iMOTIVATE: USING MOBILE APPS TO MOTIVATE LEARNERS OF SECOND LANGUAGE

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Abstract

In this technology driven era which evolves around Information and Communication Technology, education stresses on the importance of empowerment and acculturation of ICT by educators and students. Teaching and learning strategies has to accommodate the learning styles of our students who are digital natives so as to instill interest towards the subject. The digital native-immigrant concept describes the generational switchover in which people are defined by the technological culture of which they are familiar with. Therefore many educators who have lived in the analogue age have migrated to the digital world so as to cater to the learning styles of our 21st century learners. It is evident that the effective use of ICT in classrooms will revolutionise the way students learn, further enrich the curriculum, develop pedagogy and most importantly motivate students. Motivation is the key to success. It is also an important value in teaching and learning of Malay language. Through intrinsic motivation, an individual is able to attain learning objectives and will be motivated to achieve success. In Tanjong Katong Secondary School, several mobile apps (iPad and Android) have been identified to increase student's motivation in learning Malay as a second language. These mobile apps fulfil three innate needs experienced by people in all settings in order to be motivated, they are the need for autonomy, belonging and competence. In other words, the ABCs of motivation.

Keyword: digital natives, ICT, iPad, mobile apps, motivation

1. Introduction

In this technology driven era that revolves around Information and Communication Technology, education stresses on the importance of empowerment and acculturation of ICT by educators and students. Teaching and learning strategies has to accommodate the learning styles of our students who are digital natives so as to instil interest towards the subject. The digital native-immigrant concept formed by Marc Prensky (2001) describes the generational switchover in which people are defined by the technological culture of which they are familiar with. As a result, many educators who have lived in the analogue age have migrated to the digital world so as to cater to the learning styles of our 21st century learners who are digitally literate, mobile, experiential, social, craves interactivity, has strong visual-spatial skills and looks for fast response times which leads to short attention span (Rodges et. al, 2006).

In Singapore, since 2009, the third Masterplan for ICT in Education was carried out as a continuum of the vision of the first and second Masterplan that is to enrich and transform the learning environments of students and to equip them with the critical competencies and dispositions to succeed in a knowledge economy. The broad strategies of the third Masterplan for ICT in Education are:

- To strengthen integration of ICT into curriculum, pedagogy and assessment to enhance learning and develop competencies for the 21st century;
- To provide differentiated professional development that is more practice-based and models how ICT can be effectively used to help students learn better;
- To improve the sharing of best practices and successful innovations; and
- To enhance ICT provisions in schools to support the implementation of mp3.

In the Master Plan 3 (MP3), the outcome goal focuses on self-directed and collaborative learning for students, which requires learners to exercise a good range of 21st Century skills and dispositions that will lead to the desired outcomes of education. It also reflects the particular strength and potential of ICT to deepen the self-directed and collaborative learning experiences.

According to Gibbons (2002), self-directed learning also involves personally initiating challenging activities and developing personal knowledge and skills to pursue the challenges successfully. For students engaged in self-directed learning, there will be; ownership of learning, management and monitoring of own learning and extension of own learning. However, in a Malay language lesson, students need to be motivated in learning a second language first before they can be self-directed learners. Wlodkowski (1985) postulated that motivation is not only important because it is a necessary causal factor of learning, but because it mediates learning and is a consequence of learning as well. It is also an important value in teaching and learning of Malay language. Through intrinsic motivation, an individual is able to attain learning objectives and will be motivated to be a self-directed learner.

2. Objective

The objectives of this research paper are:

1) To test the efficacy of mobile apps in motivating students to learn Malay as a second language and
2) To recommend several mobile apps, which motivates students to be self-directed learners in learning Malay as a second language.

3. Literature Reviews

There are many researchs done by researchers on issues of motivation such as Mouza (2008). In his research, Mouza (2008) noted that students who carried out their lesson using their laptops were in control of their own learning. It was also found that the

students were instrincally motivated and produced highly quality projects. Some students were observed to have loan computers so that they could complete the assign tasks by teachers. Some students used their own initiatives to collaborate and work together to complete their tasks.

Daneils (2004) conducted a study on the impacts of motivation on the use of technolgy in teaching and learning. He found that the use of ICT improved students' skill in essay writing. The students writing improve by 50% in term of the length of essays. He discovered that students are intrinsically motivated to write longer essay when they are asked to write using computers. If this so-called instrinsically motivated factor can be used effectively, it will certainly improve students' interest in writing.

Apart from highlighting reseach on issues of motivation, this paper will also highlight the model use in this research which is the ARCS model by Keller and Kopp (1987). The ARCS Model is divided into four main parts: Attention, Relevance, Confidence and Satisfaction.

The ARCS is a motivation model propogate by Keller and Kopp (1987). This model can be used as guide by teacher to enhance and improve students' motivation in teaching and learning. The ARCS model is expanded based on value hope theory which consist of objective to be achieved and hope for the success of the objectives.

According to ARCS model:

1. Attention: Attention is formed by students' curiosity about learning. Therefore, student enthuthiasm and sense of curiosity can be aroused through strange, new, different and complex elements. Keller suggested various strategies such as learning variation strategy through group or peer discussions, role play, stimulation, talks, demonstrations and others; the use of interactive multi-media such as animations, video clips, software applications; use of humour in teaching and learning on time; use of anecdotes, events dan relevant and appropriate examples to explain concepts; and questioning techniques for students.

2. Relevance: Relevance refers to the teaching and learning resources that take into consideration of the prior knowledge and learning experiences of students. Students will find the learning resources meaningful and related to the values they uphold. Keller suggested that teachers need to explain the relevant of teaching and learning by explaining to students the usage of the materials used; explaining the benefits of knowledge or skill acquired in working life later on; and provide the appropriate assessment and practises according the level of readiness of students.

3. Confidence: Confidence refers to level of competency of students in interacting positively with others. Once level of confidence increases, students are motivated to improve their level of attainment and further motivated to participate in the subsequent activities intrinsically. Some of the strategies that can be employed to enhance students' confidence level is by providing more opportunities for

students to achieve success. Teachers can also reduce the burden of stress by employing chungking methods of learning. Students are introduced with byte size information to enable them to comprehend and understand the concepts thought better. Teachers can also provide opportunities for students to take control or take charge of their own learning and provide words of encouragement to motivate them further.

4. Satisfaction: Satisfaction is a feeling students felt when they achieved the learning objectives. When students felt satisfied, they will be motivated to work harder to achieve more. Teachers play an important roles in motivating students to feel satisfied in their learning process. Teachers can sustain students' motivation and satisfaction by praising their good works and learning acquired verbally, providing opportunities for students to apply the knowledge or skill gained, compare students' achievement with their own and not wwith other students.

In this research, the paper will study the motivation aspects in using 'i' technologies such as iPhone, iPad, Android, and applications in ML teaching and learning. ARCS model will be used as the main instrument in measuring the effectiveness of technology 'i' in motivating students. In addition, this paper will also encourage the usage of various applications such as iPad, iPhone and Android to motivate learners in the teaching and learning of ML.

4. Methodology

In this research, several mobile apps (iPad and Android) have been identified to increase students' motivation in learning Malay as a second language. These recommended mobile apps fulfil three innate needs experienced by learners in order to be motivated; the need for Autonomy, Belonging and Competence - the ABCs of motivation and highlighted by Anderman & Leake (2005). The mobile apps are; *Who's Next, Awards, Stick Pick, ClassDojo, Edmodo*, *TimerZ* and *Teacher Clicker*.

Who's Next is an app created by Naaptime Software that helps teachers to 'shake things up' by calling on students randomly. Calling on students randomly in the classroom keeps students engaged and can aid in classroom management. Teachers can choose between calling on every student randomly before repeating or calling on students randomly but repeats are still made possible. Other than calling on students, this app allows teachers to create random groups. Teacher will have to select a pre saved class list and choose between dividing the class into number of groups to create or based on number of students per group. This way every student gets a chance to work with different classmates and thus encourage cohesiveness and fairness.

Stick Pick is an app that is similar to *Who's next*. Teachers can randomly or intentionally choose a student's name from a virtual can of Popsicle sticks. Student sticks are tied to a mode and level of difficulty for each learner based on Bloom's Taxonomy. Each time a student's stick is drawn, a dozen of Bloom's taxonomy question stems will be shown. Teachers can use these questions stems to check for student's understanding. Stick Pick is

a handy tool for any teacher device. Stick pick can guide classroom discussion and formative assessment. In a one IOS device per student classroom, students in small groups can use Stick Pick by taking turns to ask questions to each another based on Bloom's Taxonomy. This will make group work more productive and students will stay on task.

Awards is an app created by Mobelux that allow teachers to keep track of good behaviour and reward students. *Awards* make it fun and easy to keep track of events such as when a student submits his homework on time, answers a question correctly, cleans the classroom without being asked to and other similar behavioural tasks. To reward all this good behaviour, teacher can choose from a selection of built-in list of rewards or make your own reward such like five minutes of early dismissal for recess or a box of chocolates. This reward will automatically appear next to a student's name when they become eligible for it. A teacher may also notify students of their rewards by sending them an email through the app. Students will receive a customized certificate acknowledging their accomplishment.

Timer Z is a time management app that has a simple countdown timer that can be set and start with just three taps. This timer can also run in the background while using another app. The background graphics of this app looks like a pie chart and as the time decreases, the colour of the graphic will gradually change from green to orange and eventually to red. Timer activity is automatically saved and can be emailed for record keeping.

Teacher Clicker by Socrative is a wonderful tool for educators. It engages the entire classroom with educational exercises and games while capturing students' results in real-time. This way teacher can give timely feedback on students' understanding or use it as a teachable moment to rectify any misunderstanding of concepts. This app is ideal for schools that do not practise the 1:1 iPad concept as students may use their own devices with a web browser. Teachers may also create a library of activities and share these pre-made activities with colleagues.

4.1 Subject
Malay language students from Secondary 1 and 2.

4.2 Instrument
The main instrument use for this research is survey questionaire. A pre and post survey questionaire was conducted for students. The pre and post survey questionare focusses on four main areas namely attention, revelance, confidence and satisfaction. The post survey questionaire was conducted after 10 lessons were conducted for the teaching and learning of Malay Language.

Before the conduct of the pre survey questionaire, a pilot survey was conducted to ensure the questions are of appropriate level for students and understood by students. 10 respodents were involved in the pilot stage of the survey questionaire development. The survey questions were than improved and refined.

The survey questionaire was then administered to the intended group or subject of the study. The subjects of the research are required to provide their responses based on the scale of 1 to 5 for each items for all the four components i.e. attention, relevance, confidence and satisfaction. Sample of the 5 scale survey questionaire is shown at Table 1.

Table 1: Scale 1 to 5

Response	Score
Strongly Disagree	1
Disagree	2
Moderately Disagree	3
Agree	4
Strongly Agree	5

4.3 Procedure
In the survey questioanire, each category represent different items. The researcher will collate the data and establish the average score for each items or category so as to identify the highest or the lowest score. The data or findings will enable the researcher to identify the learning needs of respondents in motivationg themselves in learning and teaching of the language. Researcher will then recommend the use of several 'i' technologies to enhance teaching and learning that match the students' learning needs.

4.3.1 Pilot Survey
To ensure that the survey questionaire is fully understand by students, a pilot survey was conducted to determine appropriateness of words or phrases used in the survey questionaire. 10 students were involved in this pilot survey. The questionaire was than edited and improved further.

4.3.2 Pre Survey Questionaire
Pre Survey questionaire was conducted to all students before the conduct of lessons using 'i' technologies.

4.3.3 Implementation of 'i' technologies in lessons
Teachers plan and carried lessons that incorporate the use of 'i' technologies and applications in teaching and learning of Malay language. Teachers ensure students participate actively in 10 lessons using various 'i' technologies.

4.2.3 Post Survey Questionaire
After attending 10 lessons using various 'i' technologies, post survey questionaire will be administered to subjects or students based on the four categories: attention, relevance, confidence and satisfaction. Researcher will analyse the data gathered and make comparision based on pre and post survey questionaire that students took.

4.2.4 Interview Session

Finally, interview sessions for students and teacher were conducted. The purpose of this session is to gather data and qualitative feedbacks from the subjects so as to improve and identify the strengths and weaknesses of the lessons using 'i' application and technologies. According to Keller (1987), a motivated teacher will produce motivated students because the teacher's characters and behavior can influence the learning environment and the motivation level of students. During the interview session, the researcher can also identify which applications that the teacher like or preferred during lessons. With the information, the researcher can suggest the most appropriate applications to use to motivate learners in their learning of Malay language.

5. Findings and Discussion

Through the use of these apps, students have shown significant change in their attitude towards learning Malay as a second language. Students are able to stay on task while doing group work by monitoring the time management apps. They are also given the flexibility to decide on the amount of time they need to complete their discussion by agreeing that they would produce high quality work. This behaviour teaches students to be self-regulated as teachers include them in some classroom decision-making. Thus, there is some autonomy as students feel some sense of personal internal control and self-determination. Students will then feel responsible for their own successes and failures when given some degree of choice within the classroom.

From teacher's observation, students have developed a sense of belonging in the classroom. Students have taken ownership of their learning by suggesting the use of the apps to choose group members. This creates a classroom climate that is based on mutual respect and recognition of diverse contributions as they welcome opportunities to work with different groups of peers.

Lastly, the use of these apps allows students to develop a sense of competence. This gives students the motivation to choose, perform and persist in tasks. Teachers may do so by matching task demands or objectives to students' current levels of achievement so that all students are working toward moderately difficult but achievable goals. In conclusion, the recommended apps has been successful in acting as catalysts for self-directed learning by first fulfilling three innate needs of students to be motivated; which are the need for autonomy, belonging and competence. This proves that the effective use of ICT in classrooms will revolutionize the way students learn, further enrich the curriculum, develop pedagogy and most importantly motivate students to be self-directed learners.

6. Conclusion

In conclusion, the use of various 'i' applications such as iPad, iPhone, and other applications can motivate students to learn Malay language. Students are more IT savvy, mobile and they learnt through experiential learning and through interactions with others. Therefore, teachers need to be more flexible and able to adapt their teaching with

students' profiles and interests so as to sustain their interest in learning the Malay language.

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