

# A Propose Concept for Mobile Learning Financial Literacy at Malaysian Elementary School

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## Abstract

Financial literacy is very important to everyone for survival nowadays. Currently, in Malaysia, there is a problem for students in learning getting a grasp of financial literacy because they are lack of education in finance. They cannot be able to coop or organize themselves even for simple financial transactions or finance skipping. Therefore, in order to solve this problem, we proposed the objectives of this research. First of all, we need to identify the requirement of the suitable mobile application for financial literacy for children. Secondly, we are going to develop an interactive courseware based on financial literacy to help the students to overcome the problem. Thirdly, we are going to evaluate the interactive courseware to know how the level of user satisfaction using our software. So, therefore this study is intended to design and develop mobile learning application interactive courseware for financial literacy for elementary school students. The methodology that used in this mobile learning software development is ADDIE and we use it together with the software development life cycle (SDLC). After that, this research is going to evaluate using heuristic evaluation. The result expected will be the requirement of the criteria design of the software. Secondly, the result expected will be a prototype of software for financial literacy for elementary school students. Therefore, this article proposed conceptual framework for this study. Then the final result expected is the level of satisfaction the users using the software. The future studies will be conducted to meet the stated objectives.

**Keywords:** mobile learning, interactive courseware, financial literacy, elementary school student.

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## INTRODUCTION

Financial education is an important element in the 21st Century as well stated by the International Networking and Financial Education (INFE) and the Organization of Economic Co-operation and

Development (OECD), which acknowledges that a financially literate society plays a role in development and economic stability to build a prosperous nation. It is well known that financial literacy is a source for knowledge information of the concept of the finance (Hussain, Salia & Karim, 2018).

Almost 70 percent of Malaysians need support in terms of financial literacy knowledge. Knowledge of financial management is very important in this era of globalization because almost every business is done involves financial management. According to Abdul Rahman & Zulkifli (2016), money management is the most important asset to meet the wants and needs of Malaysians in the face of an increasingly challenging economy. They stated that high level of financial literacy in line with the increasing economic changes day by day.

A financial crisis will happen if we fail to plan financially wisely. Besides, the financial facilities offered today are very many such as loan and investment facilities that require students to have knowledge related to finance so that their well-being is more secure (Berg-Weger, 2016) According to Nuraliani (2015), more and more youths are going bankrupt due to bearing a very serious debt burden. Lack of knowledge in managing personal finances is one of the causes of bankruptcy at a young age. What then can financial education programs focus on for early elementary school age children? This is because, exposure since childhood will make it easier for them to manage their finances in the future.

In this study, mobile applications developed through mobile phones for the purpose is to make it easier for elementary school students to learn finance literacy. This is because, financial education should start at an early age. Basic financial education must be taught to school children in order to inculcate and nurture good financial values in our young. This will enable students to apply what they have learnt about personal finance and practise prudent money management.

## **STUDY BACKGROUND**

Participation in economic life should maximize life chances and enable people to lead fulfilling lives. Selvadurai et.al, (2018) believe that financial literacy is a helpful but not a sufficient idea. This requires knowledge and competencies, ability to act on that knowledge, and opportunity to act. This is more likely when people are able to convert knowledge into action. This includes linking individual functioning to social institutions, and pedagogical methods that enable them to practice and gain competency in this functioning. The authors refer this as “financial capability”.

Young people are the ones who will be the leaders for the future. This group should be exposed to various knowledge, especially on financial management because many of the people declared bankrupt are young people. Referring to the findings of the Malaysian Insolvency Department, a total of 64, 632 Malaysian were recorded bankrupt in the past five years (Berisha & Meszaros, 2018).

In the current environment, financial education is more needed and plays an important role. Financial education is therefore key to our society to benefit from new financial systems and technologies that can change the financial landscape. This has been the motivation for Bank Negara Malaysia in developing Credit Counselling and Management Agency, AKPK “*Agensi Kaunseling dan Pengurusan Kredit*” to become an agency that provides financial education to adult consumers (Cordelia, 2017).

As part of its efforts to promote financial literacy and sound financial management by the public, AKPK has developed a special program targeting all walks of life from young people in tertiary education to senior citizens in their retirement age with the aim of increasing their level of understanding effectively in managing their finances (Cordelia, 2017). This will contribute towards introducing protection to consumers of the financial system and the household sector that remains sustainable and resilient.

## **LITERATURE REVIEW**

### **Mobile Learning**

Mobile learning carries a different meaning to each person evaluate it. In general, mobile learning can be known as consumption technology in learning and teaching to convey information. The concept of e-learning also changes as time goes on. Martin and Ertzberger (2015) found that the word in 2000 is a reference to learning computer-based particularly in intranets and the internet and Clark and Mayer (2016) agree with that definition by adding that content mobile learning content should take into account learning objectives and teaching, teaching methods to aid learning, media elements that different to convey content and try to build knowledge new and skills related to individual learning goals.

Martin and Ertzberger (2015) also showed that, experts the industry has adopted the definition that e-learning is one the use of technology to create, distribute and transmit something including valuable data, information, learning content and knowledge that can demonstrate performance in work as well as self -development. the next scope of e-learning has been further expanded by those who supply learning with introduce management tools in the form of content management systems (content management system), virtual classroom, PowerPoint software, in -house courses line, portal and performance support system (Clark & Mayer, 2016).

### **Financial Literacy**

The first portion of this literature review will detail the various aspects that define a student’s particular financial circumstances. This includes their understanding of finance, their actual financial habits, their current balances, their financial aspirations, the main sources of monetary inflows and outflows, and other related topics.

The foundation of any ability or skillset is arguably the relevant knowledge and understanding necessary to perform such tasks. While financial literacy is certainly an influence of money decisions, the degree to which students understand money is also a representations of financial situations. Research indicates that most people agree that financial literacy is a significant determinant of quality of life and future decision making (Norsyahidah & Norasmah, 2017).

Another important factor that influences the financial standings of college students is their background, or more specifically, their parents' financial status. Family income is the starting point for any student, and regardless of the current dependency on parental finances, this background affects college student perspectives and behaviors regarding money.

Graves and Savage (2015) researched students' abilities to process information relating to personal finance. They focused heavily on the concept of scarcity, as in a period of time a person is in an economic disadvantage such as poverty. Some students are only recently experiencing scarcity; they've left their parents' homes to attend school and are trying to support themselves off of limited income. Other students come from an impoverished household, which is a more prolonged period of scarcity. People experiencing financial scarcity are often stressed and emotionally taxed, which researchers have linked to a resulting lack of financial capabilities and poor attitudes toward money (Graves & Savage, 2015).

### **Theory of Mobile Learning for Financial Literacy Pedagogy**

Summarizing the results of the literature review, we can see that, despite the abundance of scientific and methodical literature on this problem, from writer point of view, there is clear lack of research on such an important components as the Pedagogy of Financial literacy education and, in particular, with regard to higher education. Concerning the known scientific publications, the exceptions are the trainers' manual of International Labour Organization (Financial Education for Youth 2014) clearly substantiates detailed structure of the curriculum related to young people aged 15-29, that is, the life stage when a transition from financial 'dependence' to financial 'independence' occurs. Other than that is, one of the publications provides a comparative analysis of the curricula on the basis of 100 educational institutions.

It is due to the lack of research in this direction that the author chose Pedagogy of Financial Education as the object of analysis. But before we proceed towards a direct presentation of the nature of the object under study. The writer say that almost all higher education institutions, regardless of their specialization, make serious efforts to promote financial education, mainly by highlighting certain issues and topic in various courses (Michael, 2016).

## Software in Financial Literacy

The advancement of information and communication technologies (ICTs) has triggered significant changes in all levels of education, from kindergarten right up to tertiary level. Education has evolved from the use of traditional methods of instruction to the use of ICTs for instruction. Hwa, S. (2018) asserted that teaching in the digital age is no longer telling, and learning is no longer listening. Shafie and Mansor (2009) added that “the ideal learning environments for digital learners are rich learning environments that enable and support learners to learn independently and collaboratively”. Malaysia has the second highest growth rates for e-learning products in the world, at the record of 39.4%, which is more than four times the worldwide aggregate growth rate (Ullah, et.al, 2017). Clark and Mayer (2016) noted that e-learning involves the use of instructional methods such as examples and practice and multimedia elements such as pictures and videos to assist learning by delivering content which is pertinent to the learning objective.

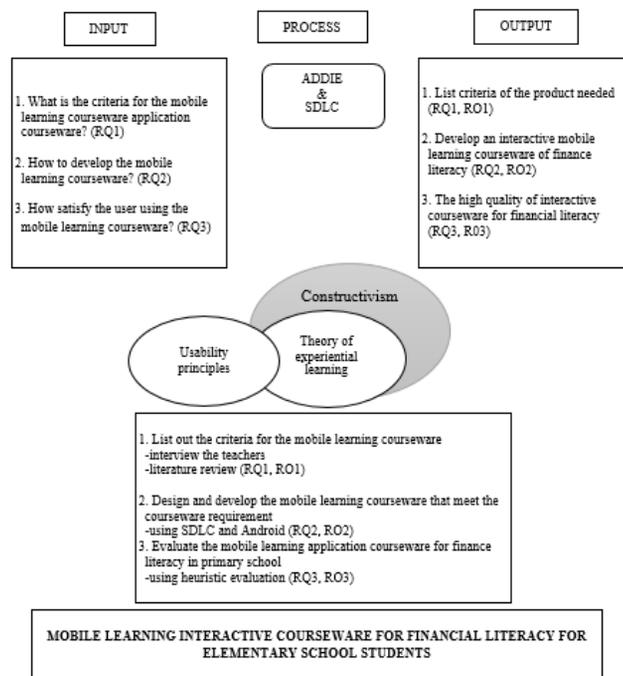
Nowadays, managing the income and expenses each month is an important activity because it can affect the amount of savings at the end of the month. According to a report from the World Bank, 40% of Millennials in Malaysia admit that they spend more than they can afford. Most of these expenses are spent on food and utilities categories. Detailed spending planning will help people understand their own money spending habits so as not to be extravagant and buy unnecessary items.

**Table 1:** List of article software product for financial literacy

| Author        | French, D., McKillop, D., & Stewart, E.  | Khairiree, K.  | Cherner, T., Dix, J., & Lee, C.   | Hidayat, Y. M., & Machmud, A.   | Lee, H. W.   |
|---------------|--|--|---|---|--|
| Year          | 2020   | 2020   | 2014  | 2019  | 2019   |
| Article Title | The Effectiveness of Smartphone Apps in Improving Financial Capability   | Financial Literacy, Mathematic Literacy and Attitude Towards the Use of Fintech Smartphone Apps  | Cleaning Up That Mess: A Framework for Classifying Educational Apps   | Improve Islamic Financial Literacy and Optimize the Islamic Economy through Financial Technology: INPES apps  | Applying Online Education Technology to Foster Financial Literacy: Financial-Institution Leaders' Insights |
| Problem       | Lack of smartphone apps that can be used to improve financial behaviour  | Students possess the moderate level of knowledge and skills in financial literacy and in mathematics                                     | Choosing educational apps based on their purpose, content, and value.                                       | Lack of Islamic financial literacy among the Muslim   | Lack of effective evaluation, and how to motivate online learning.   |
| Objectives    | 1) To improve financially capable behavior.<br>2) To measure financial knowledge.<br>3) To change financially better behavior among consumers; | To explore financial literacy, mathematics literacy, and also the attitude towards the use of fintech smartphone apps among the students | To provides teacher educators with a much-needed resource to support their instruction of educational apps. | To integrates sharia learning and sharia financing in an online based application, where users must complete their Muamalah course before they access financing services. | To maintain a financially healthy household and for a nation to maintain economic stability.               |

|                        |                                   |                         |                             |   |                             |
|------------------------|-----------------------------------|-------------------------|-----------------------------|---|-----------------------------|
| <b>Scope</b>           | Working-age members (16-65 years) | Students (16-35 years)  | Teachers and educators      | Muslims   | Educators                   |
| <b>Methodology</b>     | Randomised Control Trial (RCT)    | Content analysis        | Qualitative research method | Research and Development (R&D)                        | Qualitative research method |
| <b>Type of Product</b> | Smartphone apps                   | Curriculum fintech apps | Educational apps            | INPES (Islamic Financial Inclusion) Online based apps | Educational apps            |

**PROPOSE CONCEPTUAL FRAMEWORK**



**Figure 1:** A propose concept for mobile learning financial literacy

This study consists of three research questions named as input. The first research question is what the criteria for the mobile learning application courseware is. Secondly, how to develop the mobile learning interactive courseware. And the third one is how satisfy the user using the mobile learning courseware. There are also have three output for the input that has been specified. The first output is list out the criteria of the product needed using literature review and interview method. The second output is develop an interactive mobile learning courseware of financial literacy using the Software Development Cycle (SDLC) and Android Studio software. The last output will be the high quality of

interactive courseware for financial literacy by evaluating the application software using heuristic evaluation.

## CONCLUSION

In this study we have already discuss regarding financial literacy the study we conducted. We have introduced the concept of financial literacy which is very important to everyone for survival nowadays. The focus of this study was to identify the criteria of the good mobile learning courseware for finance literacy. The second objective is to develop an interactive mobile learning courseware and the third one is to evaluate the mobile learning courseware for financial literacy. And then we also introduced the background of this project where young people are the ones who should be exposed to various knowledge, especially on financial management. This is because, they will be the leaders for the future. Then, future studies will be going to develop the software applications and evaluate the software applications.

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