MySimB’ : Interactive tool for learning Simpulan Bahasa through educational website

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Abstract. Nowadays, students in primary school in Malaysia need to learn Simpulan Bahasa as one of syllabus in Bahasa Melayu. Manually learner or primary student can refer the meaning for Simpulan Bahasa through physical dictionary. It is however quite ancient and sometimes burdensome for students to bring that dictionary. The purpose of this paper is to present the research of learning Simpulan Bahasa named “MySimB” which provide better learning language using web based. MySimb’ is interactive website which was developed to ease and fun learning for primary students, teachers and parents to learn or teach on Simpulan Bahasa. This website provide index using alphabetic, meaning and an example of sentence for each Simpulan Bahasa, search for Simpulan Bahasa and games to attract the students. The benefits of using MySimB’ in learning as it can engage students in the learning process, improve their achievement and increase their motivation towards learning Bahasa Melayu focus on Simpulan Bahasa.

1. Introduction
Bahasa Melayu or Malay is one of the essential learning subjects in Malaysia. For primary school students, idioms or Simpulan Bahasa were introduced as one of the Bahasa Melayu syllabus revealed to students as early as in standard 3. This topic is important for this language because it can uphold the Bahasa Melayu proverb. By reading books, most students learn Simpulan Bahasa. If students want to find Simpulan Bahasa, students have to search through books such as the dictionary of proverbs. It is however quite ancient and sometimes burdensome for students to bring that dictionary.

Websites and applications for Simpulan Bahasa also exist. But in terms of interface, most websites and applications are not very interesting and not very interactive. For academic purposes, the students really needed an official Simpulan Bahasa to fulfil the curriculum. A website was developed on that basis to help students in primary school learn Simpulan Bahasa.

This study proposes an educational website based on Bahasa Melayu that focuses on Simpulan Bahasa with educational and multimedia technology to teach children and parents in an attractive way. The children and parents can search by keyword or used by index. MySimB’ also include games learning elements. Students can learn Simpulan Bahasa through games. Through playful learning, students are more likely to understand and remember the Simpulan Bahasa [1]. MySimB’ website provides information that not only consists of text, but also includes multimedia elements. Suppose that construction and development of MySimB’ in line with the latest teaching innovations can help
teachers deliver knowledge and skills to students. Learning through the website is very much in line with the constructive paradigm. So there is no doubt that the use of the website is one of the most suitable teaching and learning methods today, compared to the conventional approach.

Websites are important nowadays in the modern global competition. Today, websites are extensively used as a source of exchange for information or services. Web-based teaching is an alternative or new way of teaching that has a lot of potential to produce more meaningful teaching [2]. The interface and physical features of a website have a different impact than conventional teaching. Among the benefits of website-based teaching is the provision of hypertext, hypermedia and hyperlink features with other websites from around the world. Any of the information needed by the user is accessible and can be viewed via the website. Online learning is also very encouraging and among the best methods of learning because children's interests now is through gadgets [3]. Mobile devices such as smartphones, tablets and laptops, as well as online application and tools, have been an integral part of the lives of most teachers and students around the world over the last decades [1]. Mobile computing integrated into e-learning make courses content more accessible and portable. This situation makes the delivery of teaching can be delivered in a nonlinear form. The hypermedia format facilitates a student-centered approach. Learning like this can certainly create an active and motivated learning environment [4]. The use of new technologies have implications admittedly resulting in a more effective teaching and learning process and contributing to the smooth running of education involving all subjects [5].

2. Related works
A review analysis has been done on a few website and mobile education application with Simpulan Bahasa content inside. MySimB’ is proposed after take a certain concern related to the review findings. It is important to gather the input analysis to propose better output in determining the significance result. Below is the review findings on few existing related website and mobile education application. Figure 1 shows the review findings on one of the existing related website.

![Fig.1: Example of Website Interface 1](image.png)

This website provides a lot of information on Golongan Kata, Pengimbuhan, Penggandaan, Jenis Ayat and Rampai Bahasa. Simpulan Bahasa is allocated under Rampai Bahasa list. All the items are very useful to student in improving Bahasa Melayu subject. The website contains much free space, besides no interactive interface to attract user get along with website. Suppose the table of Simpulan Bahasa content is centered. There is no index sorting to alphabet as initial Simpulan Bahasa. User need to scroll down until end of page searching for Simpulan Bahasa that user want to look for the
meaning. This website should add on multimedia elements as suitable color, audio, video, graphic, animation also another module like Simpulan Bahasa games and so on. A

Figure 2 show the other existing website that user can learn Simpulan Bahasa. This website should employ all space in display, not just centered. This website displays not just Simpulan Bahasa, but also Peribahasa, Bidalan, Pepatah and Perumpamaan, which also give more values to user especially student who want to excel their Bahasa Melayu. There are pictures on a peribahasa to project the meaning of peribahasa. However, there is no index to look up for searched Simpulan Bahasa, no multimedia elements to attract user to sustain their intention to this website, also there is just one way interaction between user to this website.

![Figure 2: Example of Website Interface 2](image)

This website as shown in Figure 3 provides list of Simpulan Bahasa complete with the meaning, also examples of sentences related to Simpulan Bahasa. There is a searching function to search required Simpulan Bahasa, and can download the pdf document of searched Simpulan Bahasa. Simpulan Bahasa with nice picture and meaning also can be viewed to generate more understanding to user. There are also three sets of Simpulan Bahasa exercises. User need to pick correct Simpulan Bahasa for each Simpulan Bahasa questions. User can know which answer is correct or wrong. This website can improvise to multimedia element adaption in attracting user intention to gain the benefit of the website content. Multimedia element is important to keep engaging user especially kids in website platform.

Graphics and animation can boost engagement, and can be employ effectively to reinforce website content.
Figure 4 shown the example of existing mobile application. In this mobile application, it provides list of *Simpulan Bahasa* and *Peribahasa* with two versions of meaning i.e. Mandarin and Bahasa Melayu, also the example of sentences related to it. There is a searching function provided in this app which user can choose to search by keyword or meaning of *Peribahasa*. User also can save favorites the desired *Simpulan Bahasa* and *Peribahasa* for easy future reference. However the interface of this app is too simple to attract the attention of user especially focus on children. More multimedia element such as graphic, animation, sound and others should be adapt into this app to gain more attention and give interaction between user and app.
Figure 5 shown the interface of mobile application. This app provides not only *Simpulan Bahasa* but also information about the app on the dashboard which is not suitable and should be placed on different page. The user interface of this app is not user-friendly since user need to choose on each button to seek for the desired *Simpulan Bahasa*. No index or search function provided to look up for *Simpulan Bahasa*. If the desired *Simpulan Bahasa* is located at the last icon, this is troublesome. Besides that, the meaning and example of sentence is too close to each other, there should be space between meaning and example to differentiate these two and also to increase readability. This app can be improvised by adapting more multimedia element for example animation and two-ways interaction for better attractive and more user friendly. This app also should improve the searching function for more user-friendly.

![Example of Mobile Application Interface 2](image)

The mobile application as shown in Figure 6 provides feature to help user to understand *Simpulan Bahasa* in easy way. This app delivers the meaning of *Simpulan Bahasa* in two versions which is *Bahasa Melayu* and *Mandarin*. It also provides space for remarks to user note addition information. This app also has bookmark function for better future reference. However, this app is lack on multimedia element such as graphic, interaction and sounds which important to attract and sustain attention of user. For improvement, interactive exercise might possibly add to generate understanding of user in learning *Simpulan Bahasa*. 
This section has review 3 examples of website and 3 examples of mobile application for *Simpulan Bahasa* that students can access. Based on the review of existing website and mobile application above, it can concluded that lack of an interactive website or mobile application for students in primary school. Both websites and mobile application are not very interactive for primary school students to use. *Simpulan Bahasa* websites or mobile application are not really user-friendly (not user-friendly) and the website interface does not draw users from primary school students. Only a few website and mobile application have search function and games learning. Some of website or mobile application only have a few of *Simpulan Bahasa*. Therefore, students need to refer others website and mobile application to search for *Simpulan Bahasa*. As review above, it also found that there are only a few provide index function for easy searching according alphabetic.

3. Research Motivation

Nowadays, *Simpulan Bahasa* is one of the content in subject Bahasa Melayu for primary school students in Malaysia. Therefore, it is important to provide other material for learning *Simpulan Bahasa*. Usually, students learn *Simpulan Bahasa* through text book or book for *Simpulan Bahasa*. The use of technology such as information communication technologies (ICT) as instructional media can be used as educational aids to support teachers and support students with different learning materials [6]. The use of technology in teaching and learning has long been applied in education. This is in line with the ICT policy in national education which was announced by the Malaysian Minister of Education [7]. Current trends, children are now exposed to gadgets. Therefore, it much easier for students to use MySimB®.

There are many websites and mobile applications for online learning for *Simpulan Bahasa*. Based on review from three website and three mobile application in Section 2.0, there are many advantages and disadvantages those website and mobile application. The motivation of research are lack of interactive websites and mobile applications of *Simpulan Bahasa*, since the user target is primary school students. Most of websites and mobile applications of *Simpulan Bahasa* is in Indonesian. Based on reviews, most of application of *Simpulan Bahasa* only support one platform either website or mobile application. Some of website and mobile application of *Simpulan Bahasa* did not user friendly and interactive. Through the reviews of existing website and mobile application some of the website and mobile application did not have games learning.
4. **MySimB’ as interactive tool for learning *Simpulan Bahasa***

The proposed MySimB’ is the interactive education website and can be viewed also in mobile peripheral device, thus this benefit may realize the learning process can be in anytime, anywhere and anyhow. User can have flexibility and interactivity with two ways communication engagement between user and MySimB’. There are a lot of multimedia elements to deliver the fun elements especially to cater the secondary student which among of them are in range of age 12 years below. There are four main activities in MySimB’, as elaborated as following.

Figure 7 is the first page of the website. When user click Let’s Go, it will go to main page as shown in Figure 8. MySimB’ consist four main menu which is *Simpulan Bahasa*, *Carian*, *Teka Emoji* and *Teka Simpulan*. The users can directly choose what they want. MySimB’ has two types of games which are *Teka Emoji* and *Teka Simpulan*. This main page is colourful and attractive for students. It is important to has a good interface design to attract users using the website [8]. The interface also simple and easy to use for students to learn *Simpulan Bahasa*. The users can directly choose what they want. MySimB’ has two types of games which are *Teka Emoji* and *Teka Simpulan*.

The website embeds the responsive design in MySimB’ while users access the content. In order to access MySimB’ from any mobile device or browser, the responsive nature of website is sufficient for any course. The interface design should react to access to any mobile device or browser that is used. Responsive design as if the user were explicitly created for the tablet or smartphone. To provide the best possible view, the screen size will shrink or increase, images will move and options for navigation may adjust. All of this is intended to build the best user experience possible, which is why it is important for responsive design in mobile learning. Without any problem, interface elements such as text blocks, pictures and videos can be displayed. Responsive design has many benefit is implement in website such as provides an open experience for online and mobile learning, increased scope for viewers, decreases costs, improves availability and maintaining quickly.

![MySimB’ Welcome Interface](image)

**Fig. 7**: Welcome Interface of MySimB’
When user click Simpulan Bahasa, it will go to list of Simpulan Bahasa as shown in Figure 9. Starting with the A to Z alphabet, there are over 500 Simpulan Bahasa that index using alphabetic.

User can search for Simpulan Bahasa at Carian as shown in Figure 10. It can search the meaning for Simpulan Bahasa, along with a simple example of sentences.
Figure 10 shown one of games in MySimB’ which is Teka Emoji. User can choose the correct answer based on the image.

For second games which is Teka Simpulan, user need answer the correct Simpulan Bahasa based on the sentences given as shown in Figure 12.
4.1. Social impact or potential using MySimB’

Through MySimB’, it can engage students in the learning process and improve their achievement. It also can increase students motivation and understanding towards learning Bahasa Melayu focus on Simpulan Bahasa. Ease teachers, parents and students to understand Simpulan Bahasa, also in a fun way, since MySimB is interactive website including games learning. MySimB’ provide flexibility of learning. User can learn Simpulan Bahasa anytime and anywhere. It also can improve students learning performance. MySimB’ enhances the retention and recall of the learning topic for Simpulan Bahasa. MySimB’ is supporting environmental friendly, which information is in electronic form, rather than on papers (paperless). Training materials and equipment in the form of MySimB may also play a supporting and simplifying role in the teaching-learning process, such as fostering an effective relationship between the student and the use of vision lessons, and continuing to keep the student involved in the subject. MySimB ‘also uses colour diversity, causes students to be inspired and attentive, and makes instructional materials look more realistic. User understands the materials better, when they are fully engaged in the process.

4.2. Novelty of MySimB’

MySimB’ is interactive and user friendly. MySimB’ also support two platforms which students, teachers or parents can open MySimB’ through laptop or computer and mobile. So user can use MySimB’ through laptop or using mobile and will display the same interface. It support responsive design. Therefore, MySimB’ easy to use, anytime and anywhere. All term in MySimB is in Bahasa Melayu and sorted using alphabetical order. MySimB’ also included games learning. Using MySimB’, users can get a collection of Simpulan Bahasa with the meaning and example of sentences. Users also can search for specific Simpulan Bahasa. In MySimB’, it has games learning that user can play for more understanding and easy to remember Simpulan Bahasa.

5. Conclusion

New learning experiences educate current and future trends, benefiting both teachers and students. Students can access educational resources, such as interactive subject contents with multimedia. There are many existing related Simpulan Bahasa nowadays, however there are lacking of multimedia element to sustain the engagement of experience between user and website or mobile application. User in range of age 12 years and below is attracting to the fun, nice color, graphical and animation
elements. Consequently they will understand and learn the content easily and afford less. Therefore, MySimB’ can motivate user to learn Simpulan Bahasa. MySimB’ is expected to be commercialized as platform among the primary school to excel the development of student’s intellectual capital aligned with the national philosophy of education (Malaysia RMK-12- early childhood education for all).

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