## USING WEB 2.0 TOOLS FOR LEARNING HISTORY: FORMATION OF MALAYSIA

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This project is submitted in partial fulfilment of the requirements for a

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(Cognitive Science)

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## ABSTRACT

Majority of students are not interested in studying History. Searching via Google, there are only a handful of educational websites on Malaysian History for students. The aim of this project is to design and develop an online learning application entitled "Formation of Malaysia" that integrates various Web 2.0 tools. This project used an instructional design model to guide the design of the online learning application. This project also used the Cooperative Evaluation method to evaluate and improve the human-computer interaction of the developed online learning application. The development of this online learning application will provides an addition to existing electronic resources on Malaysian History. Students of the Arts stream at the STPM level taking History as one of their subjects may use it as a reference and a guide in their learning, while teachers may utilise it either as reference material, or integrate its use into their actual teaching. Other developers can expand it to other topics related to Malaysian History, while researchers may use it to examine its usability with a larger number of participants.

Keyword: web 2.0 tools, Malaysian history, teaching and learning process

## ABSTRAK

Kebanyakan pelajar tidak berminat dalam pembelajaran mata pelajaran Sejarah. Tujuan projek ini adalah untuk mereka bentuk dan membangunkan satu aplikasi untuk pembelajaran yang bertajuk "Pembentukan Malaysia" dengan mengintegrasikan pelbagai alat Web 2.0. Projek ini mengunakan model reka bentuk pengajaran untuk menghasilkan aplikasi tersebut. Projek ini menggunakan kaedah penilaian koperat untuk menilai dan memperbaiki interaksi antara manusia dan komputer terhadap aplikasi pembelajaran ini. Penghasilan aplikasi pembelajaran ini dapat menambahkan lagi sumber elektronik yang sedia ada yang berkaitan dengan pembentukan Malaysia. Pelajar yang akan menghadapi peperiksaan mata pelajaran Sejarah di peringkat STPM boleh mengunakan aplikasi ini sebagai bahan rujukan dan panduan dalam pembelajaran mereka. Manakala guru Sejarah boleh menggunakannya sebagai bahan rujukan atau mengintegrasikan pengunaannya dalam pengajaran mereka. Pembangun aplikasi juga boleh mengembangkan aplikasi ini kepada tajuk lain yang berkaitan manakala penyelidik boleh menggunakannya untuk menguji kebolehgunaan aplikasi ini untuk bilangan responden yang lebih banyak.

Kata kunci: alat web 2.0, Sejarah Malaysia, proses pengajaran dan pembelajaran.

## CHAPTER ONE INTRODUCTION

### **Background of the project**

According to Habids (2010), History was one of the subjects taught during primary school before secondary education was introduced in Malaysia. In 1984, History began to be taught in secondary school, but only for students who were in humanities classes. Then, starting from 1992, History became a compulsory subject for students from Form One to Form Five (Habids, 2010). However, History subject is a non-compulsory subject for the Malaysia Higher School Cerficate (STPM). History subject is split into two categories in Form Six. The first category consists of Word Civilization and Islamic Civilization, whereas the second category is about Malaysia and Southeast Asia, which is the History of the Asia Pacific (Nilam, 2009).

According to Mohamad (2010), History is a boring subject to many students. The majority of students dislike this subject because of the assumption that this subject is a rigid subject (Boon, 2010). According to Ahmad, Abdullah, Ahmad, & Aziz (2005), the majority of society assumes that this subject has no commercial value. It also reports that the lack of innovation in teaching the History subject can lead students having stereotypes about the subject as not challenging, having rigid content, and bored. Moreover, most of people have wrong impression towards History subject as being more focused on memorizing facts, narratives, and descriptions (Rashid as cited in Ahmad et al., 2005).

Conventionally, face-to-face classroom teaching is employed to teach the History subject (Isahak & Boon, 1992). According to Ramakrishnan & Abdullah (2008), most studies report that

a majority of teachers who are not using electronic History resources in their teaching and learning process of History. Teachers are also reported of not having adequate skills in using electronic resources. In class, teachers still depend much on the text book for teaching History (Abdullah, 2008; Gillaspie & Davis, 1998; Samsudin & Shaharuddin, 2012; van Hover & Yeager, 2004) and resource centres as making trips to museum or other historical places are often costly (Bolick & McGlinn, 2004).

The majority of History teachers are still using the traditional method in their teaching and learning process (Hassan & Abdullah as cited in Ramakrishnan & Abdullah, 2008). Only a minority of teachers exploit the electronic history resources in teaching and learning (Ahmad as cited in Ramakrishnan & Abdullah, 2008). The limitation of teachers in using Information of Communication Technology (ICT) in their teaching and learning process are more likely because of some deficiencies such as a lack of ICT knowledge, lack of skills to use ICT tools, incomplete equipment, and time constraints (Bolick & McGlinn, 2004; McGlinn, 2007).

According to Ramakrishnan & Abdullah (2008), types of electronic history resources that are frequently used include exercises, sample examination questions, History notes, images or visuals, and presentation materials. All of these resources were obtained from the internet, such as from websites, blogs, Slideshare, and Scribd. However, the consumption of electronic history resources in the form of videos, audio, cartoons, animations, documents, and maps are still limited (Ramakrishnan & Abdullah, 2008).

History teachers have intermediate skill in using electronic history resources (Ramakrishnan & Abdullah, 2008). Internet is mostly used for searching and downloading of History resource. However, teachers are still lacking of skills to plan activities using the

electronic history resources, distinguishing authentic and authoritative sources, as well as tracking copyright (Ramakrishnan & Abdullah, 2008).

According to Ramakrishnan & Abdullah (2008), findings, the teachers' challenge in the usage of electronic history resources is divided into three domains. The first domain is teachers who have been identified. The factors found in this domain are that teachers' tasks are getting more and more burdensome, problem of finishing the learning units on time, and lack of ICT's skill. Whereas the second domain involves the school and the factors are incomplete ICT equipment, and cooperation of the administrator and teachers. Electronic history resources are a new innovation, which is different from the existing practice of teaching that may cause teachers to feel worried about the authority of the sources and it is also a challenge for History teachers to use the digital history resources for teaching and learning. Overall, the study found that the teacher factor is the dominant factor, rather than school factors or electronics history resources as a new innovation.

### **Problem Statement**

Curriculum Development Division (2004) reported that History is assumed to be a rigid subject, which leads students to feel bored and not interested about the subject. Curriculum Development Division (2004) stated that the majority of society assumes that this subject has no commercial value. There are causes that lead to this issue. According to Ahmad et al., (2005), some teachers are unable to master the pedagogical process and technological skills needed to integrate the use of ICT tools into the teaching and learning process. The lack of creativity in teaching History can lead students to feel bored, fed up, and have no interest in studying History.

This weakness is due to the use of teaching methods that more oriented towards examination needs, and finishing the learning units on time (Jamil as cited in Ahmad et al., 2005).

According to the Curriculum Development Division (2004), the lack of innovation in teaching History can lead to students having stereotypes about the subject as being not challenging, having rigid content, and boring to study. In actual fact, History is not a rigid subject; however, a majority of people have the wrong impression towards History as being more focused on memorizing the facts, narratives, and descriptions (Rashid as cited in Ahmad et al., 2005). According to Habids (2010), the development of IT tools lead students to be able to obtain information or any other resource from the Internet without limit. However to date, searches via Google show that there are only a handful of websites on the History Malaysia for students.

Students often seek for history digital resource in the form of short notes, questions or forecast trial of the examination like Lower Secondary Evaluation (PMR), Malaysia Certificate of Education (SPM), and Malaysian Higher School Certificate (STPM) from the internet. Two prominent websites on the History of Malaysia are "Laman Sejarah - Tripod" and "Sejarah dan Tamadun".

- The Uniform Resource Locator (URL) of "Laman Sejarah Tripod" is http://saku30.tripod.com/.
- The URL of "Sejarah dan Tamadun" is http://btpnkl.edu.my/cerdiknet/ bahan/sejarah/stpm.html.

The web site of "Laman Sejarah - Tripod" was created by Samsudin Bin Abd Kadir a History teacher at SMK Bandar Mas, Kota Tinggi Johor. The website consists of History notes

by chapters, and sample questions for PMR, SPM, and STPM. Each of these notes and sample questions are made available in and downloadable for free PDF format.

The "Sejarah dan Tamadun" was created by Mahdi Shuid. This websites also consist of notes by chapter and exercise which are downloadable for free PDF format. This web has provided various URL that related to History of Malaysia and technique to help learners to do their revision and the strategy to answer the History subject at STPM.

#### Aim

Due to the limited number of educational websites on the History of Malaysia available for helping students to learn History, this project aims to produce an online learning application for learning the History of formation of Malaysia by harnessing the potential of various Web 2.0 tools. The aims of this project are:

- To identify the appropriate content on the formation of Malaysia.
- To design an online learning application based on the instructional design model proposed by Morrison, Ross, & Kemp (2007).
- To develop the online learning application that integrates various Web 2.0 tools.

#### **Research Questions**

The research questions of this project are:

- How to identify the appropriate content on the formation of Malaysia?
- How to design the online learning application based on the instructional design model proposed by Morrison et al. (2007)?
- How to develop the online learning application that integrates various Web 2.0 tools?

## **Conceptual Definition of Terms**

## History

According to Aristotle, History is a system to examine past events and to arrange the series into a chronological form. History is also about past events that have notes, records, proof, or concrete evidence (Wulandari, n.d.).

## Web 2.0

Web 2.0 is also called the wisdom Web, people-centric Web, participative web, and read or write web (Murugesan, 2007). According to O'Reilly (2005), Web 2.0 is known as the new version of Web 1.0. People can easily add and edit their information on the web, and almost everyone is able to create and contribute to the web content without knowing the truly technical side of web programming.

### Significance of the Project

The development of this learning application will add to currently limited resources for this purpose. Through this learning application, students and teachers will be able find information on the factors of the formation of Malaysia. This learning application will also provide a variety of online activities to reinforce learning.

Students can use this website as reference and a guide in their learning of Malaysia's History. Students can read Malaysian history from this website instead of just using reading materials. Students can have other activities or exercise while reading the contents of this website. This project hopes that the website can help students avoid feeling bored when reading

Malaysia's History. Moreover, students can read the information via their IT tools such as smartphones and tablets when they are outdoors.

This project also helps teachers to have a creative style of teaching their students. This learning application provides a showcase for history teachers on how to integrate Web 2.0 onto their teaching process. Teachers may also utilize it either as a reference material or to integrate its use into their actual teaching.

## **Scope of the Project**

This project is to develop an online learning application that focus only on the formation of Malaysia. This project is to be used as a reference by students of the Arts stream at the STPM level, which is for Form Six students who are taking Malaysian History as one of their subjects.

## CHAPTER TWO LITERATURE REVIEW

## Introduction

This chapter describes the literature review which is related to the backbone of this study. Previous studies and reviews will be utilized to support this study. It provides education of history in Malaysia and current method in teaching and learning History subject. The third subject in this chapter is the factors that cause students to be not interested in Malaysia's History. It also provided the definition of Web 2.0 and Web 2.0 in the process of teaching and learning. It then explains the benefits of Web 2.0 tools in the teaching and learning process.

### **Education of History in Malaysia**

History is one of the subjects which is taught during secondary school based on Kurikulum Bersepadu Sekolah Menengah (KBSM). After 1984, History was taught during secondary school but only for students who study the humanities class. Then starting from 1992, history subject is a compulsory subject for students from Form One to Form Five (Ni, 2012; Samsudin & Shaharuddin, 2012). In Malaysia, the History subject is taught in two categories which are lower secondary school and upper secondary school. The education of lower secondary school is for three year which starting Form One to Form Three whereas; the education of upper secondary school is for two year which starting from Form Four to Form Five (Samsudin & Shaharuddin, 2012).

History subject is a non-compulsory subject for the Malaysian Higher Education Certificate (STPM). History subject is split into two categories in Form Six. The first category consists of World Civilization and Islamic Civilization, whereas the second category is about Malaysia and Southeast Asia, which is the history of Asia Pacific (Nilam, 2009). The content of History's subject have be improved by adding the element of World Civilization. According to Ni (2012), in 2002, the Form Four History Syllabus was reviewed to include current and relevant aspects. It focuses on the reformation of 2002 to prepare students to face future challenges, the change of ICT world, and the knowledge-based economy in the 21<sup>st</sup> century.

According to Samsudin and Shaharuddin (2012), History education aims to raise patriotism towards the country. History education also aims to write our multiracial nation (Kementerian Pelajaran as cited in Samsudin & Shaharuddin, 2012). According to Samsudin & Shaharuddin (2012), with these aims in mind. History is made as a subject that requires a compulsory pass in STPM.

#### **Current Methods in Teaching and Learning History Subject**

Conventionally, face-to face classroom teaching is employed to teach the History subject (Isahak & Boon, 1992). According to Ramakrishnan and Abdullah, (2008), most studies report that a majority of teachers are using electronic history resource in their teaching and learning process of history. Teachers are also reported not having adequate skills in using electronic resources. In. class, teachers still depend much on the text book for teaching history (Gillaspie & Davis, 1998; Samsudin & Shaharuddin, 2012; van Hover & Yeager, 2004) and resource centers as making trips to museums or other historical places are often costly (Bolick, 2006).

The majority of History teachers are still using the traditional method in their teaching and learning process (Hassan & Abdullah as cited in Ramakrishnan & Abdullah, 2008). Only the minority of teachers exploits the electronic history resources in teaching and learning (Ahmad as cited in Ramakrishnan & Abdullah, 2008). The limitation of teachers in using ICT in their teaching and learning process are more likely because of some deficiencies such as a lack of ICT knowledge, lack of skills to use ICT tools, incomplete equipment, and time constrains (Bolick & McGlinn, 2004; McGlinn, 2007).

According to Ramakrishnan and Abdullah (2008), types of electronic history resource that are frequently used include exercise, sample examination questions, history notes, image or visuals and presentations material. All of these resources were obtained from internet, such as from websites, blogs, Slideshares, and Scribd. However, the use of electronic history resource in form of video, audio, cartoons, animations, documents, and maps are still limited (Ramakrishnan & Abdullah, 2008).

#### Factors That Cause Students to Be Not Interested In Malaysia's History

One of the main problems faced by the majority of school teachers teaching history subject is the lack of interest among students towards history. This problem decreases students' interest in learning history (Ni, 2014). According to Mohamad (2010), history is considered a boring subject to many students. The majority of students dislike this subject because of the assumption that history is uninteresting (Boon, 2010). For instance, students from Canada and Australia stated that history is a dull subject (Samsudin & Shaharuddin, 2012). The opinions came from the survey conducted. The results are "we wasted too much time learning Australian History, about which there is very little interest to learn. It is time we face this fact instead of trying to pretend that Australia has had a very interesting story" (Clark as cited Samsudin & Shaharuddin, 2012).

According to the (Ahmad et al., 2005), the majority of society assumes that history lacks in value in the commercial market. It is also reported that the methods used in teaching History which is lacking in novelty may cause the stereotyping among students that history is not at all challenging, dull and boring to learn. Moreover, majority of the people have the wrong impression towards History subject as it focuses much more on memorizing facts, narratives, and descriptions (Rashid as cited in Ahmad et al., 2005).

Students have an impression that History is difficult and boring because the subject requires students to memorize all the facts, concepts, timelines and historical events from the textbook without understanding it (Jamil, 2003; Mohamad & Zali, 2005). Moreover, Mohamad and Zali (2005) suggested that students' learning attitude is also one of the causes regarding the problem of history learning. For example students who are not interested in History are lazy to read, and even when they do read they cannot memorize the facts. However, there are also students who are interested but the need to memorize many facts causes them to be unable to master all the themes, which means that the particular way of teaching has not been effective for these students.

According to Ahmad et al. (2005), some teachers have difficulties in the mastery of the tutorial process and the use of ICT in the teaching and learning process to exhibit the quality of meaningful learning of culture. When history is taught in an uncreative way, this can lead to students feeling bored, fed up, and have no interest in studying History. This is because the teaching method employed are more examination orientated and teachers rushing to finish the syllabus on time (Jamil as cited in Ahmad et al., 2005).

Students have the impression that history is tough and uninteresting to learn because students constantly assume that they need to memorize all the facts (Ni, 2014). Through the study result of Ni (2014) various complaints were collected from outstanding students. One of the responses from a student was "I quickly forget even I did revision" (p.179).

Still there are also students who are interested in learning history but the need to remember all the facts and points causes them to fail in grasping all the themes. Another main issue that needs to be addressed is the teachings and learning process of this subject because the particular ways of teaching have not been effective for students. It can be seen from the study results of Ni (2014) the complaints received are such as "...I am interested in History, but it also brings a problem to me. I used to think history is easy, but when I am in Form One, now I find out History is quite difficult because too many things need to remember" (p.179).

According to Ni (2014), her study results have indicated that students will forget the historical that was being taught during the teaching session even though students can answer the questions asked by teacher during class. She also studied the students who scored less than 50% and the reason they failed in this subject. The reason she got from the students is that they have difficulty in memorizing the facts. She also identified other factors such as lack of revision, no reference material and not focusing while the teacher was teaching. The students also admitted that they focused more on other subjects such as Science, Mathematics and English subjects rather than in History.

#### What is Web 2.0?

According to Theimer (2010), there is no agreed-upon definition of "Web 2.0". Web 2.0 is also called the wisdom Web, people-centric Web, participative web, and read or write web (Murugesan, 2007). "Web 2.0" is a buzzword which obtained popularity because it is useful and versatile. However, Web 2.0 has been overused and has become clich éd. A Web 2.0 conference was sponsored by O'Reilly Media in 2004 (Theimer, 2010). Web 2.0 was used to indicate that the web had started a basic change in the way that people were able to use it(An, Ballard, & Texas, 2009).

The statement "web application that facilitate interactive information sharing interoperability, user-centered design, and collaboration on the World Wide Web" refers to Web 2.0 (An & Williams, 2010). Web 1.0 only allows the user to read the information from the web page, which is similar to books in the library (An & Williams, 2010; Murugesan, 2007). But in contrast, Web 2.0 allows the user to read and/or write on the web page. Through Web 2.0, users are allowed to become active participants and become a content creator of web pages. So, the user is not only allowed to find the information from the web page, but they are also allowed to create and share the content to others (Thompson as cited in An & Williams, 2010). In other words, Web 2.0 allows users to easily and quickly create a new Web application through writing the data, information, and other services available on the internet (Murugesan, 2007). According to Downes (2005), had described that Web 2.0 is "from being a medium, in which information was transmitted and consumed, into being a platform, in which content was created, shared, remixed, repurposed, and passed along". He also argued that Web 2.0 is not related to the

technical revolutions but it is related to the social revolution that enables and encourages participation through open application and services.

Examples of Web 2.0 applications, tools, or services are blogs, podcasts, Flickr and other image sharing sites, YouTube and other video sharing sites, Twitter, wikis, Facebook and other social networking services, and other tools (An & Williams, 2010; (Murugesan, 2007). All of these tools allow users to publish their content online, connect, and network with other people who have similar interests. This can be conducted without regard to any problem about physical location. The benefits of tags are allowing users to collect or categorize, and find particular pieces of information easily. Features like openness, micro content, knowledge sharing, user participation, folksonomy, and social networking and collaboration can be used to describe Web 2.0 (Alexandra, 2006; Downes, 2005; John, Brown, & Adler, 2008; Richardson as cited in An & Williams, 2010).

### Web 2.0 in the Teaching and Learning Process

When the learner is involved in using Web 2.0 as a knowledge creator, producer, editor, or evaluator, a more interactive and powerful learning environment can be conducted by them (Richardson as cited in An & Williams, 2010). According to Downes, (2005), mentioned that those who coined the term 'e-learning 2.0' evaluated that the development of online learning applications form a "content-consumption tool, where learning is delivered," to a "content-authoring tool, where learning is created". Through Web 2.0 and other developed tools, "learning will continue to shift from the mastery of instructor-based content to problems to be solved and products to be created" (Bonk, 2009, p.369) and the content of learning will be "less static and more open for others to use, refine, distribute, and comment on" (p. 371).

Web 2.0 technology has provided many chances for social interactions, collaboration between students, teachers, subject matter expects, professionals, as well as a host of others around the globe (Alexandra, 2006; Bonk, 2009; Downes, 2005; John et al., 2008). Thus, the sharing of ideas and collaborations in innovative ways can be conducted between teachers, learners, and others. Moreover, it also has the potential to allow users to rethink the way they teach and learn, and transform the lesson or education practices. Then, users can create or have a more active and meaningful learning that is able to inspire students to practice "learning to be" as well as "learning about".

Web 2.0 has the ability to create authentic and open learning communities. Instead of only discussing the pre-assigned titles with their classmates, students can also discuss a wide range of real world titles and have collaboration with people around the globe (Bonk, 2009; Downes, 2005; John et al., 2008).

In addition, Web 2.0 technologies allow users have personalized learning and enables a personal learning environment which involves a set of interoperating applications and supported learning in varied environments, comprising the learning from formal education, workplace learning, and informal learning (Attwell, 2007; Bonk, 2009; Downes, 2005). The personal learning environment allow users to able to manage their own learning, to reuse and remix the content based on their interests and needs, and interact and collaborate with others, whether they are local or international, in the learning process (An & Williams, 2010).