

Smart Mobile Phones as a Powerful Learning Tool in Language Classrooms at University Level

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Abstract

This paper has set out to explore the theme of mobile phone in English language classroom settings. The experiment is to be conducted in places where for reasons of technology and other facilities can hardly be expected to bid success. However, the researcher insisted in carrying out the study to challenge all the weighty circumstances. The researcher has actually managed to come up with solid results and insights which deemed the overall work as successful. More work in this area is actually needed due to the huge amount of challenges besetting the scene of research in this area in a milieu like that of Africa.

Keywords: technology, online, challenges, weighty circumstances

1. Introduction

There are billions of people using mobile devices around the world. By the year 2018 it has been estimated that there will be over seven billion mobile devices in use with constant access to the internet. Accessing the internet is a significant feature of mobile devices today, with mobile phones no longer being just a phone but a portable multimedia device. Social media, internet services, multimedia and other applications are in constant demand by users which has therefore led the rapid improvement of mobile phones and tablets. For example, in 2013 the average download rate was nearly 1.4 Mbps which had almost tripled the average speed from 2012, which was only 520 Kbps.

Benefits include understanding of the multitude of different ways to communicate by smart mobile phones use in the present day, the importance of the phone as part of authenticity of real world context in learning, as well as the flexibility of learning available to students where they can use their phone to progress at their own pace. It does seem clear from the expert opinion in the article, that the benefits of mobile phones can be best achieved when they are included with a clear purpose. Proper guidance given to students as part of their learning experience about the use of mobile phones can positively impact not only their learning, but their overall wellbeing and life in general.

There is now potential for utilizing mobile devices for teaching and learning especially as mobile devices are very popular with young people and the current generation of students and paper showing more students are owning them. Smart phones can be used for many things including instant messaging, social media, playing games, sending emails and general communication. As such they can now be considered essential to both personal and working lives.

Matthew Kearney (2013) states “if school students want to investigate, collect data, receive personalised and immediate feedback, record media, create, compose, or communicate with peers, in and beyond the classroom, then using mobile apps is ideal.”

In the same context Joanne Orlando (2014) mentioned that “We should not ban mobile phones in universities because it’s important to educate children to live well in the era in which they are growing up.” She adds, “A good education for students today is knowing how to use technology to learn, communicate, and work with ideas.”

Susan M Sawyer, a Paediatrician and Professor of Adolescent Health at The University of Melbourne elaborates that “universities need to develop policies around the use of mobile phones during school hours. Given the dynamic nature of the mobile world, regularly engaging students and parents in reviewing and revising these policies is an important part of everyone’s learning.”

Teachers have to encourage students to use mobile phones in the classroom to document their learning by taking notes, clicking photos, to paper online or test the mobile

compatibility and user experience of their recently coded projects. In fact, we find internationally that students are most motivated when they fully understand the potential of technology and consequently feel empowered to use it as a tool to positively impact their communities.

2. Statement of the Problem

Mobile learning, also known as m-learning, is a new way to access learning content, using mobiles. Mobile learning supports, with the help of mobile devices, a continuous access to the learning process. This can be done using appliances like your phone, laptop or tablet. You can learn wherever and whenever you want! With the advent of mobile learning, educational systems are changing.

The aim of this paper is to find out how students are currently using their smart devices during their learning, including classroom use and learning activities. In addition, the aim is to find out how they utilize the learning tools provided by university learning, with an emphasis to educational technologies at general. How students feel about using these tools on mobile devices in terms of usability, reliability, relevance and personal preference will also be analysed.

The paper will be used to theorize ways in which the learning tools can be changed to improve the learning process of students and whether integrating smart devices into teaching methods would be beneficial or not.

The paper investigates the use of smart phones as different from a computer lab filled with computers or a cart of netbooks putting into consideration that cell phone is personal technology. Most students have invested a great deal of time learning about the features of the cell phone, how to navigate and the limitations of the phone. The other reason to really rethink the cell phone debate is because learning on the cell phone can extend beyond the walls of the school or the confines of a class period.

In different context, some teachers may want to ban smart phones from classrooms, but some disagree. Some teachers didn't ban pens in our universities because students can pass notes during class. The pencils have also survived even though you could poke someone in the eye. And the amount of paper that is generated in most universities is almost criminal. This is a new time in education and with dwindling budgets, so university administration need to rethink possibilities, stretching every dollar. These mini computers are walking through the doors each day, let's put them to work.

Questions of the Paper

1. How are mobile devices currently used in the learning process of students?
2. What can be done to further support the use of mobile devices in the learning process?
3. What learning gains teachers can make with smart mobile phone in classroom?
4. How will smart mobile phone increase learning benefits for university students?

5. How can smart mobile devices be utilized to support the learning process of students at university?
6. It is possible to enhance the experience of students by integrating mobile devices into teaching methods by allowing students to study more effectively

Objectives of the Paper

- 1) Prove the focus of this thesis is on the use of smart mobile technology by students and how it can be applied to learning.
- 2) Illustrate the ways of study in examining students' utilization of smart phones and tablets during their studies and how they use the tools and services provided by their university.
- 3) Enhance the experience of students by functionalizing smart mobile phones in university.
- 4) Smart mobile devices utilize and offer support to the learning process of university students.
- 5) Smart mobile phone increase learning benefits for university students.

3. Methodology of the Paper

The method used will be mostly qualitative. Qualitative paper focuses more on words compared to quantitative paper where the focus is on numbers in terms of what is being analysed. Qualitative paper is also usually applied to smaller studies than quantitative studies. Statistics are usually more reliable in larger numbers and while this can be beneficial in both methods, qualitative paper can benefit from being focused on a study with limited numbers of situations and people. As the paper question is explorative and the answer may be subjective, examining opinions and experiences of students will likely be more useful than observing objective facts and numbers. Using one approach does not necessarily mean excluding the other. In this study quantitative methods will also be considered, for example, counting the amount of time students spend using their mobile devices for personal use compared to using them for studying.

4. Data Collection

To gather data for this paper, the main method used will be surveys. These will be created with questions tailored to gather the information required to answer the paper questions. The surveys and face-to-face interviews will be aimed towards students, and the intention is to survey a sample of students from each faculty. It is important to gain feedback from students from every classroom as their opinions and experiences may be different; for example, language students may be more technology orientated and utilize mobile devices

more in their learning than students in other faculties. In addition to the surveys, data will also be collected by interviewing a sample of willing students to get more detailed information about personal experiences and opinions about how mobile technology is used in their learning and feedback on the learning tools. Data will also be gathered by interviewing willing teachers. This will allow insight into how they utilize mobile devices in their teaching methods and their experiences witnessing student mobile device use during classes.

The answers from the survey will be put into tables in Excel, and charts will be created to visualize the data. It will then be possible to find correlations and comparisons, for example between faculties. This also allows identifying popular answers, for example if many people have the same problem with a certain function. The data will be analysed and then summarized in a way that refers back to the initial paper questions.

Learning Styles and Mobile Learning

It is essential to know about different learning styles and to understand what the idea of mobile learning is. Therefore, in this part of the paper will be examined to discuss and review some of the key concepts and ideas related to this thesis.

Learning Styles and Mobile Devices

Every person has their own learning style, which affects their motivation when learning new information depending on how they are being taught or studying. eLearning (electronic learning) takes students learning style into account by being designed with optional activities that students can choose. These activities help to engage and motivate students which encourages success. Applying this to mLearning (mobile learning) also allows the learning to be more flexible and convenient for the student. (Dawson: 2011, 7.) If mobile devices are considered in learning processes, teachers can use them to help engage students in learning and possibly improve their motivation towards the subject.

Mobile devices allow people to engage in activities and transactions in locations and situations where it never used to be possible or it was much more difficult, such as during a bus ride or even while walking. The device offers the usage of a computer but with greater portability. As the mobile device offers convenience, it also generates a dependency for the user. Because these devices have internet access, they allow the user to have access to many things including emails, instant messages and social media. (Ker: 2011 194.) By being able to view social media updates and messages instantly, smart phone users are more inclined to check their device frequently (Chang. 2013, 375). With most students owning a mobile device, it is very tempting to use them in lessons for things other than studying for example social media or instant messaging if someone else is messaging them during a lesson. This can make them distracted and less motivated to pay attention when the teacher is speaking. If some usage is integrated into classroom activities, students may be less likely to be distracted as they are already engaged with their school work.

Social Media and Mobile Learning

Students are often users of social media and comfortable using technology to communicate with their peers, with WhatsApp being one of the preferred instant messaging applications used. Paper has shown however that more often students will try to solve problems themselves by searching online when they have a difficulty with their course or studies. Students were also less likely to talk to teachers, students in other courses or go to the support centre on their institution when they needed support. (Bullen: 2016.) Perhaps encouraging students to use group chats in social media, such as Facebook or instant messaging services such as WhatsApp, to discuss coursework would be beneficial to students as they can easily use them on their mobile devices and are likely already familiar with them. They may also be able to have more informal discussion as the communication channel would be unofficial and not moderated by a teacher or supervisor.

In some cases introducing teaching techniques using mobile devices has had problems. Although introduction of these devices may open up possibilities, for example being able to get a better understanding of course content from multimedia available, some students, particularly older students, find it difficult to adapt to new study habits when they are used to learning in more traditional ways. There is also a similar problem where teachers are unable to use mobile devices to their full potential in learning if they are not completely familiar with capabilities or if they utilize these devices without actually changing their teaching methods to accommodate them. (Marez: 2015, 14.) To fully benefit from teaching techniques that utilize mobile devices, it may be more beneficial to introduce them to students at a younger age and ensure teachers are fully trained in using the devices which they may be unfamiliar with. This has already been taken into account in the new curriculum in basic education in Finland. In the future, this generation of students who are well acquainted to the use of mobile devices in learning may have higher expectations about utilising this technology.

To encourage students to use mobile applications that can aid their learning, the applications must be designed to provide an enjoyable experience for the student. Applications should be user-friendly, understandable, learnable and aesthetically pleasing to the user. The application should not just be a copy of the desktop alternative but be designed to be effective on a smaller screen with touch screen capability without compromising the usability available on the desktop version where possible. (Ali: 2014, 14.) These principles could also be applied to mobile versions of websites to ensure users get the best experience on whichever device they use.

Paper Data

The survey was conducted during the time period of 19th March 2019 to the 30th of March 2019. The survey was posted to several teachers from each faculty to distribute among their students. It was also posted on the students and teachers official netting page where all students would be able to see the link in an email notification if they are subscribed.

The students were selected this way to try to get as many answers as possible from a variety of faculties.

5. Data Analysis and Discussion

In this section, the data analysis will be split into mobile device use of students in learning and a part specifically. There will also be a part about the reliability and validity of the data.

Mobile device in learning

The answers from the survey have provided some insight into how mobile devices are being utilized by students and at university level. Of the twenty-one students that responded, only one said that they did not use their mobile device during lessons. Almost half of the students said they used their mobile devices during school every day. This suggests that most students are using their mobile devices at school in lessons, if not every lesson. When students were asked how they used their mobile devices during lessons, none of them answered that they only use their mobile device for non-school related activities and five people used theirs mostly for school or learning related activities which suggests most students are at least using their mobile devices to aid their learning in some way. However, only two people said that they used their device for only school related activities with six people saying they used their device an even amount for learning and personal activities. Also a third of students said they used their device in lessons mostly for personal and non-learning related activities which implies that although students are using their devices for learning reasons they are also being somewhat distracted by them during lessons.

Three students stated that they do not use their mobile devices for studying. However, all three also answered question six by saying that they used their device in lessons mostly for non-school purposes rather than only non-school purposes, which means that they likely actually do use their mobile devices to some small extent during lessons to aid their learning even if they did not consciously admit it in question five. It is also possible that they did not want to admit that they only used their mobile devices for non-school related tasks. They might not want to look like bad students despite the fact that the survey answers were anonymous.

Nine students said that they use their mobile device for peer discussion with the majority of these also using WhatsApp. This suggests that students may be using WhatsApp for discussion with their peers. Sixteen students said they used WhatsApp for learning purposes which means WhatsApp may be a useful way for students to stay in contact outside of lessons and discuss what they have learned. This could be a good way to use mobile devices to aid learning if teachers encourage students to discuss with each other using WhatsApp or similar applications. This application can also be used to share files, which could be useful for group work.

When asked about what other tools they use, students responded that they use Facebook and WhatsApp on their mobile devices for learning purposes which suggests they

communicate with their peers during their learning process. Being able to communicate easily with other students can be useful to their education as some students may not feel comfortable talking to teachers about their problems. Having these applications on their mobile devices would also likely get a faster response from other students rather than sending emails. However, Outlook was also a popular choice with twelve students saying they also use it on their mobile devices. Email is usually the main point of contact between a student and teacher outside of lessons so it is important for students to be able to access their email account regularly or receive notifications when they receive them. Despite notifications being useful, they can be annoying if the student receives a lot of emails and receives a notification for each one.

The most popular tool students said that they also used on their mobile was LUKKARIT with eighteen students selecting it. Being able to check schedules often is important to students in case classes are cancelled or the rooms they take place are changed. Therefore, being able to check schedules easily on their mobile devices is very useful to students. Schedules are now easily viewable in the ANDROID application; however, only one student who responded said that they used the ANDROID application. At the time of this paper, the ANDROID application has only recently been released. Hence not every student will have used it or maybe even be aware of it yet.

Students were asked how teachers are currently considering the students mobile devices in lessons and how they utilised them. The most common usage mentioned was searching for information, with nine people selecting that choice. Having a mobile device at hand to search for information from search engines is very convenient for students during lessons if they want to clarify something without having to ask the teacher, which some students may avoid doing due to embarrassment. Having students use their mobile devices to search for their own information allows them to be active participants rather than the teacher just presenting information at the front of the classroom. Some students also said that they took pictures or made videos with their mobile devices for classes which is a different approach to learning and adds some variety to classroom activities which may be more interesting to some students. Group work and peer collaboration were also mentioned by a few students which suggests some teachers are already making use of the instant communication available on mobile devices to students. However, five students said that their teachers have not utilised mobile devices in their lessons which means there could be potential to change and encourage relevant use of mobile devices in the classroom. Google Play was also mentioned by one student, which is another useful tool that enables the class to partake in interactive quizzes that can be a more fun alternative to traditional written quizzes that also shows an immediate difference in answers visually.

Students were asked for their suggestions on ways which mobile devices could be used more effectively for studying. Some students felt laptops and computers were preferable to mobile phones during lessons with one suggesting having a bigger screen makes students less likely to stray onto non-school related activities if they think the teacher can see what they are doing. This suggests that although using mobile devices can be utilized in class that

some students will still prefer the functionality available in a laptop or computer. Another student suggested making an application to gamify studies meaning that studying could be more engaging and fun to students who might get bored or overwhelmed with studying. One student mentioned schedules being updated so that Lukkarit matches the ANDROID application. If students start utilizing the ANDROID application and the schedules are reliable and up to date, it would be a very reliable resource for students to have on the move.

Face To Face Learning

With face to face learning, it's possible to have a live interaction with a teacher or an instructor. That interaction occurs in person, which means you need to be physically present in a classroom in order to learn. That usually happens at a specific time and date.

Face to face learning helps you get organized with your studies, because you need to be somewhere at a specific time and date. Also, it's possible to interact with the trainer and the other students. If you don't have too much self-discipline, or and didn't do your homework, no problem, you can just sit there and listen to the teacher speaking.

Face to face learning is more easily recognized as a “real” way of learning, so if you tell someone: “I’m going to a class or a training program about this and that” people understand you are actually taking time to learn something and is serious about it.

Even though we are in a modern era when we don't have to be physically present in a place in order to learn something, people still have a hard time taking online learning seriously. But, let's take a look at the facts here:

1. Most people today prefer to consume content using the Internet rather than in any other way. Actually, the very fact that you are reading this right now is proof of that! That includes reading the news, watching TV, talking to friends, booking appointments, shopping and the list goes on. Why should learning still remain strictly traditional while everything else seems to be going on a different direction?
2. Online learning requires more self-discipline and, surprise! Students actually get to learn more since there's no teacher watching students, students need to “watch yourself”. Which means you actually have to take the time to study, pay attention to what you are studying, and apply what you learned when taking an exam.
3. Exam results have shown that distance learners can get similar, or better scores in exams compared to traditional students, because they study more. In fact, many of the top universities in the world are offering distance courses now.
4. No time wasted on commuting with online learning, there's no need to spend money on transportation. You can study using any device connected to the Internet.
5. With online learning, you can still get a diploma or a certificate. And that certificate can be the same as the one given to people who take face to face classes.

6. The Findings

The findings of this study may be affected by the limitations of the research. The survey was posted to students – university students. However, the survey had a poor response rate with only twenty one students responding. Since the sample size is so small, it is possible that the answers are isolated or do not reflect the opinions or experiences of the rest of the students. Due to the poor response rate some planned comparisons were unable to be completed, as the majority of answers were from only two faculties, this study was unable to discover trends or correlations between faculties. It is also possible that some students may not have answered truthfully due to the nature of some of the questions, for example not wanting to admit that they used their mobile device only for non-learning related activities during lessons despite the survey answers being taken anonymously. As the survey answers were anonymously given, there is no way to confirm the accuracy of the responses.

The two questions on the survey that required written answers were in some cases ignored or simply answered with a dash. This meant that for these questions there were less legitimate answers than there were students who responded. With an already small sample size this limited the information gained from the responses. The original intention of this study was also to use interviews to get more detailed personal experiences and opinions. Due to time restraints and lack of interest however this was not possible and therefore limited the information available from the research.

7. Conclusion

Despite the limitations on the study, there were a variety of answers given to the survey. In this research, there were trends found that were able to answer the research question and give some insight into the potential of using mobile devices in the learning process of students.

How can smart mobile devices be utilized to support the learning process of students at University?

This is the main research question. There are several key findings from the research that can be used to answer the research questions. In this section the findings will be split to answer the two sub questions to summarise the answers to the main research question.

Answering the Paper Questions

How are mobile devices currently used in the learning process of students at University?

The answers to the first sub-question observes the current state of the situation and reveal how mobile devices are currently utilized in the learning process at University.

At university level, mobile devices are currently being used to an extent to support the learning process of students. Over half of students are using their mobile devices during

lessons with most of them using their mobile devices for learning purposes to some extent however a third of those admitted to using their device for mostly non-school activities. Some students are using applications such as WhatsApp and Facebook to communicate with other students to discuss their studies and collaborate on projects. This allows them almost instant communication if they have their mobile devices available. Students are utilizing their mobile devices to check their schedules but are mostly appear not to be using the recently released ANDROID application which has schedules built into it. Many students are also using their mobile devices to check their school email account. Sometimes classes may be cancelled or rescheduled to another time or class at short notice and this may not be reflected in the schedule but students may be notified by email so it is useful for students to be able to check their email regularly or receive notifications on their mobile device. Students can also add their mobile number to their profile which would enable teachers to use the SMS tool to send a message to students' mobile phones to notify them.

The university is functional on mobile devices for the most part but less convenient than using the desktop alternative. Students are mostly able to enrol to course areas and look at course information without great difficulty. The main issues with System on mobile devices are that System has a lot of content that is difficult to navigate on a smaller screen as the mobile version appears to be a scaled down version of the desktop version as well as the content being difficult to navigate or view all at once in some instances. Additionally submitting assignments to System on mobile devices is considered more difficult by students than on the desktop version. More than half of students preferred to use System on their laptop or computer yet none of the students surveyed in this research used the Moodle application, which is more optimized for mobile devices than the browser versions, to utilize System on their mobile devices.

Some teachers are utilizing mobile devices to an extent in their lessons. Students have been using their mobile devices to search for information, do group work, take pictures and make videos during their studies. Google Play has been mentioned by students, which is an interactive competitive quiz teachers can use to engage with students. However, almost a quarter of students said that teachers have not considered their mobile devices in lessons.

What can be done to further support the use of mobile devices in the learning process?

The answers to the second sub-question display the potential for improving the learning process for students.

Many students are already using their mobile devices during lessons. Therefore, they should be encouraged to use them for learning purposes more than personal use. It is impossible for teachers to control what their students do yet it could be beneficial to integrate mobile devices into lesson plans. Using quiz applications like Google Play or having information available to students on their mobile devices in the form of pdfs for example may stop students being distracted by their mobile device as its use will support their learning in

the lesson. Other activities such as taking photos or making videos are also useful as it allows the students to learn in different ways that they may find more interesting.

Peer discussion should be encouraged in students. Applications such as WhatsApp and Facebook can be used by students to collaborate on projects and may also help students to make new friends. The use of discussion boards on System could be encouraged by teachers as all students would benefit from peer discussion on there as all enrolled students can view the message boards of a course. However, some students may be discouraged by teachers being able to view their questions and prefer private messaging with other students available in the mentioned third party applications. Course or project team group chats could be set up so that students can discuss their courses in more informal and relaxed way.

Students should be made of and encouraged to use the Moodle application the view System as it may solve a lot of the issues students have using System in browsers on their mobile devices. There should also be some level of consistency in the way information and assignments are laid out on course pages on System. This would make it easier for students to navigate and find the information they need.

It could also be possible to create an application that helps gamify studies as suggested by one of the students surveyed. This could be used as a project for students to collaborate on and if successful could make learning become a more fun experiences and less monotonous.

Students should also be encouraged to utilize the recently released ANDROID application. It would be useful if the ANDROID application could be connected to LUKKARIT so that any changes to the schedule there are shown in the application or notifies users. If teachers need to change the schedule for whatever reason it would be more convenient if they had a method to change the schedule which notified all the enrolled students on their mobile devices. This would save the teacher from writing an email and students from needing to persistently check their school email account.

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