ESL Teachers' Internet Integration for Hearing Impairment Students in a Malaysian Primary School

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ABSTRACT
English language teachers teaching hearing impairment students too are frequently pressured from various quarters to produce excellent grades both in quality and quantity in public examinations by school administrative, parents, district and state education officials as well as the Ministry of Education in Malaysia. Excellent achievements in public examinations and the massive advancement in Information Communication Technology have rapidly transformed the ESL teachers' work culture at present. Hence, these teachers today cannot escape from the fact that many classrooms at present are technologically supported and web-connected to support the 21st century classroom teaching. Therefore, a case study was carried out to investigate the ESL teachers' Internet integration in the classroom from a sociocultural perspective using Gee's D/discourse theory and Social Practice theory. In this study, two ESL teachers teaching in the same hearing impairment school in northern region of Peninsula Malaysia volunteered for the semi-structure interview. They included both male and female teachers. Data were triangulated with observation and document analysis. The findings in this study confirmed that these teachers teaching in this hearing impairment school integrate the Internet for lesson preparation, classroom teaching, to fulfill the requirements from the Ministry of Education and for professional development. The findings of this study have implication for both the ESL teachers as well as teacher educators in Teachers' Training Institutions in Malaysia.

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1   INTRODUCTION

Special education in Malaysia provides educational opportunities for pupils with special needs such as those with hearing impairment through the "Hearing Impaired Students' Program". The students in the hearing impairment schools in Malaysia share the same curriculum with other mainstream students in Malaysian schools. In other words, the hearing impairment students are exposed to the same syllabus and schooling system with the mainstream students in Malaysia. The only difference is the medium of communication. In mainstream classes, teachers convey their lessons verbally but in a hearing impairment classroom, teachers had to convey their lessons using sign languages.

It is undeniable that special education teachers too are pressured from various quarters to produce excellent grades both in quality and quantity in public examinations by school administratives, parents, district and state education officials as well as the Ministry of Education in Malaysia. Students in Malaysian primary schools will be assessed in a public examination called "Ujian Penilaian Sekolah Rendah" (Primary School Assessment Test) after six years of schooling. Excellent achievement in public examinations and the massive advancement in ICT have rapidly transformed the teachers' work culture (Devon, 2000; Nurul Atikah Abdullah, Mohamad Jafre Zainol Abidin, Wong, Omar Majid & Hanafi Atan, 2006; Tsai, 2006; Saeideh Bolandifar, Nooreen Noordin, Parastoo Babashamsi & Nahid Shakib, 2013). Hence, teachers today cannot escape from the fact that many classrooms at present are technologically supported and web-connected to support the 21st century classroom teaching.

Internet utilisation in education has impacted teachers teaching and students' learning drastically regardless of disability, geographical location, language barriers and other impairing factor with the introduction of Frog Virtual Learning Environment program in 2011 (Termit Kaur & Noorma Hussein, 2015). According to Horn and Staker (2011) by 2019, 50 percent of all high school courses are predicted to be delivered in online format. The Malaysian Education Blueprint 2013-2025 declared that the Ministry of Education will focus on ICT-competency training for teachers and gradually improve the computer to student ratio from approximately 1:30 in 2011 to 1:10 by 2020 (Ministry of Education, 2012). This report also confirmed that the Ministry will invest in basic computer devices including low-cost laptops to achieve the 21st century education demands.

Therefore, this explained that the special education teachers are no exception in integrating the Internet for their classroom instruction. Hence, it is important to conduct a study to explore and investigate these teachers' Internet integration in a primary hearing impairment school in Malaysia.

1.1 Theoretical Perspectives

This study was underpinned by Gee's D/discourse theory and Social Practice theory. Gee defines Discourse, with an uppercase D, as

> …a socially accepted association among ways of using language, other symbolic expressions, and 'artifacts', of thinking, feeling, believing, valuing, and acting that can be used to identify oneself as a member of a socially meaningful group or 'social network', or to signal (that one is playing) a socially meaningful 'role' (p. 131).

Therefore, a Discourse is a communal way of thinking, feeling, believing, valuing and acting which is socially acceptable in a community. Gee's D/discourse theory and the Social Practice theory are basically related to these special education teachers' online practices which is highly influenced by their working culture, self-belief, educational background, capability in using sign language and schooling culture. Hence, Internet integration among the special education teachers are embedded in the larger context with broader societal influences, like institutional cultures, medium of communication, students' needs and capability as well as sociocultural contexts, which influence classroom practices in the sociocultural perspective (Tan, 2016).

1.2 Problem Statement

Internet integration in schools continuously fails to meet the targeted expectations in terms of both quantity and quality. It was revealed in the 2013 UNESCO's report that 80% of the schoolteachers spend less than one hour per-week in utilising ICT for classroom instruction. Additionally, this report too found that the ICT utilisation in Malaysian schools has not gone much further than the use of word-processing applications as an instructional tool. Other researchers have also argued that computer usage in schools is limited and, in some cases, almost non-existent (Hew & Syed Abdul Kadir, 2016). This further clarifies that the Internet integration in the Malaysian schools is still at the minimal pace especially in special education classes.

1.3 Research Objective

The objective of this study is to investigate the teachers teaching in a hearing impairment school's Internet integration for classroom teaching and learning process.

1.4 Research Question

This study investigated to what extent do the teachers teaching in a hearing impairment school integrate the Internet for their classroom teaching and learning practices?

2 METHOD

A qualitative approach was used in this study using semi-structured interview, document analysis and observation. In this study, eight special education teachers from a hearing impairment school

in northern region of Peninsula Malaysia volunteered. They included three male and five female teachers in various age groups from the three main ethnic groups in Malaysia, namely Malay, Chinese and Indian. All these eight participants were interviewed on the same day. The female teachers are addressed as F1, F2, F3, F4 and F5 in this study. Meanwhile, the male teachers are addressed as M1, M2 and M3. The interview transcriptions were analyzed using the Thematic Conceptual Matrix (Miles & Huberman, 1994) which transformed the data into dominant themes and patterns. Document analyses were done on their teaching notes and record books at random. Observations were made on the teaching aids that they used for their daily lessons. Photographs were also taken on their lesson notes, teaching aids and record books. Field notes were made based on the observation done on the teaching's aids.

3   RESULTS AND DISCUSSION

The findings in this study showed that all the eight research participants agreed that Internet is a very useful tool for classroom instructions. They mainly utilised the Internet for lesson preparation, classroom teaching, update information required by the Ministry of Education and professional development, which are highly related in improving as well as facilitating their classroom instructions.

3.1   Lesson Preparation

All the research participants agreed that they dedicate almost 70 to 80 % of their time searching and locating information for lesson preparation. This is done during their free periods and after school. According to these teachers, preparing lesson is a heavy task in special education schools as most of the readily available online teaching materials might not match with students' special needs.

All the research participants mainly used the Internet to locate pictures as Teacher F1 claimed that, "kami memang bergantung pada Internet untuk cari gambar muat turun gambar tu…dan lain-lain laa...", which means they solely depends on the Internet to locate and download pictures. These teachers shared their experience that projecting pictures on the screen using LDC safe time on explaining to students using sign language. At the same time, these research participants too claimed that, "download gambar dari net save cost jugak …"(F4), which means downloading pictures from the Internet save cost. The teachers used these pictures to attract students' attention and cater their understandings on the subject matter.

Using video clips is another popular activity among the teachers for lesson preparation. Teacher M2 claimed that he spends hours in searching, locating and downloading video clips with subtitles or translation using sign language at the bottom. This teacher too explained that video clips without subtitles and sign language translation at the bottom is meaningless for these students with hearing impairment.

Teacher F1, F3, F4, M1 and M3 too stated that the activities presented in the textbooks do not match with the students' learning ability. These teachers too explained that students

hearing impairment had slower their learning speed. Teachers need to spend more time to make the input comprehensible for their students. Thus, teachers need to browse through the Internet and locate for simpler exercises and activities which matches well with the students' impairing factor. These exercises are later printed and presented to students in the classroom as their worksheets.

All the eight research participants highlighted that they surf the Internet to check on their emails from time to time. They exchange teaching materials such as worksheets, sample test papers, pass year questions with their friends from the same school and different schools. Hence, in this study, email acts as another platform for these teachers to share the softcopy of some related and relevant teaching resources.

These teachers too utilized the Internet to access Facebook to collaborate with teachers teaching in different parts of the country. Facebook is used as a medium of interaction by Teacher F1, F3, F5, M1, M3 to communicate and exchange suitable teaching materials, ideas and teaching tips with their friends teaching in different schools. They upload pictures on activities conducted in their schools in the Facebook to show case. They too discussed and shared opinions, thoughts and ideas pertaining to teaching and learning activities in Facebook.

3.2   Classroom Teaching

All the research participants agreed that they integrate the Internet for classroom teaching for various subjects such as Malay Language, English Language, Science and Mathematics. However, the integration is only "one-way utilization". One-way utilization means only the teacher uses the computer connected to the Internet for classroom teaching. The teachers project the online teaching materials on the whiteboard. Students were not assigned with any online hands-on activity in the classroom. Hence, in this case, teacher is the active Internet user meanwhile, students are the passive Internet user. Teacher M1, M3, F3, F4, F5 claimed that they usually do not assign students with any hands-on online activities as it is difficult to control their online movements.

Teachers usually used the Internet to assist them in teaching vocabularies, Language Arts, Literature component for both Malay and English Language. All these research participants too agreed that Internet integration for classroom teaching facilitate students' understanding and motivate them to learn besides attracting their attention and concentration on the lesson.

This study showed that Internet integration for classroom teaching ease teacher's teaching burden in a hearing impairment classroom. This is because lengthy discussions or normal explanation using sign language may not always succeed in conveying messages across and could be too time consuming.

However, Teacher M2 and Teacher F2 claimed that the public examination pressure in examination classes hindered them from utilizing some online edutainment materials in their classroom. These teachers are pressured to produce grades and they do not have the opportunity to use the technology for creative online teaching.

3.3   Ministry of Education Requirements

All the research participants used the Internet outside the classroom for several clerical purposes in fulfilling the Ministry of Education's requirements. This includes updating the SPLG or "Sistem Pengurusan Latihan Guru" (Teachers Training Administration System). In this system, teachers update all the courses that they had attended throughout their services and some other personal details such as academic qualification and list of schools that they had served. Teachers too used the Internet to register the Year 6 students for the public examination known as the "Ujian Penilaian Sekolah Rendah" or "Primary School Assessment Test". The class teachers are required to update online students' particulars every year in "Sistem Maklumat Murid" or "Students' Information Details System".

3.4   Professional Development

Teachers teaching in this hearing impairment school always surf the Internet to check on the latest updates on teaching approaches and strategies for these special needs students. Teacher F1 shared that "Bright Hub Education" is a popular website that offer full guidance, teaching methods, tools and strategies online specifically for hearing impairment students. This website too offers classroom management tips online for teachers.

Teacher F2, F3, F4, M1, M2, M3 expressed that they surf the Internet to read on new ideas or teaching tips that they can model in the classroom in order to improve their teaching.

4   DISCUSSION

The findings in this study confirmed that the teachers teaching in this hearing impairment school integrates the Internet for lesson preparation, classroom teaching, to fulfill the requirements from the Ministry of Education and for professional development purposes.

The data collected in this study revealed that some teachers found that online resources aided in preparing students for the public examination. These include downloading sample test papers, pictures, pass year question papers and video clips with subtitles or sign language translations. Similarly, Wright's (2008) finding in Samoa claimed that Internet use aided the teachers' preparation in searching for information on the related subject matter, students' notes and examination tips more efficiently. Overall, the teachers should master the online skills to carefully select online teaching resources that match well with the needs of public examination format types of exercises.

Hence, useful URLs on related specific topics, examination tips and marking schemes would be a great guide in aiding teachers to prepare students for public examinations in Malaysia. It heavily depends on the teachers' online literacy skills and effort to search and locate these useful websites at present. It would be better if the Ministry of Education could prepare a manual guide of all the related URLs for the video clips with sign language translation at the

bottom and subtitles for quick reference. These will save time and effort in searching for online teaching materials for teacher dealing with special needs students nationwide.

However, some teachers found that these online resources do not support in preparing students for the public examination. They still had to adapt and simplify these online teaching resources to match with the syllabus, pupils' learning abilities and students' impairing factors. These teaching materials include the audio songs, video clippings without subtitles or sign language translation, online games with audio instructions and online movies without subtitles.

Therefore, this study brought to light that these teachers only used the readily available online resources, which they adapt and simplify to match with the students' impairing factor and learning ability. They are not up to the level of designing, creating and uploading any teaching resources, which cater the needs of these hearing impairment students on their own to be shared globally. This may due to lack of knowledge and technological skills.

According to a qualitative study done by Mei Lick Cheok, Su Luan Wong, Ahmad Fauzi Ayub and Rosnaini Mahmud (2017), Teacher Professional Development Courses, training, workshops and in-house sharing have been less than successful in helping teachers to be motivated in integrating the Internet for teaching and learning purposes. They claimed that even new teachers, whom the school communities looked up to for guidance on technology use, hardly integrate the Internet for their own classroom teaching. Mei Lick Cheok, Su Luan Wong, Ahmad Fauzi Ayub and Rosnaini Mahmud also stressed that current teacher preparatory programs are not effective enough in equipping these new teachers with the much-needed skills and knowledge required to transform today's classrooms. Therefore, they concluded that teachers today are not taught to handle effective infusion of technology in all subject areas.

Therefore, it is important for Teachers' Training Institutions to revise the courses offered to match with the current demands of school curriculum in fulfilling the 21st century classroom teaching. Teachers' Training Institutions should focused more on equipping the pre-service teachers on technologically skills and knowledge in designing, creating and uploading online creative teaching materials and interactive exercises that match well with the requirements of the special needs students as well. Additionally, these Training Institutions too should play a major role in training both the pre-service and the in-service teachers to create digital public examination materials and upload these materials on the Internet for special needs students as well.

In addition, the Ministry of Education should also look forward of offering more in-service courses for special education teachers in integrating the Internet for classroom teaching. These courses include providing technical skills and knowledge on setting up an online discussion groups for the class as well as creating interactive exercises and setting up online quizzes for students with impairing factors.

In summary, this study unearth that the special education teachers utilised the Internet more for lesson preparation that in the actual classroom teaching. Teachers teaching examination

classes spend less time in integrating the Internet for classroom teaching compared to non-examination class teachers. Teachers teaching in hearing impairment schools need guidance and help in integrating the Internet successfully for classroom teaching from various aspects.

5   CONCLUSIONS

In conclusion, this study brought to light that teachers teaching in this hearing impairment school integrated the Internet essentially for lesson preparation, classroom teaching, update information required by the Ministry of Education and professional development. This study proved that these teachers need further guidance and tips in integrating the Internet more successfully and creatively in classroom teaching.

This study is only limited to a single hearing impairment school in Malaysia. Hence, it is essential to conduct a nationwide study on the Internet utilization for special needs students in Malaysia. The findings of this study have implication for both the special education teachers as well as teacher educators in Teachers' Training Institutions in Malaysia.

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