

Chapter 1

Introduction

Technology does not discriminate based on a student's ability or skill, but instead provides an opportunity to engage students using a medium they recognize. Technology is rapidly augmenting not just within our classrooms but also in our everyday lives. It is hence natural that we should increasingly integrate it into classroom teaching and learning activities. Our world today is obsessed with doing everything quickly, learning included. Self-study is obviously important in language learning. "The future is increasingly mobile, and it behooves us to reflect this in our teaching practice." (Hockly, 2013, p.83).

In the development of teaching and learning era, some aspects in pedagogical component have pointed out examples of certain technological influences in the form of digital media which are part of the redefinition and broadening of existing boundaries of practice and our understanding of what learning means. Beetham et al (2009: p24) report that learners want meaningful choices about how they learn, with and without ICT, and that many learners use technology to multi-task while some find being online a distraction from study. But within institutions, students' use of technology is largely led by tutor recommendations and course requirements and this may be at odds with the way they use it socially. For instance, Rutherford (1987) and Krashen (1989) conducted a study in which they gave learners study materials from grammar and reading in a consequent way in order to investigate the acquisition of the material when given bit by bit using mobile learning technologies.

The term learning was chosen rather than education in order to flag an interest in settings both within and outside the classroom. Many of the more radical challenges to existing learning

agendas are happening in domains such as gaming, online networks, and amateur production that usually occur in informal and non-institutional settings. This does not mean we are prejudiced against learning as it happens in the classroom or other formal educational settings. Rather, we hope to initiate a dialog about learning as it spans settings that are more explicitly educational and those that are not.

The increasing availability of mobile technologies such as smartphones and tablets which provide access to multimedia resources and tools (audio, video and chat) undoubtedly holds further potential to support students' language learning (Kukulka-Hulme & Shield, 2008; Stockwell & Hubbard, 2013). This, coupled with the fact that mobile data connection has become more affordable, allows for distributed learning anytime and anywhere (Palomo-Duarte, Berns, Doderer, & Cejas, 2014).

Organization of Thesis

This thesis is divided into five main chapters and will explore students' perceptions on the use of smartphone for English language learning purposes which is expected to accommodate the potencies essential for teachers to implement new and emerging strategies in order to keep pace with the needs of the techno-hungry and techno-savvy Millennial and Generation-Z students.

Chapter 1, which presents background information on the study that beliefs about some particular benefits of technology for teaching and learning may in fact be "the strongest predictor" of use in the classroom. These begin with Chapter 2 covers research related to this thesis along with the theoretical framework that informs and supports the study. MALL (Mobile Assisted Language Learning) will describe the types of activities in which app users are engaged and as personal devices, and the theory of constructivism and learner's autonomy provide

frameworks that have a useful insight for teachers or practitioners to utilize the smartphones owned by students which are ideal for individualized both formal and informal learning.

Literature from generation Z characteristics and learning style help to make plain the underlying the development of current English language learning perceptions and purposes. Finally, the purpose of the study is to explore some of the possibilities of integrating smartphones in blended teaching practices to make independent learning processes both more dynamic and easier to monitor for both students and practitioners.

Chapter 3 is the methods section, which includes cited background for the methodological use of cross sectional study through questionnaires, improvisational and structured interviews, recruitment and participants, and procedures of data analysis. Chapter 4 is a summary of this thesis, including the conclusions we have drawn from our research including a critical analysis of the project, which incorporates limitations and potential problems that could be encountered, as well as proposed solutions where possible. Finally, Chapter 5 describes the writer's contributions and suggestions about several ideas for related future work. Following these concluding chapters are the reference and several appendices. The writer provides the design of complete questionnaires in Appendix A. Appendix B reproduces the documentation for Sample Size Calculation Rubric used in this thesis. Appendix C contains Cronbach's Alpha Result of Questionnaire Pilot Testing and some light-hearted, miscellaneous information which did not fit elsewhere.

Background of the Study

The purpose of the current study is to explore some of the possibilities of integrating smartphones in blended teaching practices to make independent learning processes both more dynamic and easier to monitor. Mobile devices with robust Internet connections have

proliferated in educational use since the advent of the iPad in 2010. The new mobile device ecosystems led to the rise of thousands of free or almost free applications (apps), which refer to compute programs designed to run exclusively on mobile devices. For instance, more than 775,000 apps were available as of January 2013 (Pure Oxygen Labs, 2013) that have the potential to help learners individualize immediate learning in ways that have never happened before. For example, empirical studies reported that iPad apps support the development of speaking, reading, and writing skills (Harmon, 2012; Lys, 2013; McClanahan, Williams, Kennedy, & Tate, 201) and the enhancement of learning motivation (Kinash, Brand, & Mathew, 2012).

Mobile devices were invented in 1973 for the first time and there was no one ever thought some day they would become an important part of routine life. As soon as the mobile phones became a significant part of our lives, there felt a need for utilizing them in language learning tasks. These days, the internet-based mobile devices, hereafter are called smartphones, are used everything in daily human's life starting from video and voice calls, social media activities, messenger chats, listening to audio podcasts (aac, mp3, mp4, mpeg), internet browsing or as known as web surfing, online shopping and trading, and a lot more. Apart from these benefits, mobile devices have increasingly grown toward becoming tools for education and language learning, and all its users from teachers or students. In terms of communication technology revolution, *Whatsapp*, *Skype*, *Kakao*, *Instagram*, *Snapchat*, *LINE*, *Blackberry Messenger* are some newest mostly used freeware and cross-platform instant messaging and Voice over IP service. These applications allow the sending of text messages and voice calls, as well as video calls, images and other media, documents, and user location using Global Positioning System (GPS).

From an academic perspective, it is an uneasy thing to assess the real value of these apps and even harder to see if they have been designed and developed using any underlying conceptual or pedagogic framework. TESOL has also produced a series of standards with the purpose of giving teachers and learners some basic skills in using technologies of different kinds in the good of language teaching and learning (Healey, Hegelheimer, Hubbard, Iannou-Georgiou, Kessler, & Ware, 2008). Talking to app developers and even reading background information about some of those that are available online suggests an essentially ad hoc methodology, which may reflect some teaching and learning experience on the part of the development team, but is far from what the scientific literature has to say on the subject. For students, mobile apps offer a wide range of learning tools they can be downloaded to their mobile devices and used productively at opportune times in a variety of settings and on-the-go. According to Jacobs (2013) mobile learning technologies enable access to digital content and online communities at days and nights, which make learning different from classroom environment, and help teachers and learners, organize their time and use it more effectively. Further, he claims that when students get access to such digital content, they take advantage of their learning as they can adapt to their pace, method and style. On the other hand, teachers who are able to use digital dashboards can track their students' progress of certain content on the timely manner and take advantage of time to use it more effectively when in schools settings. In a modern classroom, many teachers are excited by technology and interested in the ways in which they can use it to enhance their teaching in a modern classroom is defined by technology these days. There is constant pressure on teachers and administrators to implement technology in classes. As a teacher's assessed value for the tool's potential to meet instructional ends increases, so does the likelihood that the tool will be utilized (Hughes, 2005; Ottenbreit-Leftwich et al., 2010; Wozney et al., 2006; Zhao, Pugh, Sheldon, & Byers, 2002).

The beliefs about some particular benefits of technology for teaching and learning may in fact be “the strongest predictor” of use in the classroom (Russell, Bebell, O’Dwyer, & O’Connor, 2003). Though there are several advantages of making use of technology in teaching, the question remains – can technology replace teachers in [future classrooms](#)? In terms of Smartphone use in learning English, Zilber (2013) states that it is clear that they won’t substitute dedicated teachers, but their frequent use by second language learners, enables them sufficient English language practice to support their attempts to learn it regardless of their locations. More importantly, smartphones are such devices that can be easily taken with anywhere, they are easy to use and suitable for practicing speaking and listening skills. One can have access on different apps for updated language practice, such as for pictorial vocabulary, talking pronunciation, grammar and structure or other language skills. Furthermore, educational institutions may be failing to meet the expectations of learners. Ubiquity, accessibility, rapid feedback and ease of use are all features of learners' daily experience with digital technologies which are changing their expectations of education (Beetham, McGill and Littlejohn, 2009).

Bloom’s (1968) Mastery Learning Theory “holds mastery constant and allows time to vary while traditional instruction holds time constant and allows mastery to vary” (Bei Zhang, 2010, p.91). Bloom believed that over 90% of students can master content given the right context and learning tools for their learning style, even with a learning difficulty or disability present (Bei Zhang, 2010). In applied Mastery Learning Theory, students are provided with a variety of instructional procedures utilizing varied forms of interaction, learning and instruction. Teachers are expected to cater for a variety of students’ learning styles, rather than students catering for teachers’ teaching styles. On the other hand, understanding the new generations of students and the way they learn is the key for starting changes required in giving instruction of English to Gen

Z students. It is important to know that most of today's young learners in primary school are Millennial; the name refers to those born since 2000. They often are categorized into generation Z (Gen Z) and called *digital natives*. They are comfortable with technology, and are often more proficient with it than their teachers are. With the knowledge of mobile technology in relation to these learning theories, educators and learners can test these types of learning applications to aid in learning English as a Second Language. These learning tools can also be applied to other languages as desired. Knowing what tools exist can help learners to enhance and broaden their language acquisition. They have different attitudes and aptitudes to their predecessors. Their outlook is sometimes called the —information-age mindset, and is characterized by the ability to multitask; and a belief that computers are not technology, and that the Internet is an essential part of life. They also use mobile phones and SMS extensively. They have never known life without computers and the Internet, and therefore see information technology as an integral part of their lives. It is not uncommon to see news reports on the increasing time that children are spending in front of computer screens at home (Reilly, 2012).

To accommodate these potencies, it is essential for the teacher to implement new and emerging strategies in order to keep pace with the needs of the techno-hungry and techno-savvy Millennial and Generation-Z students. It becomes clear that teachers have been making effort to use technology in the classroom, but to be more successful and effective, preparation and support are needed. This was a shift in educational thinking and practice in the 1960s because teachers had been all providing the same type of teaching style and assignment and assessment requirements for students in the same time allotment (Bei Zhang, 2010). Students who did not master the material had been thought to be either lacking effort or incompetent in their learning abilities.

Smartphone use in language learning can be of great benefits especially in vocabulary acquisition, spelling and pronunciation, grammar, listening and reading skills. In order to be able to communicate effectively, learners have to master a large number of words, they need to practice listening in order to gain knowledge in pronunciation, they need practice in reading and grammar, too Chi-Yen Chiu (2015). Bomar (2006) also states that using mobile learning technologies such as iPods, in reading or listening skills, students are much more likely to capture the main ideas and therefore more ready for discussion. Thus, Rutherford (1987) and Krashen (1989) conducted a study in which they gave learners study materials from grammar and reading in a consequent way in order to investigate the acquisition of the material when given bit by bit using mobile learning technologies. Findings of the study suggested that the acquisition of the material was improved due to the organized way of delivering the material using iPods (cited in Chi-Yen Chiu 2015:65).

However, despite some advantages that Smartphones have in language learning and teaching, there are some limitations as well. According to Chinnery (2006) the limited time one can use a Smartphone without charging, entering data using only one finger as well as their small screen size make Smartphones not very convenient to use them in language learning field. Another negative impact of using Smartphones in education is related to learners' achievement, as Town (2013) suggests, learners may become addicted to playing games, chatting or talking to their peers, and this in fact might be considered as a waste of time rather than learning. According to Kane (2013) learners who are not able to maintain control over the use of mobile learning technologies, including Smartphones may become nervous, upset, concerned or even angry when they cannot use them for some time. In addition, the excessive use of Smartphone can impact negatively on the relationship among adolescents as well as on their educational

outcomes. On the other hand, using Smartphones could also result in harmful effects. And finally, using Smartphones for a long period of time and at a close distance may also cause symptoms of eye strain or eye fatigue (Britt, 2013). Wilson (2012) also suggests that using Smartphone in a bad position such as keeping your arms bent, head looking forward in a bent position can cause pain in the neck and spine.

The Research Questions

In line with the background of the study and the objectives to achieve, some major research questions are formulated as follows:

1. How do the high school students utilize the technology on smartphone and their daily English language?
2. What are the non-academic and academic activities undertaken by Indonesian high school students in their smartphones for English learning purposes?
3. What are the Indonesian high school students' perceptions about the usage of smartphone for English learning purposes?
4. Which smartphone apps are mostly used by the Indonesian High School students to enhance their individual English skills and language learning competence?
5. What language skills and language components of English do the High School students improve and prefer to learn through smartphone applications?

The Purposes of the Study

In relation to the aforementioned problems and the research questions, this study is driven to understand and discover about:

1. The ways of high school students utilize the technology on smartphone and their daily English language.

2. The non-academic and academic related activities undertaken by Indonesian high school students in their smartphone for English learning purposes
3. The Indonesian high school student's perceptions about the usage of smartphone for English learning purposes.
4. The smartphone apps which are mostly used by the Indonesian High School students to enhance their individual English skills and language learning competence.
5. The language skills and language components of English that the High School students improve and prefer to learn through smartphone applications

Theoretical Framework

To understand the potential of English language learning mobile apps used by Indonesian High School students and to support and foster young adult's development, the present study is influenced by four theoretical frameworks that build the foundation for utilizing mobile technology with language learners, namely: *Constructivism*, *Learner Autonomy*, *Characteristics and Learning Style of Generation Z*, and also *The Benefits and Barriers of Emerging Technology and Language Learning*. Each theory provides a segment of understanding for language learners and mobile technology. Explaining each theory and how it connects to mobile technology and language learning provides a greater understanding of the benefits of mobile technology with language learners.

The Definition of Key – Terms

Although certain words have been quite familiar, some degrees of uncertainty may also occur. Therefore, to clarify them, the following definitions are constructed:

Enhancement is a [change](#), or a [process](#) of [change](#), that [improves](#) something or [increases](#) its [value](#) to make or become better, increase the value or good qualities or intellectual benefit.

Language learning is adopted from the term language acquisition, which is defined as “the process of learning a native or a second language” (Tiwari, Mehta, and Patidar, 2008, p. 299).

Technology is used quite frequently and refers to “a manner of accomplishing a task especially using technical processes, methods, or knowledge; [and] can also refer to the practical application of knowledge within a particular area” (Technology, 2013, in Merriam-Webster.com).

Smartphone Mobile Technology which is used frequently in this study, in a more generalized term is communication technology which is defined as “technologies that provide access to information through telecommunications and provides people to communicate in real-time with others through such developments as the internet, wireless networks, mobile devices, video12 conferencing, and social-networks” (Tech Terms Computer Dictionary, 2006, in TechTerms.com).

Application refers to a software program that runs on computing devices such as web-browsers, e-mail programs, word processors, games, and utilities.

Smartphone Mobile Application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer. Mobile applications frequently serve to provide users with similar services to those accessed on PCs. Apps are generally small, individual software units with limited function. This use of software has been popularized by Apple Inc. and its App Store, which sells thousands of applications for

the iPhone, iPad and iPod Touch. In relation to this study, applications are referenced as mobile applications, mobile apps, apps, and language learning applications.

Assumptions

1. The participants provided accurate demographic information on the surveys.
2. The participants were honest and reflective in their responses to the survey questions.
3. All of the participants owned smartphone and had independent access to it.
4. The participant actually answered the survey questionnaire only once.

Significance of the Study

This study helps to understand the perceived advantages and drawbacks of using a smartphone applications by students. For teachers; the English teachers in particular, will gain authentic information from the findings of this research as they broaden more their understanding of teaching ESL, students' learning styles and learning techniques and so forth brought about by current technology manifested in mobile apps as well as in changes and advancement. In addition, students will be more selective about the use of mobile learning and its advantages. Consequently, not only will students' test scores and academic achievement increase, but more importantly, they will learn to use their English in their daily lives their proficient use of the English language. The adoption of mobile devices has potentially far-reaching consequences for learners, learning design and how learning is supported by teachers and advisors.

Personalized Learning. The rise of educational technology allow for students to have far more access to constant information than past generations. Personalized learning thrives in this technology-rich environment, but is insufficient on its own to revolutionize a student's classroom experience. Teachers, on the other hand, are more important than ever in preparing students for

an ever-changing world with infinite access to all types of information. Teachers can be the guides that shape educational experiences for their students, helping them engage with learning tools that will enrich and support deeper learning, including different types of technology.

Teachers also can use technology platforms to support data-driven learning like never before, personalizing learning to students' interests, passions, strengths, and needs.

Empowering ESL Teacher Instruction with Digital Literacy. The power of technology lies in the development of, and agency for, teachers to cultivate the tools to meet the ever-changing needs of their students. Simply providing access to new types of technology is not synonymous to cultivating transformational change to the traditional, industrial model of teaching and learning that values standardizing inputs and outputs for students. Instead, thoughtfully cultivating the use of technology in the classroom by empowering teachers to utilize the tool, in this case is the teacher's instructions in ways that support their learners is critical in the transition to a personalized learning environment.

- Instruction is aligned to rigorous college- and career-ready standards as well as the social and emotional skills students need to be successful in college and career.
- Instruction is customized, allowing each student to design learning experiences aligned to his or her interests.
- The pace of instruction is varied based on individual student needs, allowing students to accelerate or take additional time based on their level of mastery.
- Educators use data from formative assessments and student feedback in real time to differentiate instruction and provide robust supports and interventions so that every student remains on track to graduation.

Delimitation

The space of mobile apps for language learning is wide, deep, and keeps developing as the language does. There are currently two major players in the industry: iOS App Store owned by Apple Inc. and Android Play Store (formerly Android Market) that is operated and developed by Google. Each of these two digital distribution platforms contains more than 100,000 applications in the form of games, learning aids, movies, and utility software applications advertised as educational or intended for English language learning. Every single unit of these platforms has a distinct digital library of content and each platform offers unique affordances. Evaluating all of these various spaces would yield almost a limitless study project.

To provide focus, the delimitations of the study include:

1. In terms of scope, the study focuses on only English language learning aids and the utility software both iOS and android apps, specifically the apps targeted at teenagers between the ages of fifteen and eighteen years, available for either free or purchased download.
2. In terms of content, the study addresses apps that are specifically designed for both the iOS and android platform, rather than content repurposed from other non-interactive sources such as movies, television shows, digital books, social media, or other apps intended to be used with no English language learning as the primary purpose.

Apart from quantitative study being an excellent method to generate wider data, count things and measure trends that can further be analyzed and be used in guiding better decisions, some limitations could be formulated. For example, data are collected from a few individual cases and based on first-person perspectives. However, the writer believe that these findings have an added value to the research world in several respects and that they can be transferable to other innovative settings. In addition, only perceptions of the participants are examined in this

study, while these results challenge teaching practices and the development of learning materials in future research it would be interesting to investigate the impact of such tablets on teaching and learning practices. Additional empirical research is needed to gain further insight into the impact of modern technology on teaching and learning. Future research will be conducted to answer didactic questions such as: how should smartphone be implemented in class contexts and does the use of smartphone increase motivation and achievement among students? Research on this topic is still an unexplored area, requiring further in-depth studies.