudi Arabia

Arabia where you cannot do that. In Saudi Arabia you have to treat a teacher like [formal] and they are not kind to the students." (L: 128); "In Australia, I do not find the teachers to be tough. They are friendly and I get to speak to them on any issue." (L:141) • (20-F) "The teachers in Saudi have higher authority than in Australia. " (L:133)	➢ Feeling Aus. teachers as more friends ➢ Comparing teachers' authority
Comparing learning activities, and classroom practices, in KSA and Australia, including the role of memorisation, stress on originality etc. • (1-M)"…,my Australian university is friendly with students. They are easy going and you can debate with them or to complain to them"(L:68)…"In Saudi sometimes you cannot debate, you can sure complain though nothing is impossible. But you have to be worried about it, because, I guess, if the teacher wont to fail in Saudi Arabia it is easy for him, even if you do well on a subject, the teacher can fail you"(L:71) • (2-M) "although I faced a lot of challenges because the way how they teach us is the college it was not the same way that we used to be taught in Saudi Arabia, We always stack with the books and stuff … we always complain about it, Keep asking them like "give us a book" "give us a book, but they did not listen to us" (L:276). • (3-M) "The thing is, we don't have the skills, how to find information, how to use information, and how to present information. Actually this is the main skills I have learnt here. In our home country the lecture has to give information through mouth and this information is 100% right and you don't have to think about it" (L:570-273)…"I study 4 years in the first degree and I have done like had a research. We might have a summarized thing and we call it research but it's not research. We don't have the voice of the researcher in that paper we wrote before"(L:540)…" But the thing is when I came here, you have to put your experience in your essay… like in my first essay, I told you, I have C-… the transition to this….from the previous education to this one that relies on how to find the information…, how to present the information (L:578)…"Here, there is benefit for the student for the academic empowerment and how to write essays, how to interact with the lecture, how to take notes, and all these important skills" "but still there is a gap between the bridging program and the master level. The master level is very hard and the students, Australia students or some international students who came from another academic culture, they understand more than us. Actually, they have a lot of ideas about essay, about the academic inter-course"(L:582)…"I graduated from my first degree in over before 10 years, you know. But I have interacted with a lot of master students from Saudi Arabia, and they still like ask me about the basic thing on how to find information. They don't like especially when they write, I read like more than two literature review for master thesis and they still like grab the information from the library and put it down in those paper"…"So when I came in Australia, I learn there is no complete information in social science, I am talking in social science…, because we look for the theory, we look for the actual life, we might change the theory after four or five years, do it again, and it will be like different and this is way that knowledge is developed"(L:701)…"In Australia university you may learn how to find your characteristic, to find your personality in the information. Yeah, this is the main thing" (L:709)…"Believe me am not talking about cases, am talking about two different cultures and is not about culture but is about educational culture because there is part of culture that is about the academic culture. And this is what happens; at least it happened to me"(L:710) • (5-F) "The teaching methods.., in Saudi Arabia I had to take mate memorial and just memorize all information without asking about anything.…I don't have to discuss about anything. But in Australia they use things like a different method like I can collect any information and I research about any information I would like to know about. I can discuss about it, talk about it, and I can analyze the important thing" (L:83) • (6-F) "Here, you know, I love it. Here they push students to think, I mean lecturers they push students to search to find information. In Saudi Arabia we just, ahh, the teachers they just give us information and we just to memorize it, that's all" (L:345)…", it make me different better person, even my way to think I have to say that and I respect this in Australia, and I love	➢ Evaluating Australian teaching and learning environment ➢ Comparing learning activities and teachers' authority ➢ Complaining, sometimes, means fail in S.A. ➢ Comparing educational background - a lot of challenges ➢ Challenging because educational background ➢ Leaking some skills, how to find information, how to use information, and how to present information. ➢ Evaluating because educational background ➢ Comparing learning activities - doing research ➢ Influencing by educational background ➢ Gaining new skills ➢ Influenced by poor educational background ➢ Educational background influenced learning activities ➢ Evaluating friends' skills in S.A. ➢ Finding information is a basic in learning activities in Australia ➢ No complete information ➢ Learning new skills related to learning activities in Australian environment ➢ Believing there is cultural differences in education environment ➢ Comparing teaching and learning activities ➢ Memorizing all information ➢ Learning is highly interactive through discussion in Australia ➢ Pushing students to think lecturers – student-centric

it"(L:353)…"The university environment make me a different parson, has different way to think. If I want to find information I directly go to Google and even in my life. I got really great information in my field and in general"(L:430) • (7-F) "new I use many Web 2.0 tools, I think, I become [a] better learner, I can talk and treat with people well, and I can discuss at the class or by [the] online discussion board, and I also make friends." (L:634)… "And here we have blackboard we can discuss with students sharing our ideas. We can also make our ideas and we can say if the students have a good idea or not and the lecturer can review it, but in Saudi Arabia they refuse this"(L:660-663)…" here, you can say what you want easy you can discuss your idea to persuade your literature or they can persuade you, they will give you a time"(L:667) • (8-F)"The most important thing that we said was that here you see the teachers and we can explain our ideas to them"(L:838) • (9-M) "There was intensive research to be done since masters are research based. The assessment is different, timing is also important. Research and library skills were also needed and these were not emphasized back at home. " (L:63) • (12-M) " The relationship is better because there is no limit between the students and the teacher .It is all about respect and you can ask the teacher any question or any help as long as it is respectful." (L:272) • (16-F) "I didn't like the building back in Saudi Arabia, there were no computers and resources for learning" (L:104) • (17-F) "The way we used to have like a feeding process system just learning to feed the mind that's it. Now we don't have to think about that we memorize the information"L:81) • (20-F) "The different culture had to adapt to the mixed classes, both males and females in the same class, in Saudi Arabia we were just females or males." (L:72)	➢ Australian educational system focused on enabling students to discover knowledge ➢ Becoming better learner ➢ Becoming better talker when treating people ➢ Using Web 2.0 tools and blackboard for learning activities ➢ Comparing learning activities, and classroom practices ➢ Having the ability to see teachers and discussion was possible ➢ Comparing learning activities, online and in classroom ➢ Research and library skills were also needed ➢ No limit between the students and the teacher ➢ Comparing learning facilities ➢ Used to have feeding process system ➢ Comparing learning environment - had to adapt to the mixed classes
Comparing student rights in KSA and Australia, in regard to appealing marks, entering and leaving the class without asking for permission. However, Saudi students sometimes don't understand, or miss being orientated. • (2-M) "The terms of the due process or procedure, we have it in Australia, but I guess, it very hard for students to understand. You need to refer to someone with legal expertise to make it aware to students"(L: 330-332) …",we have it in Saudi Arabia but the way of delivering it to the consumer student is poor"(L-34) • (3-M) "Because we don't know a lot of things, a lot of Saudi they don't understand their rights. When I arrived, I missed the orientation week, I don't know what my rights are" (L:553-555)…"The thing is when you deal with someone like who can't accept or negotiate on anything it is very hard for me. When we came here it was very different for me" (L:684) • (I5-F) "Okay, I think the reason for this because the students in university don't know their rights. We just have like a stereotype; you have to listen to your teacher, your teacher always right" (L: 138-139)…" Also, in Australia, I can claim, if I done any exam or if I got any mark that I have concern about it. Anytime, I can make an appeal and they remark it again. I know all my rights But I think the situation Saudi Arabia University is different. It's difficult to claim about anything and difficult to communicate with my communicator or my head of school"(L:125-128) • (6-F) "Yes, here in Australia, you can feel free as a student you feel really that you have rights" …" you can go to toilet without asking for permission or drink coffee, but in Saudi Arabia you can't do that" (L:425) • (9-M) "The university treats the students like their customers and treat them well in a transparent way .It would be easy to kick out a student in Saudi. " (L:91) • (10-M) "In Saudi Arabia, there is low representation of students in running academic affairs. If there is any policy then it has not been implemented, or it's not clear. Students don't know their rights and solving their issues is difficult. " (L:130)	➢ Feeling it is hard for students to understand student's right it in Australian ➢ Delivering student's rights is poor in Saudi Arabia ➢ Missing orientation while did not know his rights ➢ Comparing student's rights in Saudi Arabia and Australia ➢ Understanding student's rights ➢ Treating the students like customers in Australian universities ➢ kicking out a student in Saudi unis easy ➢ Student's rights in S.A are not clear ➢ Comparing student rights between S.A. and Australia ➢ Educational background perspective about student's rights

• (11-M) ” Because some ideas come from the student, a teacher gets angry and can fail you in an exam in Saudi. In Australia, the students have rights, it’s fair. ” (L:157) • (13-M) “In Saudi I think you need to remain silence if you have arguments that are against your lecturer,” (L: 107). “here, I think there are many policies, as such as the university has, ….you know your rights, you know the policy, the standards, so you do not have any problem,” (L:169) • (17-F)” Students, we have the right to speak up and think they could be wrong; we have the right to speak. ” (L:88); “The first time I knew that students had rights in the university [in Australia] and the lecturer or the academic staff don’t have the full power of the university like we used to have at back in my country. In Saudi Arabia we did not know anything about rights as students. ” (L:96) • (20-F) ”The good, thing in Australia is that students have rights. In Saudi the students’ rights were ignored because the teachers have a higher authority. ” (L:133)	➢ Comparing student rights ➢ Encountering, first time that students have rights ➢ Having the right to speak In Australia ➢ Comparing teachers authority between S.A. and Australia ➢ Feeling good about having student’s right
Compares formality in KSA and Australia – mentioning Australia’s casualness, and mixing of sexes (focus on formality of society) • (1-M) "I came from a formal and completely different culture from Australian culture and it was a huge challenge for me"(L:28)…"It is completely different from Saudi. The way of teaching, the environment and culture is totally different. For example in Saudi they separate the genders in education" (L:52)` • (I5-F)"I don’t have to follow anyone like any one structure like just anytime I’d like to go just go and anytime I’d like to do anything I just do it you know"(L:44)…"the casualness in Australia made it more fun than Saudi Arabia and the environment enabled people to learn more"(L:44) • (6-F)"You know, it is different culture and different lifestyle. As you know in Saudi Arabia we have special lifestyle and gender segregation is there and here freedom, I don’t know how to explain but that but the culture"(L:313) • (7-F)"I think they have different culture from us which makes you scared sometimes"(L:320) • (8-F) "Yeah, because in my country the university was only for girls and here it was mixing boys and girls, where people are more at ease with one another.” (L:824) • (12-F) ”We had different sexes in different classes. We have some barriers and we have to follow our culture but here in Australia things are different, we can talk in public not like in Saudi. ” (L:112) • (13-M) ” so I’m suggesting it’s okay to have mixed gender but with boundary as well”…“but if you have maybe a discussion program that can have two genders discuss on it, but [without videos] to have an exchange or physical meeting.” (L:137) • (14-M) ”Here there is no pressure. You can even go and make contact even face to face and discuss together. ” (L:86) • (18-F) ”In Saudi Arabia things were very formal and you have to be careful about what to say and do. Here things are very informal and you can even hold discussions with your male lecturers. I feel comfortable here to say and do whatever I want” (L:93)…”We have activities together at the university both male and female. It is difficult, in Saudi Arabia since you do not get all the material you need and you only have female friends. ” (L:109) • (19-F) ”We have group assignments with men and women and, I am fine with that. I had a problem with that in the first two to three months but I got used to it with time.” (133)	➢ Coming from a formal and completely different culture ➢ Experiencing a lower degree of formality ➢ Comparing formality between Saudi Arabia and Australia ➢ Experiencing reduced formality and freedom - positive perspectives ➢ Comparing the different culture and the different lifestyle ➢ Segregation exists in S.A ➢ Challenging the cultural differences – feeling scared ➢ Comparing mixed gender environment ➢ Having some barriers and we have to follow our culture ➢ Accepting the mixed gender but with boundary as well ➢ Accepting online mixed gender with conditions - no physical meeting ➢ Was expecting to interact with one another in class ➢ Comparing formality between Saudi Arabia and Australia ➢ Having activities together at the university both male and female ➢ Different and difficult in Saudi Arabia ➢ having problem in the first two to three months ➢ Accepting activities together with time
Discussion of opinions and feelings about interaction between sexes – showing cultural taboos, judgment of those transgressing, fear of reputational loss and reflections about what is safe behaviour, and safe self-exposure and revelation: • (2-M) "We like to keep a distance like we get into a discussion and some like my professionals are always formal in these relationship. No silly joke or like, I think it is not culturally responsible. We always like to look good"(L:429)… I do not accept. Some of them put like false picture and do not have real names. I could not give someone I know to have access to my	➢ Influence of gender segregation ➢ Risking reputation regarding interacting with opposite sex ➢ Always like to look good ➢ Wanting their picture to appear good in front of Saudi women

information. But they could benefit from my blog. Because I do not care about whether they are a friend or not"(L:442) • (4-M) "as traditional Muslim, I saw many girls who not very formal, and maybe wore somewhat revealing clothing, so sometimes, I feel uncomfortable in interacting with them directly, so this is why I prefers to discuss educational matters with classmates over the internet" (L:1195) • (5-F) "we have a strict culture for this, maybe sometimes, they will feel this girl is not a good girl when she just put her real name and picture. I was afraid my classmates or men from my country what they will talk about me. I am just worried, worried about lots of things"(L:245) • (7-F)"Also, some Saudi men studying in Australia commit actions that are deemed wrong in Saudi Arabia and so [a girl] is careful" (L:586) • (8-F)"people I don't know most of the time, I don't put them [don't add them as online friends]. But if there was a teacher then that's okay with me"(L:971) • (14-M) "At times you find that a female is very good in a certain area and you can share information but back in Saudi Arabia it was very difficult to make contact with women. " (L:80) • (16-F). " For example, I worked in a group with two Saudi girls and two Saudi boys we don't speak to each other." (L:73) • (17-F),"I had Saudi students (males) and they would never shake Saudi female's hands. " (L:140) • (20-F) "This is common in Saudi Arabia because you can only speak to a person of only your gender, but in my course, nursing, we talk to all genders. Gender segregation is still in Saudi Arabia, it is difficult to get rid of the practice of having separate female and male classes. I think it is, difficult to change our culture, even our food. We like to buy Saudi products, you know, even if they are so expensive here in Australia" (L:116-121)	➢ Believing interacting with opposite sex it is not culturally responsible ➢ Self-definition - traditional Muslim ➢ Feeling uncomfortable ➢ Preferring to discuss educational matters with female online ➢ Having strict culture ➢ Risking reputation regarding interacting with other gender ➢ Feeling afraid and worried ➢ Saudi men commit actions that are deemed wrong in S.A. ➢ Fear of risking their reputation ➢ Risking reputation ➢ Influenced by cultural inhibition ➢ Showing interest in female idea ➢ Difficult to contact with women- influenced of gender roles ➢ Saudi girls and Saudi boys don't speak to each other ➢ Never shake Saudi female's hands ➢ Risking reputation ➢ Influenced by cultural inhibition ➢ Gender segregation exists ➢ Influenced of gender segregation ➢ Difficult to change culture ➢ Looking to buy Saudi products in Australia - expensive

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