



## EXPLORING THE USE OF MOBILE LEARNING TOOL WITH ADULT ESL LEARNERS

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### ABSTRACT

Engaging adult learners via face-to-face training is a challenging task especially in terms of maintaining their attention and interest towards the content. Therefore, intervention in learning experience via the integration of mobile learning tool with adult learners was planned in one of the in-service trainings for English Language Teachers throughout the nation. Will this intervention be acceptable? The intervention, which consisted of the combination of three underlying theories: Kolb's Learning Style, Koole's FRAME for Mobile Learning framework and Activity Theory, was planned in order to assist the trainer in improving the pedagogical approach applied for adult learners. The data was collected based on the Kemmis and McTaggart's Model of Plan-Act-Observe-Reflect cycle of action research. Observations and evaluations from participants showed that, the use of mobile learning tool in the training was proven workable and feasible. The design of the intervention using mobile devices as learning tool with adult learners has indicated that, the functional use of mobile devices would turn the content of teaching and learning English to be highly spiced. The participants were receptive towards the use of mobile devices in their learning process. It was limited only to the face-to-face sessions conducted for two weeks. The use of mobile learning tool in the training was proven workable and feasible. The design on the use of mobile leaning tool with adult learners has indicated that the functional use of mobile devices would turn the content of teaching and learning English to be highly spiced. Apart from that, the intervention was observed as a useful approach in shifting the culture of professional training from paper-based approach to technology-based. Based on the evaluation given by the participants, the intervention would be used as a yardstick for the trainer to further improve on the implementation for other courses.

**Keywords:** technology, mobile learning, training, adult learners, Action Research

### 1 INTRODUCTION

"Among the various types of ICT equipment used today, smart phones and other mobile devices have become pervasive and desirable items amongst the world population..". (ITU, 2018)

The culture of using technology for learning is now on the move. Flexibility to learn anywhere anytime should be taken into consideration in preparing students on what to learn.



Buzzing sound for e-learning which has created a long dejected “eeeeee!” among teachers or educators when it was first introduced. The sound gradually changed to the long questionable “mmmmmm!?” when the terminology for mobile learning or m-learning came into picture (Rashidah, 2018). No matter how those vowel and consonant letters were pronounced, dejectedly or questionably, teachers or those in education world need to know that, they have to accept the fact, things for education is now on the move. Learning, regardless of who are the learners, is no longer confined to the four walls of the classroom.

## THE CONCERN

Training adult learners have been the core business of the institution and basically the delivery would fall back on the theory of adult experiential learning by Kolb (1984) which highlights on the four aspects: Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation. The in-service teachers who attended the short-term courses in the institution would mean that they would go through “...the process of relearning where their ideas and beliefs are going to be tested, examined and integrated with a new and more refined ideas...” (Kolb & Kolb, 2005: pg.194). Thus, giving the adult learners experience via approaches which will engage them would need to be planned out properly. The quality of the content could only be meaningful for the participants should the activities allow involvement of their physical and social environment as well as the quality of relationships. This is what Kolb and Kolb (2005) refer to as the “...cheers/jeers experiential continuum.”. However, based on the observation being the trainer for 4 years, the common method used in the training was more on using the conventional way: Power Point presentation, pen and paper-based method. The idea of moving a little advance, in which the attempt to use mobile tool rather than just Power Point presentation, came up with the aims to:

1. get out from the basic routine
2. explore personal practice in training which will bring improvement
3. think about a different way of doing things to bring about change

## 2 THE RELATED LITERATURE

Mobile Learning and Mobile Technologies are words which trigger some confusion regarding the specific definitions. The phrase mobile learning or m-Learning is commonly associated with the use of mobile technology especially the mobile phones (Cavus, Bicen & Akçil, 2008; Naismith et al, 2004). Naismith et al (2004) state that the term mobile is generally referring to something which is portable and personal; some scholars classify the portable technologies such as hand phones, handheld computers or any devices which can be put into one’s pocket as the most suitable combination for m-Learning definitions. Alexander



(2004) views m-Learning as a wireless learning, universal and it is a subset of e-Learning which would focus more on using the personal computers such as desktop computers with internet access to learn, whereas m-Learning would be more on the access to internet via the portable device such as the mobile phones or game consoles. Therefore, the integration of mobile learning among school students is seen as alternative which can help to increase their interest and motivation.

On the other hand, mobile technologies would usually be associated with the devices which would be used and portable. Sharples (2000) states that technologies can be used in learning as: 1) an intelligent tutor system, 2) simulators and learning tools as well as pedagogy agent, 3) system device and resources, 4) communication device, and 5) simulation classrooms. In addition to that, Naismith et al (2004) give two dimensions of mobile technologies which are: 1) personal and shared, and 2) portable and static. These researchers also point out that there are six learning theories related to the use of mobile technologies such as behaviourism, constructivism, situated, collaboration, informal learning and lifelong learning, and support in teaching and learning. Today's generation is keener to conduct information exploring using technology and their world is dominated by this high- tech device. Thus, this enables them to engage in any networking globally (Mohd Arif & Rosnaini, 2003; Roziah, 2004).

### **Koole's Mobile Learning Framework**

Koole's Mobile Learning Theory (2009) is also known as FRAME Model or Framework for the Rational Analysis of Mobile Education. This framework has highlighted three main aspects in mobile learning which are: the learners, devices and social. The concept which is proposed in seen through the connection between the technology, human learning capacity and social interaction (Koole, 2009). The device as mentioned in this framework, would be more focused on the physical criteria, the ability to receive input and produce output, the ability to save and extract files, speed as well as the limitations of the technology. As for the learners' factor, the considerations are basically referring to the learners' cognitive ability, memory, previous knowledge, emotion and motivation. In addition to those two aspects, the social factor in this framework is focusing more on two things, which are: 1) the communication and cooperation, and 2) the social interaction. Most importantly, the focal point of Koole's Framework in mobile learning is the integration of the three aspects: device, learners and social. Thus, preparation of mobile learning content or concept should take into considerations the applications of strategies as well as techniques which will assist to enhance the presentation of the information to learners be more efficient. The following illustration shows the simplified version of what Koole has in the framework.

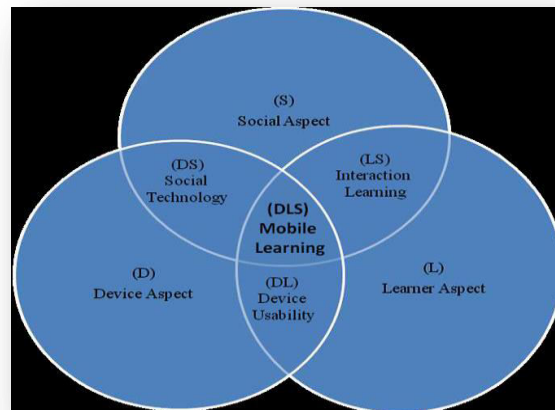


Figure 1. Koole's Mobile Learning Framework

### 3 METHODS

This small-scale study applied the action research design as suggested by Kemmis and McTaggart (1988). The application Plan-Act-Observe -Reflect was the main concept being focused on. The intervention was tried and tested with a total of 8 groups of teachers from 8 states who attended the proficiency course organized by the institution for 3 Phases. The first and third phases were the face-to-face sessions and the second phase was the online mode. The QR Codes were used when the face-to-face sessions were held. In order to gauge the use of codes in the training, the trainer used observation checklist and questionnaire. As for the checklist, the aspects were more on the involvement and the steps in improving the tasks prepared. The participants' feedback was gathered at the end of the third phase where they had to give feedback by filling-in the google form. Data was analyzed descriptively by presenting the percentage of the usefulness, user-friendliness of the QR Codes as well as the engagement aspect.

#### MOBILE TOOL AS THE INTERVENTION

The intervention used in this classroom research was the mobile tool known as the QR Codes. Based on personal observations, QR Codes have been widely used which can be found at the products sold such as drinking box or the plastic covers of the A4 papers. There was a point where the QR Codes were used in the course registration session. Therefore, based on those observations, the idea came to use QR Code in the training conducted with the English Language teachers.

QR Code is categorized as the mobile learning tool. Ashford (2010; pg.526) viewed QR Code as "...a matrix barcode readable by smart phones and mobile phones with cameras... typically appears as a small white square with black geometric shapes...QR codes were

developed in 1994 by Denso-Wave, a Toyota subsidiary”. The exploration on the benefits of using QR Codes by other fields such as business or health, has motivated the action to be taken for content delivery rather than just merely for survey or registration purposes. The statement by Ashford (2010: pg.527) where he stated that, “QR codes are a low-threshold technology. Low-cost, easy to implement, and easy to use, they are a technology that provides a lot of bang for the buck, when implemented wisely”. In addition to the benefits offered by QR Codes from the readings, the intervention also aimed at utilizing the mobile devices owned by the adult learners or teachers who attended the course. Therefore, the combination of the mobile device and mobile tool was used as the intervention for the training.

### HOW WERE THE CODES GENERATED?

For this classroom research, the codes were prepared using four simple steps: 1) worked on the existing content, 2) uploaded the content to google drive or directly to code generator, 3) generated the codes via free online QR code generator and 4) downloaded and printed the codes. The available content being focused was more on the speaking and writing tasks which were used in the sessions of the proficiency course conducted in 2017. Reflections on the previous practice were one of the foundations used in preparing the intervention. Figure 2 displays the steps taken in preparing the QR Codes.



Figure 2: The 4 easy steps to prepare the mobile tool



## HOW WERE THE CODES USED IN THE TRAINING?

The next stage was on how to use the QR Codes in the training. After the QR Codes were printed on A4 papers, they were laminated to ensure of the condition since they would be used for a few groups across the states. The QR Codes were mainly focused on the speaking and writing tasks. Each code was pasted around the training room depending on the physical arrangement. Some of the codes were visible and some were hidden. The participants were informed to follow the rules given in scanning the QR Codes. There were 3 basic rules: 1. Each group member must scan, 2. One QR Code at a time, 3. Listen to the cue given by the trainer to move to the next QR Code. The same rules were applied for all the groups.

## DATA COLLECTION AND ANALYSIS

Data was collected at the end of the 3<sup>rd</sup> Phase of the training. All the groups were given a link to the google form (<https://goo.gl/forms/xVGOvHdOcSzDHRsd2>) to the feedback form. The form consisted of two main sections: a) 5 Likert Scale items with the values of 1= Strongly Disagree, 2= Disagree, 3=Slightly Agree, 4=Agree and 5= Strongly Agree and b) open-ended questions. This data was collected from May till October 2018. Descriptive analysis was used and the concentration was more on the frequency based on the 3 main constructs: the ease of use, usefulness and engagement.

## 4 FINDINGS

### The Observations

Based on the observations carried out, it was noticeable that the participants were quite excited and curious with the QR Codes pasted all over the walls. It could be seen from their eagerness to move on from one code to another codes despite of the ground rules given: 1) must abide by the time allotted, 2) each group member will scan the code and 3) only move to the next code based on the signal given by the trainer. There were instances where the trainer had to remind them not move as the signal had not been given. The first trial of using the codes, the trainer pasted them all over the walls of the training room and could notice that the teachers were excited to scan the codes. However, the strategy was altered for the following group; some of the codes were visible for them to see but some were hidden. The change had made the teachers be more thrilled.

## The Participants' Feedback

The participants' feedback was analyzed descriptively based on the 3 main aspects: the ease of use, usefulness and engagement using the Likert Scale and open-ended questions. The following sub-headings are the findings of the analysis:

### A) USEFULNESS

There were 5 items which focused on the usefulness of the QR Codes used in the training. Generally, more than 80% of the participants agreed that the QR Codes were useful. According to their responses, the use of QR Codes saved cost and time where a total of 78 out of 88 participants agreed as compared to only 10 disagreed. In terms of viewing the using the QR Codes helped them to accomplish the tasks easier, high number of participants gave their agreement where 77 of them agreed and 11 otherwise. Besides that, the 74 of the respondents agreed that the use of QR Codes gave them more control in their teaching. About the usefulness of QR Codes in their work field as teachers, majority of the respondents (77 out of 88) agreed and 11 disagreed. The final item which highlighted on the plan to use the QR Codes in their classroom, 77 of the teachers agreed and the remaining 11 disagreed. The summary of the findings for the usefulness is as displayed in Figure 4.

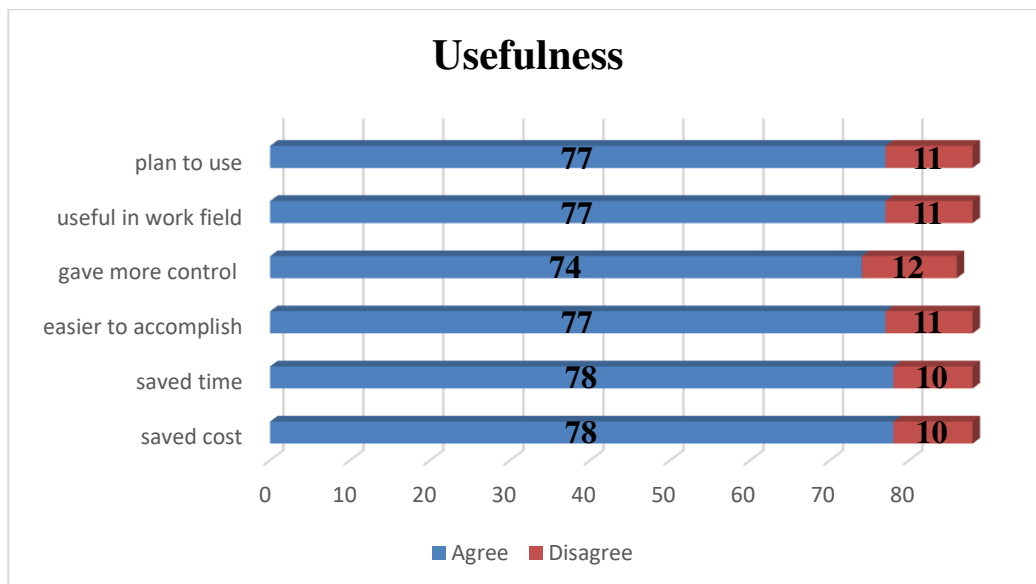


Figure 4: The Participants' Feedback on the Usefulness of QR Codes

## B) EASE OF USE

The analysis carried out generally showed similar pattern as the view towards the usefulness of QR Codes. There were 5 items focusing on getting the respondents' feedback on the ease of use of the intervention. In terms of viewing the QR Codes as easy, simple and took fewest steps to accomplish, majority of the teachers agreed where 79 out of 88 agreed and 9 disagreed respectively. They also agreed that the QR Codes were flexible and they managed to use them successfully. The analysis showed 78 agreed and 10 disagreed for these two items. The following figure shows the summation of the perceived ease of use of QR Codes.

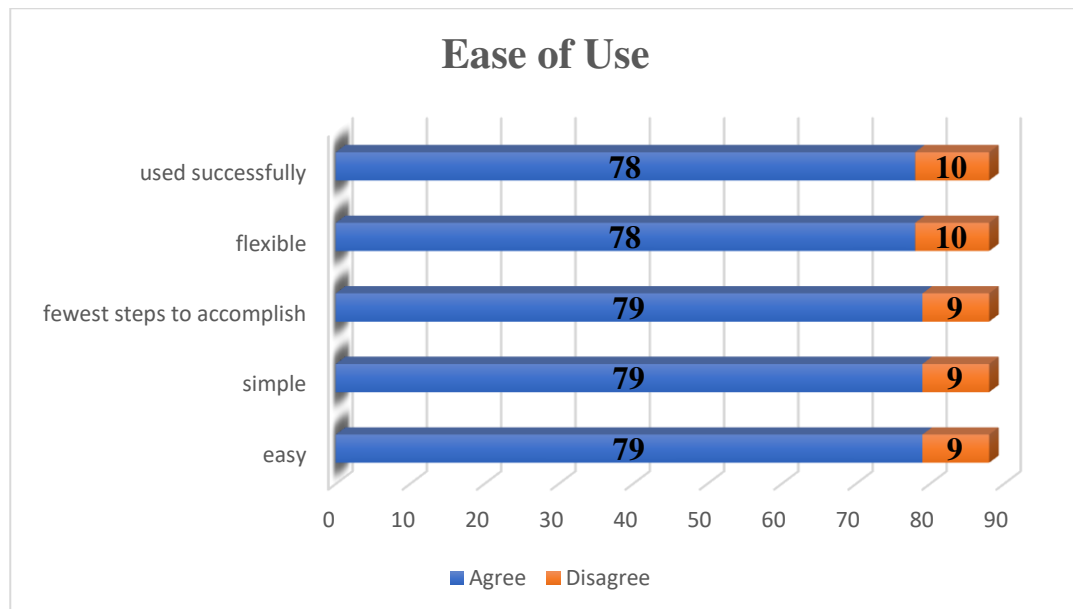
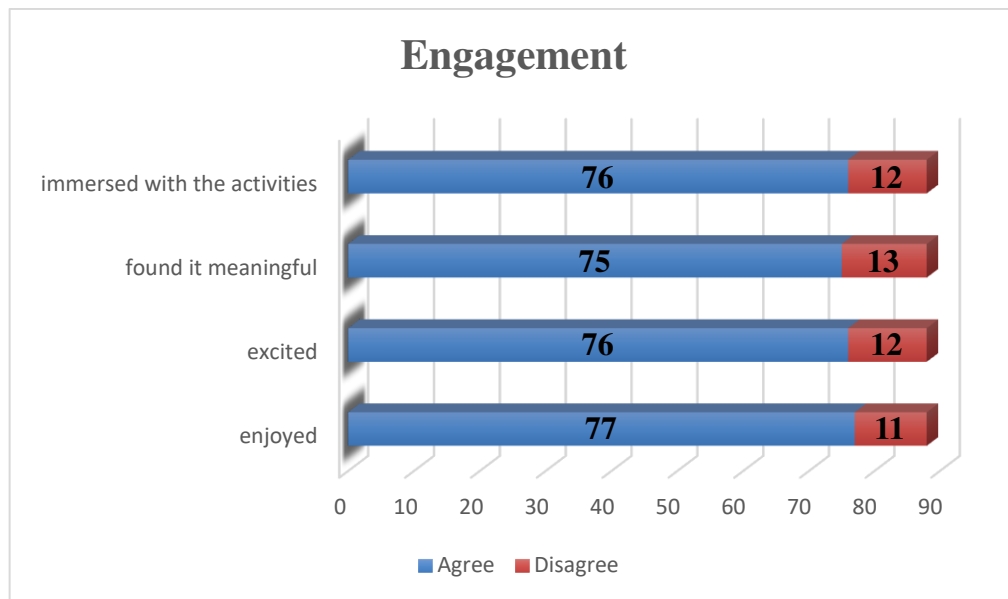


Figure 5: The Participants' Feedback on the Ease of Use of the QR Codes

## C) ENGAGEMENT

The teachers were also asked on their engagement working with the QR Codes. There were 4 items concentrating on this aspect. A total of 77 and 76 teachers admitted that they enjoyed and were excited using the QR Codes in completing the tasks given. Apart from that, they found the QR Codes meaningful as well; this is where 75 agreed and 13 disagreed over this statement. In addition to that, 76 out of 88 participants agreed that they were immersed with the activities conducted via QR Codes. Figure 6 summarizes these findings.





## 5 CONCLUSION

The dimension of linking the paper-based approach with electronic is seen feasible based on this intervention. The feedback from the teachers has helped to furnish the self-observation done in exploring the use of QR Codes in training. The reactions witnessed during the activities showed that the QR Codes as the mobile tool, have managed to create a new way to deliver the content. The mobile tool is also proven to be practical to be used for language learning activities. The content was explored with excitement and curiosity by the teachers when they were required to accomplish the speaking tasks in the first phase of the training. Their positive reactions which were shown during the first phase sessions opened up for more ideas to be explored for other language skills such as listening and writing.

Another reflective point to be highlighted will be on how to ensure not to over-do with the QR Codes. Transforming the paper-based training with electronic would be the focus however, proper planning will be needed; the "...cheers/jeers experiential continuum.." must be put as one focal element to be considered in the next planning of other technologies to be used.



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