EMBEDDING POLITENESS PRINCIPLE IN LEARNING THROUGH MULTIMEDIA TO INCREASE STUDENTS' PERFORMANCE STANDARD IN ICT SUBJECT

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Abstract

This paper presents the potential of embedding politeness principle in facilitating learning through multimedia learning courseware in the Information and Communication Technology (ICT) subject. The prime objective of this study is to increase the students' performance standard of the particular subject. It is hope that this principle would be able to support students' learning and lead to the increase of better performance standard, attitude and motivation. The chosen principle purpose in this study is non-other to ease students learning and keep them engaged throughout the learning process. This principle was selected based on related literature review and the importance of communicative interactions between learners and instructors. Consideration of instructions should not only about presenting information but the way it is presented is an important criterion as well. The issues in this study were derived from an early review and interviews, which were conducted earlier through Preliminary Investigation (PI). Feedback received from the respondents confirmed that students are having difficulties in acquiring the knowledge on some topics in the ICT subject. The findings from this paper will be able to assist the researcher in developing a multimedia learning courseware that will foster students' learning and assist them in achieving the students' performance standard to the highest level.

Keywords: Politeness principle, Information and Communication Technology (ICT), multimedia learning

1. INTRODUCTION

Information and Communications Technology (ICT) is a part of technology that is advancing and fostering from decades has become an essential and accepted part of everyday life for most people currently. The importance of technology is increasing in people's lives and it is already a trend, to the extent that technological literacy had become a functional requirement for people's work, social, and personal lives. United Nations Educational, Scientific and Cultural Organization (UNESCO) considers that ICTs can contribute to universal access to education, equity in education, the delivery of quality learning and teaching,

teachers' professional development as well as improve education management, governance and administration provided the right mix of policies, technologies and capacities are in place (UNESCO, 2016).

In the process of identifying the current scenario in schools on teaching and learning ICT, a semi-structured interview was chosen as the method of inquiry in the preliminary investigation. Semi-structured interview allows the interviewer not only asks a number of formal questions which have been prepared before the interview, but the interviewer is also given the freedom to question and explore the answers given by respondents in a more in-depth manner (Chua, 2012). Three ICT teachers (ICT Head of Panel) from three different national primary schools were interviewed. The interviews focused on three different scopes that is related in identifying the current scenarios in schools. Acquisition of ICT knowledge, acquisition of ICT skills, and students' attitude towards the lesson are the scopes that have been included in the interviews. The interviews had successfully identified some deficiency on the current teaching practice and the difficulties that the students are facing in learning the lesson.

The teachers unanimously agreed that their students are encountering difficulties in learning some of the topics in this subject. The topics that have been identified, based on the interviews are graphic, audio and video editing; understanding data measurement and developing a non-linear multimedia presentation. All the teachers are facing similar problem particularly on one topic - developing a non-linear multimedia presentation in the topic Exploration of Multimedia. The assessment for this topic is one of the listed items under students' standard performance. The Curriculum Development Centre does provide a courseware to schools for this subject. Based on the interviews, it was found that none of the teachers used the provided courseware. The reason for this as claimed by the teachers; the courseware contains too many topics and information and the teachers felt reluctant to use the courseware as it will incur more time to guide the students to the specific topic to be learnt for the lesson.

The Curriculum Standard Document and Assessment outlines the ICT curriculum for Year 4. The curriculum content is organized according to content standards and learning standards. Content standards specify the essential knowledge and skills students need to acquire by the end of Year 6. The learning standards detail the relevant knowledge and ICT skills that students need to acquire in a particular year in relation to the content standards. The performance standards serve as a tool to monitor students' developmental progress for each learning standard.

There are various reasons due to the difficulties of students in learning the knowledge and skills for the two topics. Among them are the students' ability in understanding the contents, students' attitude, and lack of appropriate and suitable educational resources that caters students' ability. Due to this, it has been found that the performance standards achieved by majority of the students are at average level only. As this is a subject being introduced to Year 4 students as an exposure to ICT, it is better to overcome any difficulties and problems arise in its implementation during this level.

The promises that ICT brings to education is relevance for future utilization by the students in their life. Serious efforts has been taken by the MOE with the hope that ICT will be able to equip students with the necessary knowledge and skills needed for them to be competitive in a technologically driven world. This study aims to provide an alternative to assist teachers and facilitate students' learning by developing a multimedia learning courseware (MLC) embedded with politeness principle as the major element and incorporating other suitable theories, based on the literature review.

As a proposed solution, the teachers agreed that a multimedia learning courseware will be a great contribution in assisting them to deliver the intended contents of this ICT subject. They hope that students will be able to learn better, acquiring the knowledge and skills; and will be able to achieve the highest level in the subject performance standard (Shuhaila & Wan Ahmad Jaafar, 2015).

2. FUNDAMENTAL OF THEORIES AND PRINCIPLES

The related learning theories and multimedia principles will be combined in formulating the theoretical frameworks that will be applied for the purpose of this study. The proposed theoretical framework is shown in Fig. 1. The theoretical framework describes the structure and expected outcomes in this study. The theoretical framework will be based on the micro and macro level. At macro level, the combination of related theories will be applied to support researcher belief that the politeness principle in multimedia learning will be able to facilitate students learning in the related ICT subject.
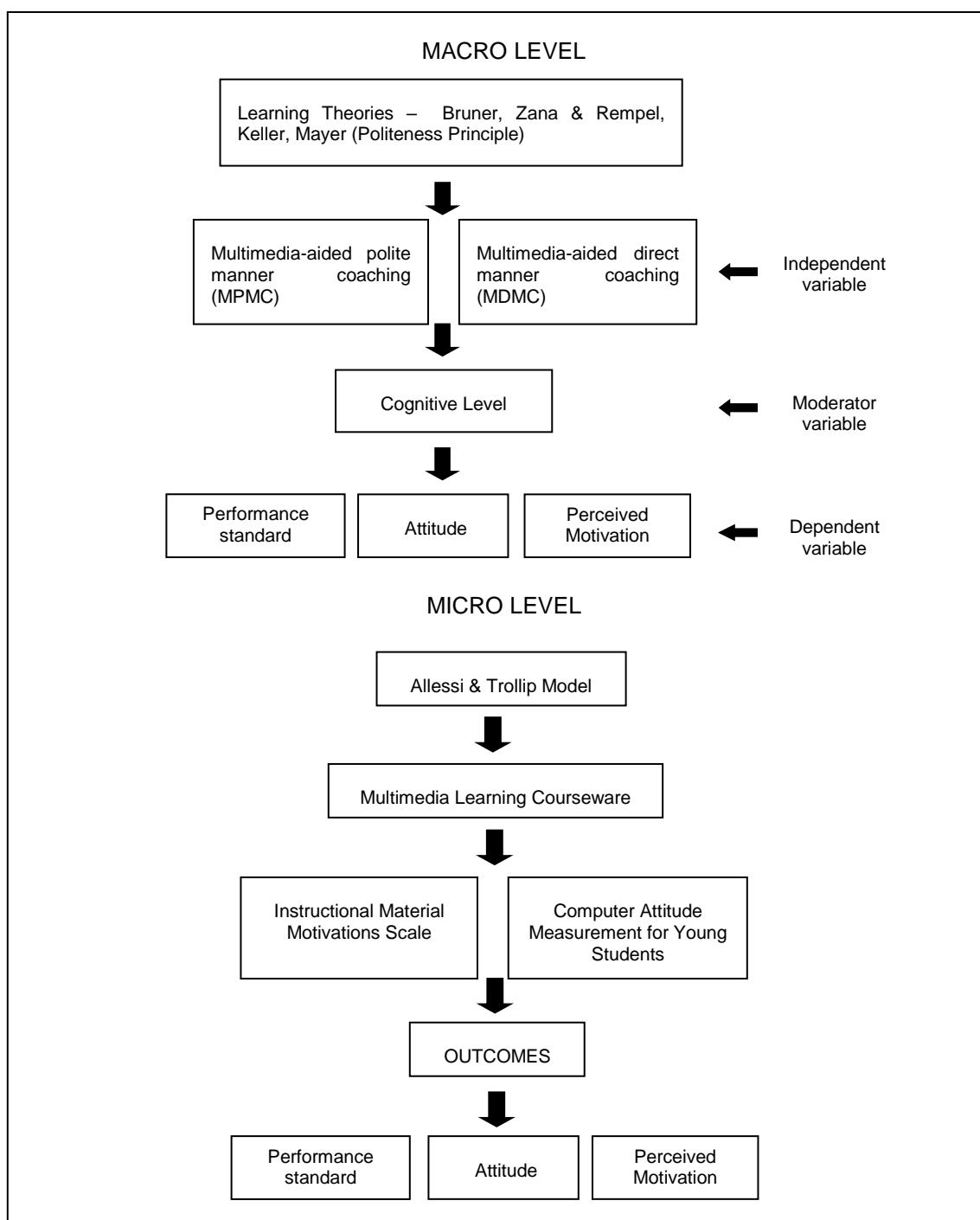
Fig. 1: Theoretical Framework of the Multimedia Learning Courseware (MLC)

There will be two modes of instructions, which are (i) Multimedia-aided polite manner coaching (MPMC) and (ii) Multimedia-aided direct manner coaching (MDMC). These two modes will be used as the independent variable in this research. Mayer, Johnson, Shaw, and Sandhu (2006) initiated this research on politeness by referring it as a politeness effect in educational software with computer-based tutors. This principle stated that people learn better, when the pedagogical agent (PA) used polite style rather than direct style. Wang, Johnson, Mayer, Rizzo, Shaw, and Collins (2008), reported that learners tend to respond to PA as social actors and mind the manners when the agent communicates with the learners. Students' cognitive level is selected as the moderating variable in this study.

The following stage in this study is the development phase of the MLC. Alessi and Trollip Model (2001) has been chosen in designing and developing the MLC for this study. The effects of the developed MLC will be analysed on three dependent variables, which are performance standard, attitude and motivation.

The learning theories and multimedia principles engaged in this research has been thoroughly selected in order to achieve the outcomes of which are to increase the students' performance standard, attitude and motivation. The process of converting all the theories and multimedia principle together from the theoretical framework is substantial because it will lead to a strong foundation in the development of the MLC. Furthermore, the application of theoretical framework in this study is to support the researcher's hypothesis that certain learning theories and multimedia principle own the potential in facilitating students' learning through appropriate multimedia learning approach.

2.1. Multimedia Learning

According to Mayer (2001), multimedia is defined as the presentation of material using both words - material is presented in *verbal* form, such as using printed or spoken text and pictures - material is presented in *pictorial* form, such as using static graphics, including illustrations, graphs, photos or maps, or using dynamic graphics, including animation or video. Multimedia provides a multi-sensory perspective and facilitates the teaching and learning experience.

Tsung (2010) had listed several strengths using multimedia as the learning platform. There are personalized education, flexibility of time and space, comfortable for a variety of personality types, personalized teaching, more concrete learning experience, effective motivation, enhancement for traditional learning methods, a hyperlinked learning method, simulated learning scenarios, reduced psychological obstacles, high quality teaching and broadened education for students, repetitive learning and immediate feedback, and effective, diversified and dedicated teaching materials.

For a multimedia presentation to be necessarily beneficial, it must be designed and applied properly. Too many appealing "choices" on a multimedia presentation may divert learner's attention from its content. A well-developed multimedia learning courseware will be able to influence students' motivation. An organized and interactive multimedia learning courseware can assist the structure of ICT-facilitated learning activities, and allows students to learn individually outside the classroom. In order for a developed multimedia learning courseware to be useful to the learners, it needs to have a sound pedagogical base design.

2.2. Politeness Theory

According to Oxford Learner's Dictionary, politeness is defined as having good manners and respect for the feelings of others. Politeness is also a well-established scholarly concept, basic to 'politeness theory' – one of the more popular branches of contemporary pragmatics, and a widely used tool in studies of intercultural communication (Eelen, 2001).

The cross-cultural theory of politeness was developed by Brown and Levinson (1987). Their theory stated that everyone has a positive and negative face; negative face is the one to be unimpeded by others (autonomy) whereas positive face is the one to be desirable to others (approval). Positive face refers to a person's self-esteem while negative face refers to a person's freedom to act (McLaren, DeLeeuw & Mayer, 2011a). The rationale for using polite wording is that it represents a form of social communication intended to minimize the threats to positive face and negative face (Mayer 2014).

According to the politeness theory (Brown and Levinson, 1987) the two components of human desire are fundamental to any social interaction and politeness is an attempt by the participants in those interactions to maintain each other's faces (positive and negative). According to the politeness theory, across all cultures, people wish to maintain positive face by appearing desirable to others whilst also wishing to maintain negative face by retaining autonomy. Subsequent research has adopted Brown and Levinson's original theory, the most commonly used of which divide politeness strategies into eight categories (Thomas, 2013). Table 1 indicates the eight categories with explanations and examples.

Table 1: Information on politeness strategies with example

Strategy	Explanation	Example
Bald-on-record	Speaker's intention is communicated clearly and concisely.	You must correct your answer.
Off-record	The speaker's intentions are ambiguous, leaving space for interpretation and often convey meaning that goes beyond what is explicitly stated.	The system identifies your answer as incorrect.
Request	It is phrased in a way to convey the speaker's desire.	I would like you to correct your answer.
Question	An indirect query that hints at an action	Could you correct your answer?
Tutor-goal	Statements are phrased to make the required action a goal of the tutor, student or both.	I would correct your answer.
Student-goal		You may want to correct your answer.
Joint-goal		We should correct your answer.
Socratic-hint	The students' goal is presented as a suggestion in the form of a question.	Do you want to correct your answer?

2.2. Politeness Principle

This study success depends on the usage of multimedia principle in designing the MLC instruction. The MLC with two modes (MPMC and MDMC) will be used as the sole independent variable to increase students' performance standard. The politeness principle is the idea that people learn more deeply when instructional support is presented in polite style (McLaren et.al, 2011a).

Further elaborated by McLaren et.al (2011a), a basis for the politeness principle is the cross-cultural theory of politeness by Brown and Levinson (1987). Their theory stated that everyone has a positive and negative face; negative face is the one to be unimpeded by others (autonomy) whereas positive face is the one to be desirable to others (approval). According to the politeness theory (Brown & Levinson, 1987), across all cultures, people wish to maintain positive face by appearing desirable to others whilst also wishing to maintain negative face by retaining autonomy.

In a computer-mediated communication study by Locher (2010), with a number of important exceptions, the majority of texts published on computer-mediated communication to date have not focused on politeness and impoliteness *per se*; politeness and impoliteness has not yet received the intention it deserves. When comparing polite and direct tutor with respect to immediate and delayed post-test scores, McLaren et.al (2011a) claimed that for students who made many error during the intervention, arguably a low prior knowledge group, the polite tutor ultimately led to more learning as compared to the direct tutor.

In another study by McLaren et.al. (2011b), found a pattern in which students with low prior knowledge learner of chemistry performed better on subsequent problem-solving tests if they learned from the polite tutor rather than the direct tutor; politeness also foster generative processing by organizing the material into a coherent structure and integrating it with other relevant knowledge. Schneider, Nebel, Pradel and Rey (2015) reported in their research on the operationalization of politeness in instructions during learning with a multimedia web page on attribution theory. Table 2 shows the different in characterization of speech on politeness and directness made in their (Schneider et.al., 2015) research.

Table 2: Characterization of Speech on Politeness and Directness (Schneider et.al., 2015)

Politeness	Example	Directness	Example
Subjunctive modal verb form	*might*	Indicatives and direct instructions	*have to, must*
Cooperative addresses	*we, us*	Direct addresses	*you, yours*
Indirect question about the learning subject	*Where might attribution theories touch our lives?*	Exclamations and commands	*!*
Metaphoric forms of the instructional verb learning to express even more indirectness	*discovering, experiencing*	Verbs referring to an immediate learning process	*memorize, acquire*
Minimal restrictions of freedom	*then, later*	Maximum restrictions of freedom	*now, instantly, immediately*

3. DISCUSSION

The use of appropriate learning theories and embedding the politeness principle in the development of the multimedia learning courseware will likely assist students' learning and lead them to achieve better performance standard in their ICT subject. Referring to the underpinning theory of this politeness principle and previous researches result in embedding politeness principle within a multimedia learning environment, this principle promises positive result on learning.

A well-developed multimedia learning courseware has a great potential in assisting students' learning and lead to a better learning outcomes. Applying politeness principle in this study will also be supported by other learning theories such as constructivist theory and motivation theory. Polite wordings will help learners learn better by providing them an environment that is likely make them feel comfortable, attached and appreciated throughout the lesson.

4. CONCLUSION

This study success will be completely rely upon students' achievement in performance standard. The intention of embedding politeness principle in a sound developed multimedia learning courseware is one of the advances in multimedia learning which its prime objective is to assist students' in learning. It is also intended to increase learners' cognitive processing and quality of learning outcome (Mayer, 2014).

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