Abstract: This paper focused on how computer-assisted instruction may help in teaching early childhood literature. Other than that, it also discusses on the problems of developing and publishing early childhood literature in Malaysia and the solution for the problems. A survey was carried out to find out whether computer aided instruction is one of the best methods to help teaching early childhood effectively. A selected Malay folk tale, its exercises and game will be discussed throughout the paper.

Keywords: Computer-Assisted Instruction, Early Childhood Literature, Educational Games.

1 Introduction

Traditional teaching in early childhood literature for kids will never be the same with the use of the computer-assisted instruction (CAI) and the implementation of the new technologies. The definition of CAI is to instruction or remediation presented on a computer [1]. One of the main factors of successfully implementation of computer in education is to convert the instructions into computer programs which should allow users to have two ways communication (interactive). The instructions will be introduced by using animation, sound and educational games. One of advantages of using CAI, students learn the subject through own pace and we can achieve personalization learning.

Traditional we measure the abilities (creativity, communication and collaboration) of our kids based on mastery of the spoken and written word. Nowadays, kids explode in a multimedia environment such as TV, video, DVD, Internet and educational games. We should look at the new ways to measure our kids’ creativity, communication and collaboration through educational games [2].

2 Literature Review

According to Azizah Hamdan and Md Sidin Ahmad Ishak (2004) [4], during year 1999, the content of nonfiction books which comprises of education book, textbook, religion, dictionary and illustration book which is the most popular publishing in Malaysia, namely 82% of issues of total amount of children publication in that year which was fiction and comic books. For that year, as much as 2,414 titles of children publication produced is education book. Data show that book category comprises of 77% issues of children publication in Malaysia, on the other hand, the work of children literature has less produced.

Hadijah Rahmat (2006) [6] found that literary work in Malay language fairly late produced and late also late grow. Although literary work growth for children already increased quickly, but development of literary work is more in quantity aspects comparing to quality aspects. Malay
children literature also not yet acted effectively as achievement model or motivation towards high standard of excellence, whereas work quality children literature will determine children's level of reading and thoughts skill.

Faridah Shamsuddin (2003) [5] also find that problem in children publication owing to the lack of quality material and keep target audience requirement. Most writers send manuscript follow his view as an adult and unable to animate material which is needed by target audience. Lack of good writer in writing children publication because they do not understand child psychology. As such, they seldom do research before writing, even though they are lack of skill set in painter or illustrator which is capable to draw children publication. Painting in book made based on what sense adult beautiful, not what interest child.

As such, all publishers should ensure child books especially literary work which produces high quality from language aspect, story, paper, lesson, illustration and others value so that functional from education aspect. This is important because child literature material is closest friend to children besides inculcating interest in reading lifelong among children.

In keeping with rapid ICT's development now, Malay literature material in early children should not be only published in printed form, but also in ICT's form, whether VCD, DVD or website.

3 Research Methodology

Rio Sumarni Shariffudin et al. (2007) conducted studies to identify learning problem such as reading faced among preschool children. They develop a software for reading and evaluate effectiveness of student by using computer to learn through reading. This research uses design system model which is based on ADDIE's lesson [8], namely combination between qualitative and quantitative research approach within one design by concentrating to qualitative approach as a dominant paradigm. To collect information about reading problems in learning, researcher has collecting data on mastery reading about children in 10 pre-school in Johor Bahru, Malaysia.

Ten teacher were selected into this study to seek information on instruction method such as reading which commonly use in lesson and learning. Apart from that, researchers also worked in several issues on teacher's perception on computer application in reading lesson and learning for preschool children. Of purpose evaluate learning effectiveness by using ICT in reading, a software was developed and quantitatively and qualitatively evaluated. In quantitative assessment achievement of children from one school will be involved in quasi experiment. Assessment on software like qualitative also carried out by using observation method through ScreenCam's software and checklist. Child interaction observed during they learn in reading using the computer.

This project is divided into 3 phases as shown in Figure 1.0.
Before we develop the stories, exercises and games, the survey is conducted. 941 respondents have been selected for the survey (347 universities’ students (University of Malaya, National University of Malaysia, Putrajaya University of Malaysia, Sultan Idris University of Education, Science University of Malaysia & University Malaysia Sabah in Malay study, Education in Early Childhood & Education in Malay Study), 299 teachers in preschools and 295 parents) There are two parts in questionnaire. Part A is to find out the background of respondent. Part B is to find out respondents’ perception towards developing early childhood story on Malay Folk Literature of the narrative form.

In this study, we focus on teaching kids in learning Malay Folk Literature. There are two forms of Malay Folk Literature such as the narrative and non-narrative forms. The narrative form is also called folk stories or oral tales, comprising several types such as lipu larai tales or folklore, exemplary stories, animal fables, humorous stories, myths and legends. Meanwhile the major part of non-narrative material occur in verse; it includes folk sayings, folk songs, traditional lore, riddles, pantuns or rhymes, gurindam or couplets, and seloka or satirical poems and others [3] This survey focus on Folk Literature of the narrative form.

Phase 1: The activities of the Plan and Elaborate
- A study of existing literature on Malay Folk Literature, Survey;
- Producing a draft plan of the project;
- Defining an initial model;
- Building some initial prototypes.

Deliverable:
A literature review on Malay Folk Literature, draft project plan, initial model and prototype are produced.

Phase 2: The activities of the Build phase (iterative and incremental)
- Refine project plan;
- Requirement capture to define a model of Malay Folk Literature;
- Design/Drawing of stories, exercises, games;
- Programming on the flow of stories, exercises, games
- Testing, integration and evaluation of the whole system;

Deliverable:
Stories, Exercises, Games
**Phase 3: Activities of the Deployment phase**
- Deliver user guide and help guide;
- Deploy the resulting software system;
- List any problems and enhancement;
- Review documentation;
- Training.

**Deliverable:**
User guide, software and documentation

**4 Output of Survey and Discussion**

Table 1: Feedback from respondent regarding the development of Malay Folk Literature (n= 941)

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Malay Folk tale is required to maintain original themes and stories</td>
<td>4.2253</td>
<td>0.8922</td>
</tr>
<tr>
<td>2. Malay literature is found more suitable than Western literature for early childhood</td>
<td>3.9639</td>
<td>1.0359</td>
</tr>
<tr>
<td>3. Type of published materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Video(DVD/VCD)</td>
<td>4.3709</td>
<td>0.242</td>
</tr>
<tr>
<td>b. Book</td>
<td>4.2423</td>
<td>0.270</td>
</tr>
<tr>
<td>c. Audio (CD)</td>
<td>4.1541</td>
<td>0.0283</td>
</tr>
<tr>
<td>4. Develop Computer-Assisted Instruction in teaching early childhood Literature for Kids (Useful)</td>
<td>4.1690</td>
<td>0.8544</td>
</tr>
<tr>
<td>5. ICT (CAI) materials which are suitable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. ICT interactive</td>
<td>4.1243</td>
<td>0.0273</td>
</tr>
<tr>
<td>b. Grafic in 3 dimension</td>
<td>4.0882</td>
<td>0.0277</td>
</tr>
<tr>
<td>c. Web page</td>
<td>3.9479</td>
<td>0.0320</td>
</tr>
<tr>
<td>6. Contents of ICT (CAI) materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Games</td>
<td>4.2752</td>
<td>0.0304</td>
</tr>
<tr>
<td>b. Interactive</td>
<td>4.2168</td>
<td>0.0258</td>
</tr>
</tbody>
</table>

| 7. Weightage of buying                                              |         |                    |
| a. Moral value                                                      | 4.2593  | 0.0274             |
| b. Quality                                                          | 4.2434  | 0.0261             |
| c. Variety of activities                                            | 4.2062  | 0.0260             |

Table 1 indicated that the respondents embrace positive towards the development of Malay Folk literature in ICT. They required that Malay folk tale need to be maintained the original themes and stories (Mean 4.2253, SD0.8922). Malay literature is found more suitable than Western literature for early childhood in Malaysia (Mean 3.9639, SD1.0359).

Asking about the published materials of Malay folk literature, the respondents prefer the Video (DVD/VCD) type (Mean 4.3709, SD0.0242). ICT interactive (Mean 4.1243, SD0.0273) is the most suitable CAI material that found among the respondents, meanwhile games (Mean 4.2752, SD0.0304), interactive (Mean 4.2168, SD0.0258) and exercises (Mean 4.1041, SD0.0282) are accepted as the contents of CAI materials.

From the perspective of respondents, the weightage of buying the CAI of Malay children folk tales are moral value (Mean 4.2593, SD0.0274), quality (Mean 4.2434, SD0.0261) and variety of activities (Mean 4.2062, SD0.0260).

**5. Development of Educational Games**

We develop our computer-assisted instruction in teaching early childhood literature which bases on three parts such as story, exercise and game.

**5.1 Story**

A Malay folk tale titled “Emergence of a Famous Country” is chosen as our computer-assisted instruction in teaching early childhood literature. “Kemunculan Sebuah Negeri yang Terbilang” was story of background of establishment state of Malacca in 15 century, is suitable reading by five
years old child. This story was about a prince named Parameswara knocked around a place where king saw a wise and brave deer avoided to pounce by prince’s beagle. Prince Parameswara then name this state as ‘Malacca’ in conjunction with plant name prince dependent.

Some of screen shots of story are shown as in Figure 2 and Figure 3.

5.2 Exercises

Exercises consists of three parts, namely cognitive, mathematics and Malay language. An example of cognitive exercise is shown as in Figure 4.

**Figure 4**: Arrange all pictures according to the chronological order of the story

An example of math exercise is shown as in Figure 5.

**Figure 5**: Count and type answer in the box which provides

An example of Malay Language exercise is shown below in Figure 6.

<table>
<thead>
<tr>
<th>a</th>
<th>=</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>=</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>=</td>
<td>8</td>
</tr>
<tr>
<td>d</td>
<td>=</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>Ki + jang = Kijang</th>
</tr>
</thead>
<tbody>
<tr>
<td>f</td>
<td>Ke + ris = Keris</td>
</tr>
</tbody>
</table>
Ra + ja = Raja

**Figure 6**: Based on the object, spell out the phonetic

**5.3 Game**

\[ \text{Figure 7: Rearrange the above puzzle to form a complete picture} \]

The story, exercises, game are designed based on the research done and psychology of early childhood education.

**Conclusion**

Together with ICT era, computer assisted instruction is getting increasingly society good response, especially early childhood education field. In this case, computer assisted instruction in teaching Malay children folk tale found to have advantage there were no in storybook, namely have the audio and visual effect, behave interactive and student centre with have screen shot story, exercises and games. These features would be planting interest of children to read and love their folk tale lifelong.

**References**:


