Students' and Teachers' Perceptions of the Use of Mobile Technology in University Preparation Classes

A thesis presented in partial
fulfilment of the requirements for the degree of

Master in Applied Linguistics

At Massey University, Manawatu Campus, New Zealand.

Susanne Thelma Aldrich

2017

Acknowledgements

Firstly, I would like to extend my appreciation to all the students and teachers who participated in this research. Without your input and willingness to express your views, experiences and beliefs this study would not have been possible. Thank you for your time and the valuable insights you shared.

I would like to express gratitude to my supervisors Prof. Cynthia White and Dr. Gillian Skyrme for your supervision, and support. I found your guidance, wisdom, encouragement and gentle navigation through the hurdles of this process invaluable, without which I would have been lost.

To my colleagues, I thank you for your ongoing support and advice. I am particularly appreciative of the constant encouragement and friendship extended to me - especially at the end of writing this thesis.

On a personal level I would like to thank my family Bill, Luke, Eilish, Alie and my friends for their committed support. In particular to my husband Bill, who not only ran our home, but also provided daily encouragement, patience and practical advice. Lastly, I would like to dedicate this thesis to the loving memory of my father Alan Aldrich who passed away young and never knew where my adult life took me.

Abstract

As in many aspects of society today, mobile technology has a presence in educational arenas. This study investigates and compares the views and perceptions of teachers and students about the appropriate use of mobile technology in university preparation classes, how the presence of mobile technology influences the classroom environment, and about what students and teachers believe to be their respective roles in the regulation of the use of mobile technology.

To investigate this the following instruments were used: a student survey to gather quantitative data about their beliefs about mobile technology in class, their behaviour around devices, and their expectations of teaching practices and regulation of devices; student focus groups using four teacher scenarios (describing different teacher behaviour and attitudes) as a basis for the discussion; and teacher focus groups posing questions gleaned from the results of the student survey and focus groups. The overall objective was to determine if any gaps in perceptions, attitudes and expectations existed between students and teachers.

Both parties agreed that devices were useful educational tools to use in class. However, there were opposing viewpoints about personal use of devices. Students expected teachers to take responsibility for regulating student behaviour around the use of devices, while teachers sought to prepare students to take personal responsibility and become autonomous learners. A need for establishing etiquette in the classroom was recognised. Teachers acknowledged that although students were skilled users of mobile technology, they lacked vital computer skills. Overall, there was a discrepancy between student and teacher beliefs about philosophical responsibility, the scope of technical ability, and logistical possibilities in the classroom. To conclude, the study confirmed that the nature of the classroom had changed and that all stakeholders need to be cognisant about ever-changing technology.

Table of Contents

List of Tables……53

Chapter One

Introduction

1.1 The Position of Mobile Technology in the Classroom

As mobile technology has become ubiquitous in all aspects of society, it is no longer optional to ignore its presence. In terms of the classroom, it is virtually impossible to overlook its appearance, as students arrive in class equipped with devices that have become extensions of their person. An implication of this is that devices are present, and therefore part of the classroom landscape, whether they are used for educative purposes or not. As a consequence, mobile technology poses both complex and perplexing classroom management issues for teachers. As a case in point, the physical environment of the classroom is no longer hallowed ground, as students roam in and out of cyber-space and teachers struggle to confine them, unlike the physical boundaries that teachers were accustomed to in the past. Also, the student population has grown up with digital technology and see it as their right to use it, and have expectations of potential educative opportunities and personal access in class. As baffling as this may be to deal with, stakeholders are also presented with ever changing technological choices and possibilities, which means they need to be prepared to adjust to new and ongoing advances in technology. Indeed, to discount mobile technology,

places people at risk of becoming isolated from opportunities that are delivered digitally, communities that are formed in cyber-space and the expectations that the young have for 21st Century living. In short, the effects of mobile technology in the classroom are multi-faceted with potentially positive and negative outcomes. Notwithstanding, mobile technology creates exciting prospects for some stakeholders, and daunting challenges for others.

1.2 My Personal Interest in Mobile Technology

Initially, my interest in mobile technology stemmed from my own enjoyment of using and incorporating devices into my life. This together with the involvement with digital technology by my husband and children meant that using devices just seemed to occur intuitively and occupy a place in our lives. For me it has been a natural progression to incorporate devices into many facets of my everyday activities.

Also, as cell phone technology morphed into smartphones, and tablets started to emerge in classrooms, I came to see how devices could be used as a teaching tool to enhance students' learning opportunities. This revelation was an exciting prospect for me, personally. However, for many teachers it represented a negative impact on their teaching environment. Subsequently, I became intrigued with the reactions and resistance displayed toward mobile technology by some teaching staff. To begin with, there was a sense of ignoring the presence of this technology, then out of necessity teachers were forced to deal with the existence of mobile technology in the classroom. As teachers started to become accustomed to the presence of these devices in the classroom, discussions about the conflicting issues surrounding them became commonplace in the staffroom and during staff meetings. The teaching staff highlighted many concerns about

the distractive influence of devices and the uncharted territory that had been imposed on them.

1.3 Resistance

As an English language teacher, I chose to integrate the use of my mobile devices into my teaching in class. Primarily, I use my mobile phone to access a dictionary, thesaurus, websites, and show students various phone applications that they can use to support their language learning. I prefer to have my phone with me at all times, and in fact, never even contemplate leaving it in my office when I am teaching. However, reflecting back five years, when I first considered embarking on this research, many of my colleagues (who taught on the English to Speakers of Other Languages [ESOL] Programme), seemed to believe that the presence of mobile technology in the classroom was disruptive, negative, disrespectful and superfluous. In response to the growing impact of mobile devices in the classroom, the majority of teachers in the ESOL programme were in favour of established formal rules to exclude devices from the classroom, and the idea of using them as an educational tool was entirely discounted. At the time, I thought that my viewpoint may have been naïve as I had only focussed on the positive eventualities; some colleagues on the other hand were very quick to point out the negative consequences and did not seem to contemplate the pedagogical value. However, as time went on, I felt concerned about the missed digital educational opportunities that were being denied.

Around the same time, the University Preparation Centre (the institution where I teach) began using an Online Content Management System (OCMS), for which I was involved in developing some of the course sites for the ESOL Programme, and subsequently tutoring the staff about how to use them. The implementation of this system was heavily reliant on the teaching staff becoming conversant with

using the sites. This was immensely challenging for some staff who viewed the new system with some resistance. Some of the reasoning was similar to their views on the presence of mobile technology, in that it was an unnecessary change. However, to their credit they embarked on learning the system and gradually adopted it into their teaching and classroom practices. In taking this step, I also believe that they became less resistant to the idea of mobile devices. After tutoring most of them, I believed that the teachers fell into what I saw as three categories, given colour names below:

1. The Blue Group believed digital technology was important for students and a natural progression in the world. They had an intuitive approach, and were not afraid of making mistakes and being experimental. In general, they only needed a few verbal instructions and then they experimented on their own.
2. The Purple Group were not entirely comfortable with digital technology, but believed it was important for students. They were unconfident, challenged, afraid of making a mistake (but willing to try), and very excited when they had a success. They required verbal, visual and kinaesthetic learning experiences to learn any new system or tool.
3. The Yellow Group had what could be described as a resentful attitude toward digital technology and liked doing things the old way. They easily found ways to avoid using digital technology, did not experiment, gave up easily, and did not retain instructions. They required verbal, visual and kinaesthetic learning experiences, and needed to write step by step instructions.

Interestingly, at varying degrees of time all the teachers adopted the system. I believe that their progress was linked to discovering possibilities to use content, and instruction with the OCMS, and incorporate it into their teaching practices. As teachers opened up to this system they also started to see some educational

prospects for mobile devices. In particular, teachers began to be more accepting of students using their devices to access online dictionaries, and seek information from websites.

I also observed that although teachers displayed some acceptance of students using mobile devices for some educational purposes, managing illicit use of devices still posed challenging situations for teachers. There were many discussions in staff meetings about the distractive nature of mobile technology, and how this could be managed. This further spurred my interest in the overall presence of devices in the classroom.

1.4 The Aim of this Research

I found it fascinating that in a relatively short period of time, the ESOL staff appeared to become more open to mobile devices in the classroom at the University Preparation Centre. In addition, there was recognition that classroom practices were changing with the advent of technology and they could no longer prevent this from happening. However, in spite of some acceptance of its presence, teachers repeatedly voiced frustration at how often they believed students were distracted in class by their devices. Furthermore, they were concerned that students were losing learning opportunities, because their gadgets could enable them to leave the classroom without physically moving anywhere. Could students escape into cyber space and at the same time attempt (or not) to listen and learn from what was happening in the classroom? Some students seemed to be able to multitask and achieve both, while others, teachers believed, missed valuable learning opportunities. Teachers were concerned about the impact on a student's ability to maintain concentration as their devices appeared to be enabling them to receive many small pieces of information at once, and potentially distracting them from learning.

From my own point of view, I believed that to some extent I could receive messages from a device and not be distracted; therefore, I was sceptical that students were always distracted. Also, I had seen my children at various stages of tertiary education integrate their devices into their study habits as a matter of course. While I shared teachers' concerns that students were easily distracted by their devices, I felt there was a level of interaction with devices that was acceptable and not necessarily intrusive. Given that I was privy to a lot of information about teachers' views I wondered what the students themselves believed about this.

Moreover, the issue of appropriate use of devices had become a constant discussion in staff meetings, and more importantly, how to manage the changes that mobile devices inflicted on the classroom environment. Again, I wondered what students' beliefs were about classroom behaviour and management.

Therefore, the main aims of this study are to investigate teachers' and students' beliefs about mobile technology in the classroom, specifically, as framed in the following three research questions:

1. What are students' and teachers' perceptions of the appropriate use of mobile technology in university preparation classes?
2. How does the presence of mobile technology influence the classroom environment?
3. What do students and teachers believe to be their respective roles in the regulation of the use of mobile technology?

1.5 Overview of Chapters

This thesis comprises six chapters. The first chapter introduces the topic and aims of the research, along with the three research questions. Chapter Two reviews the literature that is relevant to the study. It provides an overview of the context with which mobile technology has developed rapidly and significantly influenced the traditional classroom. Vygotsky's Constructivist Theory is briefly considered and how it may contribute to learning with mobile devices acting as cultural artefacts. The various affordances of mobile technology and the immense possibilities for learning are outlined. Voice is given to the notion of students being physically present in the classroom while venturing out of the class into cyber-space. The respective perspectives of students and teachers in relation to mobile technology are highlighted, including identity, technical ability and the capacity for distractions. Chapter Three describes the methodology and instruments that were used to conduct this research. This is followed by an account of the findings of the study in Chapter Four. Chapter Five then provides a discussion of the findings and interpretation of the insights that unfolded. Finally, Chapter Six brings together the key strands of the study and draws conclusions in relation to the research questions. This chapter also includes the limitations of this study, implications for students and teachers, and recommendations for future research.

Chapter Two

Literature Review

2.1 Introduction

Like so many aspects of society today, mobile technology has permeated the education arena, and become a somewhat unplanned emergence, in that mobile devices have appeared in the classroom environment, in some cases, before educators have determined what their role is. In terms of measuring mobile technology as a presence, its capacity has developed at such a rapid pace that its very existence has become an ever-changing platform for teachers to deal with. In addition, staying abreast of recent developments in mobile technology can be overwhelming, as one function is very quickly superseded by another. Often, these changes have occurred well ahead of the process of research and enquiry into practices of mobile technology use. That said, in recent years, researchers have delved into the many affordances of mobile technology in learning environments, and some have investigated students' and teachers' practices, and their applications in higher education. Nonetheless, there is little research about teachers' and students' expectations of each other in relation to mobile technology uses, technical expertise, perceptions and attitudes.

The digital world has expanded rapidly over recent years and has provided people with tools, literally at their fingertips, to access information at speed and with

efficiency. The development of mobile technology has created opportunities for people to connect to knowledge from just about anywhere and at whichever time they choose (Hwang, Tsai, & Yang, 2008; Mottiwalla, 2007; Shih, Chu, Hwang, & Kinshuk, 2010). In particular, for young people, they have only known a world where they have at their immediate disposal boundless information, entertainment and communication.

Siddiq, Scherer, and Tondeur (2016) recognise that digital skills are imperative to 21st Century life, and young people are very adept at using digital technology; however, this does not make them automatic virtuosos in all areas of technical expertise. Ferrari (2012) highlights that it is more important than ever that students foster skills to cope with digital material. Further, Stromso and Braten (2014) suggest that students need sound training in searching and critiquing digital information, in particular, when they are undertaking research. In addition, while young people may comprehend recent digital applications like texting, social networking, instant messaging, surfing the net, and downloading music they are not necessarily as proficient with other technologies and therefore may need support from educators to develop these skills (Bennett, Maton & Kervin, 2008; Thomas & O'Bannon, 2014; Thompson, 2013). Kennedy (2014) claims that these functions alone - accessing endless information, achieving personal connectedness with friends and family, and accessing just about anything a person needs or wants - are not likely to enhance learning in formal university courses. Dalstrom (2012) maintains that in a study of undergraduate students and technology they are still mainly engaging in social pursuits when they use their devices rather than educational opportunities. Thomas and O'Bannon (2014), referring to cell phones in the classroom, suggest that there is a difference between generations, and that the older generation have grown more accepting of new technologies, while the younger generation limit themselves to a narrower

range of new technologies. More significantly, students use their phones to access many functions and do this by simply pushing a button and gaining an immediate, direct path that takes them where they want to go; therefore, they are not necessarily experienced at the process of logging on to a computer and progressing through the steps to find the pathways to access programmes, information and websites. Consequently, students may not be sufficiently accomplished at using a keyboard and may lack competency with word-processing, a skill that is imperative for completing assignments and research. Kennedy (2014) claims that the success surrounding technology and mobile devices as learning tools is to some extent dependent on institutional resources, such as teachers and infrastructure. While institutions can supply wireless connection to the Internet, technical assistance and institutional applications, it is teachers who need to be able to provide direction, knowledge of resources and model appropriate use of devices.

Taking into account the prolific ownership of mobile devices, it may be essential in the future to utilise devices into curriculum design. When students are purchasing technology, the majority of them are only seeking mobile options rather than using desktop and laptop computers (Kennedy, 2014), which is an explanation as to why students may have gaps in their technology awareness. On the other hand, Thomas and O'Bannon (2014) propose that there may be a discrepancy between teachers' practices in the classroom and students' technical skills. For instance, some sectors of society may be adept at using a computer which relies on strong keyboard skills, and the ability to search for knowledge and organise digital information online. This would suggest that successfully integrating mobile technology into formal higher education is to some degree reliant on how teachers encourage students, and offer them a perspective as to how and why a variety of skills in using technology is essential to academic study. Therefore, is it

reasonable for students to expect that educators be mindful of integrating mobile technology into curriculum design, and stay cognisant of its developments in the new millennium? Also, is it appropriate for teachers to expect that students should have wider reaching technical skills and knowledge around more traditional technology, such as, computer skills, word processing skills and research skills? Interestingly, research about students' expectations of teachers in their digital world and learning seems to be lacking, as is research into teachers' expectations of students' technical awareness.

2.2 Constructivist Learning

Before delving further into the digital world it is necessary to consider how mobile technology might contribute to learning. Firstly, according to constructivist theories learning occurs when people participate in activities that they find engaging and when they are able to experience outcomes and reflect on those experiences in a meaningful way (Farris & Ylimaki, 2010; Lantolf & Poehner, 2014; Vygotsky, 1978). An influential constructivist approach to learning relevant to this study is Vygotsky's Sociocultural Theory (Vygotsky, 1978). Vygotsky considers that people learn from interacting socially and partaking in human activity that relates to their own particular reality, which includes their current understanding and state of readiness to learn something new. He maintains that interchange with an expert during an activity that the learner is engaged in allows learning to progress to a more meaningful level (Lantolf & Poehner, 2014). So, in terms of formal education the educator is pivotal in directing and mediating learning (Vygotsky, 1978), and important for developing learning communities consisting of students and teachers and other experts (Farris & Ylimaki, 2010). Interaction with peers is the basis for engaging in authentic situations and activities that relate to the real world (Farris & Ylimaki, 2010). Furthermore,

Vygotsky asserts that interaction with culturally constructed artefacts such as tools, objects, rules, and their community helps students to construct their own learning (Lantolf, 2000; Sirisatit, n.d.; Vygotsky, 1978). This theory is relevant to this study, as the 21st Century student needs digital tools to assist with accessing information, communicating with others, consulting experts, sharing ideas and experiences and problem solving (Farris & Ylimaki, 2010). Therefore, mobile devices fall into the realm of what Vygotsky identified as culturally constructed artefacts, with these digital tools being particularly relevant to the learning environment of the new millennium.

Various studies have provided examples of this. Pimmer, Mateescu, and Gronhbiel (2016) report on research where mobile devices were considered a vital component of pedagogical design, and where constructivist learning took place. These included the construction of visual contexts like the taking of photographs and video recordings, which enabled students and teachers to exchange visual information and aided students with learning portfolios. In fact, it has been noted that the camera features of devices were a very popular domain for students to build knowledge (Lan, Tsai, Yang, & Hung, 2012). Further to this, Zahn, Schaeffeler, Giel, Wessel, Thiel, Zipfel, and Hesse (2013) studied students who put together videos in small groups and compared the effectiveness of their experiences with those students who had read newspaper articles. They found that the students who used videos learned more effectively than those who read print material. Schepman, Rodway, Beattie, and Lambert (2012) investigated students using their devices for note taking and discovered that even though students took fewer notes than previously when using pen and paper, they were able to record information in more convenient and meaningful situations that led to valuable ideas. Also, another useful constructivist practice was the use of mobile devices to record speech. Researchers (Cope & Kalantzis, 2009; Schepman et

al., 2012) noted that English language students had a preference for recording their academic reflections on their mobile phones as they could do this in a setting that they were comfortable with, and over time their fluency demonstrated improvement. According to Kessler (2010), the flexibility of using mobile devices to record thoughts and passing ideas reduced the amount of stress that students experienced.

2.2.1 Formal and Informal Learning

Mobile technology has provided vast opportunities to encapsulate both formal and informal learning situations not only in the classroom but outside as well (Collins & Halverson, 2009; Karimi, 2016; Thorne, Black, & Sykes, 2009). Formal learning occurs when students engage with teacher-provided resources as part of a planned curriculum (Marsick & Watkins, 2001). For example, Saran, Cagiltay, and Seferoglu (2008) reported that they used multimedia messages to teach students vocabulary at a university in Turkey. These multimedia messages were designed by teachers and sent to students via their phones for homework (Saran, Cagiltay & Seferoglu, 2008). This kind of activity also enables individualised learning to occur, where a student is given control over when they can use their devices, and they can work at their own pace (Cheon, Lee, Crooks, & Song, 2012). However, students are still under the direction of the teacher who can provide feedback.

In contrast, informal learning transpires when a student is self-directed in a resource or activity (Wong, 2012). A good example of this is a student finding a phone application such as a game that teaches English vocabulary, and playing with it on the bus or while waiting for a friend. The student has created an opportunity to learn without direction from a teacher, and may be motivated by their own individual needs, strengths and interests. This type of learning can also

be classified as situated learning as students can learn in a personalised authentic situation. Also, situated learning circumstances provide many possibilities for gaining knowledge because of the convenience to students (Cheon, Lee, Crooks, & Song, 2012).

Finally, both formal and informal learning can be achieved collaboratively through the various communicative possibilities available to students (Cheon, Lee, Crooks, & Song, 2012). For instance, taking part in online forums set up by a teacher and with teacher-prompted discussion for the former, and students communicating through individual Facebook pages at their leisure for the latter.

2.2.2 Outside and 'Outside' the Classroom

Digital technology may have uncovered immense scope for potential formal language learning in the classroom (Thorne, Black, & Sykes, 2009), and also accessible informal learning power outside the classroom (Lai & Gu, 2011). As Lai and Gu (2011) note mobile technology has facilitated potential learning power that can sometimes be achieved more readily outside the traditional physical classroom. As reported in 2.2.1, formal activities that are pointed to by teachers can be completed while students are physically outside the classroom environment, and on these occasions teachers can support this deliberate opportunity for students to be present in their learning beyond the classroom. Additionally, teachers are able to support and welcome students who are self-motivated to seek informal educative situations based on their own initiatives. White, Direnzo and Bortolotto (2016) suggest that students seek spontaneous moments to feed their language learning by visiting sites outside the classroom that become "personally meaningful dwelling places for their everyday lives, as well as for language learning, linked to time and place" (p. 4). They claim that

learners choose affordances that are not predetermined but rather relevant to their individual activities and social context.

However, where the notion of 'outside the classroom' becomes controversial is when a student leaves the classroom to be mentally present somewhere in cyber-space (but remains physically in the classroom), and may not be focussed on the lesson. Hence, the term 'outside the classroom' has two distinct meanings and implications in modern education. Furthermore, this challenge has presented educators with uncharted territory to navigate and manage.

2.2.2.2 Students Supplementing Formal Courses

Outside the classroom there are also situations which educators welcome, where students pursue activities to informally supplement their learning. Steel (2012) suggests that there is some evidence that second language learners, in particular, can use their mobile devices to gain valuable learning experiences. Lai and Gu (2011) note that traditionally language learners have watched movies and TV, and listened to the radio and songs in their target language outside the classroom. It is commonly believed that these activities can assist students with their listening and speaking skills. More recent studies have indicated that students' participation outside the classroom includes: online dictionaries, Facebook, YouTube, online forums, online news, messengering their classmates (Lai & Gu, 2011), videos and recordings, and the myriad of phone applications and educational games that are obtainable (Lan, Tsai, Yang, & Hung, 2012; Yang, 2012). Indeed, these resources present limitless opportunities for students to complement their language learning in new and sometimes creative ways.

2.2.2.3 The Power of Apps.

A notable innovation that has emerged recently across electronic mobile devices is the development of phone applications. According to Steel (2012), mobile

technology empowers students to access and benefit from an abundance of phone applications (apps) that can provide unlimited opportunities for students to engage in activities (in their own time) that are meaningful to their own learning. As Steel (2012) notes, research suggests that students are rapidly adopting the use of apps; moreover, forecasts are that phone apps will surpass the use of desktop computers in the future. This would imply that even though these affordances are available through a range of means, young people seem to be attracted to mobile technology and its convenience, push technology (just pushing a button rather than using a mouse to navigate on a computer) and ease of use. Furthermore, Fotouhi-Ghazvini, Earnshaw, Robison, and Excell (2009) propose that game based applications can appeal to students' innate motivation and capture their interest and engage them in active learning. Given the immense learning possibilities of this technology should it be harnessed to learning? The argument has been made that sound design and strong pedagogical principles need to be combined with authentic aspects of the real world into game design (Fotouhi-Ghazvini, Earnshaw, Robison, & Excell, 2009).

2.3 Student Perspectives

The Post-Millennial (birth years ranging from the mid-1990s to early-2000s) generation enter tertiary education with a perspective that is relevant to the generation that they have grown up within. Their outlook includes the presence of mobile devices and cell phones in educational situations as they are increasingly identified as worthy implements for facilitating learning (Johnson, Adams, & Cummins, 2012). Some would say these digital devices are a vital component in the 21st Century classroom (Project Tomorrow, 2008), and may be expected by many Post-Millennial students. As Thomas and O'Bannon (2014) explain, not only do mobile devices extend to personalised learning (Kearney, Schuck,

Burden, & Aubusson, 2012), but potentially provide a platform for students to make personal responses, use applications such as games to construct their learning, participate in authentic learning in an out-of-the-classroom situation like a museum visit, and communicate with other students collaboratively. Sandberg, Maris, and de Geus (2011) point out that the availability of mobile technology has equipped young people with the ability to access countless learning possibilities, and transform them into active learners rather than being merely receptors of information (Looi, Seow, Zhang, So, Chen & Wong, 2010); also, possibly on a platform that appeals to their generations' world view and experience of the digital age.

2.3.1 Work or Play

It is often assumed that young people are obsessed with mobile devices, and in turn, are technological experts when it comes to their uses. However, equipping a student with this tool does not necessarily mean that they use it in the most effective way. In fact, in some instances young people may not view their phone as a vehicle for learning. Furthermore, in some cases students need to move from using their devices purely for communication and entertainment, and separate its functionality into educational opportunities. Viberg and Gronlund (2013) claim that as mobile phones penetrate more into young people's lives the periphery that separates recreation and education becomes increasingly nebulous. Therefore, students' expectations of using devices for all aspects of life are high, and using them for educational purposes seems a valid reason to incorporate their use into learning (Stead, 2012). However, allowing students to use devices may result in a variance in learning potential as devices are only as effective as the users' ability. Furthermore, Karimi (2016) asserts that learning with mobile devices is dependent on how self-directed a person is toward creating

their own personal learning situation. Likewise, Karimi (2016) found that the motivational factors that contribute to formal learning adoption included playfulness and performance expectancy; while, for informal learning students liked to play but did not have expectations for their performance. Playing and experimenting can be central to a student's intrinsic innovativeness and provides an essential role in adopting mobile learning (Abu-Al-Aish & Love, 2013). Cheng, Hwang, Wu, Shadiev, & Xie (2010) suggest being creative and playful with their devices appeals to students, and has been found in turn, is beneficial to their learning.

On the other hand, there are pedagogical drawbacks in allowing students full rein of their devices in class (Park, 2011). For instance, mobile technology can distract students whose attention has the tendency to wander from class activities. Consequently, devices may interrupt some students' ability to concentrate fully on lessons (Park, 2011).

2.3.2 Student Identity

It is becoming increasingly rare to see young people without a mobile device on their person. Gikas and Grant (2013) point out that an important factor of smartphone ownership is that students' identities and their devices seem to morph together, in that, students see their devices as extensions of themselves (Traxler, 2010; Viberg & Gronlund, 2013). Kennedy (2014) asserts that mobile phones have become a continuum of a young person's attachment to the world, and therefore use in the classroom; it is important to students that the classroom be a space in which they can be themselves.

Apart from the personal identity that mobile phones provide, other significant factors are not only their convenience, mobility and usability, but their affordability (compared with other kinds of technology) and availability around the globe.

Indeed, it has become important to young people to be part of the global digital world. According to Saran, Cagiltay, and Seferoglu (2008), mobile phones are more widespread and exceed personal computer ownership throughout the world; they highlight the point that the majority of students in developing countries do not own a computer, but most possess a mobile phone. Hence, the importance of the place mobile phones occupy in everyday life, particularly for the young.

2.3.3 Learning with Technology

A study conducted by Steel and Levy (2013) charted language students and their evolving uses of technologies over the five year period from 2006 to 2011. They found that over half the students that were surveyed used online dictionaries, translators, YouTube, social networking, phone applications, listening tools and language games to supplement and improve their language learning (Steel & Levy, 2013). Indeed, the list of resources is becoming increasingly abundant; however, a widespread function commonly used by native English speaking students and language learners is an online dictionary. Steel and Levy found that the electronic dictionary function available on mobile devices was particularly popular with students because of its usefulness and functional ease. Further to this, they report that their investigation revealed that students tended to use their own technologies rather than tools provided by universities. Consequently and increasingly, students prefer to upload dictionary applications onto their devices rather than use the conventional printed book. The only drawback is that these apps rely on being connected to the Internet so there may be occasions when it is not possible to access an online dictionary.

In addition to the myriad of digital functionalities available to students, a new initiative that has evolved in the classroom and employs mobile devices is the use of the camera function. Increasingly students take photographs of whiteboard

notes, Power Point presentations and handouts. This practice points to a replacement in the way that students take notes in class, and moves toward storing notes electronically rather than on paper.

2.3.4 Institutional Use

Some institutions are capitalising on the student connection with mobile devices and are providing students with an application giving instructional information about their campus. At Anadolu University in Turkey, one of the biggest universities in the world with a student population of nearly three million, a mobile campus application with institutional information such as timetables, maps, resources, services, links and logistical information, was released to students in 2012 and was reported to be a successful initiative (Yilmazel & Ekin, 2015).

2.4 Teacher Perspectives of Mobile Technology

Although assimilating mobile technology into education has sometimes been intermittent and resisted in the past, increasingly teachers are realising the importance of incorporating this technology into a diverse range of learning situations (Kukulska-Hulme & Shield, 2008). Indeed, it seems inconceivable that mobile devices will not be embraced into higher education just as they have been enveloped into all facets of modern lifestyle (Viberg & Gronlund, 2012). The success of mobile technology's assimilation is largely dependent on teachers' willingness to connect, trial, persist and measure mobile technology's success as a teaching technique and tool. More importantly, teachers' perspectives around using mobile technology as an implement for learning can have a powerful impact on students' potential success around its use.

Kennedy (2014) reported that although interviews with university teachers revealed they were reasonably positive about the use of mobile technology and

seeking ways to use it, in reality it was only used on occasion. According to Brown (2016), the factors influencing university teachers' ability to adopt and use online tools in face-to-face instruction are: teachers' pedagogical beliefs, lack of technological ability, workload commitments, the campus environment, relationships with students, and the availability of professional development. Similarly, a study conducted in the United States by Davidson, Richardson, and Jones (2014) about teachers' objective views and stated acceptance of implementing digital technology as a pedagogical tool, they found that in general teachers rarely used technology in this way, in spite of its potential for efficiency and time saving. The results of their study revealed similar factors to those identified by Brown (2016): insufficient access to equipment, limited experience, shortcomings in problem solving small technical issues, and lack of training. Ertmer, Ottenbreit-Leftwich, and York (2006-2007) categorise the above reasons as extrinsic barriers, while they cite intrinsic barriers as personal beliefs, historical technological success and failures, and lack of self-belief. In contrast they state that all of the above factors can in some cases work in the inverse to this and be considered extrinsic and intrinsic enablers for some teachers (Ertmer et al., 2006-2007); that is, the same factors can enable some teachers to learn, adopt and accomplish praiseworthy outcomes with technology for their students. Their research concluded that intrinsic elements had a more powerful effect on teachers' decisions around using mobile technology and that, in spite of the apparent obstacles; many teachers successfully incorporate digital technology into their teaching.

All research considered it seems that most researchers imply that over time teachers will progressively encompass mobile devices and digital technology into curriculum design, classroom management, instruction and learning opportunities.

Some researchers forecast that this approach will become the new model for teaching.

2.4.1 Sending Messages and Social Networking

Research has investigated the various technological affordances that teachers have applied in their teaching practices. One study suggests sending short messages - whether through social networking, texting or applications such as Viber or WhatsApp - has significant potential for enhancing teaching and learning (Lu, 2008). According to Lu (2008), language students who were sent short messages containing new target vocabulary by their teachers, were able to recognise more lexical items than their counterparts who had received the same information printed on paper even when it was more detailed. Further to this, Huang, Huang, Huang, and Lin (2012) claim that supplying visual information such as words, pictures and videos with these messages can enhance students learning. In addition, Hu (2013) states that students feel more in control of their learning when they access messages at their own convenience, as opposed to formal learning in the classroom, and that they are more stimulated by the experience (Katz & Yablon, 2011; Hu, 2013).

With regard to social networking, researchers have investigated the use of these sites as a tool for learning in universities. In a study conducted with trainee teachers in an institute in Hong Kong, WhatsApp was used to distribute instructional resources and activities outside class time to enhance conventional face-to-face learning (So, 2016), and were able to communicate back with a sense of immediacy. According to So (2010), sites such as WhatsApp, have the aptitude to enhance educational situations by taking advantage of the ubiquitous essence of smartphones (Eid & Al-Jabri, 2016). Veletsianos and Kimmons (2016) investigated how both university professors and postgraduate students utilised

Twitter for learning, and found there was a variance in how each group used it, which made success difficult to measure. Lupton (2014) conducted an online survey amongst academics to explore how they used social media. Rambe and Bere (2013) point out that social-networking sites (or mobile instant messaging) are one of the most under-utilised functions of cell phones for educational purposes in universities. At the same time, Kukulska-Hulme (2012) asserts that tertiary education must make use of social networking and social media, as its popularity must be harnessed.

2.4.2 Online Communities

Increasingly, teachers are using weblogs and online journals as a means of writing and reflecting for students, and also, nurturing online learning communities. In one study, Lee and Bonk (2015) focussed on the relationships that developed between students who wrote reflections in a weekly online blog. They found that a foundation of collaboration and support grew amongst the students, and overall their general gratification and motivation towards the online learning platform increased greatly and their sense of community grew. In similar studies, Dickey (2004) and Khoo & Cowie (2011) both evaluated online learning communities and showed that participants gained a stronger sense of community, as they could converse with their peers when and where they pleased.

2.4.3 The Distractive Nature of Mobile Technology

As much as educators recognise the potential opportunities of using mobile technology, there is also a concern or perception about the disruptive or distractive nature of these devices. There is a small amount of research available about the distracting influence of mobile devices on students. A study conducted in two Nigerian universities probed into the relationship between students'

academic results and their mobile phone behaviour (Olufadi, 2015). Olufadi reported that data was collected about students' behaviour around being addicted or distracted, their level of dependence, how much they multitasked, the time spent phoning and using social networks, and students' perceptions of their behaviour. The study found that the more a student multitasked with a device during a class or completing homework, the more it impaired their capacity to learn effectively thus affecting their performance academically. Moreover, Olufadi concluded that phone addiction leads to a higher level of multitasking, which in turn, leads to further distractions and less learning. In a similar study conducted in the United States, Gikas and Grant (2013) report that students acknowledged that one of the disadvantages of mobile devices was that they were distracted by texting and social media; however, they also note that older students at one of the universities maintained that they could answer a text and return to work immediately without being distracted. This would indicate that mature students report that they are more easily able to control the disruptive nature of mobile phones.

2.4.4 The Advantages and Disadvantages of Mobile technology

According to Gikas and Grant's (2013) study, which was conducted in three universities in the United States and investigated learning and teaching outcomes when mobile devices were used, about 70 per cent of students who participated claimed that devices were imperative to their academic success and that they used them for scholarly pursuits. Students cited the advantages of using mobile technology for learning as; being able to access information in a timely fashion; the ability to constantly communicate and collaborate with groups; and to pursue both a diverse range of ways to learn and situated learning (Gikas & Grant, 2013). Hsu (2012) reported that other advantageous features of mobile devices included

their practicalities such as their small size, light weight, ability to be easily carried, relatively low cost, and provision for flexible use.

In comparison, some disadvantages were also recognised, such as; typing was clumsy on the small keyboards; technical issues were challenging at times; sometimes devices could not be connected to the Internet; and as mentioned above, invariably students were distracted (Gikas & Grant, 2013). Cheon, Lee, Crooks, and Song (2012) suggest other limitations that should be pondered are: the user's technical ability; their psychological constraints, for instance how readily does a person adopt or change their habits; and how easily a student is distracted.

2.5 Conclusion

The literature review gave an overview of how mobile devices may contribute to learning as culturally constructed artefacts, referring to Vygotsky's Constructivist Learning Theory (Vygotsky, 1978). Drawing on published research, this chapter reveals that teachers have the potential to act as experts for mediating learning with these tools, which includes communities of learners, to assist students in constructing their own learning in a meaningful way.

Furthermore, the literature review revealed the numerous affordances that have been trialled and researched with teachers and students. This in itself unravelled a recurring, somewhat unspoken theme, which was that the educational environment was constantly changing, both in terms of the technology itself and then the need to stay abreast of the perpetually evolving affordances. Challenges posed to teachers as they try to come to terms with these ongoing changes in 21st Century classrooms were also reviewed.

The chapter also considered research and commentaries focussed on how the new outside world of cyber-space has challenged the traditional classroom environment and how teachers can no longer rely on the physical limitations that the four walls of a classroom once offered for regulating students' behaviour. Likewise, the literature revealed the different perspectives that educators and young people have toward the digital superhighway forever present in modern life, and constantly influencing educational settings.

Finally, the review identified that gaps do exist about the expectations that students have for teachers, and inversely what teachers know of students, with regard to their management of devices and their likelihood of being distracted by them. A further issue is how stakeholders deal with and manage the perpetually changing digital platform that exists in the tertiary education environment. From these gaps the following research questions evolved which will be addressed in this study: What are students' and teachers' perceptions of the appropriate use of technology with university preparation classes? How does the presence of mobile technology influence the classroom environment? What do students and teachers believe to be their respective roles in the regulation of the use of mobile technology?

Chapter Three

Methodology

3.1 The Research Setting

The research took place at the University Preparation Centre at a university situated in New Zealand. The students who participated in the research were either studying in the English for Speakers of Other Languages (ESOL) Programme, the English for Academic Purposes (EAP) Programme, or predominantly domestic students studying in university preparation courses. At the time of the research there were around 150 students enrolled in the programmes from a variety of ethnic backgrounds and language abilities. A selection of these students were invited to participate in the research, including native speakers undertaking university preparation studies. The majority of the cohort was focussed on eventually completing academic studies when their English and academic skills were at a competent level.

3.2 The Research Design

To begin with the aim of the research was to learn about students' and teachers' perceptions around the use of mobile technology; in particular, to assess if there was any divergence between each groups' expectations of the use of mobile technology as a tool in the learning environment. Over several years I heard

colleagues' make ongoing reference to their view that students are always distracted by mobile devices. I was sceptical about this as I have observed them on many occasions using mobile technology effectively as a learning tool. Given this, and assuming that each individual's perceptions are unique and difficult to quantify, it seemed important to use qualitative research to ensure that the data was rich enough to gain meaningful and authentic results (Creswell, 2015). At the same time, quantitative research seemed necessary to measure some of the frequencies around the behaviours and beliefs that persist with mobile technology. I wanted to enquire into and measure this behaviour and gauge if 'the myths' indicated by the teachers' beliefs had validity or not.

Therefore, a mixed methodology approach was decided to gain a more comprehensive viewpoint and understanding of the research issues (Creswell, 2014; Mackey & Gass, 2015; Mackey & Gass, 2011). This mixed methods research evolved into what Creswell (2014, p. 15) describes as "Explanatory Sequential Mixed Methods". Firstly, the quantitative research was conducted and analysed, and then the information that was gleaned was used as a basis for the qualitative research design.

The research design (see Figure 1) began by surveying students to gain some valuable background information about their past behaviours, beliefs and experiences. These insights were also useful as a basis to formulate questions to use during the student focus groups (Liamputtong, 2011). Then at the end of the focus groups, students were given a partially written teacher scenario, where students were prompted with the beginnings of sentences and required to complete the sentences with their own ideas of an ideal teacher (see Appendix A). From the perspectives of the students who engaged in the focus groups and their opinions of an ideal teacher, I devised some questions to ask teachers during a focus group about their views on the use of mobile technology in the teaching

environment. At the completion of the discussion teachers were shown a profile of an ideal teacher taken from the students' ideal teacher scenarios, and asked to comment. Each of the instruments that I used will be described in more detail in the next section.

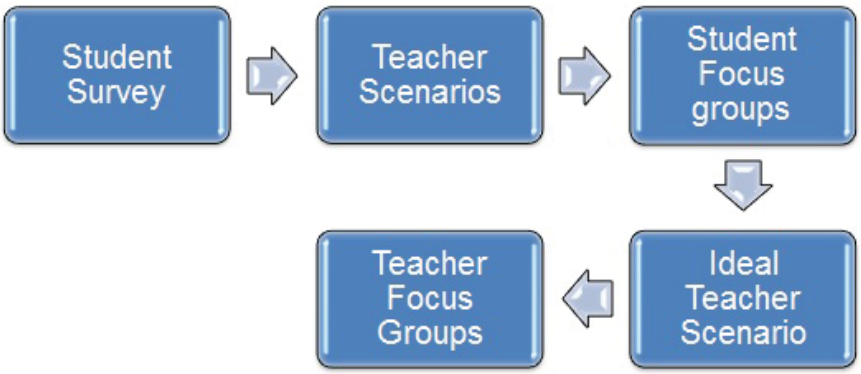


Figure 1 The Research Design

3.2.1 The Questionnaire

Although the questionnaire (see Appendix B) was primarily quantitative research with closed ended questions, the opportunity to include some open ended questions to gain richer data was taken (Arksey & Knight, 1999). This was an opening to capture students' ideas in their own words without restricting them to pre-set answers (Heigham & Croker, 2009). The process of writing the questionnaire began by jotting down some mind maps as a method of brainstorming ideas. For this I drew upon the extensive reading that I have done on this topic, my own experiences as an English language teacher in a university, a member of a teaching team, a post graduate student, and a mother of young adult university students. Using this technique and my knowledge the questions were written. I divided them into sections headed with a statement in the second person so that I could speak directly to the participant with, "I'm interested in…: …

your past, … how you use mobile technology, … your beliefs around mobile technology in class, … your beliefs about mobile technology and teaching, and … you." For the latter part, I framed questions around teaching rather than teachers in order to avoid potentially offending any teachers who may read the questionnaire. I began the questionnaire with some easier questions for students to process and answer such as simple closed ended questions, before including the more demanding questions for the students to complete.

In terms of the purposes for the categories, the first and last sections were designed to capture demographic information about the students (questions 1-5 and 24-27). In addition to this, I wanted to determine if the students had encountered any constraints around using mobile technology in their previous educational setting as this may have influenced their attitude to using mobile devices in class. Question 5 was presented as a specific open ended question (Heigham & Croker, 2009) asking them to write about what rules they had experienced. The next section about 'how you use mobile technology' (questions 6-9) was concerned with investigating students' behaviour and determining what they used their devices for. Question 8, an open ended response allowed students to write about what they used mobile technology for in class, in respect to personal use. More significantly, I was interested in the frequency for each usage. Ultimately, I wanted to share this knowledge with other teachers in order to gain a more accurate understanding of how often students' value personal use of their devices in class. The following category was a set of questions enquiring about students' attitudes towards their own practices around mobile technology in class (questions 11-17), for example, did they use devices when they got bored, and were they distracted when other students used mobile technology. The next section asked students about what they thought about teachers' behaviour and attitudes around the use of mobile technology (questions 18-20), and what their

expectations of teachers were. The final section consisted of three open ended questions (questions 21-23) inviting students to give their opinion of mobile technology as a tool. The questionnaire can be viewed in the appendices at the back of this document (see Appendix B).

3.2.2 The Student Focus Groups

In order to be able to more fully interpret and understand the quantitative data from the questionnaire, student focus groups' were chosen as an instrument. Each focus group was one hour long. According to Kitzinger (1995) focus groups enable participants to engage in discussion and trigger responses and comments from each other in a way that may not be possible in a one-to-one interview (Kitzinger, 1995). Also, in a situation of asymmetry such as a native English speaking teacher researching non-native English speaking students, the potential peer support in a group situation can be valuable in redressing any imbalance, thus providing a more fulfilling experience for the students and researcher.

To develop the focus group questions, I analysed the findings from the section of the questionnaire that inquired into students' thoughts about teachers' behaviours and attitudes. In particular, I wanted to use the focus group to examine students' attitudes about teachers' practices and what they expected from them. The teacher scenarios were a vital tool in preparing students for the discussion.

3.2.2.1 The Teacher Scenarios

Four scenarios describing teacher behaviours and attitudes towards mobile technology were written as a prompt for students to read prior to the focus groups, so they were ready to comment on them during the forum that ensued. These scenario descriptions were largely based on my own observations of colleagues and their behaviour and attitudes around the topic of mobile technology.

Interestingly, there were a few teachers who regularly used mobile technology and others who were interested in using it but lacked the confidence and knowledge. There were also teachers who seemed to be opposed to students using mobile devices; therefore, overall, there were mixed feelings toward it. Using this as a platform, I created a scenario of a teacher (Peter) who refused to acknowledge the existence of mobile technology, but who was an extremely proficient teacher. The rationale for this was to find out whether students would be concerned if mobile devices were prohibited in the classroom, if the teacher was a very effective educator. The other three scenarios (Matthew, Jane and Sally) were of teachers of varying degrees of knowledge and use of mobile technology; however, they differed in the amount of control they had over students using mobile devices in the learning environment. The impetus for the latter came from the results from the questionnaire where a lot of the students expected the teacher to take control and stop students from using mobile technology for personal use in class. (see Figure 2)

Prior to the focus group meetings the participants were given a letter asking them to read the four teacher scenarios and to think about which teacher(s) they would prefer to work with. Also, in order to obtain richer data, they were asked to underline qualities that they liked in each teacher scenario and circle aspects that they did not like. This approach to the qualitative research was in line with constructivist theory (Creswell 2014), reflecting interest in discovering the complexity of the participants' interpretations of their own experiences of mobile technology in the classroom.

I decided to begin the focus group discussion by asking the students which teacher(s) from the scenarios they would prefer to work with and why. I then asked a further five open ended questions I had prepared, in keeping with semi-

structured focus group guidelines (Dornyei, 2007). Also, I had written another four questions in case it was necessary to use them (see Appendix C).

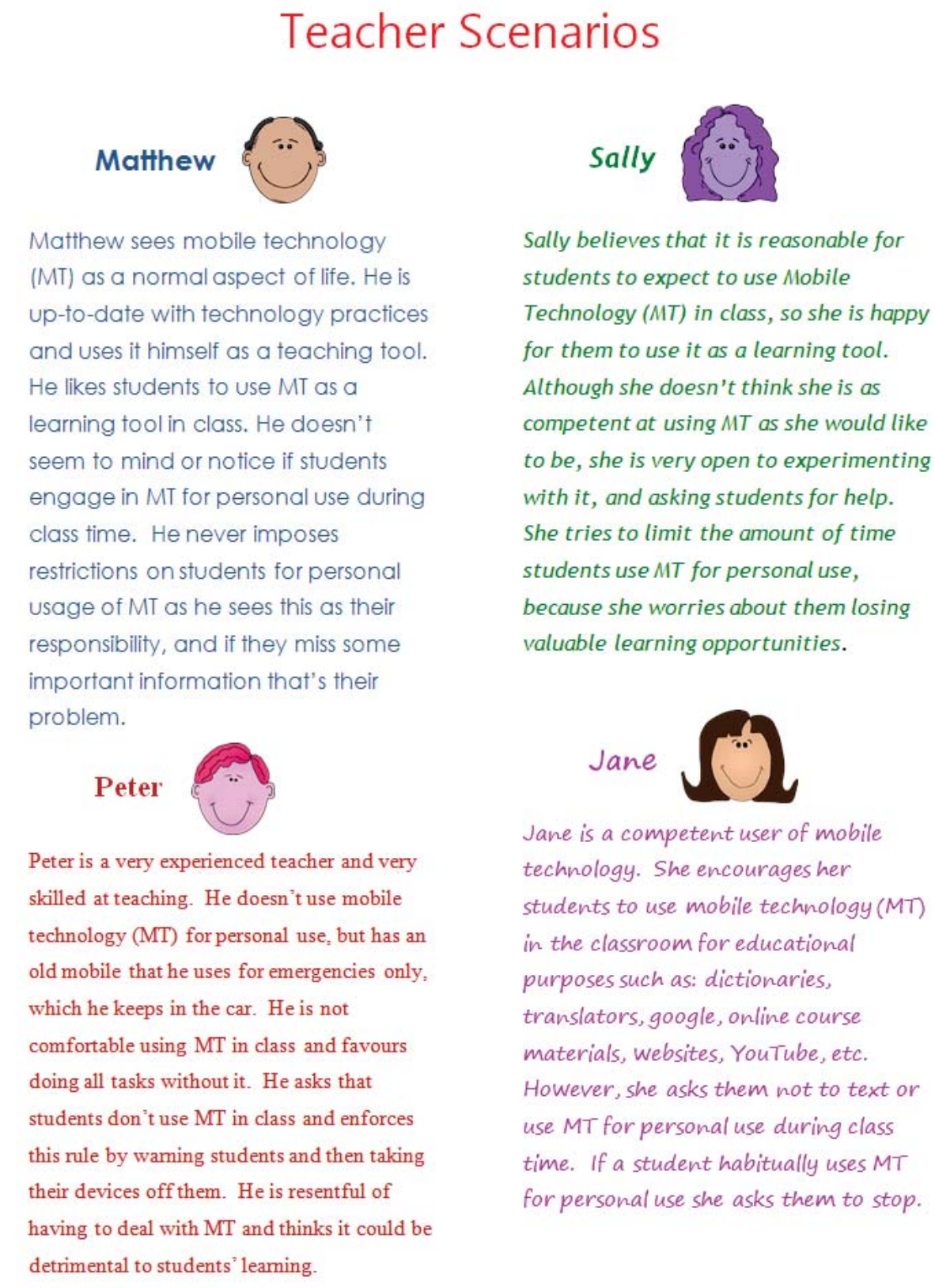


Figure 2 *Four Teacher Scenarios*

3.2.2.2 Ideal Teacher Scenario

At the end of the student focus group students were given a fill-in item to finish before they left (Heigham & Croker, 2009). This was in the form of three unfinished sentences to complete a description of 'My Ideal Teacher – Melissa'. The advantage of choosing this open response item was that it aided each participant in focussing on a specifically detailed issue and the question could be answered promptly (Heigham & Croker, 2009) (see Appendix A).

3.2.3 The Teacher Focus Groups

The basis for the questions in the teacher focus groups came from the exploration of the students' perspectives that were revealed in the questionnaire, student focus groups, their reaction to the teacher scenarios and the ideal teacher profile that they wrote. Thus, the focus of the questions revealed students' attitudes toward teachers' habits and philosophies about mobile technology. Given that some of the information might be threatening to teachers, I was mindful about the way I framed each question, in order not to create negative feelings. For instance, I wanted to enquire into their own level of expertise around mobile technology and if they were sympathetic to students making an occasional personal text during lessons; also, how they felt about students wasting learning opportunities, and then expecting teachers to take responsibility and care about the potential loss to students. Six questions were developed and written from a student's perspective of their expectations of their classroom experience (see Appendix D).

3.2.4 Pilots

Once the first draft for the questionnaire was at a workable stage it was trialled with two university students: an engineer who had just completed four years of

study and a fine arts student who was in her second year of university. The engineer's comments helped me to determine that I needed to refer more generically to mobile technology for some of the questions rather than just referring to behaviours around texting. In other words, students may partake in more digital activities than just texting and only asking about texting would limit the responses they gave for some questions. His opinion was that, "These days it is no longer distracting if other students' text. It used to be before everyone used smartphones as previous phones made a tapping noise". Furthermore, he personally was not bothered by texting in class, but found it very distracting when another student was watching a video on a laptop as the movement and light disturbed his peripheral vision. He also suggested that I needed a question asking students what they do when they get bored in class. From this idea I developed Questions 12 and 13 in the questionnaire.

The Fine Arts student pointed out that for the questions where I asked students how often they did something, I should include 'none' as a category. She also suggested that for question 17 I add the following option for students to choose: "I think it is rude to use mobile technology for personal use in class." This was a pertinent point as the question appeared in the section about students' personal beliefs about using mobile technology in class and the options I had provided did not recognise that some people may find this behaviour rude.

A trial was also conducted for the Student Focus Groups and Teacher Scenarios. The trial took place with a small group of second language speakers at the end of a formal lesson for a university preparation course, for which I was the teacher. The students kindly agreed to take part and understood that it was a trial for my research. I gave them a limited amount of context and background and merely stated that I was interested in their opinions. Firstly, I wanted to gauge if the questions that I asked were understandable to non-native English language

speakers and secondly, open enough to provoke feedback and discussion from the students. I discovered that the questions were easily understood by the students. In addition, I found that I had to be vigilant at listening and intuitive about directing questions to enlist comments from the less dominant students. I did not foresee any problems with the questions I had developed and decided to keep the format. Then I showed them the four Teacher Scenarios. The group discussed the merits of the scenarios, which provoked lively discussion and I felt confident of their value for the research.

3.3 Ethical Considerations

Applying for permission from Human Ethics Committee of Massey University was a straightforward process as my methodology design was considered low risk. This was largely due to the size of the student roll in the University Preparation Centre, in that there were enough students to invite to participate in the survey and focus groups without including those students that I taught myself. Therefore, there was no risk of compromising and influencing students' opinions because they knew me as a teacher.

I sought approval from the Director of the University Preparation Centre and when that was granted I started my research. The student participants were invited to take part in the research, and volunteers were given an information sheet about the purpose of the study, their rights as participants and the measures I would use to maintain their confidentiality (see Appendix E). In addition, information letters were also given to the students and teachers who were involved in focus groups prior to their involvement (see Appendix F) and they were asked to sign a consent form (see Appendix G).

3.4 The Research Participants

All the participants were students and teachers at the University Preparation Centre. The selection of students was very much governed by my teaching situation at the time as it was imperative to maintain the low risk consent. Therefore, I had to exclude a proportion of the potential student cohort from the study because I was teaching them or I had taught them in the previous semester. In regard to the teachers, they were a selection of colleagues from the University Preparation Centre.

3.4.1 The Student Characteristics

In order to incorporate enough students into the survey, I needed to invite students from the both the ESOL and EAP programmes. This gave me a student pool of international students and some native English speakers who were learning English for Academic Purposes to prepare them for future university study. In total I recruited 62 participants. I invited 21 English Language students from the Upper Intermediate and Advanced level classes in the ESOL programme. I chose these higher level students after discussion with the Academic Coordinator of the ESOL programme as it was felt that their English competency was at a high enough level to participate in the research. Another 16 respondents were studying EAP, and were non-native English language speakers who had gained entry to the course with an average IELTS score of at least 5.5 (with no band lower than 5), and were proficient enough to study academic English. The remaining 25 students were studying a Business Studies elective as part of an EAP course, which included native English speakers. These students were attending this preparatory course for a variety of reasons: they included those who had failed University Entrance exams at school by one or two credits, mature students embarking on study, and international students preparing for

academic study. All of the courses were offered and taught at the University Preparation Centre.

The characteristics of the student cohort covered a diverse range of languages, cultures and life experiences with the group originating from 11 countries, including New Zealand. There was a range of 16 languages spoken by the students, and six spoke two or more languages other than English. Also, included in the group were 10 native English speakers. The age of the participants ranged from 17 to 47 with most of the students being in their teens and twenties. Included in the pool were school leavers, under graduates, post graduates and people who had been working in their respective professions.

3.4.2 The Teacher Characteristics

All of the teachers who participated in the two teacher focus groups were colleagues of mine from the University Preparation Centre. Initially, I had thought that I would put teachers from across the programmes into three groups according to their attitudes toward mobile technology; for instance, those who liked mobile technology and used it, those who liked it but lacked confidence in using it, and those who disliked it and saw it as a negative influence. Then I considered that a more heterogeneous sample composed of people with differing attitudes (Dornyei, 2007) may provide more abundant data. Interestingly, I had noticed that people's opinions were beginning to change about mobile technology, and any delineations that had been obvious when I began thinking about the research had started to fade. In the end, I decided to define the groups homogeneously (Dornyei, 2007) by teaching programmes and only have two groups. The rationale behind this was that the ESOL programme consisted of students who were all English language learners, and generally the teaching was more tailored to individuals' needs and the classroom environment was more nurturing; whereas, the students

who were studying academic English were more competent linguistically and they were being prepared to learn in an academic setting, so in general, the teaching approach assumed that a student was more independent. Therefore, one focus group was conducted with five ESOL teachers and their co-ordinator, and the other group with five EAP programme teachers and their co-ordinator.

3.5 The Research Procedures

The schedule for the research was carefully planned to consider all the participants' teaching and learning constraints.

3.5.1 The Questionnaire

My research began with the collection of data from the survey questionnaire. This took thoughtful planning to implement as I was bound by my own teaching schedule and the students' timetable. I asked the five teachers of the classes involved to invite the students to participate in my research, and present the information sheet that I had prepared outlining the process to the students. Then a few days after the letter was issued I conducted the survey in each class, at a time that was suitable for each teacher. The students were happy to engage and give me their feedback.

3.5.2 The Student Focus Groups

Unfortunately, the timing of the focus groups did not coincide with the semester system, and given that the university preparation courses are taught during this time the domestic students were on semester break, and therefore, not available to take part in the forum. Nonetheless, the ESOL and EAP programmes were still in progress, as they follow a different timetable, and those students were still present on campus. I contacted students who had indicated their willingness to

be involved at the end of the questionnaire (see Appendix B). The first group comprised four of the ESOL students who participated in the survey (five students were invited but one student sent an apology prior to meeting that she was unable to come). The second focus group was made up of six students from the EAP course, who had also completed the survey. A few days before the allotted time I sent out a copy of the four teacher scenarios along with an information sheet detailing what students could do before their student focus group meeting. Both of the sessions were conducted in classrooms that the participants used for their convenience and timeliness. The seating arrangements were around a table as the students needed a place to put their teacher scenarios. Drinks and confectionary were offered to them as the meetings were after a teaching session and I was aware that they may need to feel refreshed. I began each session by welcoming the students, establishing the purpose of my research and explaining the terms of confidentiality (Barbour, 2007).

The four students who made up the first group were from four different ethnicities, and varied in age from a teenager to a mature student in her forties. They provided some thoughtful insights about the teacher scenario that they preferred. At times, I found it disconcerting that the group looked to me for a turn to speak rather than spontaneously discussing their thoughts with each other. This made my role as moderator quite challenging and I quickly gleaned that I would have to facilitate the discussion more by prompting people to speak. However, the students seemed comfortable with this and revealed their ideas.

The second group consisted of five students in their twenties and one in their early thirties: one Arab student and five Chinese. As with the first group I adopted a more controlling role to ensure that the quieter students voiced their opinions. Nevertheless, the discussion was productive.

From the students' perceptions about the teacher scenarios, I found that 'the ideal teacher scenario' was surprisingly easy for me to write as the information that the ten students had completed for the 'fill in item' (Heigham & Croker, 2009) was relatively straightforward to analyse and to identify emergent themes.

3.5.3 The Teacher Focus Groups

Quite fortuitously, the teacher focus groups coincided with the semester break. Therefore, most of the teaching staff were available for the forums. In fact, most teachers were keen to be involved, as the subject of mobile technology has become topical and can significantly affect the classroom environment. I decided to capitalise on the enthusiasm of my colleagues and invited six people to each meeting. The congeniality and comfort displayed by staff toward each other made the atmosphere relaxed and conducive for people to discuss their points of view. Prior to the sessions, I was apprehensive that the teachers may feel judged by my line of enquiry as thus far it had encapsulated the students' vantage point about mobile technology, but as explained in 3.3.5 the questions were carefully worded so as not to offend. In contrast to the student focus groups my role soon faded into the background as colleagues freely expressed their opinions, anecdotes, experiences and aspirations. At the end of the each session I showed the groups the 'Ideal Teacher Scenario'. This did not seem to evoke much response from the participants.

Originally, I had considered giving the 'Ideal Teacher Scenario' to the teachers prior to their focus groups to emulate the practice of providing a prompt for thinking that I had used with the students. However, I reflected on the teachers themselves and believed that they were already quite reflective about mobile technology and did not require a spur. I gave the Ideal Teacher Scenario to the

teachers at the end of the forum with the rationale that I wanted them to be aware of what the students had indicated and then gain their responses to this.

3.6 Data Analysis

3.6.1 Quantitative Research

As stated earlier, the reasons for collecting quantitative data were to find out general information and demographics about the student sample, as well as the frequencies around their behaviour, attitudes and expectations of teachers. The data amassed from the quantitative portion of the questionnaire was entered into a statistics programme (IBM SPSS Statistics 23), and statistical information such as frequency reports, graphs and tables were produced. According to Dornyei (2007, p. 198), "it makes sense to adopt this programme … the software package most commonly used in applied linguistics".

3.6.2 Qualitative Research

Coffey and Atkinson (1996) and Dornyei (2007) point out that analysing qualitative data is notoriously divergent. Being aware of this and somewhat daunted by the task of analysing the data I had collected I set about finding commonalities. Firstly, I spent many hours transcribing the recordings word for word from the four focus groups, which enabled me to become very familiar with and close to the data. Then I went about deciphering the hours of transcribed data by colour coding, and cutting and pasting respondents' comments into themes. Some of the themes were pre-existent because they related to the questions that I asked; while other themes emerged as I revisited and re-read the transcripts and found relationships with the various responses. From these themes I attempted to summarise the information so that I had smaller chunks to work with.

I found as the research progressed my analysis of the qualitative data evolved into an iterative process, where I found that the subsequent data collection sent me back re-examining and re-analysing the previous data, which led to more data collection and greater insights (Dornyei, 2007). This was because one stage relied on the results of the previous stage for gathering valuable insights to design the next instrument: Questionnaire – Teacher Scenarios – Student Focus Groups – Ideal Teacher Scenario – Teacher Focus Groups.

3.7 Issues of trustworthiness and generalisability

Heigham & Croker (2009, p. 264) define trustworthiness as "a set of standards that demonstrates that a research study has been conducted competently and ethically". This study achieved this by using both qualitative and quantitative instruments to allow for triangulation of the data, and in order to investigate the complexity of the respondents' perceptions accurately (Arksey & Knight, 1999). Also, the process of triangulating the different methods of data collection (questionnaire, students and teacher focus groups, teacher scenarios) allowed for the information to be checked and verified.

This study does not assume that the information that was gained can be generalised about all students and teachers. However, participants were from 11 different countries, a range of ages and a variety of backgrounds, and after much analysis this study presents a likely outcome for those who participated. Furthermore, there were two methods by which people gave voice to their beliefs and practices: a questionnaire and focus groups. A transcript of each focus group was typed and meticulously studied to ensure that people's points of views were represented authentically. Information from the questionnaire provided a foundation for the teacher scenarios, which evolved from the author's prior

experience in the field of teaching and from the ideas collected from the student questionnaire, and these were checked as the research progressed.

Taking the above mentioned factors into account, data was collected and thoroughly analysed, so that the results could be presented as the most likely outcome.

Chapter Four

The Results

4.1 Introduction

This chapter contains the research findings. Given that the research followed an "Explanatory Sequential Mixed Methods Approach" (Creswell, 2014, p. 15) the findings will be presented according to instrument in the order that each one was implemented. This is because the data from each instrument was vital to the development of the next.

4.2 The Questionnaire

The questionnaire was an important instrument in determining some general information about the students' behaviour, habits, beliefs and attitudes around their use of mobile technology. I specifically wanted to capture some statistical data about how frequently respondents perceived that they indulged in texting and personal cyber activities during class, and glean if they were distracted from learning and what their beliefs around that were. In particular, I wanted to measure this and share my findings with my colleagues who were constantly trying to assess how much impact personal use of mobile devices had on students' learning.

As mentioned before the 62 respondents who completed the questionnaire came from 11 countries and spoke 16 different languages (see Figure 3). The students ranged from 17 years of age to 47 with 22 teenagers, 27 students in their twenties, 11 students in their thirties and two in their forties. The sample consisted of 27 females and 36 males.

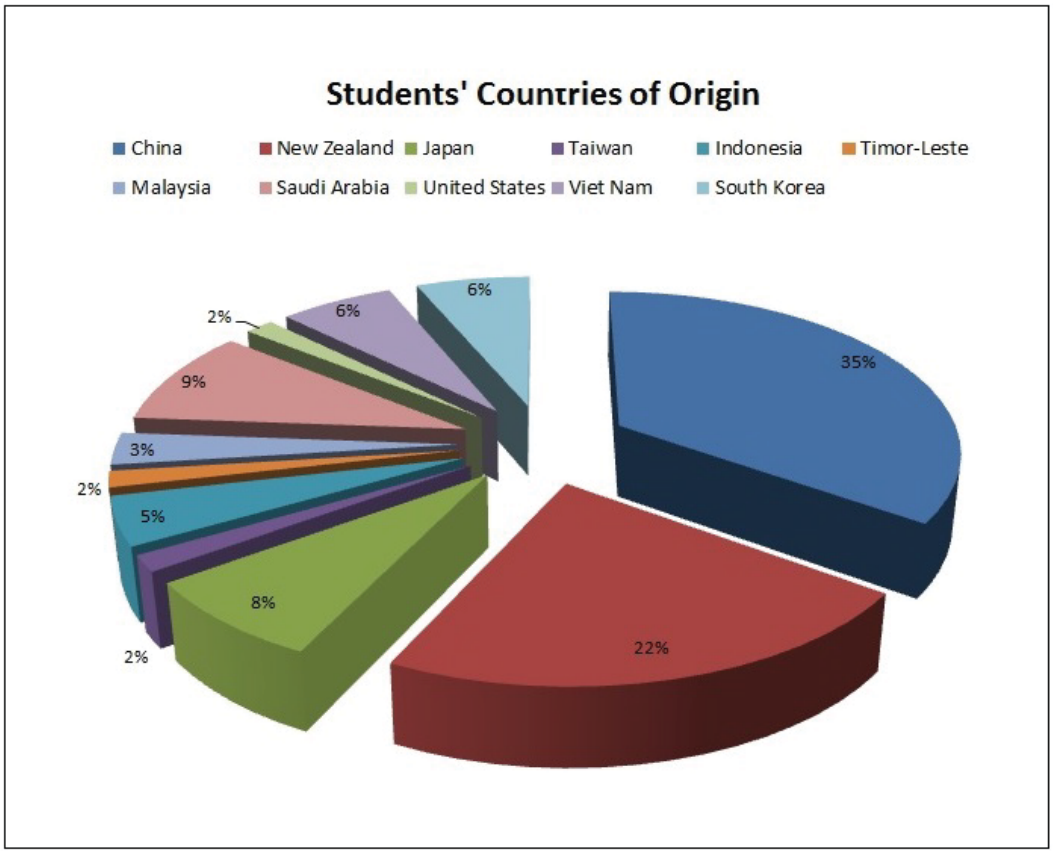


Figure 3 Students' Countries of Origin

4.2.1 Previous Educational Setting and Rules

An important aspect of inquiry in the questionnaire was establishing the students' previous educational setting and if, in fact, they had been required to comply with any rules around the use of mobile technology in that setting. I wanted to determine if they had been pre-conditioned to limitations about mobile technology or had been in the habit of using mobile devices whenever they pleased. The latter idea was another narrative that I had often heard expressed by the teaching

staff - that young people were used to using mobile technology in school and in their own country and that they had not learnt to control themselves.

In terms of their past educational situations, 22 students had come to the University Preparation Centre directly from high school and the remaining 40 students had been studying at a university prior to their studies at the Centre. From this sample 23 students reported that they had no rules imposed on them, while 39 students stipulated that they had studied in an environment where there were rules around the use of mobile technology. Some common themes emerged about the rules (note, not all students answered Question five where they were asked to write about the rules): 15 high school students and four university students were prohibited from using mobile devices in class at all; 13 university students stated that they were not allowed to use devices for various personal uses; and nine university students claimed to have permission to use mobile technology for educational purposes. Further to this, students were asked if they used mobile technology in class, in spite of whether there were rules or not: 46 students said yes they did.

To sum up, the group was divided up almost equally between students who had experienced no limitations, students who were allowed to use mobile technology for educational purposes and those who were entirely excluded from using devices at all. High schools in general had stricter rules in class than tertiary institutions. Also, in spite of 66 per cent of the students being subjected to rules around mobile technology in the classroom, 74 per cent of them chose to use their mobile devices regardless. Therefore, the existence of rules did not guarantee compliance.

4.2.2 Student Behaviour

In order to acquire and analyse a snapshot of students' behaviour the respondents were asked to think back over the last week's classes and reflect about their mobile technology usage (Questions 6, 7, 8 & 9). Firstly, I needed to establish which devices the students used in class; the results showed that cell phones were prevalent with some students using more than one device (see Figure 4).

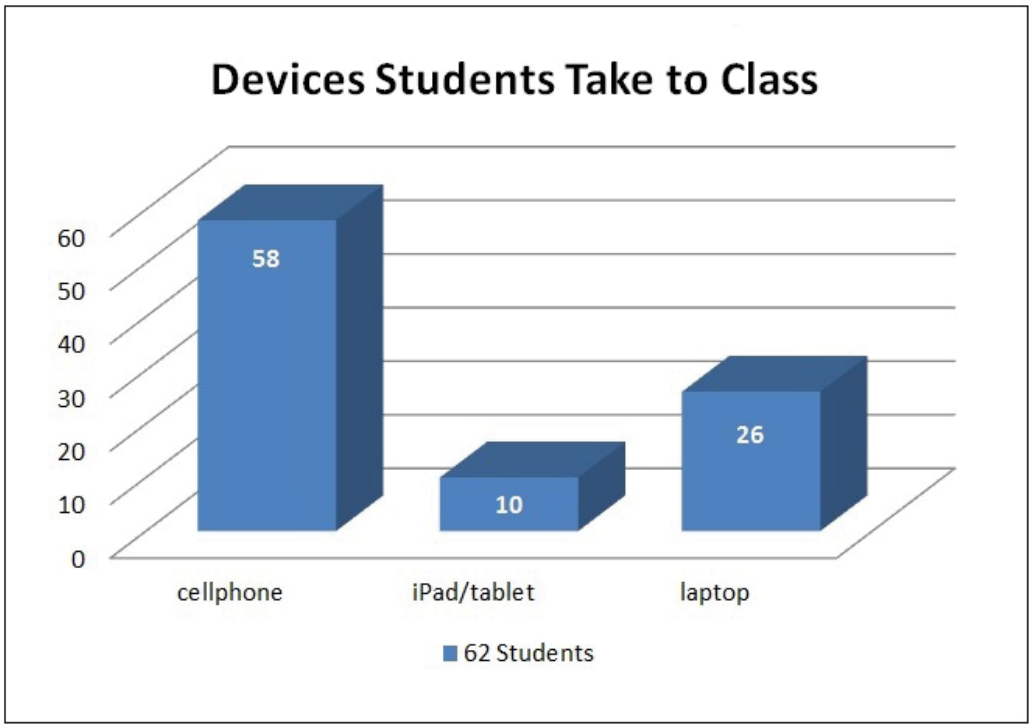


Figure 4 Student Survey Question 6. *Which mobile devices do you take with you to class?*

Next, the students were asked to record what functions they had used their mobile devices for over the last week (Question 7, Figure 5). Interestingly, several educational functions were used by most students, notably online dictionaries, viewing course material and using a translator. Although 35 students viewed a website, it is not known if this was for educational or personal reasons. In terms

of personal use there was a lot of activity with: 25 students sending texts, 22 using social media, 13 looking at or sending photographs, 12 watching YouTube, 11 using Instagram or Snapchat, 10 playing games, nine listening to music and one student shopping online. In addition, students were asked to identify the three main uses that were important to them. All in all, rankings revealed that using a dictionary was the most prevalent and preferred function, followed by viewing course material, then looking up websites. In terms of personal use, about a third of the students ranked texting and checking social media as an important function, but ranked them as their second or third choice. Overall, educational functions took precedence.

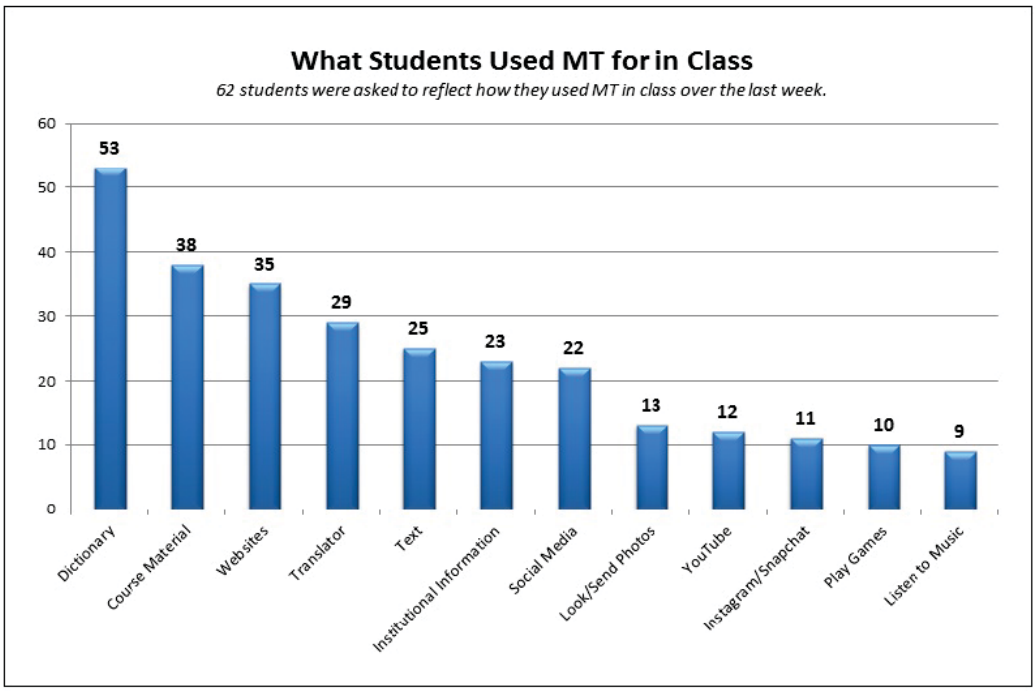


Figure 5 Student Survey Question 7. *What did you use mobile technology for in class?*

To gain a clearer impression of the frequency of personal digital behaviour the students were asked to 'think about yesterday in their classes and record the total number of times you engaged in certain tasks' (Question 9. Figure 6). The majority of students claimed that they did not engage in personal activities, but

those that did predominately took part in texting, social media, surfing the net and viewing images. Also, most of the participating students only indulged a few times in these activities with only a couple of students being regularly absent in cyberspace.

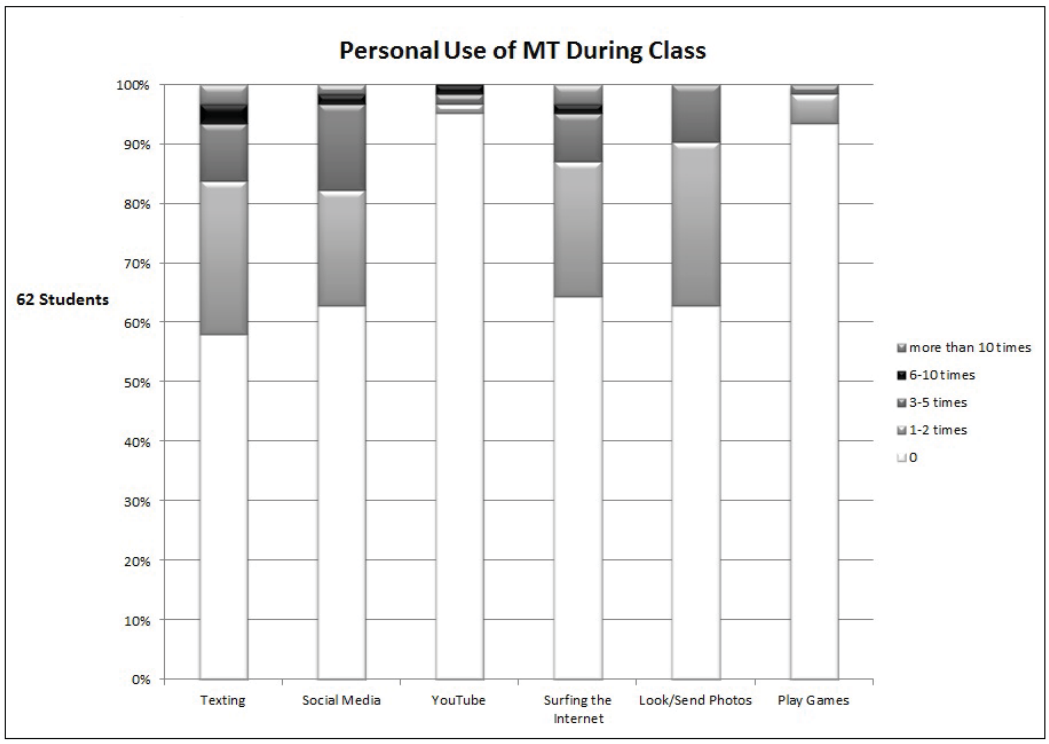


Figure 6 Student Survey Question 9. *Think about yesterday in your classes, what is the total number of times that you engaged in the following activities?*

4.2.3 Student Beliefs about Mobile Technology

As asserted in the research hypothesis, my intention was to find out if students' believed it was possible to use mobile technology in class for personal communication without being unduly distracted from the learning process. A set of questions (11-17) was given to respondents to explore their beliefs about using mobile technology in class. I wanted to discover their own views about whether they were distracted by texting or not. Of the 62 students, the majority indicated that they texted during class occasionally and they were not distracted, while a smaller group admitted they were distracted; however, only two students revealed

that they texted frequently and were often distracted (see Table 1). These results indicated that the majority of students believed they were not distracted by texting behaviour.

Table 1 Student Survey Question 11. *What are your practices around texting in class?*

Question 11	Frequency	Percent
I never text or answer texts.	13	21.0
I only text or answer a text occasionally, and it does not distract me.	36	58.1
I regularly look at my texts and respond as I can do this easily and quickly. Occasionally I'm distracted but that's OK.	11	17.7
I frequently text in class and often distracted. I know the gist but sometimes I'm confused so I ask other students.	2	3.2
Total	62	100

My enquiry extended to asking students what they do when they get bored in class. I wondered if they would consider boredom an acceptable reason to entertain themselves with mobile technology. Question 12 revealed that over half the respondents indulged in some personal online activity when they experienced boredom. These students were asked to answer question 13 and indicate how they thought this affected their behaviour and attitude (see Table 2). Interestingly, most students agreed that in spite of being mentally outside the classroom pursuing personal cyber activity, at the same time they could be present in the class and gain involvement when they felt they needed to; only a few students admitted that they became disconnected and distracted. Overall, the majority of students believed that when they were bored and played on their devices they could reconnect with the class at any time thereby maintaining a presence both in and outside the classroom simultaneously.

Table 2 Student Survey Question 13. *Describe your behaviour and attitude to being bored.*

Question 13	Frequency	Percent
Stay focussed in class & don't use MT	23	37.1
Start using MT, but aware of what is taught & can stop & get involved	32	51.6
Start using MT, but become disconnected & rely on classmates to catch up	6	9.7
Start using MT, I don't care if I miss learning opportunities or catch up	1	1.6
Total	62	100

Table 3 Student Survey Question 14. *Should texting be allowed in class?*

Question 14	Frequency	Percent
Texting should not be allowed in class, teacher should take control & stop it	10	16.1
Generally, texting should not be allowed, if students text it's their loss & responsibility to catch up	31	50.0
Texting should be allowed as long as it doesn't distract others	20	32.3
Students should be able to text as much as they like & it is not the teacher's concern	1	1.6
Total	62	100

All in all, the results revealed that most students only used mobile technology periodically and when they did use it were not distracted; whereas, the minority acknowledged they were sometimes distracted from learning and just a few students texted frequently and were often confused. In terms of students' attitude to being bored, over half the respondents used their mobile devices when they were bored and believed they were not necessarily distracted; in contrast, 10 per

cent of students were definitely distracted and the remaining 1.6 per cent simply did not care.

Next, students were called upon to consider their thoughts on whether texting should be allowed in class or not (question 14, see Table 3). About two thirds of the students believed that generally texting should be excluded from the class environment, while the other third thought it should be allowed as long as it was not distracting to others and one student claimed that students should text as much as they like.

After that, respondents were requested to consider other students' use of mobile technology around them and contemplate if they were ever distracted by others (Question 15). The majority of the cohort believed that they were not affected and were not bothered by others' cyber behaviour; however, a small group felt that if they were distracted they wanted the teacher to take control and stop the other students.

Question 16 (see Table 4) delved into students' beliefs about whether they should self-regulate how they use mobile technology in class. The origins for my line of investigation came from the historical debates and discussions held by the teaching staff at my workplace, where consensus was that students could not be trusted to do this. Overwhelmingly, 59 students out of a total of 62 thought they should be left to self-regulate.

The next question (17, see Table 5) challenged students to ponder how their use of mobile technology for personal use might affect their own learning. The data revealed that most of the respondents believed in self-regulation, and were able to gauge how they should self-regulate and could recognise their own level of distraction. In contrast, four students used it constantly and were distracted and felt comfortable with that.

Table 4 Student Survey Question 16. *Should students be left to self-regulate how they use technology in class*

Question 16	Frequency	Percent
Students should be left to self-regulate MT in class, including personal use even if it's distracting others	2	3.2
Students should be left to self-regulate MT in class as long as they are not distracting others	28	45.2
Students should only be able to use Mt for educational purposes	31	50.0
Student should not be able to use MT, even for educational purposes	1	1.6
Total	62	100

Table 5 Student Survey Question 17. *How much should teachers know about mobile technology?*

Question 17	Frequency	Percent
I think it's rude to use MT for personal use in class, so I never use it	10	16.1
I only use MT for personal use for emergencies, because I don't want to be distracted	19	30.6
I use MT for personal use sparingly, I don't allow it to distract me	25	40.3
I constantly use MT for personal use & it does distract me, but that's OK	4	6.5
I limit personal use of MT as I don't want to be distracted. Other students distract me when they use MT	3	4.8
It doesn't matter if I'm distracted a lot by MT	1	1.6
Total	62	100

4.2.4 Student Beliefs about Mobile Technology and Teaching

In order to understand students' experiences in a more meaningful way, I felt it was pertinent to ask them what their expectations of teachers were in this ever-changing digital world. Prior to this study my fear was that students may undergo a chasm of disconnectedness between them and teachers when it comes to technology. Indeed, if this is a reality, how important is this issue for students? In fact, do they place a value on teachers' digital ability and skills, and what relevance do they attribute to technology in the teaching environment?

To probe into this, the students were asked a set of questions regarding their beliefs about mobile technology and teaching. To begin with Question 18, which asked students to think about what ability a teacher should have in regard to mobile technology in class. The biggest proportion of students thought that teachers should have an awareness of mobile technology, and encourage and allow students to use it; however, it was not important if teachers used it themselves, but rather that the teacher was skilful at teaching. Additionally, students were asked to underline words or phrases within the options that best aligned with their beliefs. The findings from this exercise showed predominant identification with mobile technology being used as a teaching and learning tool, teachers at least having an awareness of mobile technology and allowing students to use it in class, but the most important consideration was that the teacher was good at teaching.

These insights gave countenance to the idea that teachers did not necessarily need to have expert technological ability and that a range of abilities, including very little, was acceptable to students. However, two thirds of the students expected teachers to have an awareness of mobile technology and allow students to use it as a learning tool.

Table 6 Student Survey Question 19. *Do you think a teacher should be up-to-date with MT?*

Question 19	Frequency	Percent
I prefer a teacher who is up-to-date about MT, uses it, & encourages students to use it	16	25.8
I don't mind if a teacher isn't up-to-date about MT, but like it if they are open to it and allow students to use it	21	33.9
I don't want a teacher who doesn't know about MT, use it or allow students to use it	1	1.6
I just want a teacher who is good at teaching it doesn't matter about MT	24	38.7
Total	62	100

Question 19 (Table 6) required students to be more specific about what they thought a teacher should know about mobile technology. Overall, two thirds of the students were happy with a teacher even if they had limited knowledge and use of mobile technology, while a third preferred a teacher who was abreast of mobile technology.

Lastly, students were asked to make a judgement about teachers who did not have an awareness of mobile technology, did not use it, and/or may be uncomfortable about students using mobile technology. I was interested in finding out if students thought it was part of a teacher's role to be proficient at using mobile technology, and would students judge an educator's teaching ability on this. The students were given seven descriptions of teacher behaviour or attitudes and asked to choose any options that applied to their point of view, in response to which 13 students chose more than one option. Not one respondent chose the option: *I feel disconnected from them* (teachers who did not have an awareness of mobile technology, did not use it, and/or may be uncomfortable about students using mobile technology) *and this is a barrier to my learning*. One student liked that teachers did not use technology; while another thought that

teachers should keep up with advances in mobile technology, as some methods used by teachers are less relevant now, but students can still learn from them. At the same time, 11 respondents were worried that teachers might limit their own experiences as students. The prevailing attitude of 53 students was that they could still learn from teachers regardless of whether they felt disconnected from them in terms of mobile technology or if some teaching methods were less relevant to life now. Over and above that, 29 students considered it important that teachers should keep up-to-date with mobile technology as this is what students are used to and expect. These results suggest that the majority of students are accepting of teachers' abilities or lack of ability around mobile technology as long as they are good at teaching, but teachers should at least try and keep up-to-date. This notion echoes the findings from Question 18, in that the prevalent attitude is that the matter of most importance to students is that a teacher can teach well.

4.2.5 Student Beliefs about Mobile Technology as a Tool

In addition to the important information that I wanted to discover, I thought the questionnaire was a pertinent situation to gather the students' feelings about mobile technology as a tool for learning in the student world. My feeling was that this was a way to amass wisdom for the future that I might be able to use in my own teaching and share with my colleagues. The students were asked in an open ended question to comment on what they would tell a new classmate about mobile technology if they had never used it before (question 21). Their positive suggestions for using mobile technology fell into six categories; it was good for: studying and learning; searching for resources and information; a dictionary and translator; convenience, efficiency, size, speed and portability; and lastly good for communicating with friends and family. To sum up, the most universal pieces of

advice were to use mobile devices as a dictionary, a tool for studying and convenience.

Then in another open ended question respondents were required to think about and write down any disadvantages they may have encountered in using mobile technology for learning. The prevailing comment from 39 students was that using mobile technology was distracting. Surprisingly, this differed from the indications that students had given for Questions 11 – 13, where the questions were centred around the issues of texting, boredom and distractions during class time. For this section of the survey the majority of students advised that they believed they were not distracted by their own or others' texting or pursuing other activities online during class. The other minor comments recorded (once each time) were that it was demotivating, disrespectful, unreliable, difficult to write notes on and easy to cheat with. Four people thought that it made students lazy as they did not develop learning skills, and three people reported that it was harmful for people's eyesight.

Finally, students were asked to be more creative and think about their perfect world and how they would like to see mobile technology used in the classroom in the future. The majority of students stated in a variety of ways that they wanted it to be used as a teaching tool. While, six students wanted a cyber environment with teachers being able to control it and limit students' use, another three respondents wanted an international cyber-classroom connected to a teacher and participants from all around the world. On the other hand, two students did not want to use mobile technology at all, and three liked the current situation at the Centre where rules regarding the use of mobile technology are strict. However, one student hoped it would be possible in the future to download information directly into the human brain.

To sum up, the questionnaire offered some useful insights into students' thoughts and beliefs about mobile technology. Examples include: a student's previous educational situation did not influence how they used their devices; students predominately used mobile technology for educational purposes in class; mobile devices can be useful teaching tools; and most importantly it did not matter if a teacher used mobile technology or not, so long as they were good at teaching. In addition, some contradictions emerged in relation to the distractive nature of mobile devices.

4.3 Student Focus Groups

The next step in the research design was the student focus groups, which took the study from quantitative to qualitative collection of data. This was an opportunity to probe into students' thoughts and beliefs in a more communicative forum, and build on the information that had evolved from the questionnaire. To begin with, and in order to maximise the time spent talking with students in the focus groups and gain as much valuable information as possible in a short time, the four teacher scenarios were given to the participants as pre-reading, devised based on my own observations of teacher behaviour and combined with the insights that I had gleaned from the questionnaire. Each scenario described a teacher with differences in their attitude towards mobile technology, their usage of it, how they felt about students using it, and how much they controlled student usage. The focus group participants were asked to read the short descriptions and decide which teacher they would prefer to work with and why; also, to underline any keywords that were meaningful to them and come to the meeting prepared to discuss their opinions.

4.3.1 The Teacher Scenario Preferences

All together 10 students participated in two focus groups. Of these students eight preferred Jane (see Figure 7). The reasons they gave were that Jane used mobile technology herself, encouraged people to use it for educational purposes, prohibited students' personal use and controlled the class. One student said:

> I think there are three points about Jane. She is competent to use it, this is the first one, teachers should know how to use mobile technology first. And then she encourages students to use that in class, after all, the mobile technology is quite helpful for students. And the third she will ask the students who actually use MT in class to stop. I think this is necessary keep the class in regular use, I think.

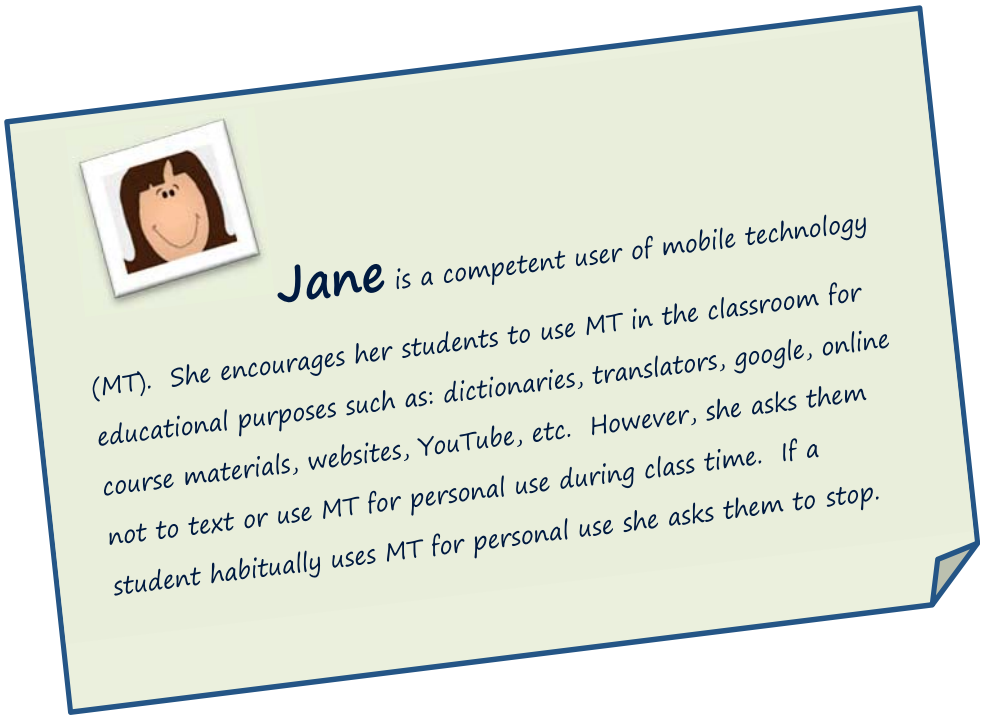


Figure 7 Teacher Scenario Jane

The second most appealing scenario, though well behind Jane, was Matthew (see Figure 8); chosen by one student with two others noting him as their second

choice. It seemed important that he was up-to-date with technology and to some extent allowed students to indulge in personal use of their devices.

Figure 8 Teacher Scenario Matthew

Only one student strongly favoured Peter (see Figure 9), as this student's belief was that mobile devices should not be present in class and he wanted a teacher who controlled this behaviour as he found it distracting. However, prevalent among the students was a feeling of discomfort about this teacher's behaviour, in particular, physically removing phones and the handling of personal property. One voice was adamant that he would only be able to tolerate this teacher if the class was limited to 30 minutes.

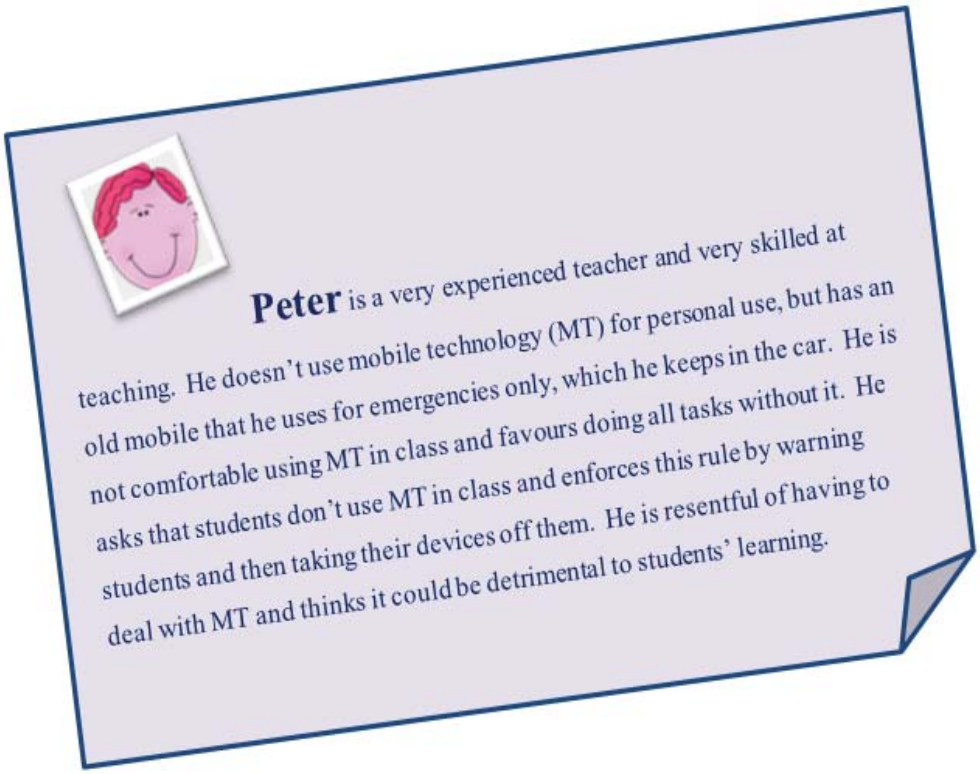


Figure 9 Teacher Scenario Peter

Figure 10 Teacher Scenario Sally

The general opinion of Sally (see Figure 10) was that she was similar to Jane, but lacked confidence and had less control over the class, and the students clearly favoured a teacher who was able to take control of the class environment.

4.3.2 Teacher Proficiency around Mobile Technology

In the general discussion that followed, students were asked to consider how up-to-date a teacher should be with technology and how important it was to their learning. Their responses on the whole paralleled the point made in the questionnaire results (4.2.4. Student Beliefs about Mobile Technology and Teaching) that teaching ability was the most significant factor though some degree of mobile technology knowledge and awareness was an advantage. A student explained, “If a teacher can explain well without technology in their life it’s OK”. Another student agreed and said, “We are not learning how to use a computer…it is not important as long as he or she tries or we help them do it…”. Only one student felt that a teacher’s knowledge and technical ability should be extensive and current. More to the point, one clear message from all was that teachers ideally would have specialist knowledge about the educative value of mobile technology. Here students are acknowledging that even though they believe they are competent with mobile technology they may be limited in their knowledge of how to use technology for language learning, and access resources. This notion links to some of the literature reviewed in 2.4 Teacher Perspectives of Mobile Technology. Essentially, students want teachers to share their knowledge of online resources that are accessible from mobile devices and provide a directory of these resources for students.

4.3.3 Teacher Control and Responsibility

The data that emerged from the questionnaire highlighted the issue of control in the classroom, and ultimately who was responsible for exerting control and monitoring cyber-activity. The general expectation of most of the respondents was that responsibility for learning was both the students' and the teachers', although they expected teachers to maintain vigilance in class and establish clear guidelines for students in respect of use of mobile technology. However, there was some variation in the degree of control that they expected, with some wanting very firm control much like a school teacher: "I would like to see a rule or policy from the school or university to not use mobile phones in class, if you break the rule you will get some punishment". Indeed, the majority opinion was that teachers need to be aware of students' personal usage and try to stop it so that each student can obtain the maximum benefit from the lesson. In point of fact, the view was that a teacher should be aware and concerned if a student misses a learning opportunity.

On the other hand, there was one voice for an expectation of self-discipline by students and trustworthiness shown toward them by teachers. The participant accepted that mobile technology was an issue far beyond the classroom and that students had a relationship with their devices that was intricately woven into all aspects of their lives. This belief extended to students needing to be educated about appropriate values surrounding the use of devices in society, education and life. Hence, she had a strong belief that teachers were powerful role models and should demonstrate good behaviour and attitudes toward mobile technology, as students have a life-long relationship with it.

> But, still they (teachers) should understand, if she just stop them from using in class and if they went home and they cannot control themselves

> – this is a problem, because they should learn when to use it and not to use it. Yes, don't just stop them from using it, teach them when to use it properly, because they will use it for the rest of their lives…

Clearly, teachers were held in high esteem to both control and regulate students' behaviour, and at the same time, monitor personal and language learning activities on devices. Also, teachers displaying trust in students was important to them; however, over and above this, they expected a teacher to recognise when a student was not being trustworthy and deal with it.

It is important to note that the students considered the University Preparation Centre as a learning environment distinctive from future academic study settings. They believed and expected that the teaching staff would be more involved, and have more governance over their learning experience than in future academic situations.

4.3.4 An Educational Tool

Notwithstanding students' expectations that device usage be regulated primarily by teachers, they also deemed it essential that mobile devices be utilised as a powerful, convenient tool to facilitate learning. Indeed, all students saw this as valuable to the classroom environment. However, they wanted the teacher to give clear signals and guidelines about when and what to use these devices for, and perhaps direct them to useful functions and activities:

> I think use MT for educational purposes is necessary. If student use MT for personal purpose for message, maybe the student may miss concept of what teacher say, so I think when teacher ask to use phone for searching something I think that is the time to do it, but when teacher or class discuss main point, I think we should concentrate and listen to the teacher, not time to message or do personal thing.

This voice is also recognising that students can be distracted very easily and that the teacher has to give explicit instructions about using devices and be very conscious of monitoring student behaviour.

4.3.5 Texting for Personal Use

Another facet was that the respondents seemed to support the idea of guidelines and controls being imposed on students who were using their devices for texting or other personal matters. This aligns with notions of students wanting appropriate relationships within the class, and an awareness for the need for respect and courtesy to be extended to all stakeholders in the classroom environment. In fact students saw it as the role of the teacher to impose and implement guidelines and controls. One student thought it was unfair if others texted in class and pointed out,

> …you are learning and studying and the student next to you is just texting and the teacher is looking… after the class the teacher will ask some students to talk about that and have a discussion and the hard working students know everything, but the students next to him or her know nothing, so maybe the hard working student and need to explain everything about the class….

This student sees it as an imposition to be called upon to cover other students' failure to learn, because they have been distracted by their devices; in comparison, she is able to reflect on the lesson because she was fully engaged. This is a justifiable point as hard-working students often unwittingly conceal those who are disengaged. In the context of this study, this student is making the point that mobile technology can be a co-dependent to this behaviour and it is unfair for hard-working students to contend with. She recognises that some students' behaviour is disrespectful to other students.

Further to the sentiment of disrespect, another voice was fearful that a teacher would consider them discourteous if he was seen to be texting a lot. These are three students' comments:

> Sometimes I feel it is disrespectful to the teacher when you use a phone.
>
> Even you want to use, but you think it…
>
> Yes, sometimes I feel or maybe the teacher will think that I'm texting or I'm using it for games or something like that. But, in fact, maybe I need some important texts, so I feel embarrassed I try and hide.

Thus, maintaining personal integrity and politeness was a powerful form of self-regulation for some students, particularly the more mature older students.

However, in contrast to this, most of the respondents felt that it was acceptable to check for messages on their phones and send quick, short personal messages. Furthermore, they felt the teacher should be able to accommodate these short personal excursions, and it would seem, be able to differentiate them from habitual, unnecessary behaviour.

To sum up, the student forums revealed that: Jane was the preferred Teacher Scenario; competence in teaching was the most preferred attribute for teachers, although an understanding of technology was advantageous; there was a prevailing view that students should limit their personal use of devices and teachers should control this behaviour.

4.4 Teacher Focus Groups

In the process of inviting teachers to participate in the focus groups I pondered how I would divide them as indicated in Chapter Three, and thus chose the

following groupings. The first grouping was six colleagues who worked on the English for Speakers of Other Languages (ESOL) Programme, where language learners were taught general English before they progressed to more academic preparatory courses. The other group encompassed six more colleagues who taught English for Academic Purposes (EAP) on the preparatory courses. There seemed to be a distinction between the two groups in regard to how they viewed the cohort they worked with. This I had observed over my tenure at the University Preparation Centre, as initially, I had worked as an ESOL teacher before becoming an EAP teacher on the preparatory courses. The staff from the ESOL programme exuded a more nurturing stance toward their students as they worked quite closely with each student to improve their language skills; whereas, the EAP teachers focussed more on encouraging students to develop independent study skills as they directed them to prepare for more academic study. In identifying these nuances I was mindful that the focus groups may reveal some differences in results, and I deemed it important that they be afforded the opportunity to express these differences rather than have them disappear in a more mixed group situation. Both groups expressed that the University Preparation Centre was an essential progression from students' previous educational experiences to future academic study. More importantly, this step was to prepare students for the demands of more autonomous, academically focussed study. In addition, the Centre provides a more intimate learning situation with more teacher regulation than may be offered at degree level.

4.4.1 Mobile Technology for Educational Purposes

The groups were asked to comment on whether they thought students might have expectations that they could use mobile technology for educational purposes during lessons. Overall, the teachers concurred that students mostly did have this

expectation; although teachers from both focus groups had noticed that on the whole, Japanese students, did not use mobile technology apart from electronic translators. One of the ESOL teachers commented that a Japanese student had told her that in Japan they do not use mobile devices in classes at all. Other teachers agreed with this and talked about how respectful and disciplined they thought Japanese students were, because they believed that they did not use devices very often. Following this, the general feeling amongst teachers revealed the theme that using devices was an act of disrespect by students; and in general teachers seemed suspicious of students using them legitimately for educational reasons. Hence, their belief that Japanese students displayed more respect towards them than students from other cultures.

Nevertheless, teachers were in agreement that using mobile devices as an educational tool was a reasonable expectation for students to have. In particular, there was much discussion about the merits of students using their devices to access a dictionary. A typical attitude that was expressed by one participant was "I think we have just grown to accept that it's the way that this generation accesses information and learns, and so…we've just had to learn to adjust to that…" This comment conveyed the prevalent attitude that many teachers had at the onset of the mobile technology revolution at the University Preparation Centre, in that massive barriers were put in place to combat the existence of devices. In fact, the practice in the ESOL Programme had been to have students place their devices in a box at the front of the classroom when they entered the room, as a measure to prevent any use by students. These measures proved futile as students vigorously developed strategies to counteract this action, and before long devices were visible in classrooms again. Then the next strategy involved some teachers removing phones from students; again, this proved ineffectual. This comment illustrates classroom behaviour at that time:

> Ha, ha, ha, remember we used to have the box (others laughing in the background), and I just remember taking a student's phone and putting it on the windowsill behind him, and every time I turned round that phone had moved back and that went on...

Indeed, going to extreme measures to exercise control over the use of mobile devices had been a controversial and compelling issue. Interestingly, most of the ESOL teachers who had done this had not felt comfortable as they were worried that this severe action may have been seen as an abuse of power, and students may have complained. This was in spite of this course of action being supported by the Academic Coordinator at the time. In comparison, the EAP teachers were not in favour of removing devices, but some admitted to doing so when they had taught on the ESOL programme.

Over and above this, some teachers recognised that many students also like traditional practices such as receiving handouts, writing notes and reading from paper. Contrary to this, there was also recognition that students often take photographs of whiteboard lessons and Power Point presentations, which is a change in behaviour from traditional note-taking, where students are required to use language skills such as writing and listening, rather than simply taking an image and storing an electronic copy on a device.

All in all, the universal endorsement was that mobiles devices have a presence in the learning environment as an educational tool, but they do not replace all traditional functions and in many cases teachers still prefer these functions. Not surprisingly, over time most of the resistant teachers began to use devices and smartphones and discovered their merits, which lead to a metamorphosis and change in attitude with some teachers using their devices as a supplementary teaching tool.

4.4.2 Mobile Technology for Personal Use

Although teachers were in agreement that devices could be used to support language learning, most felt that students should not engage in personal use of any kind in the classroom. The predominant view was that this behaviour was a menace to the overall demeanour of the classroom environment, and that it was not only disrespectful to teachers but potentially disruptive to other students. Teachers seemed generally disgruntled that this new dimension of cyber-space potentially enabled students to leave the classroom and be present elsewhere, and invariably the needs of the classroom were superseded by the outside world. Furthermore, this was difficult to control and monitor and imposed substantial management issues on teaching staff, who were coming to terms with the notion that the classroom was no longer sacrosanct. Their concerns came from the feeling of responsibility that they had to ensure that all students could take full advantage of all learning opportunities, and not be disrupted by distractions and other students' behaviour. In addition, they recognised that students (or rather their parents) paid a lot of money for tuition and teachers had a deep sense of responsibility to provide value for money. On a more practical note, some participants suggested that teachers could seize the opportunity to model good behaviour and etiquette around mobile devices. One teacher recommended "…modelling, but also telling them explicitly and saying this is an expectation in the workforce"; therefore, not only preparing students for further academic study, but future work environments. Indeed, it seems obvious that part of a teacher's role is to model appropriate behaviour, but the general feeling was that many students do not choose to mimic this. However, the following idea was suggested by a teacher as a method of greater impact:

> I was quite tempted at one point with one of my classes to put my phone in the front on the teacher's desk, leave the vibrator on and get someone to text me every couple of minutes and stop talking...look at my phone (she pretends to be looking at her phone), oh, where was I?, and see how my students were feeling. Because that's how I was feeling at one point when a couple of them were just ding ding ding and zzzzzzzz. That could be a very sarcastic way of doing it.

This humorous approach highlighted the frustration that many of the teachers felt at times about managing personal activities in the classroom. Next, the discussion moved to the notion of students being able to send short texts to make arrangements, or quickly check a text from a family member. Again this behaviour was considered unacceptable by the majority of teachers. Some reasoning for this was: students could wait until after class; they may be distracted from learning; and a teacher would be unable to differentiate between a genuine text and frivolous communication. One teacher captured the general sentiment held by teachers with this comment:

> I agree, I don't mind short texts occasionally that's fine. I don't want to be mum and persist in telling them to stop using it, stop using it...Just leave please? Just go! I'm not interested in this. Or if they still refuse to go and they still use them in class, I just ignore them in class and work with everybody else, and I make that quite blatantly obvious if it gets to that point. That's not a first step. But at that point, Ok you're not interested, I've done the work, I'm trying to help you...you're not wanting to take it on board. You are eventually a grown up adult, in the end I mean … AND considers it the teacher's job to take

> responsibility for ensuring the students don't miss a learning opportunity?

The general feeling was if teachers allowed students to occasionally text there would be many students who would misuse this privilege. Therefore, most teachers supported the establishment of parameters and rules at the beginning of the course so that students clearly understood the boundaries around personal use in the classroom. Also, there was a view that there are always students who need strong guidance as in the following quote:

> Well, I think that occasionally you come across a student that presumes that if they are getting away with it [cyber-activity], it is OK. So you probably need to establish some ground rules in a class, in order to ensure that the student who needs that learning opportunity gets it...and knows what the signals are...that they need to be able to switch back into the class mode, rather than being in an individual mode. Because I think that often students are distracted and then they think they understand and superficially they may, and therefore they don't plug back in. And in some ways my concern is that these are the students that have been doing this at school and are unsuccessful because of that, and that's actually why they are in our Bridging Programmes, and are frustrated at being in our programmes.
>
> (NB. Many domestic students who attend the Bridging Programmes are in this situation because they have not gained enough credits in NCEA English.)

Notwithstanding, the observation that some students have not yet learnt the fundamental life lesson that allowing themselves to be distracted may

impede their learning and advancement, teachers brought to light some typical behaviour that they often encounter during class time:

> I think students are pretty smart, and they'll work out which teachers let them get away with it (using their phones for personal use) and which don't….

> Yeah, I find that the very fact that they are trying to figure out which teachers are looser says something.... You know if you think that a student is not on task and is distracted, and you look and you walk around them, and they do that frantic (indicates tapping on a device changing the screen). You know it's quite obvious that they know that they are not supposed to use it for personal purposes...yeah.

Additionally, there was a lot of discussion as to how teachers managed students' deviations from educational use to personal use. When I asked teachers how they controlled this, one very experienced teacher uttered "I don't know yet". This comment seems to be indicative of how most teachers felt, as this emergent field of mobile technology becomes more present in the classroom, bringing with it forever changing boundaries with new apps, functions and activities as potential distractions. Teachers expressed the frustration of dealing with students who were venturing outside the classroom literally before their eyes:

> This situation ties in with our attendance policy too. At some point that person could be considered absent from class, even though they are sitting there.

It was apparent that teachers had tried many strategies to counteract this behaviour; one prevalent strategy was to walk around the students at random looking at what are doing, and observe who was frantically trying to change their

screen view. This course of action almost shamed students into being focussed on the task in hand. Of course, this technique of controlling students who deviate from learning has been utilised in classrooms for decades long before mobile technology was apparent. Apart from traditional practices, teachers had no clear solution to the issue of how they effectively controlled personal use of devices. Almost unanimously though, teachers felt that they should try to control this behaviour, and this added another dimension to how they managed the class.

Over and above, the regulatory issues that can hinder teachers' management in the classroom, they were also frustrated by the endlessly possible distractions that devices can facilitate.

> I think it is very difficult for a student to use it (MT) without being distracted. Very difficult, because even if they are using the dictionary, all of a sudden a 'notification' appears on the top, ummmm, someone's emailed or messengered or something...and they just can't help but check it. Because that's what they always do, if they've got their phones something comes up they check it...and so, ummm...it can too easily become a distraction. It's kinda like a kid doing their homework at home and we say OK, do your homework on the kitchen table, but here's the remote to the TV...you've got control of it while you're watching TV what's going to happen? You know?

This is a pertinent comment as the very nature of the way that digital devices operate makes it difficult to separate the various capabilities they present. For instance, mobile technology facilitates possible intrusions from the outside world and it cannot be limited to a single educative purpose; such as a student picking up their phone to access the dictionary function and seeing that they have three texts and feeling tempted to check them. Also, in this situation the student may

define the texts as important personally, whereas teachers consider them intrusions to their learning.

Overall, most teachers favoured no texting at all in class. However, they did think that students should be able to use their devices for an emergency or an important call from overseas. In this case, teachers agreed students should excuse themselves from the class to respond, and when possible arrange this with the teacher at the beginning of class.

Further to this, there were particular occasions when teachers did not want students using mobile technology at all, and for these strong rules needed to be imposed. These situations were when teachers wanted students to develop learner autonomy and prediction skills to prepare them for future university studies. Overall, the EAP teachers took their position on this very seriously as preparing students for future academic study was the premise of the courses they taught. They were adamant that students need to develop skills to be able to predict the meanings of unknown vocabulary, or learn to ignore those that can be overlooked without impacting too much on comprehension, which in turn, are vital skills for understanding and comprehending academic reading and challenging texts. In fact, for students to cope with the demands of university reading they need to be able to read texts efficiently without constantly checking for meanings of words, and develop intuitive comprehension skills to complete their work on time. The general strategy to achieve this was to emphatically insist students put their devices away, or in front of them on the desk, then give a clear, firm explanation as to why they needed to comply with these rules and guidelines.

In contrast, to preventing and controlling personal use of devices, another perspective was offered. A colleague explained that he managed his class differently, in so far as he allowed students to pursue personal activities on

devices as a reward and incentive to students. Typically, he would set a task and allow the more able students who finished earlier to play on their phones while they were waiting for others to catch up. This teacher felt that so long as students were not distracting others that was all right. Of some significance to this point of view was that students also felt that teachers could manage the classroom in this way, thus giving students regular short breaks for a few minutes and letting them use their devices to escape and relax in that time.

The next discussion point about this issue progressed to teacher responsibility. It had been revealed during the student focus groups that students believed it was the teacher's job to control students' personal use of mobile technology as teachers should be concerned if a student was missing a learning opportunity. I posed the question to teachers: do you think it is your role to care about this issue? The ESOL teachers agreed that they felt it was part of their professional responsibility and if personal use of devices escalated, then class management became a more challenging issue. Overall, these teachers seemed to accept this expectation as an integral component of their role.

The EAP teachers discussed this idea more rigorously and felt that the issue was not so definitive. They were in general agreement that it is also a student's responsibility to care about and use the educational opportunities that they are presented with:

> There's a question in there about whose responsibility it is! … I go back to the point that they are in our courses because in the past they may well have been easily distracted...and they're not actually learning or they're not actually acknowledging that they have got to do something about it by expecting the teacher to be constantly nagging them.

The point was made that some students have not reached their potential in learning, because they have allowed themselves to be distracted and have not learnt that it is their prerogative to change their own behaviour to make the most of learning opportunities. Again, the EAP teachers saw it as their role to encourage student autonomy and direct students to take responsibility for their own learning themselves, as preparation for future academic study. Furthermore, they felt that regardless of what teachers might do to manage this issue, there were always going to be some students who allowed themselves to be distracted and not take advantage of learning opportunities.

On another note, the teachers were intrigued that some students' believed that it was the teacher's place to take responsibility, regulate behaviour and care about lost opportunities. The teachers in the groups represented a wide range of experience and most had taught in another culture, which led to much discussion about the cultural backgrounds of students who expressed this view. One of the participants, who was originally from Asia, suggested that this was very much an Asian perception that a good teacher is more caring and therefore helps students to pass, whether they have the ability or not. Some of the other teachers agreed with this notion as they had experienced this attitude teaching in Asia. One teacher who had taught in Korea stated

> Part of that is cultural 'cause some cultures put a lot of weight on the teachers that it's the teacher's responsibility that the students are learning. Whereas, Kiwis, we'd put more responsibility on the student.
>
> (NB. All of the student focus group members were non-native speakers of English from Asia and Saudi Arabia.)

This attitude can be seen as counter to expectations of student self-regulation which is the norm in a New Zealand university.

Both groups of teachers entered into a discussion about how a phone was a personal item and that most students see their phone as an extension of themselves. Thus, recognising that touching or removing personal equipment was unacceptable now, and asking the student to remove the item from class or their desk was a more satisfactory strategy.

4.4.3 Teacher and Student Proficiency around Technology

The availability of sophisticated technology is without question, but achieving its full potential and capacity is largely dependent on the knowledge and proficiency of those using it. The focus groups enquired into each group's view of the other's (students, teachers) capability around technology. The predominant view of teachers was that it was fair for students to surmise that teachers have some proficiency with mobile technology, or how to direct them to learning resources on the Internet that students could access with their devices. Teachers felt more comfortable, and perhaps more professional, using a computer to demonstrate how to follow pathways and search for resources online that, in turn, students could emulate on their devices. The view of the ESOL group had some focus on student ability, including being willing to assist their teachers, and teachers were interested to find students expected specialised knowledge from them.

The EAP teachers, with thoughts to the next step of the students' educational journey, focussed on their lack of readiness for that, and in spite of technological skills with mobile technology there were other technical areas where students' skills were lacking. One of the younger teachers commented:

> That generation isn't that great at using technology, because the one I went through, you were using a computer and lots of things could go wrong and there were lots of things to learn. But, now that they've got their smartphones they are very easy to use, and they are just clicking

on an app and using that...So, and a lot of them don't use a laptop or a computer hardly at all, and so, when they go from using their phone to creating a Power Point or uploading something into Stream...that's actually quite difficult for them.

In that way they have as much learning to do as, for example my parents trying to do the same thing.

Another teacher conceded, “Even just search parameters, I mean I often have trouble with students not being skilled around this”.

Overall, the view was that students lack many valuable computer skills that they require to cope with future university demands, such as formatting assignments and research skills. It would seem that expertise in the use of mobile technology is helpful in general, but it does not replace some vital skills needed at university and the workplace in the future.

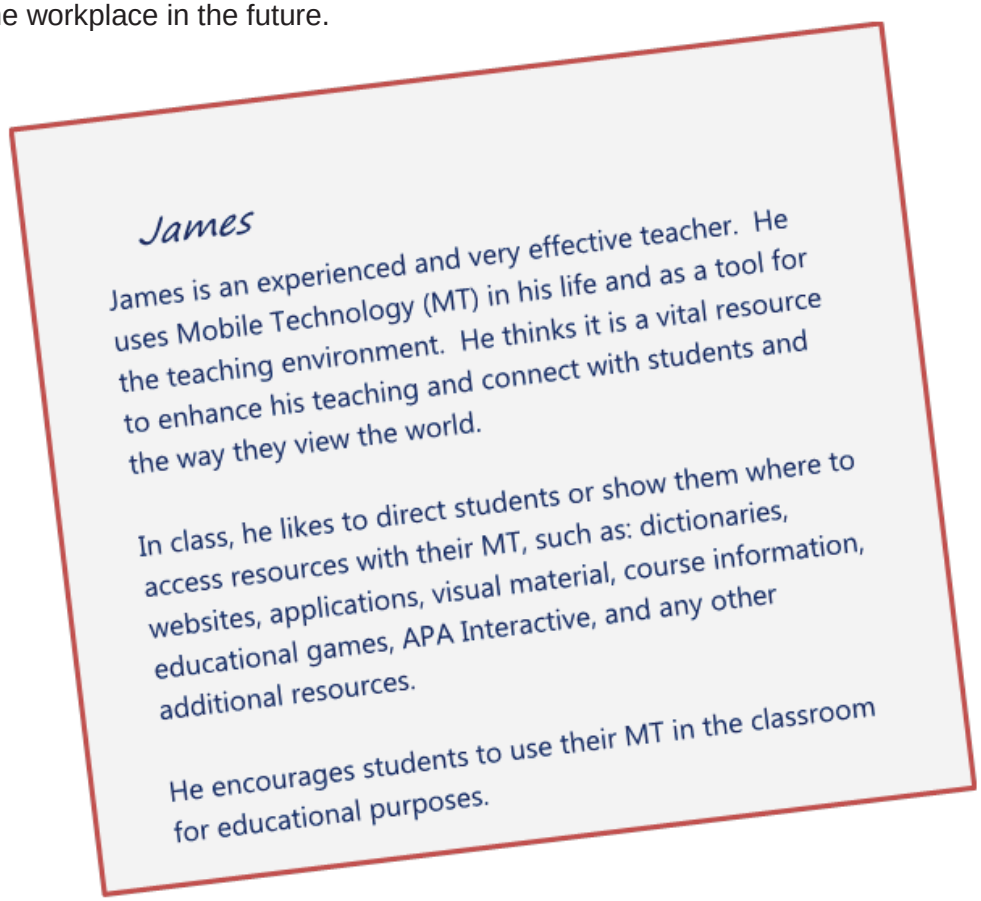


Figure 11 Ideal Teacher Scenario James

4.4.4 The Response to the Ideal Teacher Scenario

At the end of each focus group meeting the teachers were shown the Ideal Teacher Scenario 'James' (see Figure 4.9) and asked to comment on what they thought. The teachers were dubious at accepting this model for their own in that making quick personal texts would break a student's concentration. Although a teacher did offer an alternative view that young people have grown up with mobile technology and are used to multi-tasking, and therefore, capable of being able to glance at a short text and remain present in the class at the same time:

> This generation is so efficient in many ways at communicating quickly, that they can respond to… can you bring the milk home with you…texted without even thinking about it, really. It's almost automatic…

This viewpoint addressed the idea that young people have developed the skill of existing both inside and outside the classroom's immediate reality, and at the same time are able to multi-task. She lamented that this was a way of life now and that there was no return to the former regime. Also, she was confident that teachers could accept this and factor it into their classroom management.

Some teachers were offended by the presumption of students that they should be responsible for ensuring that students do not miss a learning opportunity and should care about it if they do. One teacher asserted,

> …this whole thing about it's the teacher's JOB to tell us not to use our phones; it's the teacher's JOB to stop us using our phones. Really it isn't our job! You know, this whole balance of individual responsibility and respect and all that it carries with it!

In general, the rest of the teachers agreed with this opinion and felt exasperated by the students' expectations of them.

4.5 A Summary of the Findings

To sum up, the majority of students believed that the digital world was a crucial part of their lives, and an essential educational tool. In addition, they could travel between it and the physical territory of the classroom quite successfully, and in their view this did not interfere with their ability to concentrate and take full advantage of language learning. Some students even deemed it appropriate to venture onto the electronic highway when they were bored with class. Additionally, most of the student cohort felt that they should be left to self-manage their digital behaviour; however, they wanted the teacher to take control if they exceeded appropriate boundaries as defined by them. They also wanted provision made for short quick texts during class time. In terms of teachers' technical ability, while it was preferable for a teacher to be adept with mobile technology, students were emphatic that the most critical factor was that a teacher was proficient at teaching.

On the other hand, the teaching cohort thought it was reasonable for students to use mobile devices as tools, but were unequivocal that personal digital habits should not be tolerated in class. Essentially, teachers voiced their reluctance to be policers of inappropriate behaviour around the use of mobile technology. Additionally, teachers acknowledge that students may be more familiar with mobile technology, but were concerned that students lacked vital computer and other technical skills that are critical for future academic study.

Chapter Five

Students' and Teachers' Perceptions of the use of Technology in University Preparation Classes.

This chapter begins with an explanation about university preparation and the contrastive stances and expectations held by students and teachers about their role in this preparatory stage. The chapter deals with the tensions that evolve from these mismatched beliefs, coupled with the presence of mobile technology in the classroom. Firstly, teachers' observations of students' behaviour is discussed, and how students' previous experiences may influence their behaviour in class. Then the impact that mobile devices have had on students' lives and the transformation these gadgets have imposed on the 21st Century classroom is discussed in the light of the findings. Next, the chapter delves into the issues of regulation in the classroom, responsibility and the recognition of a need for mobile technology etiquette. Both teachers' and students' technical expertise is discussed, exposing more disparities in attitudes and behaviour. Finally, an account of students' expectations of teachers is given.

5.1 University Preparation is Different

Before discussing the relevant points concerning mobile technology specifically, it is pertinent to this study to recognise the context and the particular environment that both students and teachers occupy at the University Preparation Centre. The

students are entering a bridging zone where they are not only furthering their language learning, but also being introduced to the idea of autonomy which is a key university value in Western culture. Holec (1981, p. 3) defines autonomy as "the ability to take charge of one's own learning". According to Schmenk (2005), this notion, which originated in Western culture, has now become universally accepted. Thus many international students seek Western university qualifications, as they believe they may gain greater employment possibilities and capitalise on the benefits of travel and globalisation. Hence, their entrance into university courses is dictated by their English proficiency, and successful preparatory pathway, as Singh and Doherty (2004) state:

> …the various curricula in the preparatory pathway are also explicitly geared towards developing the culturally suitable demeanours, dispositions and behaviours of a 'Western' academic student. Thus students are offered courses in not only English, but also cultural orientation and study skills (p. 3).

This highlights the importance of the transition some students need to make from their previous educative experiences to Western cultural expectations of independent learning. However, as much as prospective students may want this, in reality gaining autonomous learning skills and habits may be an overwhelming goal, and difficult to traverse.

In terms of the students at the University Preparation Centre, it was apparent from the discussions in both student focus groups that all the students believed that the University Preparation Centre was a bridge between their former situation, and further academic study in the future using English as a second or third language. However, in spite of students accepting that they were undergoing preparation they still presumed that teachers would largely serve the role of regulator and

nurturer. Students expected their current teachers to be more involved with them, take control of the class environment, be aware of students being distracted and react and control situations that could lead to students not capitalising on learning. Furthermore, students believed that it was part of a teacher's responsibility to care if a student lost a learning opportunity because they were using their devices for personal use. Of further interest, students implied that when they proceeded to their respective degrees they imagined that the landscape would be less governed by the educator. However, most students made little reference to taking personal responsibility, which is an important step towards more autonomous learning.

The teachers who participated in the focus groups shared the same view that the University Preparation Centre was a different setting to the rest of the university. However, the two teacher groups differed in their overall attitudes toward the students. The group of teachers who taught on the general English programme, who will be referred to as the ESOL Group, very much presented a nurturing attitude toward their students, and therefore, deemed it appropriate that the students should expect teachers to care about them losing a learning opportunity even when they were displaying irresponsible behaviour.

The second teacher focus group, referred to as the EAP Group, taught academic English to students studying university preparation courses and adopted a more university instructional 'norm' approach toward students. However, they agreed that teachers needed to be closely involved in students' language learning and definitely needed to control the classroom; there was however some conjecture over whether it should be part of a teacher's demeanour to care about a student losing an opportunity to learn because they were indulging in digital activity instead of paying attention to the class. Their stance was closer to Turner's (2004) who warns:

> We should not confuse caring for students' well-being with leniency over their language use. At the risk of sounding a bit ruthless, I would argue that we should be less caring and more critical. (p. 100)

In addition, the EAP group felt that the students were being prepared for future academic study; therefore, students needed to take responsibility for their own behaviour and develop some control over their own ability to work within the guidelines given to them at the beginning of the course.

As outlined above, there was a discrepancy in expectations toward self-governance by the student cohort and the teachers. In particular, students tended to misunderstand the concept of university preparation and some expected autonomous learning traits to miraculously appear when they entered academic study. The teachers, in particular the EAP cohort, struggled with mismatched student expectations and the challenge of instilling autonomous habits and study skills into students who were still largely immersed in non-Western culture educative values. The discussion in the chapter that follows will discuss some of the tensions emerging in the data as a result of this being both an in-between space in which students and teachers might have divergent expectations, and the result of an evolving process of integrating this new technology into the classroom and the necessity of establishing appropriate behaviour.

5.1.1 Observations about Previous Educational Experiences

The students' expectations of teachers, in particular that they should care about students' self-inflicted, lost learning opportunities came under scrutiny by the teacher cohort. Due to the teachers' diverse careers, overseas teaching assignments and a wealth of teaching experience, the cohort voiced some observations about groups of students from different cultural, educative origins. Teachers inferred from the nature of the student responses that the students who

participated in the two focus groups were from Asia, and discussed and highlighted how this was a typical attitude that they associated with Asian perceptions of teachers' roles. Three of the teachers in the group had taught in Asia or Asian contexts and one teacher herself was of Asian ethnicity. One teacher commented:

> That's a very Asian way of a student perceiving the teacher, because the teacher who talks to the students more is perceived to care about the student more. The teacher who stays back late after class to help, or talk, or address something with the student is perceived as being more caring.

Another teacher added:

> My experience in East Asia,…is that it tends to be for the want of a better word 'hand holding' and if you don't do that there's a massive...um...blowback. What was it...umm...Asian teachers help students to pass, but Western teachers don't…something along those lines...

This confirms the viewpoint of Scollon and Scollon (1994), that there seems to be intrinsic divergences between how Asians and Westerners view authority (teachers in this case):

> The Asian focuses on the care, nurture and benevolence (or their absence) of the person in authority, while the Westerner tends to focus on the restriction, limitation and dependence of the person over which the authority is exercised (p.21).

To compare the two approaches, Western cultural views of university education place particular importance on student autonomy and independence; whereas

Asian cultural views place the teacher as central to a student's success (Li, 1999). Hence, a limitation of this study is that there were no students in the focus group phase whose early academic experience had been in a Western culture of learning, and they may have perhaps presented a differing point of view.

Interestingly, another issue that arose from the teacher focus groups was some definite beliefs that they shared about various cultural groups. All the teachers were adamant in their judgements about some behaviours concerning the Japanese and the New Zealand students. However, a discrepancy between the teachers and students in terms of perspectives emerged from the research, such as, overall, teachers felt that Japanese students were more conservative, polite and respectful about using their devices in class. Most teachers thought that Japanese students did not use online dictionaries and certainly did not indulge in personal digital use. Teachers in both groups were confident that Japanese students did not use mobile devices (apart from traditional translators) in class at all. A teacher commented:

> I think it depends on the culture, because the Japanese students on the whole don't want to bring theirs (mobile phones) out, they'll use their electronic translator/dictionaries. But they've told me that they certainly wouldn't use their phones in their classes in Japan. SO they're not used to using them in that situation.

Another teacher said:

> The Japanese I've had here, they use their electronic dictionaries rather than use their mobile phones.

However, the data from the survey would suggest otherwise, as three out of the five Japanese participants did claim to use an online dictionary (with their phone),

but also reported using their devices for, surfing the net, social media and texting. One Japanese student acknowledged texting more than 15 times during the previous day's classes.

In addition to this, teachers also shared the common belief that the native English speakers were less likely to use online dictionaries on their phones, and that instead they did not worry about using a dictionary at all. Again, the data would imply that this is not necessarily the case, as four out of the seven native speakers reported that they did use an online dictionary in class. Perhaps this indicates that teachers have made these observations in the past (as all the teachers who participated shared these beliefs), and in reality the behaviour of Japanese and New Zealand students has changed and cannot be generalised.

5.1.2 The influence of Previous Regulation

Most students indicated, that in spite of having controls imposed on them in their prior learning environment, this had not necessarily influenced how they regulated and managed their devices at the University Preparation Centre. Clearly, previous compliance did not guarantee that some students had learnt self-control or indeed saw regulation as their own responsibility. From the teachers' point of view, they recognised that regardless of students' previous experiences and differing cultural learning approaches, they had a responsibility to prepare students for future academic settings. The EAP teachers in particular identified that it was important to negotiate with students the ground rules in the class, and encourage learner autonomy. Furthermore, students would need to understand what was expected of them in an institution with Western views of university education. There was much regard for the fact that some students may struggle with this, and need more guidance and explicit instructions in what was expected of them; also, that teachers needed to maintain some vigilance. Some teachers

were not happy about being a cyber policeman, but understood that it was essential for students to develop self-governance and self-control.

5.2 Mobile Technology is a 21st Century Necessity

An important reason for pursuing this research was to discover how or why students and teachers use mobile technology. Certainly, young people perceive mobile devices as an intricate part of their lives and a necessary function much like sleeping and eating. As discussed in section 2.2 on Constructivist Learning, theorists believe that learning is mediated with tools, and for the purposes of this study, mobile devices can be considered as cultural artefacts (Vygotsky, 1978; Sirisatit, n.d.; Lantolf, 2000). The students themselves recognise these devices as being particularly pertinent to the 21st Century learning environment. In contrast, teachers varied in the degree to which they used mobile devices and incorporated them into their lives. As much as teachers can accept these tools as culturally constructed artefacts that are relevant to the students' world, they also recognise that digital tools can be used too much. Seemingly, teachers are able to compartmentalise their use of devices and control how they use them; whereas many students do not appear to observe any boundaries, limitations or control around using these tools.

5.2.1 Mobile Phones are Personal

Research supports the notion that mobile phones have become an interwoven component of a person's identity (Gikas & Grant, 2013; Traxler, 2009; Viberg & Gronlund, 2012). Overall, this idea was apparent amongst the students as participants conveyed how their mobile phones were with them all the time and, in some cases, connected them to their friends and families on the other side of the world. To draw a comparison, some of the teachers also considered mobile

phones to be important personal items, but held a contrasting belief about what that meant. They saw devices as intrinsically linked to their personal life, not their professional role in the classroom. Therefore, because of this belief, they turned them off or put them into their bags until after class. However, a teacher made the observation that the same concept may be different for students:

> This tool…I view it as a personal thing. The students might have a big crossover between personal and learning, because for them they use it quite differently…So what is the symbolism of the mobile phone?

Another teacher added, "Yes, is it their private diary or is it a sort of a text book?"

This was an interesting observation about how the different generations may view personal use of mobile phones, in particular. Some of the teachers seemed to be indicating that a mobile device was primarily a phone to them, and so putting a phone away in a bag or desk was logical and considerate behaviour. However, teachers recognised that mobile phones were more than just a phone, and represented a multi-faceted tool for students and a valuable personal item that they could not be separated from.

Furthermore, on the whole, teachers understood and believed that mobile phones were intimate, special possessions for students. However, the ESOL group teachers indicated that practices and management tactics were evolving and the strong move to keep the outside world separate from the classroom had turned. Just five years ago, some teachers had gone to extreme measures and physically removed students' phones as a means of dealing with and deterring recidivist personal use and texting. This was a practice that had been discussed in staff meetings at the time and a decision had been made to deal with personal use in that way. Teachers revealed that they had not been comfortable with this

practice, but when they had done so they had usually known the particular student quite well. All teachers said that they no longer adhered to this practice. In contrast most of the EAP group teachers had never removed a phone, but rather asked the student to remove themselves or the device from the class. All of the teachers agreed that phones were expensive, personal possessions and it was not appropriate to handle them (with the exception of an examination situation).

An important point to consider is that students were adamant that a teacher has no right to touch a student's phone as it is private property. More importantly, students were offended by this action. This presents teachers with a clear boundary that phones are personal items and not to be physically touched. It would seem that teachers had also come to this realisation and had changed their practices and attitudes toward this issue.

5.2.2 The Changing Classroom

An unspoken theme emerging from discussion with students is the notion that it is unrealistic to consider preventing the digital world outside from entering the once sacrosanct classroom, but rather that it is accepted as a necessary accessory and managed appropriately. Clearly, it would seem that for students the classroom does not impose a physical limitation, as they are accustomed to venturing outside the classroom swiftly and returning swiftly. Many students maintain that this action (short, swift interactions) does not disrupt their concentration and they can stay focussed on the lesson at hand.

However, for teachers who are accustomed to the classroom environment being sacred, and physically defined, this is a challenging concept to manage. Not all teachers are happy about this imposition, but agree that out of necessity they have to compete with and manage it.

5.2.3 Study Use Versus Personal Use

Indeed, the management of device usage is a complex matter, not only for teachers, but for the students themselves. Given that they see their devices (particularly phones) as personal items and extensions of themselves, do students believe that they can and should separate personal activities from educative pursuits in the classroom? Indeed, how do they perceive they actually use their devices during class time?

As indicated in this study, students were unanimous in their belief that devices are a vital component of their life today, and the vast majority of students saw devices as educational tools that can be utilised in class. Interestingly, only one of the 62 students indicated that he never used mobile devices in class; while the other students believed that they were using their devices in class predominantly for educational use. In fact, dictionary use, looking up course material and using websites were the most frequently used functions. However, it is not known if students were using websites for educational or personal use, which is another limitation of this data. The most popular function was the use of online dictionaries with almost all the students reporting using them. Of particular interest was the importance that the students placed on the various functions as they were asked to rank the three main uses that were important to them, which also included texting, social media and all the other personal uses. The majority of students considered that an online dictionary was the most important function, followed by looking up course material, then looking at websites. This shows that most students consider mobile devices important for accessing educational support.

However, in terms of personal usage of devices in class, the students gave a range of, at times, contradictory responses. For instance, around a third of

students who participated in the questionnaire ranked texting, social media and translators as the most important functions. Also, about half of the students indicated that they should be able to use mobile technology for personal use during class, including activities such as social media, YouTube, playing games and listening to music. In addition, the majority of students claimed they were able to use mobile devices sparingly or for personal emergencies only, while only a few constantly indulged. However, in contrast to the questionnaire feedback, in the student focus group sessions most of the students seemed to prefer that mobile technology was not used for personal use at all in class. All in all, students maintain that educational use of devices is an important function for them.

However, they present mixed messages about using devices for personal activities. On one hand, students rank personal activities as unimportant or unnecessary, but on the other hand, they want to pursue them if they so desire, just so long as they are not disrupting others. It would seem that at times some students are unable to separate the two functions, but most participants accept that they can minimise personal usage. Clearly, personal use of mobile technology and the propensity for distractions provide teachers and students with much debate and concern in the language learning classroom. In addition, all the participants feel confused and frustrated as they try and make sense of the role of mobile technology in the classroom. This is also indicative of the evolving practice facing teachers who have to be mindful of the ever-changing technological landscape and the impact on their classroom regulation practices.

5.2.4 Response to Texting

One of the most contentious factors surrounding personal use of devices in the classroom is whether texting should be allowed or not. The data collected in this study revealed there was much conjecture about texting amongst students and

teachers. Although students perceived texting as a normal everyday function, they also presented mixed messages and conflicting views about texting in class time. When they were surveyed about their texting practices over 70 per cent of students claimed to text occasionally in class, with less than half of them admitting they were sometimes distracted. Interestingly, most of the students stated that they did not want texting to be allowed in class, with a third saying it was alright as long as it did not distract others. This information is quite contradictory with most students stating texting should not be allowed in class, in spite of most students admitting to texting. The student focus groups allowed for more investigation into this issue. While, in general, students were against habitual texting they thought it was acceptable for students to quickly check logistical, short texts and respond if it was done very swiftly. Most students felt that they were not distracted by this. One mature student said, “If my wife text I answer”! Another student said:

> Ahhh, I will see the text coming in. And ahhh if the answer can be short I will text back in a short time, and immediately come back to the class.

In contrast to students, most teachers were very clear that texting should not be present in the classroom. The rationale behind this was that it was seen as disrespectful, distracting and unnecessary. Also, classes are a short period of time so the students can text during the break or after class. However, they thought it reasonable, if a student needed to respond to an emergency or an important issue, this was because being away from families and living in a different time zone has a significant impact on an international student’s ability to attend to personal matters, in a time that is suitable for teachers outside of the classroom.

Teachers raised the issue that sometimes students are disingenuous about a claim that they need to take an important message from their embassy or family. Also, a student may see a particular text as important, but it may be considered less

important by the teacher. One teacher shared a management strategy for dealing with this; he set a ground rule at the beginning of the course, asking students to approach him at the beginning of the class if they needed to respond to a message during the lesson. That teacher felt that students then had to analyse if their potential message was in fact genuinely important or not, as they had to justify it to him.

To sum up, the majority of teachers were opposed to students' texting in class, with the exception of an emergency or important contact from family in another time zone. The basis for teachers' perceptions was that texting can lead to disruptive behaviour and that students may not gain the full benefit of the lesson. Additionally, it was discourteous to teachers and the other students, and often halted the class and wasted time while teachers dealt with the interruptions. In contrast, students' attitudes were less clear, in that they wanted teachers to control texting, but at the same time they wanted to self-manage and be able to partake in short, quick texts. When teachers were given the students' feedback (as mentioned above) they were left bewildered as to how they could manage what they consider to be nebulous circumstances. Additionally, this adds to the already complex dilemma of how teachers can fulfil their role of guiding students to develop both learner autonomy and appropriate behaviours for university classes.

5.3 Regulation in the Classroom

Classroom management or regulation is nothing new. However, now it is undeniable that the electronic superhighway which teachers are presented with, is extraordinarily difficult and sometimes perplexing to manage. On one hand, devices can be used as tools for learning and teachers may wish to accommodate this into their classroom environment. On the other hand, as mentioned earlier (in 2.2.2 Outside and 'Outside' the Classroom), the ability for students to travel

outside the classroom while being physically present is a new dimension that has been imposed on teachers. This notion, together with students' expectations of a teacher's role poses a dilemma for teachers to manage. Further to this, mobile devices offer students vast opportunities to be distracted if they have the inclination.

5.3.1 Reflecting Back

Before moving forward, it is worth considering some age old remnants of classroom antics. Disruptions have always been present, and as a teacher pointed out "there's always been the deviant student who is distracted, and using a mobile phone is the 21st Century notes in your pocket thing". In addition, teachers noted that most students are aware of the ethics around using their devices for personal use and apart from the "odd rogue student" most of them are respectful of this. Students have always known the boundaries and there have always been students who have pushed them. Therefore, dealing with students who are distracted is nothing new, but has merely taken on a new form.

In the same manner, boredom has always been present in the classroom and students have invariably found ways to deal with this. Now more than ever, mobile devices seem a likely distraction when a student is bored. In terms of students' behaviour when they are bored, two thirds of students indicated that they pursue various activities on their phones, while around a third said they stay focussed on the lesson regardless. However, a few students resorted to more traditional forms of avoidances such as sleeping, daydreaming or reading a book. The majority of students who participated in phone activities pledged that they were still connected to the class and could stop and get involved in the lesson and were not necessarily distracted.

In general, teachers accept that students do get bored; however, learning to deal with boredom is a valuable skill that all adults need to learn. One teacher had a more sympathetic attitude and said:

> I think it's kind of unrealistic for us to expect them to always be on task; because I remember when I was an undergraduate people were doing all sorts of things. And lectures I still remember people still going to sleeeeep, in them. So I think our expectations that they are always going to be focussed in what we want them to do are realistic…

All in all, boredom and distractions have always interfered with classroom dynamics, and mobile technology is simply a new accomplice to this.

5.3.2 Beliefs about Who Should Control Mobile Devices in the Classroom

Of great significance to all participants, whether students or teachers, is governance of the classroom environment, and more specifically, whose role it is to take responsible for regulating illicit digital behaviour. A lingering theme that emerged from the students' point of view was the level of control that the teacher had over the class. The belief was that the teacher should be responsible for regulating student behaviour in the classroom and remind students to pay attention if they were distracted by technology. In addition, the majority of students felt that personal use should be controlled and limited and they wanted a teacher who would do this; what is more, a teacher who allowed students to take part in personal cyber-activities would be deemed irresponsible.

Indeed, a teacher exercising control was a key issue for nearly all the students. It was very clear that students preferred the teacher to be in control at all times and monitor people's behaviour. There was a strong leaning to the idea that a teacher who regulated students' activities and stopped them wasting time was more

caring, for instance reminding them that while they were texting they were potentially losing a learning opportunity; thus, showing that the teacher cared about the student's education. Overall, there was an attitude that the teacher was responsible if the student lost the possibility to gain knowledge and little acknowledgement that the student needed to exercise personal responsibility. In general students indicated that they should also take responsibility; however, their responses to more specific questions and situations would indicate they did not know how to be personally responsible and defaulted to the teacher taking responsibility. This attitude was displayed by students from a variety of ages, backgrounds and cultures. However, paradoxically, in spite of wanting this control, about 50 percent of the students also wanted to be autonomous and make quick, short texts in class. Ironically, they expected the teacher to be able to differentiate between a quick text and a more involved text or activity and stop a student doing the latter, but allow the former. There was little awareness displayed by students that this may be an almost impossible expectation for teachers to achieve.

In contrast one student expressed a minority opposing opinion (he was the only student in this study with this view), in that he wanted a teacher that created a classroom environment that completely excluded the digital sphere. This particular student, who was aged around 20, believed that mobile technology should not be in the classroom environment at all. He offered:

> I think…we should not use mobile phone in the class, because we should focus on what teachers said and instead of doing texting communication with maybe parents or friends during class time, yeah.

He maintained that there was time during breaks, and before and after class for students to use their devices. Similarly, this was a view shared by the teachers.

On the whole, teachers were prepared to take responsibility for regulating behaviour; however, they expected students to accept personal responsibility for their actions. Teachers were adamant that students are undertaking preparation for future academic study in a Western culture educational facility, and they will need to develop self-discipline and self-motivation to succeed. Furthermore, students are adults and should take responsibility for their own behaviour.

With regard to students making short texts in class (as mentioned above) the teachers were very clear about this issue. Their premise was that most of the time that students embark on personal activities they are being distracted and this is very disrespectful to them as teachers and may be distracting to other students (see section 4.4.2 Mobile Technology for Personal Use). Furthermore, teachers were unhappy with the expectation that they should be able to make a distinction between quick texts and more involved texting sessions. One teacher said, “But how can you monitor it? How do you know?” Another teacher agreed and then offered:

> Yeah, but the thing is you're never going to stop that from interrupting...it doesn't matter if it's on silent, if it's in their bag. This generation are so…what's the word, not attuned, they are so programmed to be constantly checking incoming data, incoming information... it's just wired into their whole way of learning and being. You know that is just how this generation thinks and acts, and we can't undo that, we can't.

This voice expressed an acceptance of the cyber-world and its influence on young people, and that teachers need to move forward and find ways to accommodate this behaviour in their classroom management.

Other teachers expressed frustration over trying to regulate students’ behaviour with varying degrees of success. One teacher had been tempted to imitate the

inappropriate behaviour of students to prove a point, but had stopped herself as she wanted to maintain her professionalism and was mindful of the unspoken adage that a good teacher can control their class. She also felt that blatant, persistent inappropriate use of a phone (as long as other students were not distracted) was a student's choice, and if they did not want to change their behaviour that was their loss.

Another teacher was not prepared to resort to treating students like children, where she felt she would be like a surrogate mother. Her expectation was that students are adults and should as a matter of course be responsible for themselves. This sentiment distils the views of teachers who teach in a Western culture university setting, where student autonomy is a desired outcome.

A powerful and important form of self-regulation was noted by some students, where they felt compelled to preserve their personal integrity and remain courteous to the teachers and other students. Indeed, the threat of being considered disrespectful and impolite motivated them to minimise their personal use on mobile devices.

Overall, and with some reluctance, the teaching cohort understood that this was the reality of the 21st Century classroom, and that they had been compelled to regulate it. The majority of teachers were strong in their belief that establishing ground rules at the beginning of the course, and ensuring that students follow them was a necessity; albeit the same strategy that has always been employed in the classroom (before the availability of mobile technology). The teaching staff recognised that, in spite of this, there will always be some students who do not respect the rules, and that regulating undesirable behaviour is nothing new.

5.3.3 Lesson Phases

Overall, regulation was a significant issue for all concerned, and at times the two stakeholder groups identified particular phases of a lesson where they thought control around devices should differ.

Most of the participants in the student focus groups were very clear that educational use of devices was a necessity in the classroom, but it was imperative that personal use be minimised and kept in control. Therefore, for most of the time teachers needed to impose controls and regulate students' activities and behaviour. However, at times students felt that it was desirable for them to self-regulate and control how they used their devices during different phases of a lesson as this allowed for differing responses. Namely, they could swiftly access the world of cyber-space and gain instant knowledge and information in the pursuit of education.

In addition, when they had reached the end of a task and they could amuse themselves with their devices while they were waiting for others to catch up. Some students regarded this as taking a short break in between learning and it helped them to relax. The idea of maintaining concentration for 50 minutes of learning time without being interrupted by notifications seemed unrealistic to students, and the expectation of an entertainment break within that time to help them refresh and refocus seemed more realistic to them.

In contrast, as mentioned above (in 5.3.2 Beliefs about who should regulate), most teachers were opposed to students indulging in any form of personal use of their devices during class with the exception of one teacher who used it as a strategy of reward (see 4.4.2. Mobile Technology for Personal use). However, most of the teachers were happy with the idea of students using mobile

technology for educational use in class in general, but were decisive about it needing to be controlled, and that at times it was not to be used. There was much concern that the over-reliance on devices would impede students' ability to develop important educational imperatives. It is significant to note here, that just as students identified that various stages of a lesson called for different responses, so too did the teachers; albeit not for the same phases. For instance, teachers felt that in particular learning situations students need to try and develop beneficial language strategies. This includes prediction skills for reading, and strategies for guessing the meaning of words from context and other clues around vocabulary. However, students often did not value nurturing these skills nor attribute time to cultivating them, as in most circumstances they believed they could use a device to find the information they needed. Furthermore, in spite of (with the exception of exams) students assuming they could always rely on their mobile devices, teachers pointed out that devices were only useful if WiFi was available and they could connect to the Internet. All in all, teachers felt strongly that it was imperative that students foster their ability to develop guessing and prediction strategies, particularly for the demands of academic reading and language acquisition. In these circumstances, teachers claimed that they would stipulate that students not use their devices and would then be vigilant at policing this.

5.3.4 Modelling Etiquette

Surfacing from the teachers' focus group discussions was the notion that people need to learn appropriate etiquette about how to respond to their mobile devices in class. The teachers thought that it was important for them to act as role models for behaviour and establish an expectation of courtesy around the use of mobile devices. One teacher commented:

> It goes back to…the etiquette netiquette type thing…would it be OK for us right now just to look at our phones?...It's not acceptable, so in a sense I think we are also training students about what's going to be acceptable in their lectures, and their tutorials when they get to university.

Again, the idea highlights that teachers believe that students are being prepared for future academic study and the workforce in the future; hence, teachers underlined the importance of demonstrating professionalism by using their devices appropriately.

This philosophy of modelling manners was strongly aligned with the point of view of one student. She believed that because mobile technology is part of the world today, personal use should be incorporated into class time, and then students would learn more discipline. She saw the potential for students to have the opportunity to learn the self-regulation that will be required for future academic study, as opposed to simply expecting teachers to police behaviour. This student had a strong conviction that part of a teacher's role should be modelling appropriate mobile technology conventions.

5.4 Technical Expertise

In spite of the expectation that the onus for establishing etiquette was on teachers, for most of the teachers in the ESOL teacher focus group and all the students who participated in the focus groups, there appeared to be an unspoken assumption that students were indeed more technologically minded and skilful with mobile technology; further to that, students occupied a sphere that set them aside from most educators (Howard, Ma, & Yang, 2016). Some students spoke of themselves as growing up with mobile technology and that it was a way of life to

them and most teachers simply did not understand this world. However, all the ESOL teachers had an awareness of and used mobile technology to some extent, while a few had embraced it in their own lives and understood how it could be used for people's learning and why young people wanted to be continuously attached to it.

In contrast the EAP teacher focus group in general differed in their viewpoint that students were more technologically aware and conversant. This is perhaps indicative of this group's greater focus on preparing students for future academic university study. Students may be proficient with mobile phones, iPads and tablets, but there were disparities in their technological ability as many of them lacked keyboard, word processing and general computer skills. This was a critical and significant issue for teachers, in that a wide range of technical skills are vital for a student's survival in the academic environment of university in New Zealand. For example students need to be able to produce a correctly formatted word-processing file with citations and referencing; develop research skills which involves being able to use search engines and digital libraries; and be cognisant with operating the university's online learning platform including uploading files and participating in activities and forums. In addition, students need many skills that teachers have long since mastered, such as: choosing keywords to research online; using many common programmes; and the protocol around writing formal and informal emails. The latter issue is indicative of the influence of texting, by virtue of text language becoming a habit of which people are not even aware. Indeed, recent research would tend to support the belief that the younger generation is very enlightened with digital mobile technology and the use of phone apps, but the older generation has a level of computer skills that some younger people do not possess and need (Bennett, Maton & Kervin, 2008; Thomas & O'Bannon, 2014; Thompson, 2013).

The EAP teachers spoke of how they often spent time instructing students in how to apply these skills as they are necessary for students' future academic study. At least half of the teachers in the group felt that they had a wide range of skills compared to those of many students and they were often astonished to see students lack of knowledge about technology.

To conclude, students may be adept at using mobile technology, but they were found to lack the wide range of computer skills that are essential for academic studies. Also, teachers may not be as influenced by and connected to mobile technology as younger people, but they are becoming accustomed to its presence and are using and accepting it into their lives. Furthermore, most teachers have a more complex set of technological skills that they can apply to the academic landscape, in that most teachers have grown up with computers or made the transition to computer technology in the 1980s, 1990s and 2000s when it became commonplace in work environments. This means they have progressed technically as the scope of computers, network usage and the Internet has developed; markedly, teachers are competent at word-processing. In contrast, students are accustomed to using apps on their devices, which merely involves pushing a button and instantly gaining access to what they want. Indeed, for some young people there has been no need to open or own a computer to achieve what they want as their phones and apps have been sufficient for meeting their needs. Consequently, some students have not necessarily needed to develop computer skills, and therefore, have a deficiency in their technical ability. Of great significance, is that students themselves identified that teachers should be directing their use of technology for language learning and modelling appropriate etiquette. This last insight, that students saw teachers as potential experts, was somewhat surprising to teachers and a source of pride for them.

5.5 Student Expectations of Teachers

Much of the research involving students' perspectives was discovering what abilities and traits students considered desirable for teachers to have, and it revealed that there were some generalities around what students liked or wanted. For instance, there was a strong preference for technological competence; this was based entirely on their interpretation of this and (as mentioned above) was mostly centred on mobile technology. However, most students also admitted that it was not necessarily important that teachers be conversant with mobile technology, but rather that they made some attempt to use it and learn it; but, of greater significance was that they actively accepted and encouraged students to use mobile technology and that it was present in the classroom.

Of great significance, after much discussion about what a teacher's technical ability should be, students felt that regardless of a teacher's awareness or adoption of mobile technology, and its integration into class time, the most important underlying factor was that the teacher was good at teaching. Clearly, the highest priority for students was that teachers have excellent teaching skills, and if they were conversant with mobile technology this was a bonus.

A student commented, "If the teaching skill is good it doesn't matter…"

Another student agreed:

> We are learning English…so what we learn is just maybe the information we want to give, it's not the technology itself…as long as he or she tries or we help them do it…

Overall, the dominant message was that a teacher's ability to teach was the highest priority to most students.

5.6 Conclusion

To sum up, there were contradictory beliefs amongst the students which manifested in mixed messages about mobile device usage and the regulation of behaviour around devices. There were conflicting beliefs between students and teachers about behaviour, expectations and responsibility. The bridging situation posed demands on teachers, as they contended with preparing students to deal with the Western cultural expectations of autonomous learning. Also, there was an evident challenge for teachers to navigate their way through continuously changing technology and the emerging practices that follow. All in all, there was clearly a discrepancy between student and teacher beliefs at the levels of philosophical responsibility and logistical possibilities.

Chapter Six

Conclusion

This conclusion begins with a summarised response to the three research questions, which have formed the basis of this study. This will be followed by a review of the implications of the study for students and teachers, the limitations of the study, and recommendations for potential future research.

6.1 Responses to the Research Questions

6.1.1 Research Question One

What are students' and teachers' perceptions of the appropriate use of technology with university preparation classes?

The research shows that both students and teachers regard mobile devices as personal items that are present in all aspects of most people's everyday lives. However, the definition of *personal* varied, in that the majority of students viewed these items as extensions of themselves and not separable from them; whereas, a lot of the teachers considered them part of their personal life and separate from their professional life. In fact, most of the teachers claimed that they did not take their devices with them to class, and others only used them in breaks or for emergencies.

Nonetheless, all parties agreed that digital devices had the capacity to be powerful educational tools, and worthy of implementation to access knowledge and enhance learning in the classroom, most of the time. However, teachers were resolute that there were phases in a lesson where using these tools (for educative purposes) may impede a student's ability to develop guessing and prediction skills, which are necessary for coping with the challenges of academic reading and vocabulary acquisition. On these occasions teachers would make it clear that students were not to use them.

There were other phases during a class when some students felt inclined to use their devices. These students claimed that after they had completed a task and they were waiting for others they could amuse themselves on their devices. Also, this would act as a little pause to relax their minds, as they considered that 50 minutes was a long period of time to concentrate without a break. Although most teachers were opposed to this notion, one teacher deliberately encouraged this behaviour as a reward strategy in his class, and believed it was successful.

This issue of personal use of mobile devices was more controversial between the two groups of participants. The teachers were disapproving of any personal activity on devices in class time, with the exception of an emergency or a student needing to make contact for personal matters with a relative living in a different time zone. Apart from this, most teachers were not flexible on this facet of mobile technology.

Students conveyed mixed messages about personal usage. On one hand, students claimed to not want personal use present in the classroom at all (data from focus groups); while, on the other hand, they indicated that they wanted to self-regulate personal activity, and make quick, short, logistical texts during class (data from the student focus groups). Additionally, students believed that most of

the time they were not distracted by personal activities, but wanted teachers to prevent them from indulging in more involved cyber-activity, such as playing games and surfing the Internet. These conflicting voices conveyed that students saw a division between short, logistical transactions and complex digital activity, with the need for self-regulation over the former and the desire for teachers to control the latter.

Overall, students wanted teachers to encourage and allow them to use mobile technology in class. Also, they thought it advantageous if teachers used mobile devices themselves, or at least had an awareness of it. However, all students were steadfast in their belief that the most important doctrine was that teaching excellence took precedence over technology skills. In the end, it mattered that a teacher was good at teaching.

6.1.2 Research Question Two

How does the presence of mobile technology influence the classroom environment?

One positive influence of the presence of mobile devices in the classroom is the instant connection to knowledge, and the capacity to access a myriad of learning resources. All the stakeholders agreed with this stance. Students regarded teachers as having the potential and knowledge to lead them to valuable resources that they could utilise with their devices. Teachers were pleasantly surprised at this revelation and realised that they had a role in facilitating and harnessing students' potential learning with their devices.

A pivotal negative influence of mobile technology is the potential for students to be distracted and lose valuable learning opportunities in the class. Teachers endorsed that distractive behaviour is not a new concept, but rather delivered to

them via a different medium. Most students claimed to not be distracted by short interactions on their devices; however, more complex interchanges had the potential to be disruptive. In contrast, teachers viewed all personal activities as distracting and disrespectful to teachers and other students.

A huge implication for the physical landscape of the class environment is the ability for participants to cyber-travel outside the four walls of the traditional classroom. In other words, a student is physically present, but mentally they are absent in cyber-space with the help of their mobile device. This new dimension has opened the once hallowed classroom to unlimited escape routes for students. This is another reason why teachers are in opposition to any personal activity being sanctioned in the classroom.

Indeed, all participants acknowledged that students are adept at using mobile devices; however, the teachers noted a detrimental consequence of young people's focus on digital mobile technology. This preoccupation with the use of devices has contributed to a deficit in young people's technical knowledge. Teachers expressed concern at the lack of technical ability a lot of students possessed in a wider range of technological skills that are vital for future academic study. These skills include basic computer knowledge, searching online, formatting and uploading files and lacking familiarity with commonly used computer programmes. With the advent of mobile technology, young people have concentrated their efforts into using mobile devices and have not needed to develop computer skills. The implications in the classroom are that teachers need to spend time teaching computer skills.

6.1.3 Research Question Three

What do students and teachers believe to be their respective roles in the regulation of the use of mobile technology?

Overall, the students believed that the teachers were responsible for regulating behaviour around mobile technology. This included the teacher evaluating any potentially distracting situations and stopping them, and at the same time, differentiating between short, digital interchanges and allowing them, but stopping complex cyber activities. What is more, in taking responsibility students felt teachers conveyed that they cared about the students' learning opportunities. It was important for students that teachers take control and accept responsibility for students' behaviour in the class. However, in contradiction to this, some of them wanted to self-regulate their personal use of their devices, but have the teacher take control if they exceeded a reasonable usage.

In turn, teachers were stupefied by this expectation that they should be skilled at distinguishing if a student was just making a quick logistical text, or indulging in a long conversation on Facebook. Furthermore, this was an imposition that they did not want or welcome. The majority of teachers were uncomfortable at having to compete with unwanted cyber-activity, but had accepted that they had to contend with it out of necessity.

Notwithstanding, teachers also believed that they needed to take responsibility and feel concerned if students were distracted. However, some were affronted that only they were deemed responsible and that most students did not consider accepting responsibility themselves. Teachers believed it was everyone's responsibility as an adult to regulate their own behaviour. In addition, it is part of a teacher's role to prepare students for the future where they would be expected to be autonomous learners and exercise self-control.

Although the teacher participants have always been accustomed to encountering disruptive behaviour in classroom settings, the notion of students' cyber travelling

outside the physical limitations of the class, and constantly receiving digital activity presents challenging management issues. To some extent, teachers felt imposed upon with this new dimension, and admitted that they were still finding out how to manage it. In general, they believed that negotiating firm ground rules at the beginning of the course, and enforcing them was a sound start to good management; however, they did not as yet have any new ideas as to how to manage illicit cyber-activity.

6.2 Implications of the Study

The overlying implication for all participants of the study is that the presence of mobile technology is an ever- evolving field that impacts all people's lives. This means that students and teachers need to be mindful of staying abreast of recent developments in mobile technology, and constantly developing ways to incorporate it, use it, and manage its ubiquitous presence in the classroom.

In addition, students who have come from a different educative cultural background (other than a Western education system) often have divergent expectations compared to those of their Western counterparts around responsibility and regulation. Also, they may be able to read about and intellectualise the notion of self-management, but in reality may not know how to make this shift, or have an understanding of a teacher's role in this scenario. Furthermore, some students have an ingrained idea that the teacher must take responsibility for regulation of their behaviour, and they need significant experiences and reminders in order to modify their understanding of Western expectations around self-governance. Students need to realise and accept that it is crucial for success (at Western tertiary institutions) that they endeavour to develop independence around their study habits and skills. The ramifications for teachers are that they need to be aware of the potential disparity in beliefs, and

emphasise to students the expectations of Western culture in the tertiary education environment, and actively guide students through the process of fostering autonomous learning. Most importantly, teachers need to mediate a joint understanding with the students about what is expected around regulation at the beginning of course, and persevere at facilitating students' learning of this new concept.

Another implication for students is that they need to develop self-discipline around the use of their devices, and learn to take responsibility for their own behaviour. This is vitally important to the success of their future academic studies, where Western educational institutions expect students to be self-disciplined and effective autonomous learners. Of course, ideally this should occur, but in reality it is not always that straightforward. Therefore, an implication for teachers in a bridging situation is that they need to be aware of the potential gap in understanding, and if it does exist have strategies at the ready to act upon.

In addition, students need to be made aware earlier on in their education that there is an expectation that they possess basic computer skills before they embark on study in a Western academic facility. So often, students only focus on mobile devices to fulfil their everyday technological needs, and have not deemed it important to learn general computer skills that are essential for academic study.

An obvious implication that has emerged from this study for teachers is the challenges of meeting the changes to the traditional classroom since the presence of mobile devices. Teachers are faced with the imposition of competing with cyber-travel and factoring this into the teaching environment. Classroom management is the biggest challenge. In addition, teachers need to model classroom etiquette as another means of controlling inappropriate behaviour, and

to prepare students to cope with the expectations of learner independence in future academic study.

A further implication is coping with the expectations presented by the students. Many teachers feel that these presumptions of teachers' powers and abilities are impossible to achieve and they feel overwhelmed by this. Their challenge is to educate students about what is realistically possible for all the stakeholders to accomplish.

Finally, teachers need to talk with students and negotiate their respective roles in the use, management and regulation of mobile technology in the classroom.

6.3 Limitations of the Study

The most significant limitation of this study was that there were no native English speaker participants in the student focus groups. This was because there was a lack of availability of domestic students during the time of the data collection for the student focus groups. Consequently, this excluded the views of people who had been educated in a Western education system, who may have offered different perspectives, attitudes and perceptions. The views that were offered by the students who did participate in the focus groups may have been reflective of their generation and previous educational experiences, which were centred in Asian educational institutions, and experiences. In particular, their beliefs about a teacher's role may have been influenced by the participants' previous educative situations.

6.4 Future Research

This study just touches on an aspect of the effects of mobile technology on education today, in particular in university preparation courses. Data reveals that

teachers and students are still coming to terms with the power of these tools, and how they can be utilised most effectively, how they can he managed, and how they have changed the traditional classroom in the 21st Century.

More specifically, it would be interesting to delve into students' behaviour around quick cyber absences from the physical classroom and investigate if they are, in fact, able to multi-task and stay connected with the lesson while responding to a short message. It seems that most students believe that they can successfully achieve this, and I believe myself that I can also check short messages and stay connected to another task. However, most teachers did not think this was always possible, as they believe students can be distracted from a class by another activity while checking a text. I think it would be fascinating to research what happens when students venture out of the classroom in quick bursts, where they go, what they do, and how they decide to come back to the lesson. This could perhaps be achieved by using a stimulated recall methodology based on recordings of classroom behaviour. It would be exciting to unravel this and gain some understanding of students' cyber distractions and behaviour. Also, to gain insights into how young people have fostered processing multiple pieces of information; and in turn, how these dynamics affect university preparation classes. Finally, research into this area is imperative as digital technology increasingly becomes embedded in learning situations, and influences the constantly changing classroom landscape.

Reference List

Abu-Al-Aish, A., & Love, S. (2013). Factors influencing students' acceptance of m-learning: An investigation in higher education. *The International Review of Research in Open and Distributed Learning, 14*(5).

Arksey, H., & Knight, P. (1999). *Interviewing for social scientists.* London: SAGE Publications Ltd. doi: http://dx.doi.org/10.4135/9781849209335

Barbour, R. (2007). *Doing focus groups.* London: SAGE Publications Ltd. doi: http://dx.doi.org/10.4135/9781849208956

Bennett, S., Maton, K., & Kervin, L. (2008). The "digital natives" debate: A critical review of the evidence. *British Journal of Educational Technology, 39*(5), 775–786.

Brown, M. G. (2016). Blended instructional practice: A review of the empirical literature on instructors' adoption and use of online tools in face-to-face teaching. *Internet and Higher Education, 31,* 1-10.

Cheng, S. C., Hwang, W. Y., Wu. S. Y., Shadiev, R., & Xie, C. H. (2010). A mobile device and online system with contextual familiarity and its effects on English learning on campus. *Educational Technology and Society, 13*(3), 93-109.

Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012). An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers and Education, 59*(3), 1054–1064.

Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data: Complementary research strategies.* Thousand Oaks, CA: SAGE Publications Ltd.

Collins, A., & Halverson, R. (2009). *Rethinking education in the age of technology: The digital revolution and schooling in America.* Retrieved from https://llk.media.mit.edu/courses/readings/Collins-Rethinking-Education.pdf

Cope, B., & Kalantzis, M. (2009). "Multiliteracies": New literacies, new learning. *Pedagogies: An International Journal, 4*, 164–195.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications Ltd.

Dalstrom, E. (2012). *The ECAR study of undergraduate students and information technology, 2009.* Louisville, CO: EDUCAUSE Center for Applied Research. Retrieved from http://net.educause.edu/ir/library/pdf/ERS1208/ERS1208.pdf

Davidson, L. Y. J., Richardson, M., & Jones, D. (2014). Teachers' perspective on using technology as an instructional tool*. Research in Higher Education Journal, 24*, 1-25

Dickey, M. (2004). The impact of web-logs (blogs) on student perceptions of isolation and alienation in a web-based distance-learning environment. *Open learning, 19* (3), 279-291.

Dornyei, Z. (2007). Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies. Oxford, UK: Oxford University Press.

Eid, M. I. M., & Al-Jabri, I. M. (2016). Social networking, knowledge sharing, and student learning: The case of university students. *Computers & Education, 99*, 14-27. http://dx.doi.org/10.1016/j.compedu.2016.04.007

Ertmer, P. A., Ottenbreit-Leftwich, A., & York, C. S. (2006-2007). Exemplary technology-using teachers: Perceptions of factors influencing success. *Journal of Computing in Teacher Education, 23*(2) 55-61.

Farris, D., & Ylimaki, R. (2010). *Towards a neo-Vygotskian approach to 21st Century learning*. Retreived from http://dfarris.oia.arizona.edu/neo-Vygotskian_manuscript.pdf

Ferrari, A. (2012). *Digital competence in practice: An analysis of frameworks*. doi:10.2791/82116

Fotouhi-Ghazvini, F., Earnshaw, R. A., Robison, D., & Excell, P. S. (2009). *Designing augmented reality games for mobile learning using an instructional-motivational paradigm.* Paper presented at 2009 International Conference on CyberWorlds, Bradford, England, UK. Retrieved from http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=5279554

Gikas, J., & Grant, M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *Journal of Internet and Higher Education, 19*, 18-26.

Heigham, J., & Croker, R. A. (2009). *Qualitative research in applied linguistics: A practical introduction*. Basingstoke, England: Palgrave Macmillan.

Holec, H. (1981). *Autonomy and foreign language learning*. Oxford, UK: Pergamon Press.

Howard, S. K., Ma, J., & Yang, J. (2016). Student rules: Exploring patterns of students' computer-efficacy and engagement with digital technologies in learning. *Computers & Education, 101*, 29-42.

Hsu, L. (2012). English as a foreign language learners' perception of mobile assisted language learning: A cross-national study. *Computer Assisted Language Learning, 1*, 1–17.

Hu, Z. (2013). Vocabulary learning assisted by mobile phones: Perceptions of Chinese adult learners. *Journal of Cambridge Studies, 8*(1), 139-154.

Huang, Y. M., Huang, Y. M., Huang, S. H., & Lin, Y. T. (2012). A ubiquitous English vocabulary learning system: Evidence of active/passive attitudes vs. usefulness/ease-of-use. *Computers and Education, 58*(1), 273-282. doi:10.1016/j.compedu.2011.08.008

Hwang, G. J., Tsai, C. C., & Yang, S. J. H. (2008). Criteria, strategies and research issues of context-aware ubiquitous learning. *Educational Technology & Society,11(*2), 81–91.

Johnson, L., Adams, S., & Cummins, M. (2012). *NMC horizon report: 2012 K–12 edition.* Austin, TX: The New Media Consortium.

Karimi, S. (2016). Do learners' characteristics matter? An exploration of mobile-learning adoption in self-directed learning. *Computers in Human Behavior, 63,* 769-776.

Katz, Y. J., & Yablon, Y. B. (2011). Affect and the digital learning at the university level. *Campus-Wide Information Systems, 28*(2), 114-123.

Kearney, M., Schuck, S., Burden, K., & Aubusson, P. (2012). Viewing mobile learning from a pedagogical prospective. *Research in Learning Technology, 20*(3), 1-17. doi: 10.3402/rlt.v20i0.14406.

Kennedy, D. M. (2014). M-learning to support English in a Hong Kong university. *MERLOT Journal of Online Learning and Teaching, 10*(4) 640-653.

Kessler, G. (2010). Fluency and anxiety in self-access speaking tasks: The influence of environment. *Computer Assisted Language Learning, 23*, 361–375.

Kim, H. J., & Jang, H. Y. (2015). Factors influencing students' beliefs about the future in the context of tablet-based interactive classrooms. *Computers & Education, 89*, 1-15.

Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ : British Medical Journal*, *311*(7000), 299–302.

Khoo, E. G. L., & Cowie, B. (2011). A framework for developing and implementing an online learning community. *Journal of Open, Flexible and Distance Learning, 15*(1), 47–59.

Kukulska-Hulme, A. (2012). How should the higher education workforce adapt to advancements in technology for teaching and learning? *Internet and Higher Education, 15,* 247–254.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL, 20*(3), 271–289.

Lai, C., & Gu, M. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning, 24*(4), 317-335.

Lan, Y.F., Tsai, P.W., Yang, S.H., & Hung, C.L. (2012). Comparing the social knowledge construction behavioral patterns of problem-based online asynchronous discussion in E/M-learning environments. *Computers & Education, 59*(4), 1122-1135.

Lantolf, J. (2000). Second language learning as a mediated process. *Language Teaching*, *33*, 79-96.

Lantolf, J. P., & Poehner, M. E. (2014). *Sociocultural theory and the pedagogical imperative in L2 education: Vygotskian praxis and the research/practice divide*. New York, USA: Routledge.

Lee, J., & Bonk, C. (2016). Social network analysis of peer relationships and online interactions in a blended class using blogs. *The Internet and Higher Education, 28*, 35-44.

Li, M. (1999). Conflicts in teacher-student role beliefs and expectations: A study of expatriate teachers teaching English in China. *The Weaver: A Forum for New Ideas in Education, 3,* 1-15.

Liamputtong, P. (2011). *Focus group methodology: Principles and practice*. London: SAGE Publications Ltd. Retrieved from http://dx.doi.org/10.4135/9781473957657

Looi, C. K., Seow, P., Zhang, B., So, H. J., Chen, W., & Wong, L. H. (2010). Leveraging mobile technology for sustainable seamless learning: A research agenda. *British Journal of educational Technology, 41* (2), 154-169.

Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Educational Research, 99*(4) 218-230.

Lupton, D.A. (2014). '*Feeling better connected': Academics' use of social media*. Canberra, Australia: News & Media Research Centre, University of Canberra. Retrieved from http://www.canberra.edu.au/about-uc/faculties/arts-design/attachments2/pdf/n-and-mrc/Feeling-Better-Connected-report-final.pdf).

Mackey, A., & Gass, S. M. (eds) (2011). *Research methods in second language acquisition: A practical guide*. Chichester, UK: John Wiley & Sons, Ltd. doi: 10.1002/9781444347340.fmatter

Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design.* New York, NY: Routledge. Retrieved from http://www.eblib.com

Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New Directions for Adult and Continuing Education,* (89), 25-34.

Mottiwalla, L. F. (2007). Mobile learning: A framework and evaluation. *Computers in Education, 49*(3), 581–596.

Olufadi, Y. (2015). A configurational approach to the investigation of the multiple paths to success of students through mobile phone use behaviors. *Computers and Education, 86*, 84-104.

Park, Y. (2011). A pedagogical framework for mobile learning: categorizing educational applications of mobile technologies into four types. *International Review of Research in Open and Distance Learning, 12*(2), 78–102.

Pimmer, C., Mateescu, M., & Gronhbiel, U. (2016). Mobile and ubiquitous learning in higher education settings: A systematic review of the empirical studies. *Computers in Human Behaviour, 63,* 490-501.

Project Tomorrow. (2010). *Learning in the 21st century: Taking IT mobile.* Retrieved from http://www.blackboard.com/resources/k12/k12_ptmobile_web.pdf.

Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology, 44* (4), 544–561.

Sandberg, J., Maris, M., & de Geus, K. (2011). Mobile English learning: An evidence-based study with fifth graders. *Computers & Education, 57*(1), 1334-1347.

Saran, M., Cagiltay, K., & Seferoglu, G. (2008). Use of mobile phones in language learning: Developing effective instructional materials. *IEEE International Conference on Wireless, Mobile, and Ubiquitous Technology in Education 2008* (pp. 39-43). doi:10.1109/WMUTE.2008.49

Schepman, A., Rodway, P., Beattie, C., & Lambert, J. (2012). An observational study of undergraduate students' adoption of (mobile) note-taking software. *Computers in Human Behavior, 28*, 308–317

Schmenk, B. (2005). Globalizing learner autonomy. *TESOL Quarterly, 39*(1), 107-118.

Scollon, R., & Scollon, S. (1994). *The post-Confucian confusion.* (Report No. 37). Hong Kong: Department of English, City Polytechnic of Hong Kong.

Shih, J. L., Chu, H. C., Hwang, G. J., & Kinshuk (2010). An investigation on attitudes of students and teachers for participating in a context-aware ubiquitous learning activity. *British Journal of Educational Technology, Advance Online Publication.* doi: 10.1111/j.1467-8535.2009.01020.x.

Siddiq, F., Scherer, R., & Tondeur, J. (2016). Teachers' emphasis on developing students' digital information and communication skills (TEDDICS): A new construct in 21st century education. *Computers & Education, 92-93,* 1-14. doi.org/10.1016/j.compedu.2015.10.006

Singh, P., & Doherty, C. (2004). Global cultural flows and pedagogic dilemmas: Teaching in the global university 'contact zone'. *TESOL Quarterly, 38*(1), 9-42.

Sirisatit, R. (n.d.). *Insights from using activity theory frameworks to understand an ESP task-based instruction.* Retrieved from http://www.litu.tu.ac.th/journal/FLLTCP/Proceeding/916.pdf

So, S. (2016). Mobile instant messaging support for teaching and learning in higher education. *The Internet and Higher Education, 31*, 32-42.

Stead, G. (2012). Towards open formats for mobile Learning. *Proceedings of the 11th international conference on mobile and contextualised learning (pp. 78–85).* Retrieved from http://ceur-ws.org/Vol-955/.

Steel, C. (2012*). Fitting learning into life: Language students' perspectives on benefits of using mobile apps.* Paper presented at the Ascilite 2012: Future Challenges Sustainable Futures Conference, Wellington, New Zealand. Retrieved from http://www.ascilite.org/conferences/Wellington12/2012/images/custom/steel,_caroline_-_fitting_learning.pdf

Steel, C. H., & Levy, M. (2013). Language students and their technologies: Charting the evolution 2006-2011. *ReCALL, 25*(3), 306-320. doi: 10.1017/S0958344013000128

Strømsø, H. I., & Bråten, I. (2014). Students' sourcing while reading and writing from multiple web documents. *Nordic Journal of Digital Literacy, 9*, 92–111

Thomas, K., & O'Bannon, B. (2013). Cell phones in the classroom. *Journal of Digital Learning in Teacher Education, 30*(1), 11-20. doi:10.1080/21532974.2013.10784721

Thompson, P. (2013). The digital natives as learners: Technology use patterns and approaches to learning. *Computers & Education, 65*, 12–33.

Thorne, S., Black, R.W., & Sykes, J.M. (2009). Second language use, socialization, and learning in Internet interest communities and online gaming. *Modern Language Journal, 93*, 802–821.

Traxler, J. (2009). Current state of mobile learning. In M. Ally (Ed.), *Mobile learning: Transforming the delivery of education and training* (pp. 247–264). Retrieved from http://www.aupress.ca/books/120155/ebook/99Z_Mohamed_Ally_2009-MobileLearning.pdf

Traxler, J. (2010). Students and mobile devices. *Research in Learning Technology, 18*(2), 149–160.

Turner, J. (2004). Language as academic purpose. *Journal of English for Academic Purposes, 3*(2), 95-109.

Veletsianos, G., & Kimmons, R. (2016). Scholars in an increasingly open and digital world: How do education professors and students use Twitter? *Internet and Higher Education, 30*, 1-10.

Viberg, O., & Grönlund, Å. (2012). Mobile assisted language learning: A literature review. *Proceedings of the 11th international conference on mobile and contextualised learning* (pp. 9–16). Retrieved from: http://ceur-ws.org/Vol-955/.

Viberg, O., & Grönlund, Å. (2013). Cross-cultural analysis of user's attitudes toward the use of mobile devices in second and foreign language learning in higher education: A case from Sweden and China. *Computers and Education, 69*, 169-180.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wetzel, K., Buss, R., Foulger, T. S., & Lindsey, L. (2014). Infusing educational technology in teaching methods courses: Successes and dilemmas. *Journal of Digital Learning in Teacher Education, 30*(3), 89-103.

White, C., Direnzo, R., & Bortolotto, C. (2016). The learner-context interface: Emergent issues of affect and identity in technology-mediated language learning spaces. *System, 62,* 3-14.

Wong, L. H. (2012). A learnercentric view of mobile seamless learning. *British Journal of Educational Technology, 43*(1), 19-23.

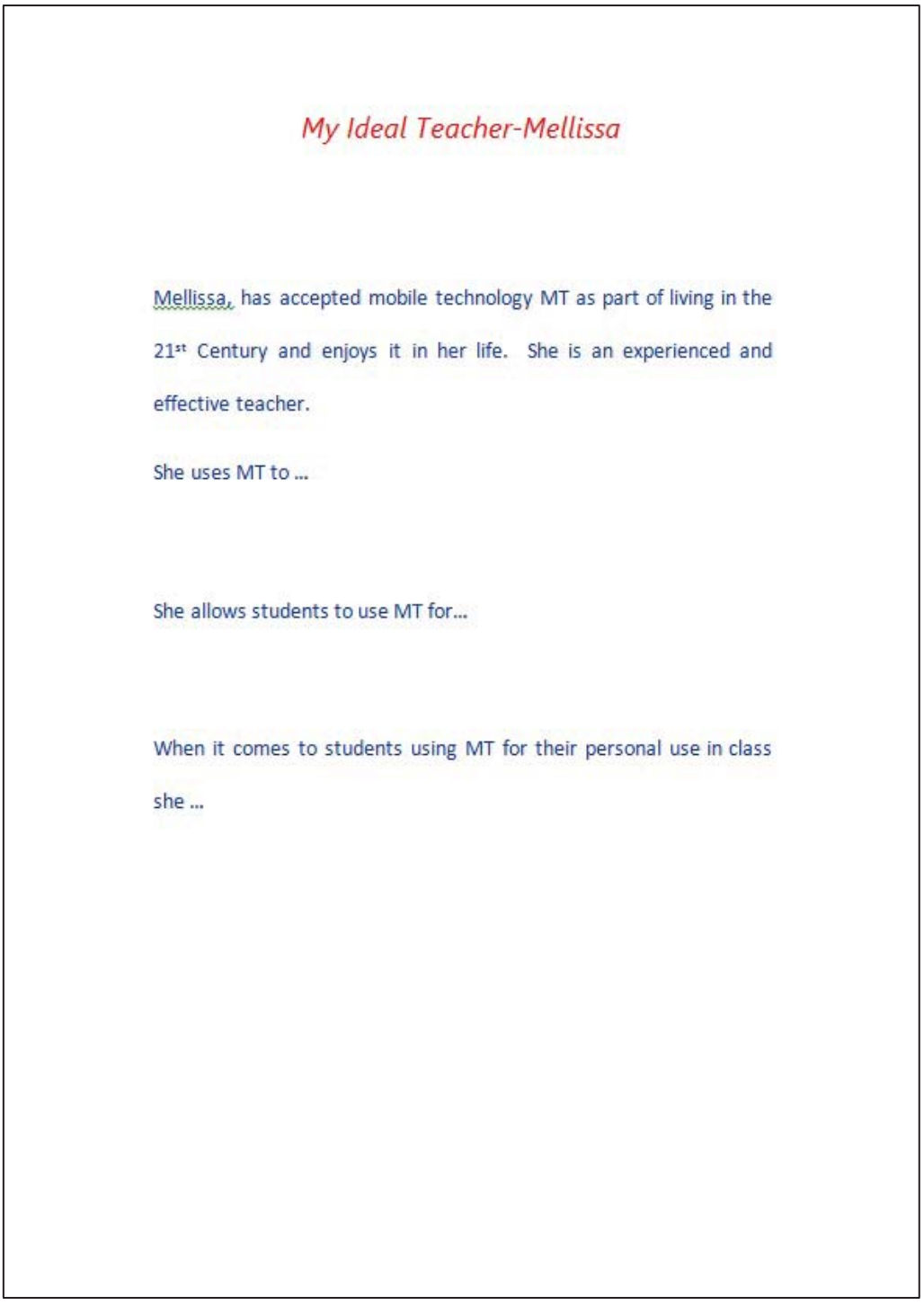
Yang, S. (2012). Exploring college students' attitudes and self-efficacy of mobile learning. *The Turkish Online Journal of Educational Technology, 11*(4) 148-154. Retrieved from http://www.tojet.net/articles/v11i4/11414.pdf

Yilmazel, O., & Ekin, E. (2015). Mobile applications at a mega university: Anadolu university campus app. *Asian Association of Open Universities Journal, 10*(1) 13 - 21. doi.org/10.1108/AAOUJ-10-01-2015-B003

Zahn, C., Schaeffeler, N., Giel, K. E., Wessel, D., Thiel, A., Zipfel, S., & Hesse, F. W. (2013). Video clips for YouTube: Collaborative video creation as an educational concept for knowledge acquisition and attitude change related to obesity stigmatization. *Education and Information Technologies, 19*(3), 1–19.

Appendices

Appendix A Ideal Student Scenario Gap Fill



My Ideal Teacher-Mellissa

Mellissa, has accepted mobile technology MT as part of living in the 21st Century and enjoys it in her life. She is an experienced and effective teacher.

She uses MT to ...

She allows students to use MT for...

When it comes to students using MT for their personal use in class she ...

Appendix B *Student Questionnaire*

Student Survey

My name is Susanne Aldrich and I am an English language teacher at _____ I am doing some research to find out how students use mobile technology in the classroom, and how they would like to use it in the future.

I would really appreciate it if you would complete this questionnaire, it will take about fifteen minutes to complete. I would very much like to thank you for your participation.

Susanne

The first section is about your past.

1. **What was your last educational setting? (E.g. school, university)**

2. **Where was this (which country)?**

3. **Did you use mobile technology in class?** **yes ☐ no ☐**

4. **Were there any rules around using mobile technology in class?**
   yes ☐ no ☐

5. **If you answered yes, what were the rules? Please write in the box below.**

The next section is about how you use mobile technology.

Think back over the last week's classes and reflect.

6. **Which mobile devices did you take to class with you.**
   a. cell phone
   b. iPad or tablet
   c. laptop
   d. other, please write in the box below

7. **A) If you used mobile technology in class, what did you use it for? Tick as many boxes as you need to.**
   a. a dictionary ☐
   b. a translator ☐
   c. to text (SMS) ☐
   d. to go onto social media sites, e.g. Facebook ☐
   e. to watch something on YouTube ☐
   f. to look at a website ☐
   g. to listen to music ☐
   h. to view course material, e.g. assignment specifications, Stream sites ☐
   i. to access institutional information, e.g. timetables, grades, maps ☐
   j. play games ☐
   k. online shopping ☐
   l. Instagram/snapchat ☐
   m. looked at and/or sent images ☐
   n. other, please explain in the box below ☐

B) Can you identify the three main uses that were important to you? Number them 1 for the most important, 2 for the second most important, 3 for the third most important.

8. **Still thinking about the last week's classes, have you used mobile technology for personal use in class? If so what for and why? Please write in the box below.**

9. **Think about yesterday in your classes, what is the total number of times that you engaged in the following activities.** *NB. This means when the lesson was underway, not before class or at break-time*. **Tick the boxes that apply to you.**

	none	1-2 times	3-5 times	6-10 times	10-15 times	More than 15 times *(please write in a quantity)*
Texting						
Social media e.g. Facebook						
YouTube						
Surfing the Internet						
Looking at images/photos						
Playing games						
Other *(please write in the activity)*						

I'm interested in your beliefs about using mobile technology in class.

10. **Tick the boxes that apply to you.**

a. I use a dictionary on my mobile devices. ☐

b. I use a thesaurus on my mobile devices. ☐

c. I use a translater on my mobile devices. ☐

d. I don't know what a thesaurus is. ☐

e. I never use dictionaries, thesauruses or translators on my mobile devices. ☐

11. **What are your practices around texting in class? Tick the box that best applies to you.**

a. I never text or answer texts. ☐

b. I only text or answer a text occasionally, and it does not distract me. ☐

c. I regularly glance at my text messages and respond to them, if I want to, as I can do this easily and quickly. Occasionally I am distracted, but I'm OK with that. ☐

d. I frequently have texting conversations in class, and I am often distracted. Although, I do know the gist of what is going on in class, sometimes I am confused. Then I ask other students what to do. ☐

e. I constantly text in class and cannot be without texting. I am frequently distracted and often miss learning opportunities, but I am ok with that. ☐

f. Please feel free to write any additional comments below.

12. **What do you do if you are bored with the lesson? Tick the box/boxes that best matches your thinking.**

a. Stay focussed on the class and do not use mobile technology ☐

b. Start texting ☐

c. Start using social media, e.g. Facebook ☐

d. Start surfing the net, watching YouTube, listening to music ☐

e. Start playing online games ☐

f. Other, please explain

13. **If you have ticked any of the following boxes b, c, d, e, or f in Question 12, answer this question. Tick the box that best describes your behaviour and attitude.**

a. If I get bored I start using mobile technology or/and text, but at the same time I am aware of what is being taught. If I need to I can stop and get involved in the lesson. ☐

b. If I get bored I start using mobile technology or/and text; however, I become disconnected from the lesson and miss learning opportunities. I rely on other students to tell me about the lesson or I read notes, then I try and catch up. ☐

c. If I get bored I start using mobile technology or/and text. I don't care if I miss learning opportunities and I don't try to catch up. ☐

d. Write any additional comments that you may have.

14. **Which of these statements do you agree with? Only tick one.**

a. I think texting should not be allowed in class. If a student texts, then the teacher should take control and ask them to stop. If they do not stop the teacher can ask them to leave the class. ☐

b. I think as a general rule texting shouldn't be allowed in class. However, if students text and they are distracted that is their loss and their responsibility to catch up. ☐

c. I think texting should be allowed in class, as long as it does not distract other students. ☐

d. I think students should be able to text when they like and as often as they like, as the consequences of doing this is their responsibility and not the teacher's concern. ☐

e. Write any additional comments that you may have.

15. **Are you distracted by other students' use of mobile technology (excluding texting), e.g. watching a YouTube clip, playing games, listening to music, surfing the net? Tick the box that best matches what you think. Only tick one.**

a. I don't mind if other students use mobile technology around me, because I am seldom distracted. ☐

b. I don't mind if other students use mobile technology around me, but I am sometimes distracted and this can annoy me. ☐

c. I don't mind if other students use mobile technology around me, but if it becomes distracting I want the teacher to take control and ask the person to stop using it. ☐

d. I prefer it if other students don't use mobile technology during class. ☐

e. I don't mind if students use mobile technology or not. I'm not bothered by what other students do. ☐

f. Write any additional comments that you may have.

16. **Tick the box that you agree with. Only tick one.**

a. Students should be left to self-regulate how they use mobile technology during class. This includes personal use of texting, social media, YouTube, playing games, listening to music and any other use, even if this is distracting them or others during class time. ☐

b. Students should be left to self-regulate how they use mobile technology during class, as long as; they are not distracting other students. ☐

c. Students should only be able to use mobile technology for educational purposes during class time. ☐

d. Students should not be allowed to use mobile technology, even for educational purposes, during class time. ☐

e. Write any additional comments that you may have.

17. **Tick the box that you agree with. Only tick one.**

a. I think it is rude to use mobile technology for personal use in class, so I never use it. ☐

b. I only use mobile technology for personal use in class for emergencies, because I do not want to be distracted. ☐

c. I use mobile technology for personal use sparingly in class. However, I do not allow it to distract me from the lesson. ☐

d. I am constantly using mobile technology for personal use in class, and it does distract me from the lesson, but I am OK with that. ☐

e. I limit how much I use mobile technology in class for personal use, because I do not want to be distracted. It irritates me when other students use mobile technology around me, because it distracts me from my learning. ☐

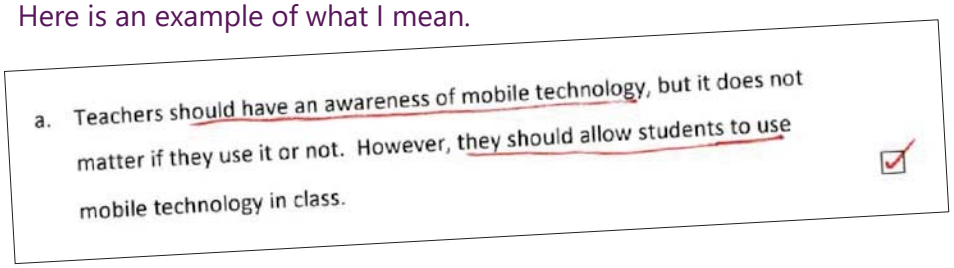
f. It does not matter if I am distracted a lot in class by mobile technology. ☐

g. Write any additional comments that you may have.

I'm interested in your beliefs about mobile technology and teaching.

18. **I'm going to ask you to read these statements. Firstly, tick the box that best matches your thinking. Secondly, underline the words or phrases in the statement you have chosen that best align with your beliefs.**

Here is an example of what I mean.



a. Teachers should use mobile technology as a teaching tool regularly in class, and encourage students to use mobile technology as a learning tool in class. ☐

b. Teachers should have an awareness of mobile technology, but it does not matter if they use it or not. However, they should allow students to use mobile technology in class. ☐

c. It doesn't matter if a teacher has an awareness of mobile technology, uses mobile technology, or doesn't allow students to use mobile technology. The most important consideration is that the teacher is a good teacher. ☐

d. Any additional comments that you may have would be appreciated.

19. **As with question 18, I'm going to ask you to read these statements. Firstly, tick the box that best matches your beliefs. Secondly, underline the words or phrases in the statement you have chosen that best align with your beliefs.**

a. I prefer to have a teacher that has up-to-date knowledge about mobile technology, uses mobile technology in class, and also encourages students to use mobile technology. ☐

b. I don't mind if a teacher doesn't have up-to-date knowledge of mobile technology, but I would like them to be open to learning about it. Also, that they allow students to use mobile technology in class. ☐

c. I don't want a teacher who doesn't know about mobile technology, doesn't use mobile technology, and doesn't allow students to use mobile technology in class. ☐

d. I just want a teacher who is good at teaching it doesn't matter about mobile technology. ☐

e. Any additional comments that you may have would be appreciated.

20. **Some teachers don't have an awareness of mobile technology, don't use mobile technology and/or may be uncomfortable about students using mobile technology? What is your view of this? Tick any boxes that apply to you.**

a. I am worried they might limit my learning experiences in the 21st Century. ☐

b. They should keep up-to-date with advances in mobile technology as this is what students are used to and expect. ☐

c. I feel disconnected from them and this is a barrier to my learning. ☐

d. I feel disconnected from them, but it doesn't matter as I can still learn from them. ☐

e. Some of their methods are irrelevant to life now, but I can still learn from them. ☐

f. It doesn't matter as long as they are good at teaching. ☐

g. I like that they don't use mobile technology. ☐

h. Any additional comments that you may have would be appreciated.

Now, I'm interested in what you think of mobile technology as a tool.

21. **Imagine a new student is brought into class and they have never used mobile technology before. The student asks why you use mobile technology. How do you answer? Write your answer in the box below.**

22. **Do you think there are any disadvantages of using mobile technology for learning? Write your answer in the box below.**

23. In a perfect world, how would you like mobile technology to be used in the classroom in the future? Write your ideas below.

Lastly, I'm interested in you.

24. Are you a native speaker of English? yes ☐ no ☐

25. What other languages do you speak (if any)? Please write in the box below.

26. How old are you? Please write in the box below.

27. What gender are you? female ☐ male ☐

I would very much appreciate it if you would be happy to take part in a short follow-up interview. I am really interested in your experiences and opinions. Interested?

Then?

↓

Write your details below, then fold the piece of paper in half. Now give it to the person collecting the questionnaire.

Your name: _____

Email address: _____

Cell phone number: _____

Questions for Student Focus Groups

1. I'd like to start with your opinion of the four scenarios. Which teacher would you prefer to work with?
2. Do you think a teacher should respect that a student is going to use mobile technology for their own personal use?
3. Do you think a teacher should know (a lot) about mobile technology? Why/why not?
4. How do you feel about a teacher who is extremely good at teaching, but will not allow any mobile technology in the class?
5. Do you think it's OK for a teacher to be strict in class (much like school)?
6. Do you think students should take responsibility for their learning experiences, or should the teacher control the environment?

Extra Questions

1. Is there a time when the teacher used mobile technology in class and it was valuable to your learning?
2. Is there a time when the teacher used mobile technology in class and it was a waste of time?
3. Can you think of a classroom experience where a student has initiated using mobile technology as a learning tool and the teacher has supported this?
4. Can you think of a classroom experience where a student has initiated using mobile technology as a learning tool and the students have supported this?

Questions for Teacher Focus Groups

1. Do you think students might have expectations that they can use mobile technology (MT) during a lesson for educational purposes?
    a. Do you think this is reasonable or not?
    b. How would you deal with this?
    c. Would you have difficulties being able to do that?

2. Do you think students might have expectations that they can use mobile technology during a lesson for personal use?
    a. Do you think this reasonable or not?
    b. How would you deal with this?
    c. Would you have difficulties being able to do that?

3. What expectations do you think students might have about teachers stopping students from using MT for personal use?
    a. Do you think this reasonable or not?
    b. How would you deal with this?
    c. Would you have difficulties being able to do that?

4. Do you think students might expect that when a student is using MT for personal use and missing a learning opportunity that it is part of the teacher's role to care about this?
    a. Do you think this reasonable or not?
    b. How would you deal with this?
    c. Would you have difficulties being able to do that?

5. Do you think that students may have expectations that teachers should know about MT, use it and stay abreast of MT technology?
    a. Do you think this reasonable or not?
    b. How would you deal with this?

c. Would you have difficulties being able to do that?

6. Do you think students may expect teachers to use MT as a tool for their language learning and direct them to resources they can use with MT?
    a. Do you think this reasonable or not?
    b. How would you deal with this?
    c. Would you have difficulties being able to do that?

Appendix E Information Sheet for Students

My Research Project

Students' and teachers' perceptions of the use of technologies for university preparation courses and settings.

What is the project about?

The purpose of this research is to find out how students use mobile technology in the classroom, and how they would like to use it in the future.

Who are the researchers?

My name is Susanne Aldrich. I am an English language teacher at [redacted] I am currently doing some post-graduate research at Massey University. My work is being supervised by Professor Cynthia White and Dr Gillian Skyrme.

Why are you being asked to participate?

You are being asked because you are a student on one of the bridging programmes at Massey University.

What will you be asked to do?

You will be asked to fill out a questionnaire about how you use mobile technology in the classroom, and also how you think and feel about mobile technology being used in the classroom. The questionnaire will take about fifteen minutes to complete.

What will happen to my information?

I will take the information from the questionnaire and discuss it in my Master's thesis.

Will other people know who I am?

No. In the thesis you will be called a 'student' and your name and contact details will not be in there. I will not tell anybody about you directly so that your name and information stays confidential.

What if I agree to participate and then change my mind?

You may withdraw from the study at any time during the project. Any information recorded about you will be removed from the records.

How can I find out about the results of the study?

A short written summary will be available to you at the end of the study.

Who can I speak to about participation in this project?

You can speak to me (Susanne) directly. If you do not feel comfortable speaking to me, you can contact either of my supervisors: Prof Cynthia White or Dr Gillian Skyrme. Their contact details are listed below.

Will I be asked to sign anything?

No. When you have finished the questionnaire and given it back to me this will be seen as you giving your consent.

Contact Information.

Ms Susanne Aldrich: ph 06 356 9099 ext 84125 s.t.aldrich@massey.ac.nz

Prof Cynthia White: ph 06 356 9099 ext 81141 c.j.white@massey.ac.nz

Dr Gillian Skyrme: ph 06 356 9099 ext 83572 s.r.skyrme@massey.ac.nz

Appendix F Student Focus Group Invitation

Student Focus group

Topic: Teacher Scenarios

Dear …

Thank you so much for agreeing to be involved in my Focus Group. I very much appreciate you giving your valuable time to my research studies.

I would like to ask you to do some reading and thinking before you come to the Focus Group. Please find included a sheet with four teacher scenarios. These are fictitious (made up) profiles that I have written and are not based on real people.

I would like you to read the scenarios and think about which teacher(s) you would prefer to work with. I understand that there may be aspects of all four scenarios that you like or don't like, so can I suggest that you underline things that you like and circle things that you don't like. Then choose which teacher profile you like the best. This will give you some preparation for the Focus group where I would like to discuss your ideas with you and two other students.

Once again, I'd like to thank you for agreeing to help me with my research.

Focus Group Time: Wednesday 25 November 3-4 pm in S

Kind Regards

Susanne Aldrich

Appendix G Consent Form

Student's and teacher's perceptions of the use of technologies for university preparation courses and settings.

Participation Consent Form – Student Focus Group

The details of the study have been explained to me. My questions have been answered to my satisfaction, and I understand that I may be asked further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet (this was given out at the time the survey was conducted).

Signature _____ Date _____

Full Name – printed _____