การศึกษาการใช้สื่อประสมของครูผู้สอนวิชาภาษาอังกฤษ
ในโรงเรียนที่มีวัตถุประสงค์พิเศษในเขตภาคเหนือ
STUDY OF THE USE OF MULTIMEDIA FOR ENGLISH TEACHERS
IN SPECIAL PURPOSE SCHOOLS IN NORTHERN REGION

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บทคัดย่อ

       การวิจัยนี้มีจุดประสงค์เพื่อ 1) สำรวจประเภทสื่อประสมที่ใช้ในห้องเรียนภาษาอังกฤษ และ 2) ศึกษาการใช้สื่อประสมในห้องเรียนภาษาอังกฤษ กลุ่มตัวอย่างของงานวิจัยนี้คือครูไทยผู้สอนภาษาอังกฤษในฐานะภาษาต่างประเทศจำนวน 20 คน จากโรงเรียนที่มีวัตถุประสงค์พิเศษในเขตภาคเหนือ การเก็บข้อมูลของงานวิจัยนี้ได้จากแบบสอบถามและการสัมภาษณ์ การวิเคราะห์ข้อมูลเชิงปริมาณ ใช้ค่าเฉลี่ยและค่าร้อยละ การวิเคราะห์ข้อมูลเชิงคุณภาพนั้นใช้การวิเคราะห์เนื้อหา ผลการวิจัยแสดงให้เห็นว่า จากประเภทของสื่อประสมทั้ง 7 ประเภทที่ใช้ในห้องเรียนภาษาอังกฤษนั้น ประเภทที่ 1 คือไฟล์เสียงและวีดีโอนั้น ผู้สอนใช้เพลงและภาพยนตร์ ประเภทที่ 2 คือคอมพิวเตอร์ ผู้สอนใช้โปรแกรม Microsoft Word® และ PowerPoint® ประเภทที่ 3 คืออินเตอร์เน็ต ผู้สอนเลือกใช้ Google YouTube Facebook Google Sites เว็บข่าว BBC และแอพลิเคชัน LINE ประเภทที่ 4 คือเกม ผู้สอนใช้เกม Final Fantasy ประเภทที่ 5 คอมพิวเตอร์พกพาเครื่องเล็กและหนังสืออิเล็กทรอนิกส์นั้น ผู้สอนใช้คอมพิวเตอร์พกพา ประเภทที่ 6 เป็นเครื่องเล่นเพลง โทรศัพท์เคลื่อนที่และเทคโนโลยีใหม่ ผู้สอนใช้เครื่องเล่นซีดีและดีวีดี ประเภทที่ 7 สื่อพิเศษ ซึ่งสื่อที่ผู้สอนใช้ในชั้นเรียนคือ Text Reader สำหรับการใช้สื่อประสมในการจัดการเรียนการสอน ผู้สอนนำเสนอว่ามีการใช้สื่อประสมในการเริ่มต้นบทเรียนเพื่อกระตุ้นความสนใจของผู้เรียนรวมถึงนำเสนอเนื้อหาใหม่และให้ตัวอย่างการใช้ภาษาให้กับผู้เรียนด้วย ผู้สอนจำนวนน้อยใช้สื่อประสมในการสัมมนา/ประชุม หรือพูดคุยกับนักเรียน ผู้สอนได้ใช้แอพลิเคชันของ Google ในการสร้างข้อสอบออนไลน์ด้วย จากการสำรวจพบว่าครูใช้สื่อประสมในกิจกรรมการเรียนการสอนในห้องเรียนภาษาอังกฤษทุกทักษะ โดยเฉพาะสื่อประสมประเภทที่ 1 ไฟล์เสียงและวีดิโอ ประเภทที่ 2 คอมพิวเตอร์ ประเภทที่ 3 อินเตอร์เน็ตและประเภทที่ 5 คอมพิวเตอร์พกพาเครื่องเล็กและหนังสืออิเล็กทรอนิกส์

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Abstract

The study consists of two main objectives: 1) to explore the types of multimedia used in English classroom and 2) to study the use of multimedia in English classroom. The participants were 20 Thai EFL teachers teaching at Special Purpose Schools in Northern region. The data collection obtained from questionnaire and semi-structured interview. The quantitative data was analyzed using mean scores and percentile while qualitative data obtained from semi-structured interview was analyzed using content analysis. The results showed that from 7 types of multimedia used in English classroom, the type of audio and video technologies, teachers used song and movie. For computers, they used Word®, and PowerPoint®. In the Internet type, they applied Google, YouTube, Facebook, Google Sites, BBC, and LINE. For game and simulation, they used Final Fantasy. For small mobile computers and e-book, they used notebook while in MP3 Players, cell phones, and other new technologies, they relied on CD and DVD players. And specialized electronic tools, they pointed out Text Reader. In using multimedia in classroom, they reported using them in warm-up or introduction to provoke students' interest, present new content, and show language used examples. Few teachers used multimedia in seminar/ conference or talk with students. They created online test using Google Applications. Teachers appeared to use multimedia in all skills activities especially in audio and video technologies, computers, the Internet, and Small mobile computers and electronic books (e-book).

คำสำคัญ: การใช้สื่อประสม / ครูผู้สอนภาษาอังกฤษ/ โรงเรียนที่มีวัตถุประสงค์พิเศษ

KEYWORDS: MULTIMEDIA USED / ENGLISH TEACHER / SPECIAL PURPOSE SCHOOLS

Introduction

With the change of receiving information for students, they can learn from sources outside classroom. According to the statement on Section 66 of National Education Act (Office of the Prime Minister, Office of the National Education Council, 1999) that learners shall have the right to develop their capabilities for utilization of educational technologies as soon as possible so that they shall have sufficient knowledge and skills in using these technologies for acquiring knowledge themselves on a continual lifelong basis. In this point, some educators have suggested that using technology can change educators' teaching style and influence student learning outcomes (Becker, 2000, Burnston, 2003 cited in Eskandari 2013, & King, 2003).

For English teaching, Susikaran and Phil (2012) mentioned that *"Chalk and Talk teaching method"* is not enough to teach English effectively. If teachers can't create a learning environment which is sufficiently stimulating to young learners, the possibility of students learning in classroom seemed to be reduced (Boulter, 2007). Nunan (1999 as cited in Amine et al, 2012) stated that a percentage of language educators depend on the transmission model, which emphasizes the teachers' responsibility to convey knowledge and correct errors while students are tired of this teacher-centered model of English-language teaching and complain about boring class and that they want a new and different way of teaching. Taylor (1980, cited in Amine et al, 2012) also agreed that the advent of technology and the Internet is that computer usage in language teaching provides an authentic environment in which students can communicate with native speakers inexpensively.

Brinton (2001, as cited in Thao, 2003) insisted that multimedia tools serve as an important motivator in the language teaching process because *"media materials can lend authenticity to the classroom situation, reinforcing for students the direct relation between the language classroom and the outside world"*.

Liontas (2004, as cited in Boulter, 2007) defines multimedia as digital learning that *"enables the orchestration of various cognitive learning strategies, support teachers modeling, making language instruction innovative and exciting."* While Mayer (2001) stated that multimedia typically refers to the presentation of material in two forms: auditory/verbal and visual/pictorial (Mayer, 2001 cited in Berk, 2009). That also included PowerPoint® (Mayer & Johnson, 2008), games (Moreno & Mayer, 2005), and computer-assisted video learning (Gay, 1986 cited in Berk, 2009) in a variety of content areas, in addition to auditory and video media. Lu, Wan and Liu (1999 cited in Amine et al, 2012) suggested that multimedia enables learning through exploration, discovery, and experience. With multimedia, the process of learning can become more goals oriented, more participation, flexible in time and space, unaffected by distances, and suitable for individual learning styles and can increase collaboration between teachers and students. They can be fun without fear of inadequacies or failure. Hubbard (2005) also reported on his study that multimedia software and web sites developed by educators offered a range of new opportunities for learners to develop listening proficiency in the target language.

Attending schools in Thailand sometimes worried parents as they may face problems such as their working time limitation, school distance, or even the belief of school conveniences for students' academic activity. Many of them sent their children to Special Purpose Schools as they believe that schools will help their children in many aspects (Kongsakul et al, 2013).

Special Purpose Schools were founded with the purpose to honor the King and the Royal family for their support in education in every part of Thailand. There are four schools in the Northern region: Kanchanapisek Wittayalai School Uthai Thani and Phetchabun, founded to honor the King, Srinagarindra the Princess Mother School Phayao, founded to honor the Princess Mother, and Princess Chulabhorn College Chiang Rai, founded to honor the Princess Chulabhorn. Special Purpose Schools, originally, focus on motivating and developing student to be a well-manner lady and gentleman, excel in studying, able to live in diversity, and able to use technology and foreign language (Office of Basic Education Commission, 2014).

However, with time restriction for students to do daily activities provided by school, they appeared to have problem in their learning management such as time for their review or homework and outside classroom learning (Dulyakasem, 2003). Since Special Purpose Schools operate the system as a boarding school, they have got a set of budget to invest on learning materials and multimedia due to their school emphasis especially in science, math, ICT, and

English. Therefore, researcher aims to explore and study of what and how English teachers of those Special Purpose Schools apply multimedia to help students in English classroom.

Objectives
1. To explore the types of multimedia used in English classroom.
2. To study the use of multimedia in English classroom.

Methodology

Participants

The participants in this study were 20 Thai EFL teachers who all are currently teaching at a secondary school level in Special Purpose Schools in Northern region: 2 teachers from Kanchanapisek Wittayalai School Uthai Thani, 5 teachers from Kanchanapisek Wittayalai School Phetchabun, 7 teachers from Srinagarindra the Princess Mother School Phayao, and 6 teachers from Princess Chulabhorn College Chiang Rai.

Research Instruments

There were two instruments used in this study. They were (1) Questionnaires on the use of multimedia in English classroom and (2) Semi-structured Interview questions on the use of multimedia in English classroom.

Questionnaires on the use of multimedia in English classroom were developed through the following four steps. The first step was to review previous studies and related studies focused about using multimedia in English classroom. The second step was to develop the questionnaire using the seven types of multimedia in second language learning in young learner discussed by Parker (2008). The third step was to validate the contents of the questionnaire by three experts in the field of language teaching using the IOC index. The fourth step was to revise questionnaires as per the suggestions from the experts.

Questionnaires on the use of multimedia in English classroom is a 5 rating scale questionnaire consisted of three parts which the first part is used to ask the samples to provide their personal information. The second part is used to explore types of multimedia used in English classroom through the frequency used which consisted of 7 categories and 84 items of multimedia used in English classroom based on the work of Parker (2008). There were (a) audio and video technologies, such as audiocassettes and television; (b) computers; (c) the Internet; (d) game and simulation technologies; (e) small mobile computers and electronic books (e-book); (f) MP3 Players, cell phones, and other new technologies; and (g) specialized electronic tools. And the third part is used to find multimedia used in learning activities of the four skills.

In order to gather qualitative information from the participants, the semi-structured interview questions were conducted to explore their perceptions and opinions on how

teachers apply multimedia in classroom. In this step, the seven questions were designed and adapted from the questionnaire but added the following 'how' questions to invest and explore more details in each topic. The questions were sent to three experts to check the contented validity. The three experts gave some comments for revising the questions. They suggested to add more 'Yes-No' questions so that the researcher could add more follow-up questions and it would be easy for the participants to answer. For the semi-structured interview questions, two teachers of each school who had difference in time of teaching experiences were selected to involve in the interview, in order to merit their differences in their opinion towards using multimedia in English classroom.

Data Collection Procedures

The researcher reviewed on background of the study and literature in order to design questionnaires with following topics: multimedia, principles of using multimedia in learning, the use of multimedia in English subject classroom, and related studies. Data collection was carried out using questionnaires and semi-structured interview.

Questionnaires were distributed to 20 Thai EFL teachers teaching at a secondary school level in Special Purpose Schools in Northern region. To explore more on teachers' perspective and opinion about using multimedia in English subject classroom, two participants of each school were selected considering the different years of teaching experiences to explore in-depth opinions on the use of multimedia in their English classroom . The interview was in English as they mentioned that they usually used English while teaching in class. The interview lasted from 10 – 15 minutes. All the interviews were recorded.

Data Analysis

To answer research question 1: *'What types of multimedia used in English classroom?'* participants were asked to rank how they often used multimedia in class. The data were analyzed to find the mean scores of each type of multimedia that teachers used in English classroom.

To answer research question 2: *'How English teachers use multimedia in English subject classroom?'* the participants were asked to answer the "Yes-No" question: **Are you using multimedia in this activity and what do you use?** and then specified the multimedia types they used in each activity. The data were analyzed using content analysis to find the activities and multimedia they used for teaching English language skills and using percentile to find the number of the participants who used the multimedia.

Results

The results of this study could be summarized into two aspects 1) results from the questionnaire which include the samples of the study and the answer to the research questions, and 2) results from the semi-structured interview.

Results from the questionnaire

Samples of the study

The number of samples was 20 Thai EFL teachers in Special Purpose Schools in Northern region included 10% of male and 90% of female. Age of the teachers was in the range from 26 years old to the late of 50. In terms of experience in teaching, 35% of the participants indicated more than 17 years, 25% showed 0 – 5 years while 40% were separated to 6 – 11 years and 12 – 17 years equally.

For highest degree earned, 54% of the participants graduated in Master's degree and 45% went to Bachelor's degree. The participants are currently teaching in all grades with courses such as Fundamental English, Academic English, Reading – Writing, Listening – Speaking, and English Communication. Lastly, 85% of the participants have participated in the training, workshop, or professional development about using multimedia in classroom. They mentioned course names such as Google Applications for Education, WordPress, On – Demand, Social Media, and e-Book. Only 15% said they have never been on the training about using multimedia in classroom.

The table below presented the summary types of multimedia used in English subject classroom by Thai EFL teachers of Special Purpose Schools in Northern region.

Table 1 Summary types of multimedia used in English classroom

Item	Types of multimedia	Multimedia used
1	(a) Audio and video technologies	Song
		Movie
2	(b) Computers	Microsoft Word®
		Microsoft PowerPoint®
3	(c) The Internet: *Search Engines*	
		Google www.google.com
	Social Network Websites	YouTube www.YouTube.com
	Blogs	Google Sites www.google.com/sites
	EFL Sites	WIKIPEDIA www.wikipedia.org
	Online Chat	LINE
4	(d) Game and simulation technologies	Final Fantasy
5	(e) Small mobile computers and electronic books (e-book)	Notebook
6	(f) MP3 Players, cell phones, and other new technologies	CD player
		DVD player
7	(g) Specialized electronic tools	Text Readers

From Table 1, results from questionnaire showed that from the seven types of multimedia used in English subject classroom – there were (a) audio and video technologies, such as audiocassettes and television; (b) computers; (c) the Internet; (d) game and simulation technologies; (e) small mobile computers and electronic books (e-book); (f) MP3 Players, cell phones, and other new technologies; and (g) specialized electronic tools, it can be summarized that for the first type – audio and video technologies, Thai EFL teachers teaching in Special Purpose Schools in Northern region used song and movie. For computers, they used Microsoft Word® and PowerPoint®. In the Internet type, they applied Google, YouTube, Facebook, Google Sites, BBC, and LINE. In the type of game and simulation technologies, they used Final Fantasy in English classroom. Teachers used notebook along with their teaching for the type of small mobile computers and electronic books (e-book) while in MP3 Players, cell phones, and other new technologies, teachers relied on CD and DVD players. The last type of multimedia was specialized electronic tools and teachers pointed out Text Reader as the multimedia they used in English subject classroom.

The findings from questionnaire and interview indicated the various used of multimedia in English classroom activities for Thai EFL teachers in Special Purpose Schools in Northern region, defined by skills. The summary of the study showed on the figures below.
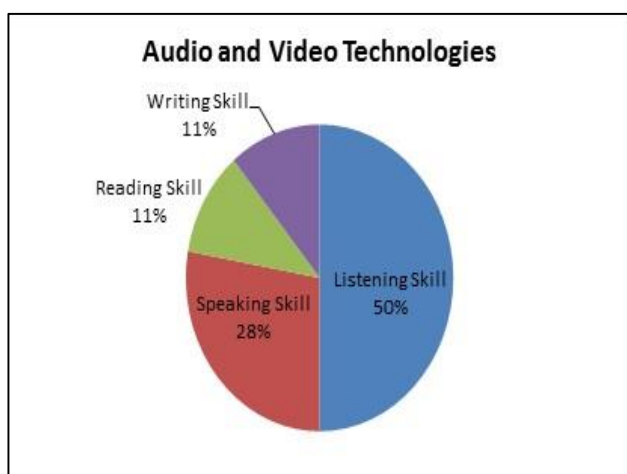

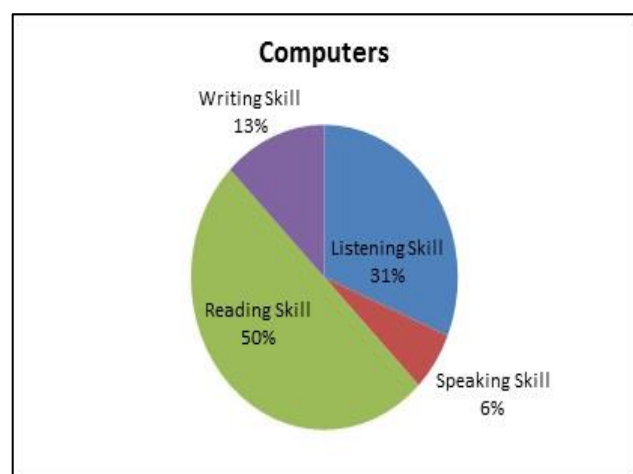**Fig. 1** Using audio and video in English classroom

Fig. 2 Using computers in English classroom

According to fig. 1 it's shown the ratio of teachers using audio and video in English classroom defined by skills. What they applied in classroom were songs, audio files, video clips, and movies. While in fig. 2, it indicated percentile of teachers using computers in English skills which they used programs such as PowerPoint®, Microsoft Word® in English classroom.
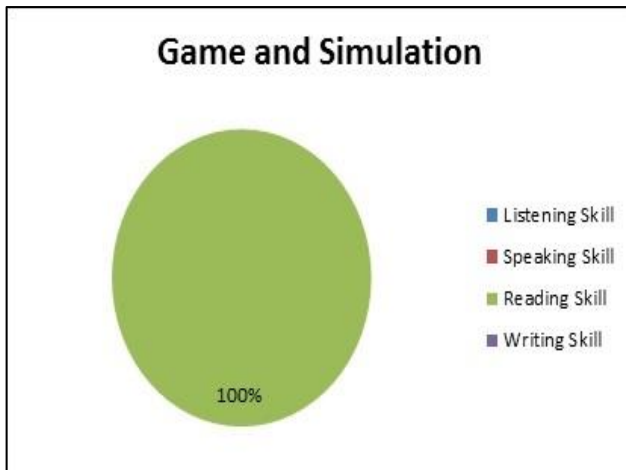
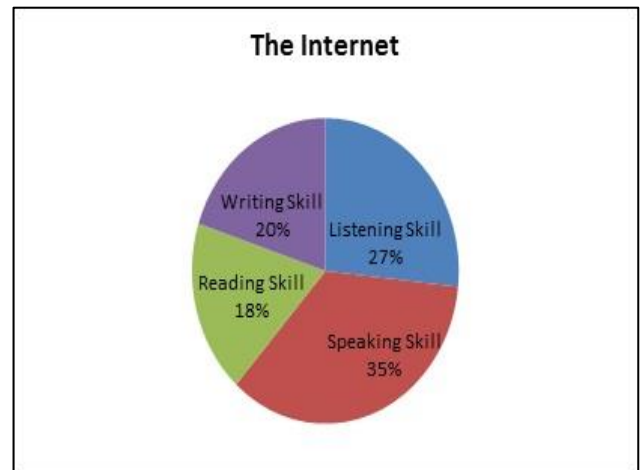**Fig. 3**   Using game and simulation in English classroom   **Fig. 4** Using the Internet in English classroom

Fig. 3 showed that teachers applied game and simulation in English classroom only in reading skill as they used Final Fantasy to have students learn vocabularies from the game while Fig. 4 indicated that teachers frequently used the Internet in English classroom, mostly in speaking skill. Teachers mentioned websites and applications such as Facebook, YouTube, Google Plus, LINE, Tango, Wikipedia, Storybird, BBC, Cambridge, On-Demand, and Video Conference.
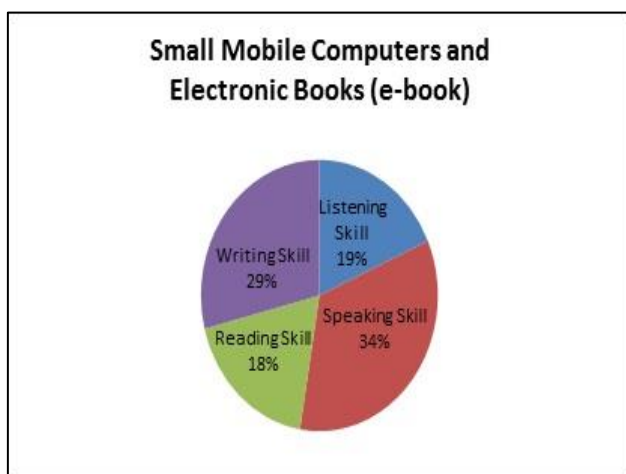

Fig. 5   Using small mobile computers and   **Fig. 6** Using MP3 players, cell phone and
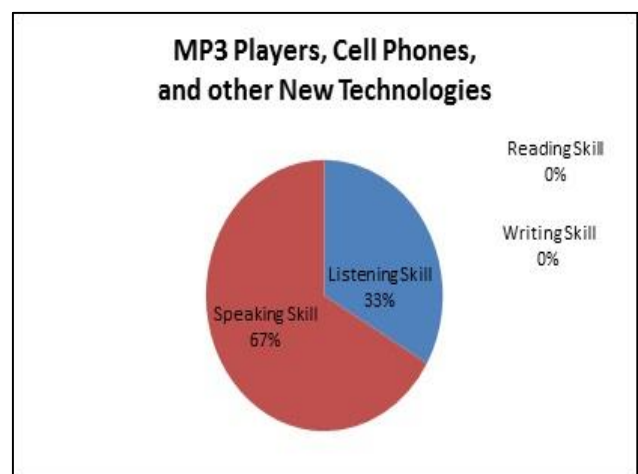Electronic Books (e-book) in English classroom   other new technology in English classroom

Fig. 5 illustrated the use of small mobile computers and Electronic Books (e-book) in English classroom. Teachers applied notebook computer, iPad®, and e-book in their classroom. In Fig. 6, it showed the result that teachers highly used MP3 players, cell phone, and other new technology in speaking and listening skills. They pointed out that they used CD player and cell phone in classroom.
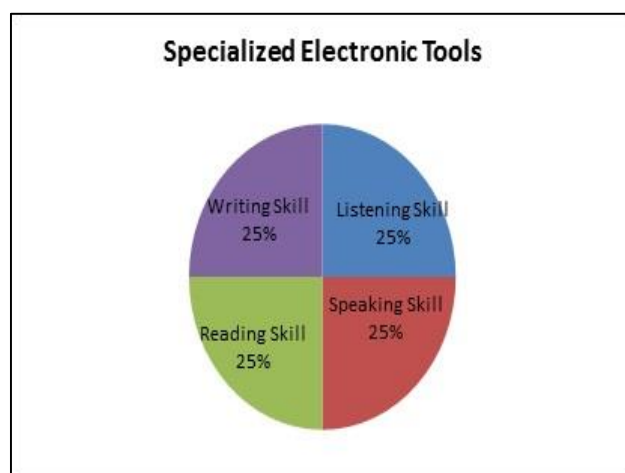
Fig. 7 Using specialized electronic tools in English classroom

Fig. 7 showed that teachers applied specialized electronic tools in English classroom. For this type, teachers mentioned Text Reader and IDP program which is used to enhance students' 4 skills especially vocabulary and sentence structure.

In conclusion to this point, teachers appeared to use types of multimedia more on the Internet, small mobile computers, computers, and audio and video technologies (see fig. 8 below).
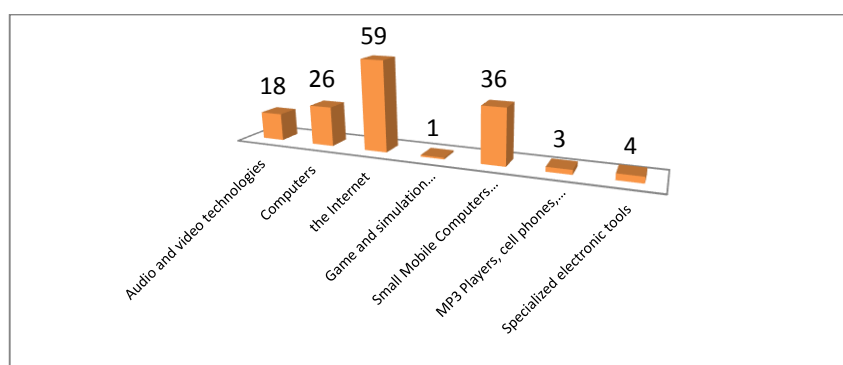

Fig. 8 The use of multimedia in each type

Results from the semi-structured interview

The variety usages of multimedia in English subject classroom activities for Thai EFL teachers were found from questionnaire and interview in Special Purpose Schools in Northern region. For the semi-structured interview, there were eight teachers from all schools participated in the interview selected by the years of teaching experiences difference. From the interview data, it's clear that all the teachers used variety of multimedia in English subject classroom, even they're differences in years of age and teaching experiences. The examples they listed were PowerPoint®, YouTube, search engines, Microsoft Word®, audio files such as songs, notebook, TV programs, and Facebook.

Most of the participants used multimedia in introduction or warm-up stage to stimulate, motivate, and, sometimes, awaken students to participate in class activities. One teacher used LINE to provide feedback to students and some chatted on Facebook with students. They went on the same direction that multimedia helped teachers when they presented new content and lesson to class because multimedia can provide more examples, help students to see clearer pictures of abstract situations, and motivate students on using video clip of native speakers used the language.

When asking about how the students react when the teachers used multimedia in classroom, all of them agreed that their students were happy, excited, and having fun in class. They added more that students were active and showed more interest in that lesson more. However, one teacher mentioned that it depended on the lesson itself. She added that when the lesson was about something entertain such as listening or speaking, they were fun, but when it came to something academic such as grammar points or writing, the multimedia didn't seem to help much.

For the limitations in using multimedia in English classroom, the teachers pointed out to the supportive equipment because the multimedia they used were like audio files, video clip, YouTube, songs, etc. but the equipment they had in classroom, sometimes were not in good condition which led to the problem that teachers didn't want to use multimedia in classroom. One school mentioned about the limited budget they had to invest on personal multimedia stuffs such as notebook, cell phone, or personal hotspot because schools' Internet access was not stable. All teachers mentioned that there was the same rule in all Special Purpose Schools that students were not allowed to bring mobile phone and notebook to schools. That led to the limitation for students when teachers assigned outside classroom homework or task for them. The way to solve the problem was to assign integrated project with other subjects so they can complete the task when they go back home. Therefore, teachers used the benefits of social media websites to create groups to monitor their progression and also used to publish students' work or assignment.

All teachers insisted that schools promoted using multimedia in classroom by providing facilities such as Internet access area, training or workshop on how to use the applications, however, teachers found that it's interesting to use new applications and websites but schools have to provide them enough time to try out and train before using in real classroom. One teacher who had lots of experiences in teaching mentioned that even she was on so many trainings but she still had difficulty in slow using new applications. A teacher stated her difficulty was about choosing appropriate multimedia for her students as there're a lot of resources out there but not all of them could match with all teaching activity. She had to select the level of the language used in the sources to relevant with the students and topic she's going to teach and it took time.

Discussions

The finding from questionnaire on types of multimedia used in English subject classroom showed the relevant to the discussion of Parker (2008) about technology and tools using in second language learning in young learner.

The lists of multimedia the participants mentioned that they used in listening skill learning activities were agreed to what AL-Hammadi (2011) used in the study that he found using multimedia software can develop listening skill and improve listening skill of Saudi Arabia secondary school students. It concurs to the study of Woottipong (2012) who found out the result from the study that using Video Materials in the teaching of listening skills can help students to gain more listening comprehension. As same as Benjarattananon et al (2009) mentioned on their study about activities and materials for developing English listening and speaking skills that song, movie, news, CAI, and EFL Online Courses play important role in developing listening and speaking skills because they allow students to learn English naturally in different situations. This was supported with Odhabi & Nicks-McCaleb (2011) on their study in using video recordings which the result showed that students can review their records of missed classes and help them to prepare for their examination.

In speaking skill learning activities, teachers listed the multimedia which related to what Dudeney and Hocly (2007) suggestion that podcast can use to promote students' listening and speaking skills as they can make their own podcasts. It's supported by Benjarattananon et al (2009) that using EFL Online Courses are currently popular because of its ease to access and they're user friendly. They contained various types of learning activity and motivated students to learn English.

For multimedia used in reading skill learning activities, the results were consistent with the studies of Glenberg, Goldberg and Zhu (2009) who found that computer-mediated helped improving students' reading comprehension while Liu (1994) also found that technology offers tools and opportunities to enhance vocabulary acquisition. In accord with Sukavatee (2007) on her study of the development of the social constructivism blended learning module which the result showed that the SCBLM helped the low reading ability students, improved their reading ability, and was proper for their various collaborative learning behaviors. As same as Lee (2008) and Lomicka (1998) who found that students who had access to computer-mediated foreign language text glosses showed consistently higher levels of vocabulary and reading comprehension. The evidence was supported by Rattanasaeng (2011) on her study of the development of Collaborative Strategic Reading (CSR) instruction in which she applied electronic children's picture books in English class and was found the positive way with high score after using them.

The multimedia used in activity in writing skills supported by the studies of Dudeney and Hockly (2007) reported that the benefit of using Microsoft Word® works well with creative writing because it includes dictionary, grammar, thesaurus, and spell-check options. Agreed by Richard (cited in Ketsmen, 2012) who mentioned using Web 2.0 tools such as LittleBirdTales and StoryBird can be used to create stories in the foreign language and allow students to practice foreign language writing and reading skills. It showed the relevant with the study of Sangcharoon (2007) on her study of effects of web-based learning lesson using blog upon learning achievement and retention in English subject of lower secondary school students which found that the learning achievement and the learning retention in English subject of students after learning by using a web blog was higher than the students who use personal journal blog.

Based on the finding from the semi-structured interview, it's found that using multimedia can help keeping students' attention and interest to the class. Participants also mentioned that using multimedia in English subject classroom motivated students to learn how to use language which had the same agreement as Herron et al (1995) found that using video materials can reduce ambiguity due to the visual support and motivate students to learn the foreign language. The finding was consistent with the study of Lu, Wan and Liu (1999, cited in Amine et al, 2012) who suggested that students can be fun without fear in learning language when they learned with multimedia.

Recommendation

It was recommended that future research should be extended and to include a broader sample of schools and other types of schools besides Special Purpose Schools, teachers, and even on students' attitude of teachers using multimedia in English subject classroom so teachers can meet students' needs on the use of multimedia in English subject classroom. Moreover, the further study in this area could then focus on the effectiveness in using specific multimedia or latest trend of using multimedia in English classroom.

References

AL-Hammadi, F. S. (2011). The Effectiveness of using a multimedia software in developing some listening skills among Saudi secondary school students. *Damascus University Journal, 27*(3), 43 – 86.

Amine, B. M., Benachaiba, C., Guemide, B. (2012). Using multimedia to motivate students in EFL classrooms: A case study of English master's students at Jijel University, Algeria. *Malaysian Journal of Distance Education, 14*(2), 63–81.

Becker, H. J. (2000). Findings from the teaching, learning, and computing survey: Is Larry Cuban right? Paper for 2000 School Technology Leadership Conference, Washington D.C.

Benjarattananon, A., Kaewprathom, S. (2009). Activities and materials for developing English listening and speaking skills. *Journal of Humanities and Social Sciences*, *Prince of Songkla University, 5*(2), 173 – 196.

Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the College Classroom. *International Journal of Technology in Teaching and Learning*, *5*(1), 1-21.

Boulter, C. H. (2007). *EFL and ESL teacher values and integrated use of technology in Universities in the Asia-Pacific region* (Doctoral Dissertation, Queensland University of Technology) Retrieved from http://eprints.qut.edu.au/16525/

Dudeney, G., & Hockly, N. (2007). *How to teach English with technology*. Harlow, England: Pearson Longman.

Dulyakasem, U. (2003). *High demand on sending children to boarding school*. Retrieved from http://www.karn.tv/math/193

Eskandari, Z., & Ebrahimi, N. A. (2013). Effects of computer and multimedia software on Iranian High School Students' learning and perceptions of chemistry classroom Environments. *International Journal of Technology in Teaching and Learning*, *9*(2), 159-172.

Glenberg, A. M., Goldberg, A. B., & Zhu, X. (2009). Improving early reading comprehension Using Embodied CAI. *Instructional Science*, *39*(1), 27-39. DOI: 10.1007/s11251-009-9096-7

Herron, C., York, H., Corrie, C., Cole, S. P. (1995). A Comparison study of the effects of a Story-based video Instructional Package versus a Text-based instructional package in the intermediate-level foreign language classroom. *CALICO Journal*, *23*(2), 281-307. Retrieved 27 July, 2015 from https://calico.org/html/article_118.pdf

Hubbard, P. (2005). A Review of subject characteristics in CALL research. *Computer Assisted Language Learning, 18*(5), 351-368.

Ketsmen, O. (2012). *Technology-enhanced multimedia instruction in foreign language classrooms: A mixed method study* (Unpublished Doctoral Dissertation). University of Nebraska, Nebraska.

King, K. P. (2003). Learning the new technologies: Strategies for success. *Wiley Online Library*. *98*, 49–58. doi:10.1002/ace.99

Kongsakul et al. (2013). A Study on Princess Chulabhorn's college Petchaburi students' attitude towards boarding school. Sa Nguan Ying, School Supanburi, Thailand. Retrieved from http://indystv.weebly.com/

Lee, B. A. (2008). Computer-mediated glosses in second language reading comprehension and vocabulary learning: A meta-analysis. *Computer Assisted Language Learning*. *21*(3), 199-226. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/09588220802090246

Liu, M. et al. (1994). A Look at the research on Computer-based technology use in second language learning: A review of the literature from 1990–2000. *Journal of Research on Technology in Education*. *34*(3), 250-273. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/15391523.2002.10782348

Lomicka, L. L. (1998). To gloss or not to gloss: An investigation of reading comprehension online. *Language Learning & Technology, 1*(2), 41-50. Retrieved from http://llt.msu.edu/vol1num2/pdf/article2.pdf

Mayer, R. E., Johnson, C. I. (2008). Revising the redundancy principle in multimedia learning. *Journal of Educational Psychology 2008, 100*(2), 380-386.

Moreno, R., Mayer, R. E. (2005). Role of guidance, reflection, and interactivity in an Agent-based multimedia game. *Journal of Educational Psychology, 97*(1), 117-128.

Ministry of Education. (2008). *The basic education core curriculum B.E. 2551 (A.D. 2008)*. Bangkok: Kurusapa Ladprao Publishing.

Odhabi, H., Nicks-McCaleb, L. (2011). Video recording lectures: Student and professor Perspectives. *British Journal of Educational Technology, 42*(2), 327-336.

Office of Basic Education Commission, Ministry of Education. (2014). *Announcement for 2014 enrolment of special purpose schools*: Office of plan and basic educational planning. Retrieved from http://plan.obec.go.th/more_news.php?cid=101&filename=index

Office of the Prime Minister, Office of the National Education Council. (1999). *National Education Act 1999*. Bangkok: Printing Press of the Express Transportation Organization of Thailand (E.T.O.).

Parker, L. L. (2008). *Technology-mediated learning environments for young English learners: Connections in and out of school*. New York: Erlbaum.

Rattanasaeng, K. (2011). The development of collaborative strategic reading (CSR) instruction using electronic children's picture books for fifth grade students. *An Online Journal of Education (OJED), 6*(2), 16- 27.

Sangcharoon, S. (2007). *Effects of Web-based learning lesson using blog upon learning achievement and retention in English subject of lower secondary school students* (Master's Thesis). Retrieved from http://cuir.car.chula.ac.th/handle/123456789/19210

Sukavatee, P. (2007). *A development of the social constructivism blended-learning module for enhancing reading engagement and English reading ability of upper secondary Students* (Unpublished Doctoral Dissertation). Chulalongkorn University, Bangkok.

Susikaran, R. S. A., & Phil, M. (2012). *The use of multimedia in English language teaching*. Retrieved from https://sites.google.com/site/journaloftechnologyforelt/archive/3-2-april-2013/1-the-use-of-multimedia-in-english-language-teaching

Thao, V. T. P. (2003). *The contribution of multimedia tools to EFL settings unfamiliar with technology*. Retrieved from http://asian-efl-journal.com/sept_03_sub3vtptp.pdf

Woottipong, K. (2012). Effect of using video materials in the teaching of listening skills for university students. *International Journal of Linguistics*, *6*(4), 200 – 212.