THE UNIVERSITY OF HONG KONG
FACULTY OF EDUCATION

Master of Science in Information Technology in Education (MSc[ITE])
Assignment Cover Sheet

Name: Huang Biyun (Lucy)

University number: 2013877830

Intake: Sept. 2013-2014

Module code and title: MITE 6304 Designing shared virtual environments for learning

Term: Semester 1, 2013-2014

Module tutor: Dr. Felix Siu

Topic of assignment: Individual Assignment, Virtual Learning Environment –
A Fairy Tales Castle for English Course, Primary3 Students

Assignment due date: December 12, 2013

I declare that
i) this assignment does not contain plagiarised materials.
ii) I have read the booklet "What is Plagiarism" (available at http://www.hku.hk/plagiarism/page2s.htm) which gives details of plagiarism, and I have observed all the requirements set out in the booklet.
iii) the contents of both submitted versions (electronic and hard copy) of this assignment are the same.

Signature: 

Date of submission: December 12, 2013

Note:
All assignments must be uploaded to Moodle ON or BEFORE the deadline set. Please note that it is students' responsibilities to make sure that they have uploaded the correct file onto Moodle. In addition, the content of the file should be the same as your hard copy submission if you are required to submit a hard copy to the Faculty Office. For hard copy submission, it should be submitted to the Faculty Office within four calendar days after the deadline.
Students are required to include the MSc(ITE) Assignment Cover Sheet as the first page of their submission. Even if you are only required to submit an electronic copy of your assignment, you still need to submit the signed front cover to the Faculty Office within four calendar days of the assignment deadline. The signed front cover can be submitted by mail, email, in person or fax.

Office: G03, Hui Oi Chow Building, Main Campus, HKU
Mailing address: Faculty of Education, The University of Hong Kong, Pokfulam Road, Hong Kong
(Ref: MSc(ITE) assignment)
Email: mite@hku.hk
Fax: (852) 2517 0075

Master of Science
ITE - Information Technology in Education

Title: A Fairy Tales Castle for English Course

A Proposal of Virtual Environment for Learning

MITE6304: Designing shared virtual environments for learning

DR. Felix Siu

12 Dec, 2013

A Fairy Tales Castle for English Course

Contents

General information:

Level of students: Primary 3 Students
Prior knowledge:
- Have learned some simple descriptive words
- Have learned some simple conversational skills
- Have learned some simple ICT applications

Number of students:20 students, 4students a group
Number of teachers:1-2
Session: Fairy Tales Castle------Story 1 Three Little Pigs
Course: English Course

Theme and Introduction

1.1 Theme

The theme of this Virtual Learning Environment is "Fairy Tales Castle---for English Course ".It is designed and targeted for Primary 3 students for the subject of English. This Fairy Tales Castle consists of Information Centre, 5 Story Zones, a Theatre, and a Collaboration Zone. The 5 story zones covers these stories: Story 1 Three Little Pigs, Story 2 Jack and the Beanstalk, Story 3 The Ugly Duckling, Story 4 Hansel & Gretel, and Story 5 The Frog Princess. Each story is an independent learning unit, and spans for 1.5 to 2 school calendar weeks.

1.2 Background

"English Language Education is one of the eight Key Learning Areas in the school curriculum"(CDC, 2004). " As a key learning area, English Language Education aims to provide primary school learners with a wide range of contexts and learning experiences to: develop their English Language proficiency; enhance their personal and intellectual development; and extend their understanding of other cultures through the English medium" (CDC, 2004).Teachers should help the students to develop their "generic skills, values and attitudes", and expose them to "rich learning experience"(CDC, 2002). "To facilitate effective learning and teaching, teachers are encouraged to enhance learners' experience through:providing ample opportunities and a conducive environment for the learning and practice of language forms (including text types, vocabulary, and grammar items and structures), communicative functions, and language skills in meaningful contexts; making extensive use of a variety of text types (including stories, informational reports, expositions) to develop critical thinking and encourage free expression and creativity"(CDC, 2004). However, many teachers find that it is very challenging to meet all those requirements in the conventional classroom, due to time, place, and resource limitations.

How to build up a conductive environment for students and "provide opportunities to improve the quality and variety of teaching and learning that are not being achieved using current methods"(Britain,& Liber, 2004)? How to " reduce the administrative burden on teachers, thus allowing them to manage their workload more efficiently and to be able to give more time to individual students educational needs"(Britain,& Liber, 2004)?

To stimulate students learning motivation, optimize learning efficiency and effectiveness, it is quite necessary to develop a Virtual Learning Environment for primary school students to communicate and collaborate under an English context. This Virtual Learning Environment "Fairy Tales Castle---for English Course" is established on Active Worlds, a 3D Virtual Platform. Some other Web 2.0 tools, like Popplets, Lino, Quizlet, Socrative,Weebly, Educreations, are embedded in this platform to extend its interactive functions.

Learning Objectives:

2.1 Target Audience Analysis

Target audience: Primary 3 students, 7 to 8 years old.
Prior knowledge:
Have learned some simple descriptive words, like red, pink, blue, fat, thin, big, etc.
Have learned some simple conversational skills, like greeting, talking about weather, transportation, etc.
Have learned some simple ICT applications, like office tools, youtube, quizlet, Socrative, Educreation,etc.

2.2 Intended Learning Outcome

Through learning on this platform, students are expected to achieve such specific learning outcomes:

No.	Teaching objectives:	
1	Knowledge:	Know more descriptive words on describing common objects and people
		Know comparative adjectives, like “stronger”, “weaker”
		Know the storyline of this story
2	Skills：	Be able to make predictions with given hints.
		Be able to use sentence structure “I can see….”
		Be able to state opinions and express feelings, using “in my opinion”, “ in my view”, “I think”...
		Be able to use a new ICT tool Popplet.
3	Attitudes and awareness:	Develop confident in using English, and enjoy listening, speaking &reading
		Develop collaboration and problem-solving skills.
		Develop critical thinking and reflection skills

Design Overview:

3.1 Choice of Technology Platform

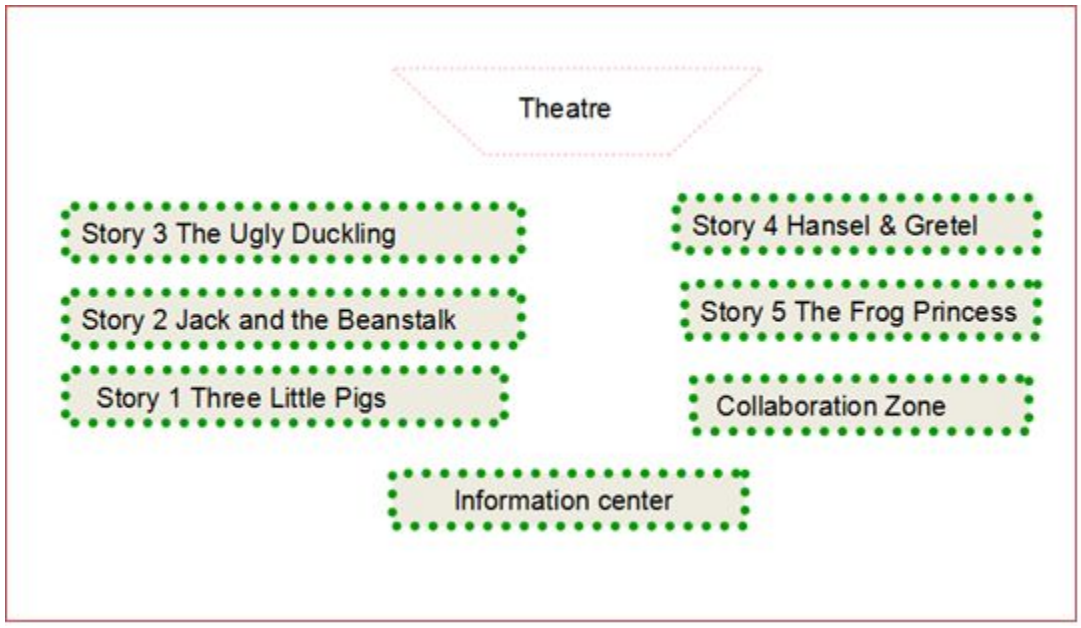
To achieve those teaching objectives, in consideration to the characteristics of learners and the feature of this teaching material, Active Worlds would be used as the main supporting platform, and other Web 2.0 tools, like Popplets, Lino, Quizlet, Socrative,Weebly, Educreations, would be embedded in this platform to extend its interactive functions.

Why do we choose Active Worlds? Active Worlds is a 3D virtual platform, and instructors can add in 3D objects and figures flexibly. It would be easier for pupils to understand the presented learning content under such an environment. Meanwhile, it can provide pupils opportunities to apply their knowledge and skills in a concrete context. Hyperlinks and other Web 2.0 tools can be easily embedded into this platform, which can greatly extend its interactive affordances. It can enable “pupils to create and store digital work which can refined as a project progresses”, and also enable “pupils and teachers to communicate and collaborate in a number of ways”(Gillespie,.Boulton,.Hramiak,. &Williamson,2007).

3.2 Details of design and learning activities

As mentioned above, this Fairy Tales Castle consists of Information Centre, 5 Story Zones, a Theatre, and a Collaboration Zone. The 5 story zones covers these stories: Story 1 Three Little Pigs, Story 2 Jack and the Beanstalk, Story 3 The Ugly Duckling, Story 4 Hansel & Gretel, and Story 5 The Frog Princess. Each story is an independent learning unit, and spans for 1.5 to 2 school calendar weeks. Here, we will introduce the details of each zone.

Figure 1. The Floorplan of Fairy Tales Castle

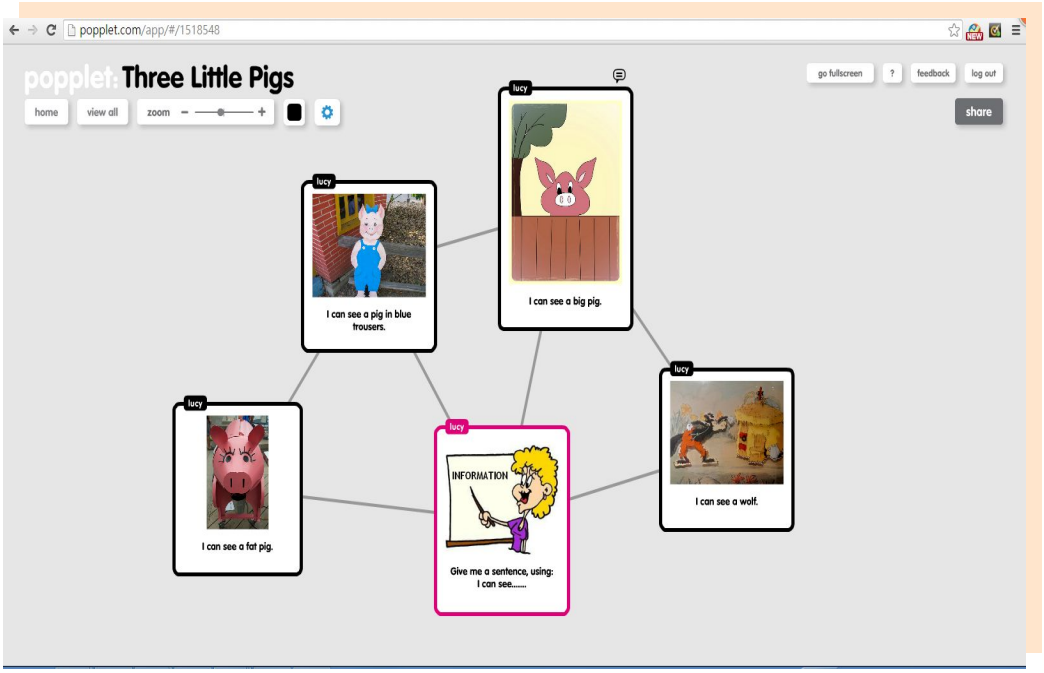


Information center Zone: In this zone, students can find clear guidance on how to start this fairy tales journey, including brief course introduction, main learning activities they would encounter, functions of this learning area.

Zone 2 Story 1 Three Little Pigs:
Actually students' main study activities take place in this zone, and as each story is an independent unit, the other 4 story zones' functions and activities resemble this zone.
Each story zone consists of 4 sub-zones. Here we will introduce Zone 2 Three Little Pigs as an example.

- *Sub-zone 1 Preview Zone*

Supporting IT tools: Quizlet (https://quizlet.com/create-set),
Learning activities:
There are pictures of 3 pigs and a wolf showing on the wall. First, let students describe what they can see on Popplet.
Teacher should teach students how to use Popplet, and instruct them to describe what they can see on Popplet.
Using: I can see.....
Eg. I can see 3 pigs.
I can see 1 wolf.
I can see three lovely and fat pigs.
I can see an ugly wolf with sharp teeth.
Then, let students predict what the story will be about.



➢ *Sub-zone 2 Scenario 1*

Supporting IT tools:Weebly, Socrative (http://www.socrative.com), Voicethread

Learning activities:

1.Watch scene 1 of the story Three Little Pigs, and do the Multichoice quiz on Socrative. This multichoice quiz will test their understanding on this scene, and test whether they can figure out the new descriptive words' meanings in this context.

2. Listen to the video, imitate it and upload it to Voicethread.

➢ *Sub-zone 3 Scenario 2*

Supporting IT tools:Weebly, Socrative, Voicethread

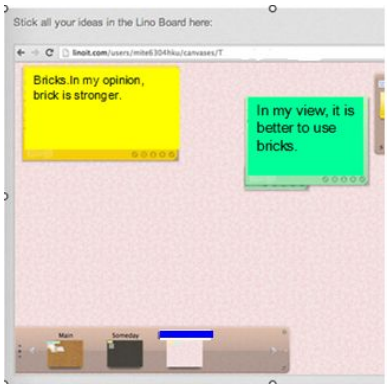
Learning activities:

1.Watch scene 2 of the story Three Little Pigs, and do the Short answer quiz on Socrative. This short answer quiz will test

on students understanding of this scene, and test their ability on using comparative forms, like “stronger”, “bigger”.
2. Listen to the video, imitate it and upload it to Voicethread.

- *Sub-zone 4 Scenario 3*

Supporting IT tools:Weebly, Socrative, Lino, Voicethread
Learning activities:
1.Watch scene 3 of the story Three Little Pigs, and do the WH-question quiz on Socrative. In this activity, students will answer some general questions. After that, teacher will ask some reflective questions, and let students answer it using Lino, eg. “What kind of house will you build?” “ What will you do if others laugh at you when you are trying to build a brick house?” “What can we learn from this story?” Students will be instructed to use “in my opinion”, “in my view” to answer those questions.
2. Listen to the video, imitate it and upload it to Voicethread.



Theatre Zone:
Supporting IT tools: Weebly, Educreation.
Learning activities:
After students finish all those activities, students can go to Theatre zone and act them out. In this activity, students will work in groups and role play the whole scene. Use camera or mobile phone to shoot it, and then upload it to Educreation.While they are preparing for their show together, students’ collaboration and communication skills would be enhanced.

Collaboration Zone:
Supporting IT tools:Weebly, Socrative
Learning activities:
Finally, students go to collaboration zone and do self-reflection , peer-assessment, peers will give feedback to each other through the pre-prepared questionnaire on Socrative.
Moreover, in collaboration zone, links to other libraries and multimedia learning resources are also provided. Students can reach for those extra resources for further self-directed learning.

Key Technological Affordances

Based on the framework "A Taxonomy of ICT Accordance in Education" by Conole and Dyke (2004), the key technological affordances are:

ICT Affordances	Features
Accessibility	With ActiveWorlds software installed PC or laptop, students can access this virtual learning platform anywhere and anytime via internet
Speed of Change	Up-to-date information and quick feedback for students can be given through Socrative
Diversity	Learning resources and learning activities are specially designed for different students needs
Immediacy	Simultaneous multiple shared editing (e.g. Lino and Popplet) supports knowledge construction
Risk, fragility and uncertainty	The whole design is for a green learning environment, no risky information being exposed to students
Surveillance	Most student activities are done using online tools (e.g. Popplet, Lino). Teacher can easily track learners' activities and progresses.
Reflection	Online self-evaluation questionnaire and peer feedback questionnaire are created for students via Socrative.
Communication and collaboration	Inside the VLE, students can collaborate through the role play process, and while they are preparing for the show in the Theatre they can learn communicative and collaboration skills using Educreation.

Pedagogical Theories

Tennyson and Rasch (1988) first proposed the linking theory, which directly links learning theory to educational goals, learning objectives, and instructional prescriptions. This is an instructional design theory that includes behavioral, cognitive and contextual learning theories with appropriate instructional prescriptions, and blend the structured and self-regulated strategies. The linking theory emphasizes that learning involves three types of knowledge, declarative, procedural and contextual, the selection of a given instructional prescriptions is based on the content and learner need.(Tennyson ,2010) And in consideration to pupils motivation, the"starter activities tend to be short, usually fewer than 10 minutes, and the more interesting they are, the more interested the students are likely to be in the rest of your lesson"."Online starter activities can also be easily differentiated to cater for the individual needs of all learner in your group, because of the flexibility of the online medium and the array of resources available to you."(Gillespie,.Boulton,.Hramiak,. &Williamson,2007) To design a learning space that suits the needs of our target learners, it is essential to clearly define the learning goals, anticipate the challenges and difficulties students might meet, plot the strategies and interactions that can enhance their learning motivation and learning attainment.

Evaluation of the VLE design

"Virtual Learning Environments (VLEs) are learning management software systems that synthesize the functionality of computer-mediated communications software (e-mail, bulletin boards, newsgroups etc) and on-line methods of delivering

course materials.(Britain,.& Liber,.2004)". According to Laurillard (1993), there are 4 dimensions to be considered when evaluating a VLE, discursive, adaptive, interactive and reflective. And this evaluation model is called Conversational Framework (Britain,.& Liber,.2004).

- Discursive: In the information zone, students can receive guidance on learning goals, and what preparation they should do .On this VLE, teachers and students are also able to change ideas through Lino instantly, and Popplets. But there is not a mechanism for teacher and students to exchange their perceptions and ideas constantly.

- Adaptive: Teachers would adjust their supportings to students after they know student's special characteristics and conception.

- Interactive: There are many interactive tools that teacher use to facilitate easy communication among students to students, and students to teachers.

- Reflective: In collaborative zone, students can make self-reflection, and in there students can "link the feedback on their actions to the topic goal for every level of description within the topic structure(Britain,.& Liber,.2004)." However, it would be better to design some surveys, before students use this platform and after they use this platform, to know students expectations, and collect informations on how to improve this platform.

Limitations and Consideration:

Limitations：

1.Technology. Active Worlds is as a 3D virtual platform can bring students to a virtual world, but it can only be installed on Windows platform. If in the future it could be used across all platforms, including Apple system, it would enjoy higher popularity. Meanwhile, on Active Worlds, users can not create new objects directly, but need to locate a similar object , copy it, and then modify it to what users need. This is an inconvenience of Active Worlds. It would be better to research on how to make users create objects more conveniently. Thirdly, it would be better if Active Worlds has its own affordances on uploading video, creating quiz. If so, instructors can save lots of time on building up external links.

2. Workload. The present VLE we build creates chances for students to interact with students, but to organize and support all the students in using this platform at the beginning stage might adds up to lots of extra efforts from teacher. Anyhow, if students become flexible users of ICT tools, teachers workload could be reduced.

Considerations:

1. Support and self-directed learning. Students at this grade level are usually curious about new technology, new learning environment, and are quite willing to try new things out. But at the same time, they are easy to be distracted. Hence, it is suggested that teachers should give clear guidance and sufficient support to them when the kids use this VLE platform, especially at the beginning stages. And after kids becoming flexible users, teachers can leave more room for them to conduct self-directed learning.

2.Differentiation. One bonus of VLE learning is that it provides chances to differentiate student learning. There are different ways instructors can think to differentiate learning, namely, differentiate for students interests, differentiate for students skills, differentiate the way content is presented, differentiate the way knowledge is demonstrated(Kipp,2013). As instructors, it is quite necessary to learn to differentiate and reflect on their practices.

Bibliography:

CDC(2004), CDC English Language Curriculum Guide (Primary 1-6) 2004. Retrieved Oct 11th, 2013 from http://www.edb.gov.hk/attachment/en/curriculum-development/kla/eng-edu/primary%201_6.pdf

CDC(2002), CDC English Language Education Key Learning Area Curriculum Guide (P1 - S3) 2002 . Retrieved Oct 11th, 2013 from http://www.edb.gov.hk/en/curriculum-development/kla/eng-edu/curriculum-documents.html

Gillespie, H.; Boulton, H.; Hramiak, A.J.; Williamson, R (2007) Learning and Teaching with Virtual Learning Environments. London, Learning Matters

Britain, S. and Liber, O. (2004). A Framework for Pedagogical Evaluation of Virtual Learning Environments. Retrieved Dec 1st, 2013 from http://www.leeds.ac.uk/educol/documents/00001237.htm#_Toc463843853

Tennyson, R.D.(2010)Historical Reflection on Learning Theories and Instructional Design. Retrieved Nov 30th, 2013 from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.184.3742&rep=rep1&type=pdf

Weller, M. (2007) Virtual Learning Environments: Using, choosing and developing your VLE. Routledge. London and New York.

Kipp, K.(2013) Teaching on the Education Frontier: Instructional Strategies for Online and Blended Classrooms. Jossey-Bass.San Francisco

UNESCO,(2008) ICT competency standards for teachers retrieved from http://www.unesco.org/en/competency-standards-teachers