Internet Integration as Sociocultural Practices by Urban English Teachers in Malaysia

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Abstract

To tap into the potentials of online educational innovations, schools in Malaysia are working towards equipping classrooms with Information and Communication Technologies (ICTs) to carry out technology-mediated web-based lessons. Teachers are also being trained and encouraged to integrate the Internet in their teaching. Where English teachers are concerned, to what extent and how have they used the Internet in their lessons? What are their problems in integrating the Internet in their teaching? This paper explores these questions from a sociocultural perspective, using a part of the data from a survey of 218 urban secondary school English teachers and a further interview with four volunteer teachers to supplement quantitative trends. The findings show that teachers' use of the Internet is mainly confined to appropriating and downloading online materials for offline class use. Actual teaching in a web-connected classroom is limited. Teachers' practices are discussed in relation to sociocultural constraints. These findings carry implications for the 21st century classroom, in Malaysia and other similar sociocultural contexts, where there is expectation for teaching and learning to be mediated by digital technologies.

Keywords: discourses, ESL, Internet integration, Malaysian urban English teachers, sociocultural practices

Introduction

In the 21st century the field of education seems to be abuzz with terms like digital technologies, e-learning, blended learning and web-based instruction. An emphasis worldwide to incorporate Information and Communication Technologies (ICTs) into classroom pedagogy has given rise to much research on technology use among teachers. Needless to say, the studies are wide-ranging and cover not only English teachers but also other subject teachers. Some examples over the years are, preservice English teachers acquiring literacy practices using Web-based tools (Doering & Beach, 2002), teachers' access to ICT infrastructure (Burnip, 2006), teachers' preparation for technology integration (Velazquez-Torres, 2006), Internet-assisted language teaching (Shin & Son, 2007), teachers' online communications (Najafi & Clarke, 2008), teacher acceptance of e-learning technology (Lau & Sim, 2008; Yuen & Ma, 2008; Wong & Teo, 2009), preservice teachers' experience of online pedagogy (Duncan & Barnett, 2010) and their views on the use of video games as instructional tools (Kenny & McDaniel, 2011), knowledge-sharing among teachers (Booth, 2012), teachers' perceptions of e-textbooks in a primary school (Oliveira, Camacho & Gisbert, 2014) and English teachers' choice of online participation that supports teaching, learning and literacy (Rodesiler, 2015). This variety of studies is an indication that teachers are engaged with Internet technologies in their everyday professional practices.

In Malaysia, there are observations that while the school may be equipped with the latest ICT equipment, teachers confine their use to the recording of marks, computing and presenting school statistics and uploading school results for students and parents to access periodically. The Executive Summary (2012) of the Malaysia Education Blueprint for 2013-2025 reported that a survey by the Education Ministry in 2010 found that about 80% of teachers use less than one hour of ICT a week and a third of students perceive their teachers as regular users of ICT. Additionally the summary reported that the 2012 UNESCO review found that ICT usage has not really advanced beyond the use of word-processing applications in the computer as an instructional tool.

The present study moves beyond the use of ICT for school administrative purposes to the integration of the Internet in actual English lesson delivery. This paper reports a portion of the data obtained from a larger study on English teachers' online literacy practices and their concerns over the adoption of the Internet as an innovation in teaching. Using both qualitative and quantitative data, this paper explores the research questions, "To what extent and how have teachers used the Internet in their English lessons?" and "What are the teachers' problems in integrating the Internet in their teaching?" It is hoped that the findings to these research questions will help practitioners, ESL/EFL teachers to be specific, understand the sociocultural constraints they work within and fulfil the expectations of using Internet technologies in their teaching.

Background of the study

The Education IT section of the Asia Pacific FutureGOV (2013), a large body that specialises in public sector organisations covering government, education and healthcare in Asia, is filled with news emphasising that ICT remains a priority in education. Going digital in teaching is not just about using the computer. It includes operating in a webbed environment for mobile learning, online assessment and interactive learning within a learning management system. It encourages students and teachers to collaborate and share knowledge using

technological innovations, emerging technologies and widely accessible information online. Advanced technology such as cloud computing is explored for its educational benefits.

From a policy perspective, Leu, Kinzer, Coiro and Cammack (2004) have described a range of public policy initiatives related to the Information Age by governments around the world. The implementation of such policies in countries like the United Kingdom, the United States, Finland, Australia and New Zealand show these governments' emphasis on the type of knowledge, skills and values of a literate person in the contemporary digital world.

Likewise Malaysian schools have advanced in the use of technology in classroom instruction. To ensure that no school is left behind in this age of digital technologies and global connectedness, millions of dollars have been spent on establishing Smart Schools (Smart School Project Team, 1997). The Smart School project is a flagship project, under the Multimedia Super Corridor (MSC) program launched in the early 1990s, to produce a technologically literate workforce.

Consistent with the MSC program, in the 2005 Budget, RM16.3 billion was allocated to the Ministry of Education to create a knowledge-based society and to intensify the use of ICT in schools (Kumar, Raduan & D'Silva, 2008). The latest ICT in education policy (Frost & Sullivan, 2010) reflects the reality of the prevalence of ICT in everyday experiences and current views of learning, knowledge and knowledge transmission within the new information age. The policy recognises the need to prepare school experiences that are relevant and sufficiently equip students for living in the 21st century. ICT is recognised as an education enabler. Its use is facilitated by the teacher who creates the opportunities for students to access information and increase their understanding and learning.

With more budget on hardware, software and training, Malaysian teachers experience greater expectations to integrate technology in their pedagogy. However they have to realistically work with constraints in the system of education and context of schooling. In the bureaucratic organizational structure of the education ministry, teachers constitute the lower echelon of members tasked with implementing curricular innovations. They are also under pressure to maintain, if not improve, school statistics in high stakes examinations. These are some forces within the institution and society affecting the extent of teachers' use of networked technologies in the classroom.

Theoretical perspectives

From a sociocultural perspective, Internet use among teachers for teaching purposes is viewed as part of their online literacy practices. Teachers' classroom practices are embedded in the larger context, thus enabling us to study how broader societal influences, like institutional cultures and sociocultural contexts, impinge upon what happens in the classroom. It enables us to go beyond merely observing and documenting what technological skills the teacher possesses and uses to enhance teaching and learning.

In the present study, when Internet integration in teaching is constructed as a practice we try to understand the teachers' technologically-mediated teaching and learning activities in the light of the dominant Discourses (Gee, 1996) in Malaysian society. 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)

A Discourse is a collective way of "thinking, feeling, believing, valuing, and acting..." that is socially acceptable and signals membership in the society or a social group. Within a society, Discourses are multiple and can be overlapping or conflicting. While not using the uppercase D for discourse, Pennycook (1994) draws our attention to the discourse of English in a local second language context intersecting with discourses of, for example, "pop culture, national culture, capitalism, colonialism and education" (p. 132). An understanding of the interplay of these discourses can help us see how English is taught and produced in the ESL classroom.

The conceptualization of discourses is particularly useful and interesting in informing teachers' practices in regard to how and how far the Internet was employed. Problems, constraints and concerns raised by teachers show them operating from overlapping discourses. In particular English teachers' practices (that is, their thinking, feeling, believing, valuing, and acting) in the digitally connected world can be explored using the local discourse of examinations (Koo, 2004; Tan & Miller, 2007).

Using a sociocultural practice or discourse lens to interrogate technological practices among teachers is rather uncommon. An example is a study by Lim, Lee and Hung (2008) who traced the learning trajectory of a pre-service teacher in the integration of ICT in Singapore and showed "how social contexts afford or constrain teachers' actions and behaviour" (p. 225). This qualitative study stands in contrast to the majority of studies that survey teachers' views and use of technology and report statistical findings. Some examples are, studies reporting the positive outcomes of ICT integration in an educational setting (Mas Nida, Moses & Wong, 2009; Goos, 2005), challenges and barriers to ICT use (Baslanti, 2006; Chong, Horani & Daniel, 2005; Garcia-Valcarcel, Basilotta & Salamanca, 2014) and trends in teacher practices in school (Boakye & Banini, 2008; Iyamu & Ogiegbaen, 2005).

Other than studies reporting trends, the literature also shows small scale studies documenting individual teachers teaching or experimenting with specific networked technologies in their own place of professional practice. For example, the Journal of Adolescent & Adult Literacy has been publishing classroom-based studies in the United States that examine a diverse range of teaching ideas mediated by the Internet (cf. Johnson (2010) on teaching with authors' blogs; Rance-Roney (2010) on using digital storytelling technologies; Smythe & Neufeld (2010) on teaching and learning with podcasting; Schillinger (2011) on shared reading and writing on a Wiki; Ehret & Hollett (2013) on composing with iPods). In contrast there are relatively fewer studies reported in the Asian context. A few stand out, for example, using blog tasks to teach writing to a group of Japanese university English language learners (Fellner & Apple, 2006); learning outcomes and students' perceptions of online writing in a blended learning setting which used forums, blogs and wikis (Miyazoe & Anderson, 2010); writing output, fluency and accuracy of a group of secondary school ESL students participating in a wiki project in Hong Kong (Mak & Coniam, 2008) and stances in argument in school-administered online forum postings by 15-year-old students in Singapore (Chandrasegaran & Kong, 2007).

In the field of ELT in Malaysia, ICT has also emerged as a topic for presentations in conferences. They are indications of rare, small scale use and investigation of ICT in teaching. Some of the topics in recent Malaysian English Language Teaching Association (MELTA) International Conferences are

1. Engaging learners in literacy lessons through digital resources: Experiences from Malaysian Classrooms
2. Language learning through literature via WebQuests
3. ESL undergraduates' attitudes toward using Wiki and Skype in completing project-based tasks
4. Facebooking in today's net generation: Does it have a place in language classrooms?
5. Tweeting the words away: Rethinking the use of Twitter in vocabulary learning
6. Enriching the learning of English language through 'whatsapp'

Against the background of the different types of studies presented above, the present study discusses some statistical findings of English teachers' Internet integration in teaching and supplements these with anecdotes from interview data. All these are interpreted within the framework of sociocultural practices.

Research methodology

This study had both quantitative and qualitative approaches. To investigate English teachers' use of the Internet for teaching and the problems faced, a questionnaire was employed. This was adapted from a questionnaire used to survey urban Malaysian adolescents' online literacy practices (Tan, Ng & Saw, 2010). To supplement quantitative trends, an in-depth interview was conducted with four volunteer teachers. Each interview lasting about one hour was audio-taped and transcribed for analysis. The interview data were analysed using thematic analysis (Miles & Huberman, 1994).

The target respondents were English teachers in urban secondary schools. However due to time constraints and logistics, only the states of Penang and Perak were involved. Purposive sampling was used to choose only schools within an urban location. Permission to conduct this study was obtained at three levels: the Education Planning and Research Division under the Ministry of Education, the Penang State and Perak State Education Departments and the school principals.

The questionnaires were handed out to the English teachers in the schools sampled. At the end of the questionnaire participants were invited to contribute further in an interview. Interested participants gave their name and contact number.

Findings and Discussion

A total of 220 participants comprising 115 English teachers from 12 urban secondary schools in Penang and 105 teachers from 12 urban secondary schools in Perak were involved in the study. After the initial cleaning up of the data, two participants had to be taken out due to incomplete data. Thus data for this study came from 218 practising English teachers. Like their students, Malaysian teachers come from different cultural and ethnic backgrounds. The three major ethnic groups were represented in the study in the proportions of 40.8% Chinese, 30.2% Malay and 27% Indian. The remaining small proportion of 2% was from minority groups.

Female teachers (75%) far outnumbered male teachers (25%), reflecting a generally female-dominated teaching profession. The teachers ranged from less than 30 years old to more than 51 years old. The specific age categories were 30 years old and below (n=15), 31-35 years old (n=24), 36-40 years old (n=25), 41-45 years old (n=45), 46-50 years old (n=60) and 51 years old and above (n=49).

To answer the first research question of "To what extent and how have teachers used the Internet in their English lessons?" types and frequency of Internet-related activities for teaching English are discussed below. To answer the second research question of "What are the teachers' problems in integrating the Internet in their teaching?" descriptive statistics of teachers' multiple responses are presented.

Use of the Internet in teaching

The data showed that 120 out of 218 participants (that is, 55%) reported that they used the Internet in their teaching. This covered direct use, as in connecting the English classroom to the Internet in real time, and indirect use, as in using pre-downloaded online materials. For direct use, the lesson was either conducted in the school computer lab or in the classroom with the teacher's laptop connected to the school wifi. This practice is not common as shown later in the statistics on frequency. For indirect use, the range of activities outside the classroom is as shown in Figure 1.
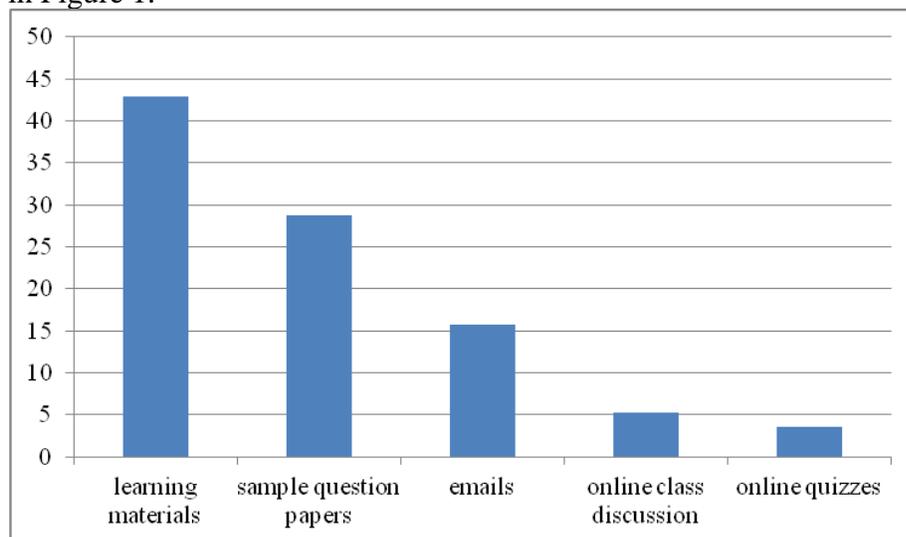

Figure 1 Teaching related activities outside the classroom

The teachers basically downloaded learning materials (42.9%), looked up sample question papers online (28.7%), used emails to communicate with students (15.8%), set up a class discussion (5.3%) and administer online quizzes (3.6%). These activities fell under two main types: sourcing of information (the more dominant type) and interacting with students online. It is not surprising that the teachers relied on the Internet for learning materials and sample questions that will benefit the students directly and prepare them for their examinations. This is part of the discourse of examinations surrounding secondary school education in Malaysia.
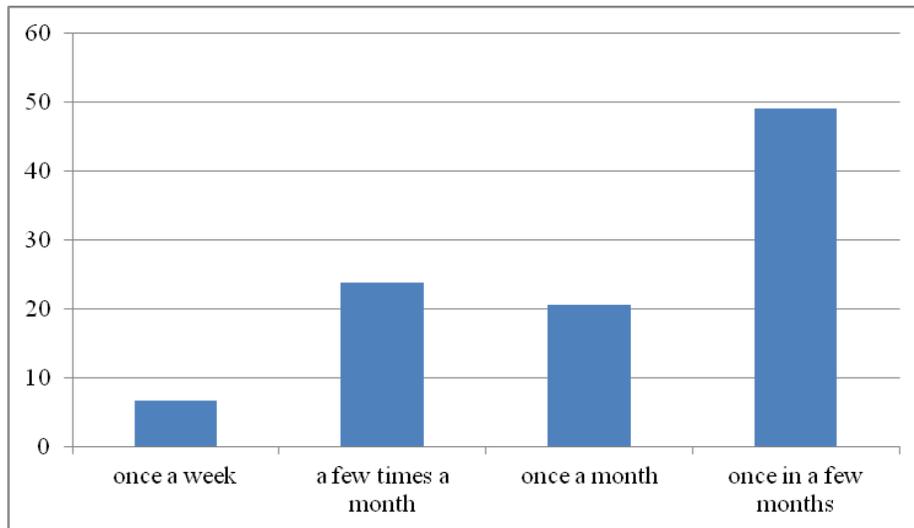
Figure 2Frequency of conducting online lessons

As shown in Figure 2, in terms of conducting an online lesson in the classroom, the frequencies are as follows: 6.6% for once a week, 23.8% for a few times a month, 20.5% for once a month and 49.2% for once in a few months. Therefore while teachers claimed they used the Internet in the classroom (or the computer lab) they rarely did so. Similarly a survey of teachers in eight representative schools in Ghana (Boakye & Banini, 2008) reported that 71% of the teachers never used the computer for teaching in class and never took their students to the computer lab while 49% used ICT for lesson preparation. The main conclusion was most of the teachers seemed unprepared to integrate ICT in their practice. Another study by Iyamu and Ogiegbaen (2005) among 200 Nigerian social studies teachers found that all the participants were in the category of non-users of educational technology with 92% stating that they never used any form of technology in class.

Overall, in the present study, 73.3% of teachers in the youngest age category of 30 years and below indicated they used the Internet in their teaching while a lower figure of 50% of teachers in the age category of 46 years and above did so. This is consistent with the observation that younger teachers are more at home with the contemporary digital and Internet culture and participate in many technology-mediated activities.

Problems with Internet integration in the classroom
As mentioned earlier, conducting a lesson in a networked environment was rather rare. This is closely linked to the problems indicated by the teachers in Figure 3.
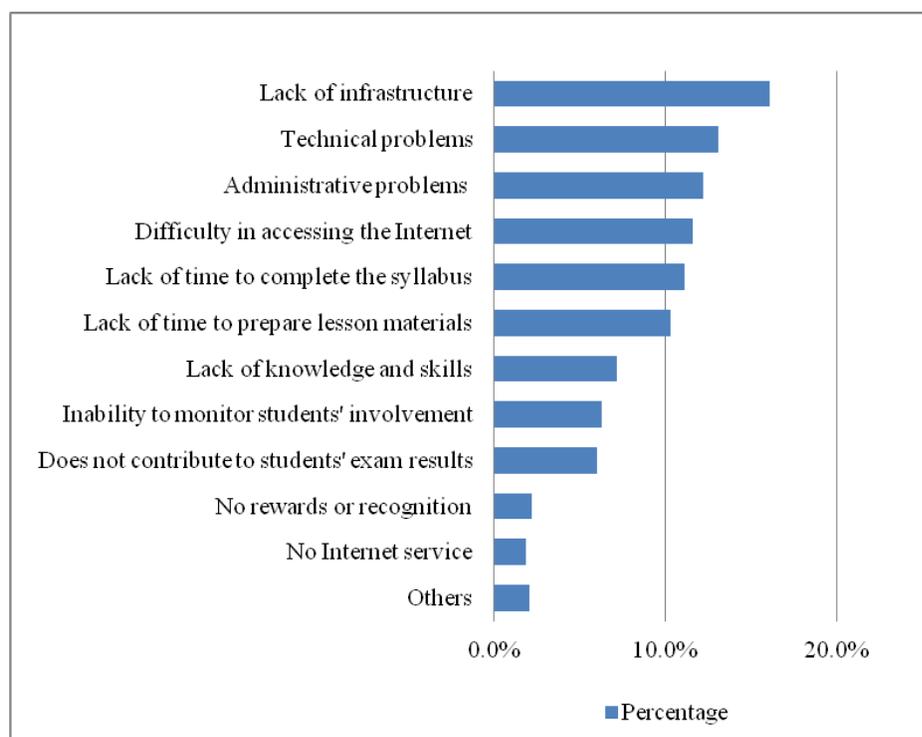
*Figure 3*Problems cited for lack of use of the Internet in the classroom

As shown in Figure 3, the lack of infrastructure seemed to be the main problem. The average urban school usually has a computer lab or resource room equipped with 30 to 40 computers. This facility is shared by the whole school which may have an enrolment of 2000 students. The demand for the lab comes from teachers across the curriculum as well as class levels. Moreover, for the teacher to conduct a lesson here, an entire class has to be displaced. Not surprising all this has led to administrative problems that concern not only booking, scheduling and use of the computer lab but also maintaining a facility serving so many people. Teachers also faced technical problems with connectivity, hardware breaking down, software incompatibility, obsolete equipment and others. Clearly adequate funds and a fulltime technician were needed to keep the lab functional. However such matters are not within the control of the school principal. The Malaysian Education System is a highly centralised system under the charge of the Ministry of Education. Education in Malaysia is a federal responsibility. This means that to solve problems with funding and infrastructure the school has to endure long bureaucratic procedures. Alternatively, some schools turn to their own Parent-Teacher Association for support.

Other than infrastructure, another set of problems concerns time. The discourse of examinations dictates that the school's core business is to train students to do well in school and nationwide public examinations. Thus completing the syllabus and practising for examinations are prioritized. Most teachers struggle to finish the syllabus and with weaker students, this is an even more difficult task to accomplish. Teaching and learning using the Internet in formal classroom instruction seemingly has little value. As seen in Figure 3, about 6% of the respondents felt that integrating the Internet is a problem because it "does not contribute to the students' examinations." Parents, students and even principals may query the immediate benefit of conducting a web-based lesson. Moreover, unless the teacher has quick access to a repository

of readymade materials on the Internet, a lot of time is needed to search for and appropriate online materials for class use. This problem could be linked to "lack of knowledge and skills" especially with the older teachers.

The difficulties expressed in this study are similar to those found in Garcia-Valcarcel, Basilotta and Salamanca's (2014) study among teachers from schools well-developed with ICT infrastructures in Castile and Leon. These Spanish teachers also listed problems like teacher unpreparedness, intense efforts required of teachers, resistance from families who preferred the traditional curriculum and technical problems.

Supplementary qualitative findings from interview data
While a number of themes were generated from the interview input using Miles and Huberman's (1994) thematic analysis, only the following three related themes that have emerged are deemed relevant for the purpose of this paper. Multiple readings of the interview transcripts included a constant comparison of input across four volunteer teachers (A, B, C and D) as well as with quantitative results of the questionnaire. Excerpts are presented as they are, that is, voices of Malaysian ESL teachers. The aim of the themes is to help explain some of the descriptive findings given above.

Theme One: "Not truly online."
The combined problems on infrastructure support were possible reasons why many teachers resorted to bringing to their class downloaded hardcopies, the closest they could get to "using the Internet" in teaching. As Teacher A put it,

"We only have one computer lab with 40 computers and then not everything is accessible... . So if you were to take the students to the computer lab, by the time you get them to settle down you have only 10 to 20 minutes. So not really practical *lah*. So mostly we adapt everything ready, we print or we prepare slides and bring to class... . You take from your source *lah*... . You don't bring online activities... . (The class is) not truly online."

Teacher A found it not practical to conduct a web-based lesson involving real-time online participation of her students. She could not "bring online activities" to class but only adapted online materials for classroom teaching.

A tactical approach was to have the whole class share the teacher's laptop, as explained by Teacher B, "I brought my laptop into the class... . So, what I did is I sit down. I said (to the class), 'Come two-two, three-three.'... So I let them see and then after that I downloaded some of the poems and...so we just practised." Teacher B was referring to how she used pre-downloaded video clips on choral speaking competitions on YouTube to introduce the topic. She could not project the images on a big screen as there was no supporting equipment in the classroom. So in twos and threes, students took turns to watch the clips on her small laptop screen.

Another common approach was to set assignments which required surfing the Internet for ideas and information. This was done outside of school in the students' own time. Teacher C explained,

"You get them to read more because they don't read books and magazines. Yesterday I gave them a TIME magazine to show some arr, a story of a lady who

lost her nose, in Afghanistan. So, I told them, 'Go back home and log in and see what else you can know about Afghanistan.' So next week I can know whether they have done it or not."

This approach saves class time and taps on students' online skills and interests. But it requires close monitoring by the teacher to ensure that every student carries out the task independently and benefits from it.

Theme Two: "Very, very truthfully got no time."
Teachers in the study also found it time consuming to prepare a lesson that utilizes the Internet. For Teacher C, to find the appropriate materials, "You have to take the initiative to look up and sometimes I... I tend to spend hours and hours looking at various websites." Teacher D felt that the teacher must be "a frequent user" and "must know which website to go to… ." Otherwise he would be "looking for a needle in the haystack." Teacher A also felt that one should be purposeful and skilful, "First, you must know what you're looking for and then know what you want to do. And then, you have to click and search."

Pressed for time to cover the set syllabus for examinations, Teacher B admitted that "Very, very truthfully got no time. Got to finish the syllabus, want to make sure they understand the format of exam." In the Malaysian context finishing the syllabus and familiarizing students with examination formats are crucial (Tan & Miller, 2007). As indicated in Figure 3, there are teachers who felt that integrating the Internet in the classroom did not count in the examinations. In preparing students to sit for their English papers (set based on standard syllabi and marked using known criteria), textbooks, practice books and past-year exam series are crucial, rather than the Internet. Therefore as long as the system of education remains an exam-oriented one and success is determined largely by high stakes examinations, web-based teaching and learning will not (and cannot) be prioritized by the school, parents or teachers.

Theme Three: "... we close one eye ..."
All four teachers concurred that while the Internet was a useful one-stop resource centre to help their students complete their English assignments for continuous assessment purposes, the work turned in was sometimes plagiarised. However the practice was not checked. For example, Teacher C said, "I know the whole block they copied from the Internet but it's just that when I was filling in their marks, it's so near to the exam, so I have no time to address it" and Teacher D confessed he did not warn his students about plagiarism in their first project but "after this I'll give them another one which I'll caution them about plagiarism... ."
Teachers are held accountable when students do not submit their work on time. Teacher B explained the practical reality of continuous assessment in this way,

"... we just want the (students') work to be done, our work to be arr short and sweet, I suppose... . Until the last moment, the teachers are after them... . So arr, the teachers are just happy you take, paste or something there and then we give you a mark...we are just happy for that."

We see teachers here having the unenviable task of chasing students for their work. Sad to say, to accomplish their part, teachers compromise on honesty and quality of work.

An added reason for overlooking plagiarism is related to students' proficiency levels. With the weaker students, Teacher A did not want to,

"... dampen their spirits, because they bring something and then we reject and reject. These are the students who never bring things. So if they bring something it's good enough. So with them we close one eye *lah*. We accept. But the smarter ones and the average ones we are a bit strict."

In the Malaysian ESL school context, there are many students struggling with English. For them, locating the appropriate websites and putting things together, even with other people's words, are high hurdles. Therefore some teachers tend to accept their work and ignore pointing out their breach of ethical values in academic writing so as not to "dampen their spirits." Even among the better students, one wonders how seriously plagiarism is treated, given the pressure on teachers under time constraints to report good grades for their numerous students.

Conclusion

This article has highlighted some patterns and issues of Internet integration in the classroom practices of a group of English teachers within the sociocultural context of ESL teaching and learning in Malaysia. Obstacles to conducting an online lesson are contributed mainly by the lack of infrastructure, technical and administrative problems and time constraints. Furthermore, in their preoccupation with examinations and grades, teachers hardly have any time left to explore enhanced teaching and learning in an online environment. While Internet use in the classroom is limited, teachers do direct students to useful websites and set homework tasks that require browsing, reading and downloading of information. Teachers also appropriate materials online for classroom use and indirectly model the use of the Internet for school purposes. To promote Internet integration in instruction, some steps can certainly be taken.

Internet integration in classroom teaching is clearly constrained by the emphasis on high stakes examinations. However with the shift in emphasis towards School-Based Assessment in recent years, more autonomy can be given to teachers to realise the potentials of web-based teaching and learning. Proper guidelines on online assessment tasks accompanied with clearly articulated rubrics and grading schemes are crucial to guide and motivate teachers to plan and conduct online lessons effectively.

The more techno-savvy teachers should be encouraged to share their online teaching ideas with others. It would be fitting to have their contributions stored in an online repository, accessible to a local network of teachers from one school or a group of participating schools. This could really save teachers time in searching for materials developed according to the specifications of the English syllabus in Malaysian schools to suit local needs. Perhaps there are isolated cases of English teachers uploading useful ideas. There should be efforts to pool these teachers together to create the repository.

Other than showcasing teachers' innovative ideas in a repository, practising teachers should be encouraged to carry out action research to try out innovative ideas among their own students. For example, they could teach their writing class using an online writing tool that they have personally developed (e.g. Nagaletchimee, 2014; Tan-Ooi & Tan, 2013). Findings of such small scale studies disseminated in local seminars, conferences and publications can increase

awareness of online practices in the classroom. Research can strengthen teachers' confidence in integrating the Internet in their teaching as well as suggest solutions to overcome problems arsing from the discourse of examinations.

Another issue concerns teachers' substantive knowledge (Katyal, 2010), more specifically, their conceptual understanding of teaching and learning in digital environments. The present study shows that teachers are at best encouraging the students to use the Internet as a source of information. They do not seem to see students' online practices within bigger issues like student autonomy, critical reading and plagiarism. These forms should be made relevant to the Malaysian teacher education programs and ICT training courses. It is not so much ICT competencies but rather a deeper understanding of as well as concern for educational, social and ethical issues arising from an Internet-based classroom that should challenge our teachers.

Finally, it is appropriate to discuss some limitations of this study which open up possibilities for future research. The study only focused on 218 secondary school English teachers from 24 urban schools in Perak and Penang. English teachers in rural schools have not been represented in this study for the reason that urban schools are more likely to have Internet connections and the potential for conducting web-based lessons. Given the difference between urban and rural school cultures, web-based teaching and learning in rural schools necessarily requires a separate study. To get the larger picture, this study can be duplicated among other groups of English teachers teaching different grades, across diverse educational contexts and geographic locations. Admittedly, documenting the voices of only four teachers is insufficient albeit a good start. Thus future studies should attempt to obtain representative voices from a variety of respondents.

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