Styles and Needs in Learning English by Using Tablet PCS among Grade I Students

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Abstract

The study investigated the learning styles and needs of Grade 1 students in learning English by using tablet PCs. The purposes of the study were (1) to investigate the English language learning styles of Grade 1 students who use tablet PCs, (2) to investigate the needs of students in learning English by using tablet PCs, and (3) to find out the effective way to teach English by using tablet PCs in order to respond the students' learning styles and needs. The samples were 354 Grade 1 students of four schools in the "Integrating Technology to Enhance Learning" pilot project in the academic year 2012. The instruments used for data collection were questionnaires and semi-structured interview. The data revealed that; (1) Grade 1 students learnt English via tablet PCs by auditory, visual, and kinesthetic learning style with 91%, 88%, and 50% respectively. (2) Grade 1 students needed contents to end up with games and activities, listening activities, self-using tablet PCs, and practical activities. (3) The effective way to teach English by using tablet PCs depended on teachers and materials. Teachers should weight the all 3 styles in any step to suit the students and the teachers should adapt themselves to keep up with technology in order to be a leader of students to learn presently and in the future. The materials or contents should be animation with sound and translation. Activities or games should be interactive and they can enhance learning and students can use to revise or study in advance by themselves. The body of the tablets should be larger with clear buttons and easy – used application. In addition, the battery should keep more power for longer using.

Keywords: learning styles, needs, using tablet PCs

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Introduction

In the present global society, learning English language is very important and essential to daily life, as English language serves as an important tool for communication, education, seeking knowledge, livelihood, and creating understanding of cultures and visions of the world community (Ministry of Education, 2008). It is anticipated that the number of English users will increase each year due to the fact that English prevails in almost all aspects of people's life. The Ministry of Education recognizes its importance and has stated in the core curriculum to require learning English as a foreign language during the basic education level.

The global society is changing rapidly, particularly in the advancement in technology. The role of English has been stressed even more both in Thailand and abroad due to the innovation of computer technology. Therefore, it is necessary to improve teaching and learning to cope with these changes, especially in English language. These changes have affected every segment of society and all levels of education (Martin &Rader , 2003). As Caladine (2008) said that in the first decade of the 21st century, the rate of change of technology is greater than

ever before. The Ministry of Education (2008) presented that in the past decade, the role of Information and Communication Technologies (ICT) in education increased rapidly. In a direct way, ICT enables learners, both inside and outside the schools, to access a wide variety of information that goes beyond the traditional classroom setting. Learners can search for cutting-edge knowledge from the internet to expand their learning horizons as well as to develop the thinking skills and creativity needed for the 21st century.

Because of the importance of technology in education as mentioned earlier, the former government provided the use of technology to change learning paradigms into learner-centered and lifelong learning through hi-speed internet. In addition, the government promoted all levels of students to use tablet PCs for education by an initiative to provide tablet PCs for Grade 1 students in education policy in the project "Integrating Technology to Enhance Learning" (One Tablet Per Child) to be a tool in 21st century learning. The tablet PCs were expected to be tools for learning and access to resources and knowledge available both offline and online. By using the tablet PCs, students had the opportunity to

learn and practice their knowledge by themselves (Ministry of Education, 2012).

Apart from the provision of appropriate learning materials, Kolb & Fry, 1975 (cited in Pothaworn. 2009), stated that in teaching and learning, the learning styles of students should be considered because each student had a different ability, a unique way and style of learning. This style of learning was determined by the physical, emotional, and cognitive style that was relatively constant and indicated that learners perceived, interacted, and learnt to respond to the environment. Hunt & Dunn, 1981 (cited in Raenark (2003), studied the importance of learning styles of students and found that it was necessary to explore the learning styles of students to use as a tool to reflect the unique characteristic of each individual to affect the best result of students' learning as background information for teachers to use in planning and teaching and learning activities appropriate to the specific effects.

Because of their differences, it is possible that they need different things in learning. Therefore, learner needs help to powerfully clarify and validate true needs. It enables educators and practitioners to shape the curriculum development that bases the content of language courses on the communication needs, wants and interests of the learners (Lepetit & Cichocki, 2002). It ties learning as closely as possible to teaching (Grier, 2005) and it leads educators and practitioners to provide better and more accessible sources for the students of the programs concerned (Long, 2005).

As mentioned earlier technology plays a significant role in education, therefore, the government provides tablet PCs for students from Grade 1 in order to learn appropriately. The study of learning styles and learner' needs by using tablet PCs is a point that should be useful to those responsible for education to respond to the learning needs of students. In addition, learning by using tablet PCs is a new innovation in Thailand and also particularly interesting in how the students learn from using tablet PCs. I as the researcher was attracted to investigate the study on using tablet PCs and other technological materials in responding to students' learning styles and needs.

Definitions of Key Terms

Learning styles refer to the way Grade 1 students respond to using tablet PCs in learning English. The learning styles in this study comprised of;

1) Visual Learning Style

Visual learning style means learning by seeing. Visual learners can organize their thoughts and remember things by seeing. Pictures and written texts help them learn and they think in images or pictures.

2) Auditory Learning Style

Auditory learning style means learning by hearing. Auditory learners benefit from sound and music. They learn best when they hear things. Talking out loud can help them learn.

3) Kinesthetic Learning Style

Kinesthetic learning style means learning by movement. Kinesthetic learners learn by using their bodies, hands, and sense of touch. Writing, drawing, and movement help them remember important things and they like to demonstrate what they have learnt.

Learner needs refer to what learners want from using tablet PCs in learning English. The learner needs in this study comprised of ; 1) content of lessons in tablet PCs; 2) the four language skills consist of listening, speaking, reading, and writing; 3) technical know-how; and 4) physical abilities.

Tablet PCs refer to tablet PCs provided by the former government to Grade 1 students of the schools in the pilot project "Integrating Technology to Enhance Learning" (One Tablet PC per

Child) in the academic year 2012. The tablet PCs contained English materials according to the standard of the Ministry of Education.

Limitations of the Study

This present study has been carried out with limitations as follows:

1. The study has been conducted with Grade 1 students in the pilot project "Integrating Technology to Enhance Learning" (One Tablet PC per Child) in the academic year 2012.

2. Tablet PCs which were used in the study refer to the tablet PCs provided to Grade 1 students by the former Thai government only.

3. The project "Integrating Technology to Enhance Learning" (One Tablet PC per Child) has been canceled in 2014 due to political reason; however, the study has to be carried out as defined. Furthermore, not only tablet PCs provided by the former government are currently used, but also computers and another technology materials have been already used widely in learning and teaching. Thus, conducting the study can be beneficial to use technology materials in teaching and learning English.

Purposes of the Study

1. To investigate English language learning styles of Grade 1 students who use tablet PCs.

2. To investigate the needs of students in learning English by using tablet PCs.

3. To find out the effective way to teach English by using tablet PCs in order to respond the students' learning styles and needs.

Research Method

This present study used mixed methods to gather both quantitative and qualitative data. The quantitative part was a survey using questionnaires to find out students' learning styles and needs. The qualitative method was used to collect the deep and detailed information by using semi-structured interview and focus group discussion. The learning styles were investigated by using a questionnaire based on Perceptual Learning Styles. The needs of students were explored through questionnaire and interview. The researcher interviewed the respondents individually after doing the questionnaires for more in-depth information and to confirm the finding of needs from the questionnaire. During the interview, audio recording and note-taking were used. The interview data was analyzed by content analysis.

The last point was finding an effective way in teaching English by using tablet PCs. The conclusion of this point was acquired by focus group discussion. The researcher formed questions to use in the discussion from the obtained learning styles and needs data to elicit more and specific information involve learning styles and learner needs. The participants of focus group discussion discussed how to teach English by using tablet PCs to Grade 1 students effectively based on the data obtained from the students.

Populations and Participants

Populations in this study were 1,426 Grade 1 students of four schools under the jurisdiction of Office of The Basic Education Commission (OBEC) in the project "Integrating Technology to Enhance Learning", the project according to government policy phase 1. They were; 1) Rachawinit Bangkok School; 2) Lampang Kindergarten School (Kelang ratanusorn); 3) Pang-nga Kindergarten School; and 4) Sanambin School.

Respondents for the questionnaires were 354 students of the four schools. They were acquired by simple random sampling. Ten percent of the questionnaire respondents were selected

purposively to participate in the interview.

The participants for the focus group discussion consisted of a supervisor, two school directors, three teachers who teach by using tablet PCs, one parent, and three government officials from The Bureau of Technology for Teaching and Learning. They were selected by purposive sampling.

Data Analysis

1. Data Analysis for Questionnaires

The data obtained from the learning style questionnaire was analyzed by frequency of each part and summarized into the percentage. It indicated that students learnt with that style. The percentage was divided into two degree: (1) less than 50% = students did not learn with that style; (2) 50% or more = students learnt with that style.

The learner needs questionnaire was utilized to find the mean and standard deviation. The data derived was the items that students needed from using tablet PCs in learning English. It meant the items that students checked under the smiley face were essential to learner needs.

2. Data Analysis for Interview

The audio recorded data obtained from the interview was transcribed and analyzed by content analysis.

3. Data Analysis for Focus Group Discussion

The data from focus group discussion was brought together and processed. The results were presented as conclusion of the discussion according to students' learning styles and learner needs. In addition, the summary on effective teaching with tablet PCs was also submitted.

Results of the Study

The results of the present study are presented according to research questions further below.

Research Question 1 : What are the English learning styles employed by Grade 1 students?

In response to research question 1, the research finding revealed that Grade 1 students learnt English by using tablet PCs with auditory style (91%), visual style (88%), and kinesthetic style (50%) respectively.

Research Question 2 : What are the needs of Grade 1 students in learning English by using tablet PCs?

1. Finding from Questionnaire

The result of learner needs in subject matter has found that the learners needed to learn contents ended up with games and activities with

90.68%, contents created from familiarity of students with 83.05%, and contents presented as cartoon with 82.20%. In language skills, the learners satisfied to learn with listening activities with 87.29%. The following need was learning with reading activities with 83.05% and the last need was learning with sound in every word/sentence with 82.49%. The result in technical know-how has found that the learners needed self – using tablet PCs with 85.31%, it meant the tablet PCs were easy to use. Another one need was quickly response tablet PCs with 74.86%. The result of physical ability has found that the learners preferred practical activities with 69.21% and they liked instruction to work with friends with 57.06%.

2. Finding from Interview

The information gained from the semi-structure interview revealed that students liked to learn in an area of matter around them such as pets and school. A minority said about the other topics such as tourist attractions, conversation, and another subject. On the issue related to image, they preferred both animation and image. In case of sound, they preferred content narrated by Thai people than native speaker. They also liked to learn with Thai translation every word and sentence. Moreover, they liked the other

sounds such as waterfall and birds' singing. For story of contents, they preferred true stories to tales. They liked both long and short stories and also movies. In the point of activities, most of the students liked various kinds, such as matching games, filling in the blanks, drawings, paintings, and any kind of games. In addition, they liked to repeat and practice as they listened to tablet PCs.

Research Question 3 : What would be the effective ways to teach by using tablet PCs to respond to Grade 1 students learning styles and needs?

Regarding the focus group discussion, agreement of effective teaching by using tablet PCs can be concluded into two areas, the first was teachers and the second was materials.

In the area of teachers, the discussion concluded that teachers should conduct teaching and learning with all three styles but weighting each style should be considered. Using tablet PCs can be located in any step of teaching depending on teachers' consideration. Furthermore, tablet PCs can be a teachers' resource. The last point was teachers should adapt themselves to keep up with technology which would play a crucial role in teaching and learning presently and in the future.

In the area of materials, 3 issues became evident; 1) characteristic of the materials, 2) process of learning units, and 3) tablet PCs body. The materials or contents should be animation with sound and translation. The contents should be activities to enhance learning and achievement. The materials should provide learning through games and should be used by themselves to revise lesson and to study in advance. Moreover, the materials should be interactive, reflect students' immediate interaction. Body of the tablet PCs should be larger size with clear command buttons. The applications should be easy to use and battery should keep more power in order to use it longer.

Discussion

According to the result of the learning styles employed by Grade 1 students, it revealed that they learnt English with tablet PCs by auditory style and visual style with arithmetic mean score of 91% and 88% respectively, it could be because the styles respond to their perception and affect their learning. This finding was relevant to many studies. Ryan (2014) studied the effect of auditory integration training on the working memory of adults with different learning preferences. The study revealed that participants with an auditory learning preference showed highest change of working memory scores. Khamkhien (2012) investigated the demystifying Thai EFL learners' perceptual learning style preferences and the finding indicated that Thai EFL learners preferred auditory learning most. Corbit (2013) explored the preferred foreign language learning styles of MFLP (Modified Foreign Language Program) and non-MFLP students of postsecondary Spanish and found that both MFLP and non-MFLP students had a preference for visual over auditory and tactile/kinesthetic stimuli.

Many studies come to the same conclusion that learning styles contribute to learning. Jeral (2010) also supported the contribution of learning styles. She studied the influence of visual, auditory, and kinesthetic learning opportunities and found that student benefit from being able to choose activities to demonstrate their learning. Moreover, Yassin (2015) studied the learning styles ESL students, they found that learning styles affected learning outcome positively. Furthermore, they agreed that matching teaching styles to students' learning styles impacted to improvement of students' academic success.

As the result of learner needs, it presented that Grade 1 students had

several needs in learning English by using tablet PCs. As mentioned earlier that learner needs was a powerful facilitation skill enhance instructors and students to be companions in learning. Knowing the learner needs from the study may cause teachers conduct instruction to meet learner needs and many studies realized the importance of learner needs as well. Pothisuwan (2005) said that adults will be motivated to learn well if the learning meets their needs and interests of past experience. Kaur (2007) examined the English language needs of 15 Malay administrative staff in two departments in University Sains Malaysia in an ESP (English for Specific Purposes) course. He found that needs analysis guided design for ESP course and ESP learners indicated that the course content suited their needs and contributed to a positive learning experience for adult students from a non-native English speaking background. Kaewpet (2009) presented a framework for investigating learner needs that needs analysis extended to curriculum development. His review literature indicated that learner needs should be addressed if the course wants success and he stated that need analysis research which further involves curriculum development is required.

The results of the focus group discussion indicated that effective teaching by using tablet PCs depended on two factors, teachers and materials.

Teachers

Education is the process that makes humans improve their quality of life to be able to live in society with happiness, support the country in suitable way, according to change in every way and the people who take an important role in education are teachers. That is because teachers' role is to create the experience of learning and improve learners in overall, in order to have knowledge, skills and academic experiences that lead to better quality of life and along with becoming good members of society. Therefore, to develop educational quality must rely on quality teachers, also (Preawpairporn, 2011). In the discussion, teachers were discussed as a major factor to teach effectively by using tablet PCs especially in the age of technology as present. They must adapt themselves to be able to teach with technology and prepare learners to be ready in adapting to live in the 21st century society. Teachers have to support students to be self-developed to fulfill their potential, according to the necessity of living in a society of a new age, supporting in acquiring lifelong learning habits.

As it is known that learning materials have high impact for teaching and learning in all level of education, materials help to motivate learners to pay attention and understand easily what they are learning. It also encourages thinking process and problem solving within limited time and makes students able to apply experience in learning in their real life. When the world is changing into technology era, teaching and learning process are also changing as we use ICT learning materials in teaching. It is important to use ICT materials to make learners participate and interact with the materials. Moreover, ICT materials also encourage learners to gain necessity skills for 21st century. Even though the One Tablet Per Child project has been canceled, the kind of learning materials are still extensively used and tend to be used increasingly due to its efficiency.

Recommendations

Recommendations for the Present Study

1. Tablet PCs could refer to another kind of ICT instructional media such as contents in computer PC and Computer Assisted Instruction (CAI) that should keep characteristic in order to respond to students' learning styles and learner needs derived from the study.

2. At the present time, using technology in teaching and learning is inevitable so teachers need to adjust themselves in order to use technology to keep pace with students

3. Even though the One Tablet Per Child Project has been canceled, the contents of other ICT materials such as internet and CAI are similar in tablet PCs, hence, teachers should give priority in using the materials since these kinds of materials have many advantages. They can present contents concretely, students can study by themselves, variety of media, and all time keep up to date.

Recommendations for Further Research

1. Similar research should be conducted with other subjects to get an entire overview in order to instruct and to prepare materials to respond to learning styles and needs.

2. Different ICT materials should be studied in order to support teaching and learning because tablet project has been canceled.

3. Researchers should investigate grade 1, 4, 7, and 9 as they are the first year of each grade level so that the teaching can meet learning styles and learner needs for entire grade level.

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