International Journal on E-Learning Practices
Volume 3, 2016

http://www.edututorial.net/ijelp

ISSN 2289-4926

PENERBIT UNIVERSITI MALAYSIA SABAH
Kota Kinabalu • Sabah • Malaysia
http://www.ums.edu.my
2016

A Member of the Malaysian Scholarly Publishing Council (MAPIM)

Typeface for text: Times New Roman
Text type and leading size: 11/13.2 points
Published by: Penerbit Universiti Malaysia Sabah
Tingkat Bawah, Perpustakaan
Universiti Malaysia Sabah
Jalan UMS
88400 Kota Kinabalu, Sabah

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About the Journal
The International Journal on E-Learning Practices (IJELP) (ISSN 2289-4926) is an international peer-reviewed journal. It is also the latest flagship journal of Universiti Malaysia Sabah (UMS). IJELP is the 12th journal of UMS since its establishment on 24 November 1994. IJELP is published once a year. IJELP is published in English and it is open to all local and international authors.

Goal of IJELP
The primary goal of IJELP is to publish and share all forms of e-learning practices among e-learning practitioners around the world.

Quality
We aim for high quality journal publishing. We strive to ensure a decision for a paper submission not later than 12 weeks from the date of submission.

Vision
The journal aspires to be internationally recognised as one of the leading e-learning practices journals.

Aims and Scope
IJELP is an online open access journal aimed at disseminating and sharing of e-learning practices to worldwide audience. IJELP accepts manuscripts in the area and sub-area of e-learning such as teaching and learning with technology, mobile learning, e-learning technology and innovation, multimedia-based learning, Computer-Assisted Language Learning (CALL), best practices in e-learning using social networking, PLE, management, assessment, administration and leadership. The journal aims to be indexed by SCOPUS (Elsevier) and EBSCO after six periodic issues are published.

Editorial Statement
The International Journal on E-Learning Practices (IJELP) (ISSN 2289-4926) is an official journal of Universiti Malaysia Sabah. IJELP is managed by the Faculty of Psychology and Education (FPE), UMS.

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EDITORIAL PREFACE

Welcome to Volume 3, 2016 of the *International Journal of e-Learning Practices* (IJELP). IJELP is one of the printed and online open access journals published by Universiti Malaysia Sabah, Sabah, Malaysia. IJELP is aimed at sharing and disseminating e-learning practices such as teaching and learning with technology, mobile learning, e-learning technology and innovation, multimedia-based learning, Computer-Assisted Language Learning (CALL), best practices in e-learning using social networking, PLE, management, assessment, administration and leadership to worldwide audience.

For Volume 3 of IJELP, we have a selection of articles covering a number of stimulating topics related to corpus linguistics, particularly in the use of computer software to analyse a corpus of interesting data in Vietnam; through to the use of Web 2.0 tools such as Web-Based Text-To-Speech Tool to improve pronunciation and error correction. This volume also showcases studies involving the use a mobile application as an online supplementary listening tool; the use of blog and WhatsApp for developing story writing and Collaborative Writing among Second Language Learners Using Google Docs in a Secondary School Context. It also highlights a case study on learning English with technology; science teachers acceptance towards Microcomputer-Based Laboratory; the use of TAM to explore Pre-Service Teachers' perception Towards Online Learning. We are confident that you will find this eclectic selection of topics both beneficial and enlightening for your research and professional development.

We would like to take this opportunity to express our heartfelt thanks and appreciation to a number of blind reviewers who have contributed their valuable time and effort in reviewing and proofreading the articles that were submitted for consideration. We owe a great deal to all authors who have contributed and supported IJELP all this while. We hope to seek your continued support and assistance in helping us to publicise IJELP to your colleagues, friends, and graduate students.

Sincerely,
Volume 3, 2016

Editor-in-Chief
Dr Denis Lajium

Analyzing Modality Expressions as Hedges in English Discourse: A Corpus-based Approach

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ABSTRACT

This paper aims at investigating the communicative purpose of different forms of hedges in English discourse under the umbrella of corpus-based analysis. Hedges are expressions showing the speaker's tentativeness, indirectness and modality in speech communication. The two research corpora of British and American ambassadorial speeches are compiled to provide the data source and the software package of Wordsmith 5.0 is used to achieve statistical data for a comparative analysis of hedges in the research corpora. The results of this research show that most hedges occurring in ambassadorial speeches are in patterns with modal lexical verbs, modal adjectives and modal adverbs as intensifiers and downtoners. Hedges in patterns with modal lexical verbs and modal adjectives occur with higher frequency in the American ambassadorial corpus while more hedges with modal adverbs as intensifiers and downtoners are found in the British ambassadorial corpus. As such, it can be claimed from the data analysis in this research that American ambassadors appear to be more personal and subjective, whereas British ambassadors seem to be more tentative and objective in the use of modality expressions as hedges in their speech delivery.

Keywords: corpus-based approach, corpora, modality expressions, hedges, discourse analysis

INTRODUCTION

Hedges are linguistic devices, i.e., understatements, used to convey purposive tentativeness and vagueness in communication. These are tools that the speaker adds to the proposition to make the utterance more acceptable to the hearer. Actually, hedges create no information for the sentence but they increase the capability of acceptance and reduce the risk of negation. As such, hedges are important devices to the discourse by their overall effect on the implication or the message of the text.

This domain has been the interest of ongoing research by a large number of linguists, pragmatists and discourse analysts. The term hedging was commenced into the field of linguistics by Lakoff (1972) in which hedges are associated with unclarity

or fuzziness, as Lakoff (1972) claims "for me some of the most interesting questions are raised by the study of words or phrases whose job is to make things more or less fuzzy". According to Myers (1988) scientists do not always want precision in all situations. "We sometimes want to be vague" and thus, hedges are among the safest ways to show our vagueness and tentativeness. However, as observed in linguistic research, the term hedging has now been widened to cover a number of interrelated concepts, not only vagueness and tentativeness but also indetermination, indirectness, approximation, etc. (see Brown & Levinson, 1987; Hyland, 1996; Vazquez & Giner, 2008).

Therefore, hedges can be seen as important tools used for "projecting honesty, modesty and proper caution in self-reports and for diplomatically creating space in areas heavily populated by other researchers" (Swales, 1990). They are linguistic devices used to indicate a lack of complete commitment to the truth of the proposition, a desire not to express the commitment categorically (see Hyland, 1996) and to allow the speaker the greatest liberate in performing actions and making decisions. It is possible to purport that hedges are expressions of indetermination, indirectness, vagueness in communication. Among linguistic theories closely related to the issue of hedging, modality can be seen as a framework for the analysis of linguistic expressions denoting the domains of the speaker's attitude as mentioned above. Furthermore, in this study the way to approach such modality expressions is under the umbrella of corpus-based analysis. As such, this study presents results of an investigation into modality expressions used as hedges in British and American ambassadorial speeches under the method of corpus-based analysis.

CORPUS LINGUISTICS

The school of corpus linguistics developed over recent decades with new computational generations has brought considerable influence to linguistic studies. In the presentation of "historical background" of corpus linguistics, Leech (1991) highlights the 'first generation corpora', as early as Randolph Quirk's plan for the Survey of English Usage (SEU) Corpus in 1959, and soon afterwards with the Brown Corpus compiled by Nelson Francis and Henry Kucera in 1961. These are followed by the Lancaster-Oslo/Bergen (LOB) Corpus 1970 – 1978, and the London Lund Corpus (LLC) 1975. In the 1980s a wide range of English corpora were compiled for specialised purposes.

In the 1990s 'second generation mega-corpora' became available. Among these are the Cobuild Corpus, the Longman Corpus Network (LLELC, LSC and LCLE), and typically the British National Corpus (http://www.natcorp.ox.ac.uk) (see Aston and Burnard, 1998; Leech et al., 2001), the International Computer Archive of Modern English (ICAME), http://www.hd.uib.no. Stubbs (1996) makes use of four major 'computer-readable corpora' of spoken and written English (LLC, LOB, Longman-Lancaster corpus and The Bank of English) in his study on the semantics of different levels of 'texts, text

types, text corpora and social institutions'. Other large corpora of written and spoken English can be seen in Aijmer and Altenberg (1991), Hunston (2002) and Meyer (2004).

Leech (1991) suggests the 'third generation' corpora, claiming that "it would not be impossible to imagine a commensurate thousand-fold increase to one million million words corpora before 2021". Corpus linguistics has become quite popular as a methodology in language study. This approach has been widely employed in several areas of linguistic studies such as in dictionary compilation, e.g., Longman Dictionary of Contemporary English 3rd edition (1995), Collins COBUILD English Dictionary (1995); and in writing grammar reference books, e.g., Biber, Johansson, Leech, Conrad and Finegan et al., (1999).

AN OVERVIEW OF MODALITY

The term 'modality' has long been used by philosophers, logicians and linguists to refer to a range of aspects in logic and language. Although it has been studied since Aristotle's time, the formal theory of modality "was revolutionized in the 1960s" (Kaufmann et al., 2006: 71). Since then there have been a range of approaches to modality, leading to a wealth of publications referring to both the semantic and pragmatic features of this domain. However, it is also its diversity and broad sense that makes it difficult to delineate modality in appropriate and relevant terms.

As such, different studies with different structures and aims have approached the notion of modality from different angles. Consequently, there have been a variety of approaches to the theoretical description and analysis of this domain. Some are grammar-centred, (e.g. Givón, 1982, 1990; Bybee et al., 1994; Bybee and Fleischman ed., 1995); while others are semantically oriented, centring on ideas of modal notions, showing the speaker's attitude towards the information presented in the proposition (Palmer, 1990; Coates, 1983, 1995; Facchinetti et al., 2003; Frawley, 2006). In addition, recent approaches to modality have been modified by critical analyses of the basic semantic dimensions and propose a "nomenclature" of modality categories (Bybee, 1985; Bybee et al., 1994; Bybee and Fleischman, 1995 among others). There are further additional notions and subcategories in the manifestations of modality such as subjectivity vs. objectivity; and performativity vs. descriptivity.

Therefore, the 'many-faceted features' of modality, together with linguists' different views, make it a highly diverse object of study. Van der Auwera and Plungian (1998: 80) claim that "modality and its types can be defined and named in various ways. There is no one correct way". Nuyts (2006: 1) also claims that "modality turns out to be very hard to delineate in simple, positive terms". As a result, it is relatively difficult to give a stable and clear definition that can cover all these related dimensions of modality.

Perkins (1983: 1 – 4), when presenting the five principal ways that distinguish his approach from Lyons' (1977) and Palmer's (1979) views in defining modality, states that: "in spite of the vastness of the available literature, it is by no means easy to find out what modality actually is". Likewise, conducting research on modality "is very similar to trying to move in an overcrowded room without treading on anyone else's feet" (Perkins, 1983: 4).

Although previous studies on modality diverge in different ways with suggestions for other alternative divisions of modality, the major interest that scholars share is in the taxonomy of this domain. That is to say the common thing that can be seen from prior theoretical approaches to the domain of modality is to reflect multi-faceted relationships between the speaker's attitude and the proposition; between the proposition and the objective reality; and between the speaker and the addressee in terms of the basic semantic categories of modality. The framework of modality meanings can be set up as in Table 1 below.

Table 1 Theoretical framework of modality meanings

<table>
<tr><th rowspan="2">Other alternative divisions of modality</th><th colspan="3">The basic semantic categories of modality</th><th rowspan="2">Authors</th></tr>
<tr><th>Epistemic</th><th>Deontic</th><th>Dynamic</th></tr>
<tr><td>Discourse-oriented</td><td></td><td>obligation, permission</td><td></td><td>Palmer (1986)</td></tr>
<tr><td>Subject-oriented</td><td></td><td></td><td>ability, volition desirability</td><td>Palmer (1974)</td></tr>
<tr><td>Intrinsic</td><td></td><td colspan="2">obligation, permission, volition, desire, ability, intention, willingness</td><td rowspan="2">Quirk, Greenbaum, Leech (1985)</td></tr>
<tr><td>Extrinsic</td><td>certainty, possibility, probability, likelihood, prediction</td><td></td><td>Ability</td></tr>
<tr><td>Theoretical</td><td>certainty, possibility, probability, likelihood, prediction</td><td></td><td></td><td rowspan="2">James (1986)</td></tr>
<tr><td>Practical</td><td></td><td colspan="2">wish, regret, obligation, permission, ability, desire, intention, willingness</td></tr>
<tr><td>Agent-oriented</td><td></td><td colspan="2">obligation, root possibility ability, desire</td><td rowspan="2">Bybee and Fleischman (1995)</td></tr>
<tr><td>Speaker-oriented</td><td></td><td colspan="2">Imperatives, permissives, Optatives</td></tr>
</table>

It can be seen from the theoretical analysis of modality that no matter what ways of reorganisation are suggested for modality categories, the common factor is that modality can be viewed as a device in spoken communication conveying the three basic dimensions of modality including (1) epistemic: the speaker's attitude in assessing the truth value of the proposition in degrees of certainty, possibility, probability, and likelihood; (2) deontic: the speaker's intervention in the speech event by imposing obligations, and giving or declining permission; and (3) dynamic: the speaker's emotional expressions such as wish, regret, desire, ability, intention, and willingness. As such, the alternative divisions of modality (as shown in Table 1) can be seen to originate from the basic dimensions of epistemic, deontic and dynamic modality. These are combined to form an overall picture of modality meanings.

It can be seen in Table 1 that although there are a variety of ways in approaching other alternative divisions of modality, the distinction of modality meanings in such divisions is not clear-cut because there is overlap in the elements of the theory. Therefore, it can be argued that these proposed dimensions of modality cannot be used as a replacement for the basic categories of *epistemic*, *deontic* and *dynamic* modality.

As observed in these theoretical elements, the sense of epistemic modality remains unchanged whereas the other alternative divisions are mainly proposed merely to cover the meanings of modality in paired comparisons, and within each pair there is an overlap of the dimensions with each other. As such, there is no consensus on how the set of modality dimensions should be characterised and each of them is identified separately with specific meanings which are not in themselves sufficient to replace the basic dimensions of modality. Therefore, it can be argued that the three basic dimensions of modality remain more prominent than the other alternative divisions. The *epistemic-deontic-dynamic* scheme can be considered as the framework for the analysis of MMs collected from ambassadorial speeches.

With regard to linguistic forms of modality, there seems to be a tendency for most accounts of modality in English to be central to the use of the modal auxiliaries (see Coates, 1983; Perkins, 1983; Quirk et al., 1985; Leech, 2003) and semi-modals (see Bybee et al., 1994; Krug, 2000; Leech and Smith, 2009). However, the linguistic expression of modality is actually marked through a wide range of other syntactic structures and lexical items (see Hoye, 1997; Nuyts, 2001). Consequently, the sense of modality is expressed not only by the main verbs (including modal auxiliaries or other modal lexical verbs) but also by other non-auxiliary modals such as modal adverbs, modal adjectives or modal nouns. In addition modality is expressed through the whole sentence (see Palmer, 1986: 2) or a finite or non-finite clause (see Halliday, 1994: 89; Nuyts, 2001: 29).

REVIEW OF CORPUS-BASED RESEARCH ON MODALITY

Corpus-based methods have been employed to provide data for comparative analyses of frequencies and semantic categories in studies on the English modal verb forms. However, such studies as Kennedy (1998: 195) claim "have been rare because of difficulties in getting corpora which contain similar text types or were compiled at a similar time". Thus, in this section an overview of some corpus-based research on modality is presented as a guideline for the analysis of modality expressions as hedges in the research.

Among the early corpus-based studies on modality, Coates (1983) provides a comparative analysis of the frequencies and semantics of ten modal auxiliaries occurring in the London-Lund corpus of spoken British English (BrE) and the LOB corpus of written British English. Collins (1991) compares modality in an Australian English corpus with that in British and American English (AmE) corpora based on parts of the LLC, LOB and the Brown corpora. Kennedy (1998) considers the use of modal verbs in the London-Lund corpus and the LOB corpus claiming that while some modal verb forms like *need, ought, must, should* and *can* are the most frequently used in root meanings expressing obligation, necessity and possibility, others such as *may*, *will*, *would* and *could* are mainly used to express epistemic meanings (i.e., degrees of certainty) and hypothetical meanings. The common factor that can be gleaned from such studies is in the comparative analyses of the frequency use of modal verbs in categories of root, epistemic and hypothetical meanings in different varieties of English.

Recent corpus-based studies on modality, i.e., Krug (2000), Leech (2003), Leech and Smith (2006, 2009) have been central to changes in the English modals. Krug (2000) in his study on "emerging modals and emergent grammar" suggests that a change in the English modals is under way, the quasi-modals have become modalised and are assuming the typical features of central modals. Leech (2003), in a corpus-based study on the changes of modal auxiliaries in the two British corpora (LOB and F-LOB), claims that "the English modal auxiliaries as a group have been declining significantly in their frequency of use" (2003: 223). Leech and Smith (2009: 175 – 195) propose an explanation for grammatical changes in BrE and AmE with the main focus being on the English modal verbs. In sum, prior corpus-based studies on modality, as discussed above, provide important guidelines for the semantic and pragmatic analysis of modality markers (MMs) in this research.

RESEARCH QUESTIONS

The main focus of the design of British and American ambassadorial corpora was to investigate modality expressions used as hedges in the ambassadors' speeches. The research was designed on the basis of research corpora with the utilization of the software package of Wordsmith 5.0. This research sought to explore the use of modality

expressions as hedges in speeches made by some British and American ambassadors and to contribute to the practice of the discourse community with corpus-based analysis. Therefore, the research gave answers to the following key questions:

1. What forms of modality expressions occur as hedges in the research corpora of British and American ambassadorial speeches?

2. What similarities and differences can be identified from the comparative analysis of modality expressions used as hedges in British and American ambassadorial speeches?

METHODOLOGY

Basic Tasks in a Corpus-based Research

A corpus is obviously the key component in any corpus-based research. Therefore, the initial issue in any corpus-based study is corpus design which determines the effect of any corpus-based research. Although there is a wide range of corpora of different levels of text types, size and style, it would be misleading to treat corpora as the overall storage of any potentiality for linguistic research and then to only the appropriate software to sort out the questions of study from the corpora. Basic principles have to be considered, and careful collections and planning for the organisation of the corpus have to be undertaken before a corpus is designed. Aston and Burnard (1998: 21) indicate two groups of criteria to be considered in designing a corpus: "on the one hand the size of a corpus and of its component parts and on the other the material actually selected for inclusion". Hunston (2002: 25 – 31) proposes four principal issues in corpus design as 'size', 'content', 'balance and representativeness', and 'permanence'.

Basic tasks in the development of corpus-based research as claimed in Leech (1991) are three stages in priority: (i) basic corpus development, (ii) corpus tool development, and (iii) development of corpus annotations. Kennedy (1998) and Leech (1991) suggest that the key points in any corpus design are in the researcher's determinations of what texts are to be included in the corpus to achieve data for analysis; what comparison is intended to be made between corpora; and for what purposes the data is to be obtained. There must be careful planning decisions in selecting texts which promise the potentiality of the research efficiency in order to ensure its appropriateness in terms of variables, e.g., origin, genre, style, authorship, topic, etc.

Building the Research Corpora and Process of Data Collection for Analysis

Typical in building the research corpora and process of data collection for corpus-based analysis are in Biber et al., (1998, 1999, 2002); Keck and Biber (2004); Baker (2006). On

the basis of prior studies on data collection, the steps of collecting British and American ambassadorial speeches and building the research corpora are undertaken as follows.

Firstly, British and American ambassadors' speeches are selected because they are expected to contain expressions of the speaker's tentativeness. Then, patterns of hedges are coded and selected speeches are compiled into two research corpora. One is built from speeches made by British ambassadors to Vietnam (BAC) and the other is from speeches delivered by American ambassadors to Vietnam (AAC). These two research corpora provide data of hedges for quantitative analysis while qualitative analysis is used on selected utterances as illustration.

Table 2 Data on the corpus of American ambassadorial speeches (The AAC)

Ambassadors	Date range	Number of speeches	% of corpus	Number of words	% of words
A01	2000 – 2003	13	19.25%	19,763	18.91%
A02	2003 – 2005	17	23.61%	26,910	25.76%
A03	2005 – 2008	25	35.22%	33,267	31.84%
A04	2008 – 2011	15	21.32%	24,544	23.49%
Total		**70**	**100%**	**104,484**	**100%**

Table 3 Data on the corpus of British ambassadorial speeches (The BAC)

Ambassadors	Date range	Number of speeches	% of corpus	Number of words	% of words
B01	2002 – 2004	20	28.52%	29,599	28.19%
B02	2004 – 2006	17	23.38%	23,638	22.51%
B03	2006 – 2008	17	23.38%	24,920	23.73%
B04	2008 – 2010	18	24.72%	26,845	25.57%
Total		**72**	**100%**	**105,002**	**100%**

In Table 2, the AAC consists of 70 speeches delivered by four American ambassadors to Vietnam in the period from 2000 to 2011, in the size of 104,484 words. The highest proportion of speeches contributing to the compilation of this corpus is from those made by ambassador A03, accounting for 25 speeches, at 35.22% of corpus and 31.84% of total words. The number of speeches delivered by ambassador A01 is the fewest in this corpus, with 13 speeches, at 19.25% of corpus and 18.91% of total words. The number of speeches made by ambassadors A02 and A04 collected for this corpus are 17 and 15 respectively, at 23.61% and 21.32% of the corpus, 26.76% and 23.49% of total words.

Table 3 shows details of the BAC compiled from 72 speeches delivered by 4 British ambassadors to Vietnam in the period from 2002 to 2010, in the size of 105,002 words. Ambassador B01 contributes the highest proportion of the BAC, accounting for 20 speeches, at 28.52% of the corpus and 28.19% of total words. The number of speeches made by ambassadors B04 follows, accounting for 18, at 24.72% of the corpus and 25.57% of words. The speeches made by ambassadors B02 and B03 are equal, each with 17 speeches, at 22.51% and 27.73% of total words, respectively. In general, the size and synchronic range of these transcribed speeches are approximately equal. Therefore, they are expected to be relevant for collecting data and analysing the hedging expressions that the British and American ambassadors perform in their speech delivery.

Actually, the population of ambassadorial speeches selected for the compilation of each research corpus is not very large (70 speeches in the AAC and 72 in the BAC) and the size of the research corpora is also small (over 100,000 words each). However, the two research corpora can be seen representative since they contain similar text types of general speeches delivered by British and American ambassadors to a general audience of Vietnamese users of English at similar times and are thus expected to provide spontaneous data for the comparative analysis and interpretation of hedging expressions.

It is recognised that the research corpora are not all-sided for the genre of ambassadorial speeches in terms of varieties. Actually, samples of ambassadorial speeches for this genre could be collected from more varieties of English other than only those made by British and American ambassadors. However, speeches delivered by non-native English speakers would make this genre of speeches more complicated and thus cause the research corpora to be less representative.

Ambassadorial speeches collected are examined carefully and the patterns of hedges are coded manually. Then, the software package of Wordsmith version 5.0 (see below) is used to provide statistical data of hedges in patterns as coded for analysis. Quantitative analysis shows the difference in frequency of the use of hedges between the corpora of British and American ambassadorial speeches. Qualitative investigation into selected utterances provides illustrations of hedges as well as indicates the major differences between British and American ambassadors in using patterns of hedges in their speech delivery.

The Software Package Used in the Research

Aijmer and Altenberg (1991), Kennedy (1998), Biber et al., (1998), Baker (2006) can be considered as seminal studies on the development of computerised corpora, statistical tools, computer programmes and specialised software packages used for corpus-based studies on issues of authentic language. The software package used for this corpus-based analysis of modality markers as hedges is Wordsmith 5.0 (http://www.lexically.net/

wordsmith), as shown in Figure 1. Particular tools used to achieve statistical data are in terms of wordlist, keywords and concordance lines.

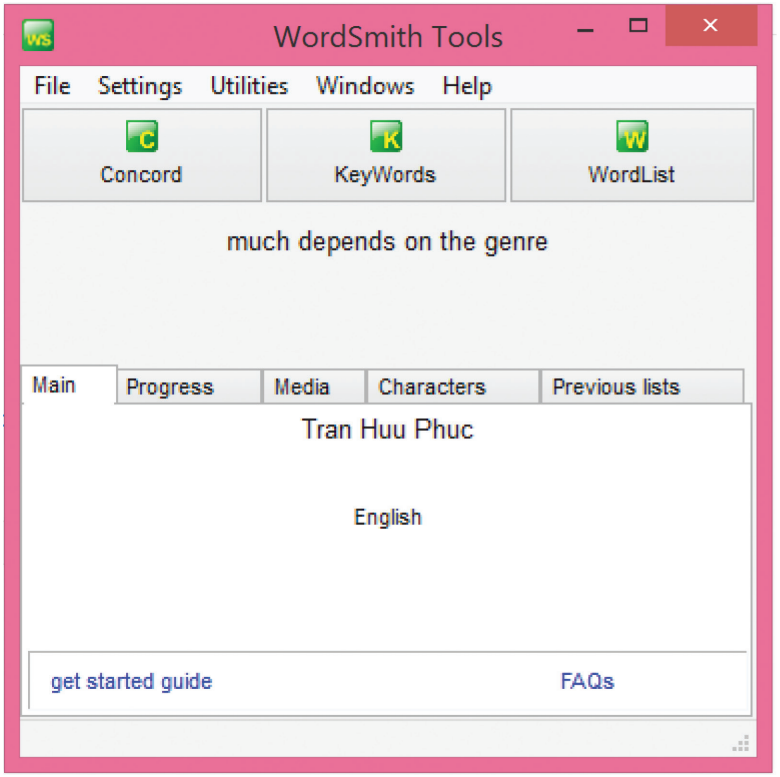
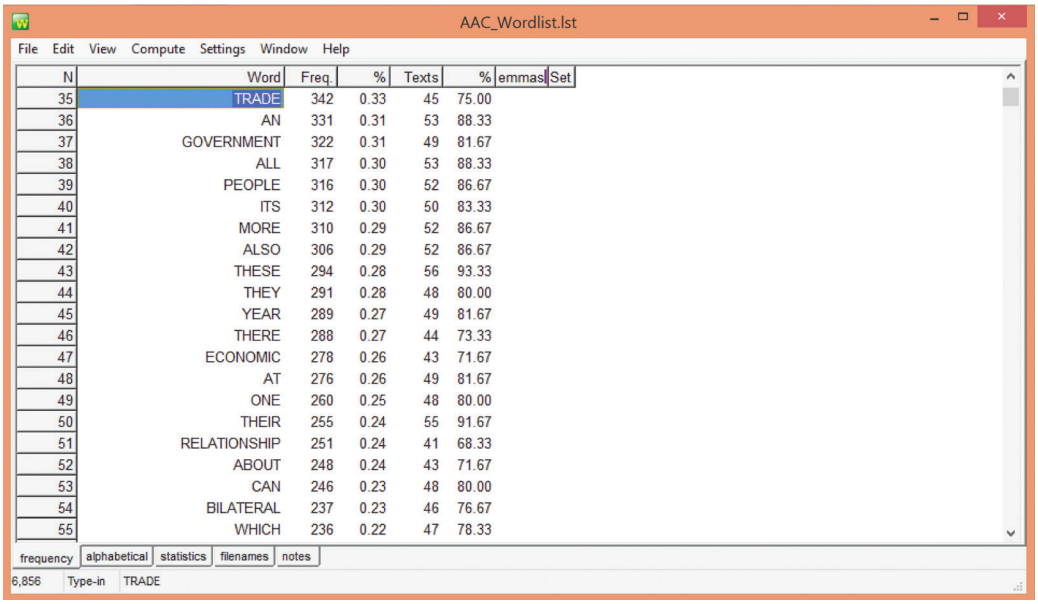


Figure 1 The software package of WordSmith 5.0

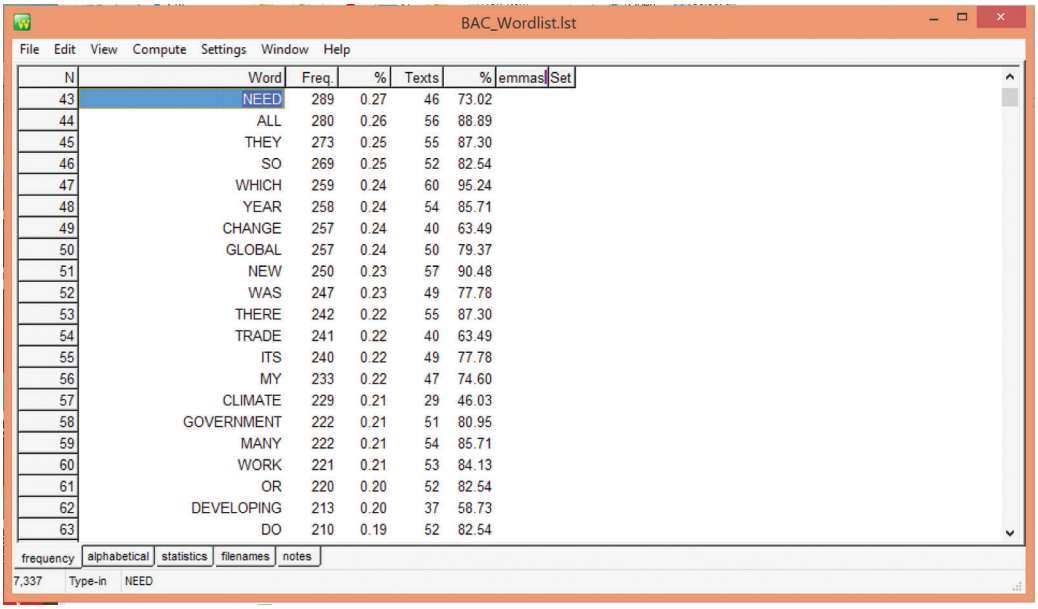
Wordlist

The tool of wordlist (or frequency list) is used to collect statistical data on the frequency of words used in a research corpus, the number of running words counted (tokens) and distinct words occurring in the corpus (types). With the utilisation of this tool, the researcher can find the frequency of the use of words in inverted alphabetical order; identify the keyword; analyse the concordance lines of keywords in a text; compare the pragmatics and semantics of the same word in different text types.



N	Word	Freq.	%	Texts	%	emmasl	Set
35	TRADE	342	0.33	45	75.00		
36	AN	331	0.31	53	88.33		
37	GOVERNMENT	322	0.31	49	81.67		
38	ALL	317	0.30	53	88.33		
39	PEOPLE	316	0.30	52	86.67		
40	ITS	312	0.30	50	83.33		
41	MORE	310	0.29	52	86.67		
42	ALSO	306	0.29	52	86.67		
43	THESE	294	0.28	56	93.33		
44	THEY	291	0.28	48	80.00		
45	YEAR	289	0.27	49	81.67		
46	THERE	288	0.27	44	73.33		
47	ECONOMIC	278	0.26	43	71.67		
48	AT	276	0.26	49	81.67		
49	ONE	260	0.25	48	80.00		
50	THEIR	255	0.24	55	91.67		
51	RELATIONSHIP	251	0.24	41	68.33		
52	ABOUT	248	0.24	43	71.67		
53	CAN	246	0.23	48	80.00		
54	BILATERAL	237	0.23	46	76.67		
55	WHICH	236	0.22	47	78.33		

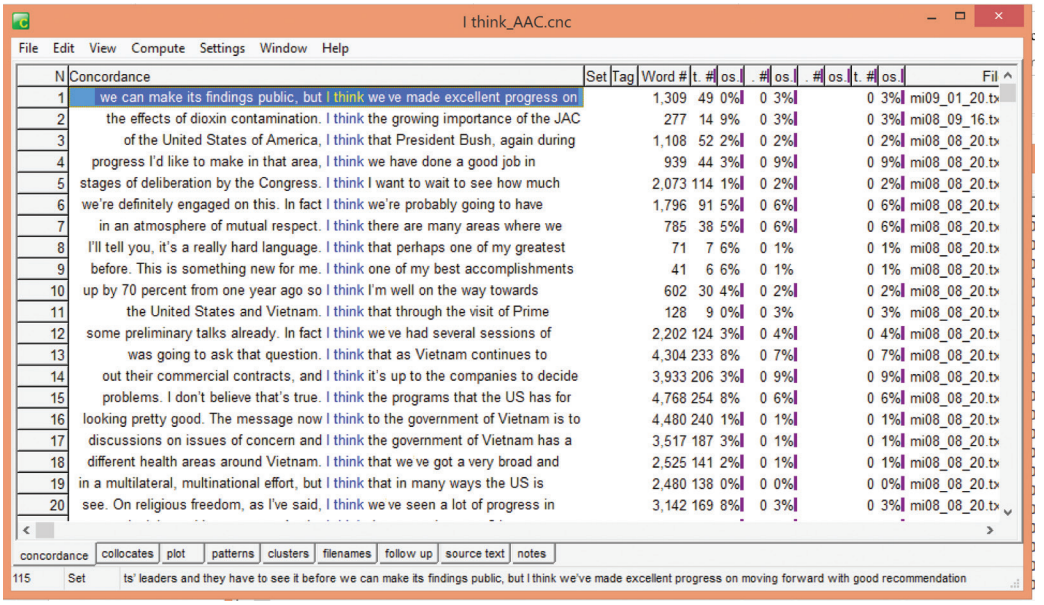
Figure 2 The wordlist in American ambassadorial corpus (AAC)



N	Word	Freq.	%	Texts	%	emmasl	Set
43	NEED	289	0.27	46	73.02		
44	ALL	280	0.26	56	88.89		
45	THEY	273	0.25	55	87.30		
46	SO	269	0.25	52	82.54		
47	WHICH	259	0.24	60	95.24		
48	YEAR	258	0.24	54	85.71		
49	CHANGE	257	0.24	40	63.49		
50	GLOBAL	257	0.24	50	79.37		
51	NEW	250	0.23	57	90.48		
52	WAS	247	0.23	49	77.78		
53	THERE	242	0.22	55	87.30		
54	TRADE	241	0.22	40	63.49		
55	ITS	240	0.22	49	77.78		
56	MY	233	0.22	47	74.60		
57	CLIMATE	229	0.21	29	46.03		
58	GOVERNMENT	222	0.21	51	80.95		
59	MANY	222	0.21	54	85.71		
60	WORK	221	0.21	53	84.13		
61	OR	220	0.20	52	82.54		
62	DEVELOPING	213	0.20	37	58.73		
63	DO	210	0.19	52	82.54		

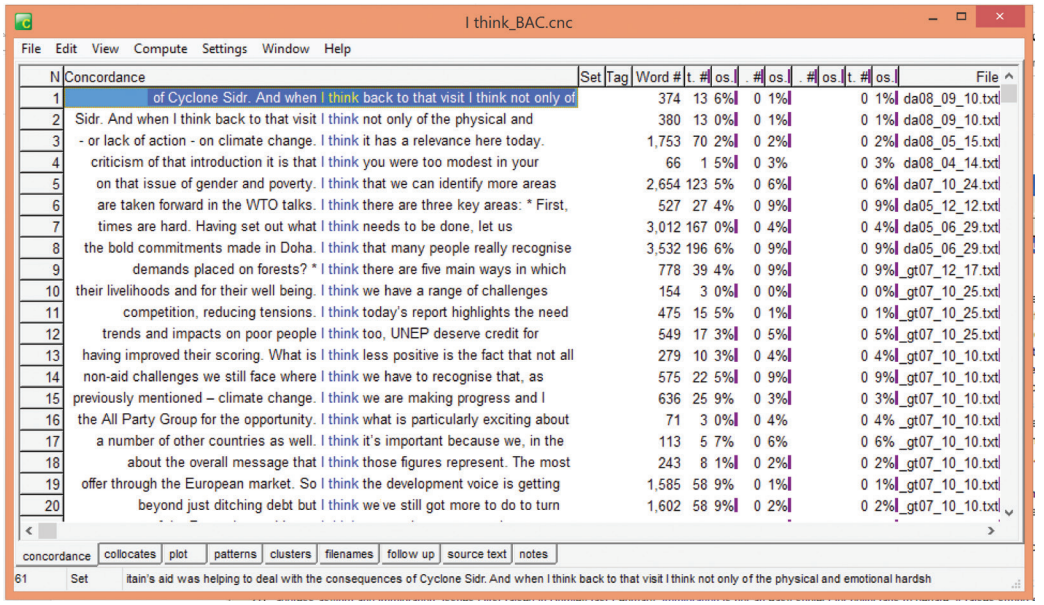
Figure 3 The wordlist in British ambassadorial corpus (BAC)

CONCORDANCE LINES



N	Concordance	Set	Tag	Word #	t. #	os.	. #	os.	. #	os.	t. #	os.	Fil
1	we can make its findings public, but I think we've made excellent progress on			1,309	49	0%	0	3%			0	3%	mi09_01_20.tx
2	the effects of dioxin contamination. I think the growing importance of the JAC			277	14	9%	0	3%			0	3%	mi08_09_16.tx
3	of the United States of America, I think that President Bush, again during			1,108	52	2%	0	2%			0	2%	mi08_08_20.tx
4	progress I'd like to make in that area, I think we have done a good job in			939	44	3%	0	9%			0	9%	mi08_08_20.tx
5	stages of deliberation by the Congress. I think I want to wait to see how much			2,073	114	1%	0	2%			0	2%	mi08_08_20.tx
6	we're definitely engaged on this. In fact I think we're probably going to have			1,796	91	5%	0	6%			0	6%	mi08_08_20.tx
7	in an atmosphere of mutual respect. I think there are many areas where we			785	38	5%	0	6%			0	6%	mi08_08_20.tx
8	I'll tell you, it's a really hard language. I think that perhaps one of my greatest			71	7	6%	0	1%			0	1%	mi08_08_20.tx
9	before. This is something new for me. I think one of my best accomplishments			41	6	6%	0	1%			0	1%	mi08_08_20.tx
10	up by 70 percent from one year ago so I think I'm well on the way towards			602	30	4%	0	2%			0	2%	mi08_08_20.tx
11	the United States and Vietnam. I think that through the visit of Prime			128	9	0%	0	3%			0	3%	mi08_08_20.tx
12	some preliminary talks already. In fact I think we've had several sessions of			2,202	124	3%	0	4%			0	4%	mi08_08_20.tx
13	was going to ask that question. I think that as Vietnam continues to			4,304	233	8%	0	7%			0	7%	mi08_08_20.tx
14	out their commercial contracts, and I think it's up to the companies to decide			3,933	206	3%	0	9%			0	9%	mi08_08_20.tx
15	problems. I don't believe that's true. I think the programs that the US has for			4,768	254	8%	0	6%			0	6%	mi08_08_20.tx
16	looking pretty good. The message now I think to the government of Vietnam is to			4,480	240	1%	0	1%			0	1%	mi08_08_20.tx
17	discussions on issues of concern and I think the government of Vietnam has a			3,517	187	3%	0	1%			0	1%	mi08_08_20.tx
18	different health areas around Vietnam. I think that we've got a very broad and			2,525	141	2%	0	1%			0	1%	mi08_08_20.tx
19	in a multilateral, multinational effort, but I think that in many ways the US is			2,480	138	0%	0	0%			0	0%	mi08_08_20.tx
20	see. On religious freedom, as I've said, I think we've seen a lot of progress in			3,142	169	8%	0	3%			0	3%	mi08_08_20.tx

Figure 4 The concordance lines of 'I think' in American ambassadorial corpus (AAC)



N	Concordance	Set	Tag	Word #	t. #	os.	. #	os.	. #	os.	t. #	os.	File
1	of Cyclone Sidr. And when I think back to that visit I think not only of			374	13	6%	0	1%			0	1%	da08_09_10.txtl
2	Sidr. And when I think back to that visit I think not only of the physical and			380	13	0%	0	1%			0	1%	da08_09_10.txtl
3	- or lack of action - on climate change. I think it has a relevance here today.			1,753	70	2%	0	2%			0	2%	da08_05_15.txtl
4	criticism of that introduction it is that I think you were too modest in your			66	1	5%	0	3%			0	3%	da08_04_14.txtl
5	on that issue of gender and poverty. I think that we can identify more areas			2,654	123	5%	0	6%			0	6%	da07_10_24.txtl
6	are taken forward in the WTO talks. I think there are three key areas: * First,			527	27	4%	0	9%			0	9%	da05_12_12.txtl
7	times are hard. Having set out what I think needs to be done, let us			3,012	167	0%	0	4%			0	4%	da05_06_29.txtl
8	the bold commitments made in Doha. I think that many people really recognise			3,532	196	6%	0	9%			0	9%	da05_06_29.txtl
9	demands placed on forests? * I think there are five main ways in which			778	39	4%	0	9%			0	9%	_gt07_12_17.txtl
10	their livelihoods and for their well being. I think we have a range of challenges			154	3	0%	0	0%			0	0%	_gt07_10_25.txtl
11	competition, reducing tensions. I think today's report highlights the need			475	15	5%	0	1%			0	1%	_gt07_10_25.txtl
12	trends and impacts on poor people I think too, UNEP deserve credit for			549	17	3%	0	5%			0	5%	_gt07_10_25.txtl
13	having improved their scoring. What is I think less positive is the fact that not all			279	10	3%	0	4%			0	4%	_gt07_10_10.txtl
14	non-aid challenges we still face where I think we have to recognise that, as			575	22	5%	0	9%			0	9%	_gt07_10_10.txtl
15	previously mentioned – climate change. I think we are making progress and I			636	25	9%	0	3%			0	3%	_gt07_10_10.txtl
16	the All Party Group for the opportunity. I think what is particularly exciting about			71	3	0%	0	4%			0	4%	_gt07_10_10.txtl
17	a number of other countries as well. I think it's important because we, in the			113	5	7%	0	6%			0	6%	_gt07_10_10.txtl
18	about the overall message that I think those figures represent. The most			243	8	1%	0	2%			0	2%	_gt07_10_10.txtl
19	offer through the European market. So I think the development voice is getting			1,585	58	9%	0	1%			0	1%	_gt07_10_10.txtl
20	beyond just ditching debt but I think we've still got more to do to turn			1,602	58	9%	0	2%			0	2%	_gt07_10_10.txtl

Figure 5 The concordance lines of 'I think' in British ambassadorial corpus (BAC)

With the support of Wordsmith 5.0, the researcher can investigate the context and concordance lines of any keyword in the discourse. This tool provides the statistical data of MMs identified in each research corpus. Data collected by the use of concordance lines are the authentic reflection of the collocation of the keyword which helps the researcher undertake any specific analysis of the research corpus. For instance, the following tables indicate hits of a particular pattern of '*I think*' identified from the concordance lines provided by the software package of WordSmith 5.0.

When investigating the hits of concordance lines, e.g., 'I think' as in Figures 4 and 5, perspectives in terms of vocabulary, grammar and semantics of tokens of *I think* can be analysed. (The whole sentential context will be shown when double-clicking on each token of the keyword.)

FINDINGS AND DISCUSSIONS

Hedges with Modal Lexical Verbs

Modal lexical verbs normally occur in the comment clause of an utterance to indicate the speaker's commitment to the occurrence of the event presented in the complement clause of the utterance. These are in patterns with "parenthetical verbs" co-occurring with 1st person subjects to form comment clauses expressing the speaker's "mental state or attitude" towards the proposition (see Perkins, 1983: 97). As such, different modal lexical verbs in patterns of comment clauses as MMs indicate different levels of the speaker's commitment to the event presented in the proposition uttered as in the following excerpts from the research corpora:

[1] Madame Minister, I personally renew our commitment to you here today, to stand with you as your partners and to fight side by side with you as your friends against this dreaded disease. Together, *I believe* we can keep making progress and give hope to those in need. [A03U]

[2] *I think* today's report highlights the need for sound science, for monitoring and assessment, so we can understand the environmental trends much better, and, crucially, to understand the impact of those trends on the very poorest. [B03M]

In the excerpts above, patterns like *I believe…, I think…* are expressions of embedded modality. Such patterns play the function as hedges marking the speaker's engagement to the content of the utterance. The epistemic meaning expressed by the pattern *I believe* as in [1] indicates the speaker's strong belief that the two sides *can keep making progress and give hope to those in need*. Thus, this pattern is used to convey the strong epistemic sense of commitment. In [2], the pattern *I think* implies that the speaker neither completely commits himself to nor is fully responsible for the achievement of

today's report and he just shows his opinions. As such, it can be claimed that '*believe*' is typically used in hedges showing the speaker's strong commitment while '*think*' is used to express the speaker's weak commitment to the occurrence of the event presented.

Other modal lexical verbs combined with the *I* pronoun expressing the sense of strong commitment as *believe* are *known, see, understand, assure*. Modal lexical verbs in the sense of weak commitment as *think* are *hope, expect, wish, suggest.* These convey the speaker's implication in lacking of confidence in the proposition presented. Observations of these patterns in the research corpora show that American ambassadors (AAs) employ more patterns of hedges with modal lexical verbs than British ambassadors (BAs) do, accounting for 484 instances (4.6 per 1,000 words) in the AAC compared with 378 instances (3.6 per 1,000 words) in the BAC.

Hedges with Modal Adjectives

Modal adjectives are used in the comment clause as hedging expressions showing the speaker's confidence in the occurrence of the event presented in the utterance. Observations of hedges with modal adjectives collected in the research corpora show that the sense of the speaker's strong or weak confidence is not in the modal adjective itself but through patterns of embedded modality expressing subjective or objective meanings as in the following excerpts:

[3] *It is clear that* beneath this financial crisis lies a human crisis, and we need a coordinated global response to this crisis to ensure that the coming years do not become the 'lost years' in the global fight against poverty. [B04P]

[4] *I am confident that* Vietnam will continue to make domestic changes to ensure the future prosperity and happiness of its people. *I am hopeful that* Vietnam will strengthen its cooperation on challenges to global and regional stability that threaten us all. *I am certain that* our two peoples will continue to grow closer together… [A03P]

In [3], the pattern of modal adjective combined with the impersonal subject '*it*' indicates the sense of objective epistemic modality. Hedges like '*It is clear that…*', '*It is likely that…*' convey the speaker's implication that it is not his judgement but it can be inferred from the situation that it is the case. The speaker transmits a message to the listeners that although he does not commit himself to the event presented, he would like listeners to believe it. Patterns of hedges with modal adjectives as [It is + Adj_{Mod} + that/to] occur with higher frequencies in the BAC than in the AAC, accounting for 25 instances of *clear* found in the BAC, at 29.76% compared with 15 instances in the AAC, at 12.82%; and 23 instances of *likely* in the BAC, at 27.38% compared with only 6 in the AAC, at 5.13%.

In [4], the pattern of a modal adjective combined with the *I* pronoun conveys the sense of subjective epistemic modality. Hedges like '*I am confident that…*', '*I am hopeful that…*', '*I am certain that…*' indicating the speaker's strong belief or subjective commitment occur frequently in the research corpora. Interestingly, patterns of hedges as [I am + Adj_{Mod} + that/to…] are found with a higher frequency in the AAC than in the BAC, accounting for 96 and 36 instances, respectively. As such, it can be argued that AAs are more subjective and thus, more personal and direct than BAs in making commitment to the proposition presented in the utterance.

Intensifiers as Hedges

Intensifiers are MMs used to modify the level of certainty that the speaker would like to claim for the propositional content of the utterance. Most hedges found in ambassadorial speeches as intensifiers are modal adverbs such as *obviously, certainly, definitely, of course, indeed, clearly, etc*. Hedges of this type are used to reinforce the impact of the utterance and help the speaker avoid direct imposition on listeners as in the following examples:

[5] *Obviously there is a need* to make the information that's contained in the Vietnamese media available in English; otherwise your leadership is going to be very limited. [A03Y]

[6] *Clearly* the challenge is huge and *we need* to do more. This Government has committed to spend 0.7% of our national income on aid by 2013 – and we are the first UK government to put a date to the UN target. [B03C]

In [5] and [6], the modal adverbs *obviously* and *clearly* are used to enhance the speaker's opinion that the impact on the sense of obligation represented in *there is a need to…* or in *we need to…* is certain. That is to say although the impact of the utterance is intended to impose on listeners, with these intensifiers the sense of obligation becomes objectively obvious. As such, intensifiers can be seen as hedges conveying the sense of objective certainty about the occurrence of the event presented other than the speaker's subjective opinion. Hedges as intensifiers occur with a higher frequency in the BAC than in the AAC, accounting for 206 and 175 instances, respectively.

Downtoners as Hedges

Downtoners are hedges used to serve the speakers' politeness in attenuating the strong impact of the utterance on listeners. Downtoners as hedges found in ambassadorial speeches are modal adverbs. They are used as sentence modifiers and can be pragmatically seen as the opposite to intensifiers. Downtoners as hedges indicate the speaker's avoidance of certain assertion or candid comment on the issue presented. As such, they are used to

express the speaker's intention in avoiding the strong impact of the utterance on listeners. In ambassadorial speeches downtoners such as *perhaps, probably, maybe, possibly,* etc. are frequently used as hedges as in the following excerpts:

[7] *Perhaps* the first thing to bear in mind is the need for informed public debate. [B03N]

[8] In a business sense, you *probably* really should plan to be patient. It takes time; it takes longer than you may think sometimes. [A02C]

Downtoners like *perhaps* and *probably* are hedges used to attenuate the strong impact on listeners. As in [7], *perhaps* makes it easier for listeners to accept the imposition of obligation paraphrased as *the first thing you must bear in mind is…* In [8] the deontic *should* of obligation is weakened when the modal adverb *probably* is used as a hedging expression.

Downtoners as hedges occur with a higher frequency in the BAC than in the AAC, accounting for 96 compared with 50 instances, respectively. Moreover, the frequencies of individual downtoners are found with higher frequencies in the BAC than in the AAC.

CONCLUSION

It has been observed from the research corpora that hedges are in patterns with modal adjectives, modal lexical verbs, modal adverbs as intensifiers and downtoners. It can be argued that the American ambassadors and British ambassadors are strikingly different in using patterns of hedges in their speech delivery. More instances of hedges with modal adjectives and modal lexical verbs are found in the AAC than in the BAC. On the contrary, higher frequencies of intensifiers and downtoners are found in the BAC than in the AAC. Such differences in patterns of modality expressions as hedges indicate that American ambassadors are more personal and subjective, whereas British ambassadors are more tentative and objective in using hedges in their speech delivery.

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Exploring the Affordance of 'BBC 6 Minute English' Mobile Application as an Online Supplementary Listening Tool

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ABSTRACT

Listening skills have always played an important role in English learning. Communication and improvements in English can only be established when a certain level of proficiency is achieved. Therefore, it is important for all English learners to reach the required level. Nowadays, with advanced technology, learners can make use of many digital tools to improve their listening skills. Apart from the Internet and other applications for computers, English learners can also use their mobile devices as an alternative option to improve their listening skills thanks to a large number of software developed for these devices. An example of a mobile application for this purpose is "BBC 6 Minute English" developed by Kavin.flee. This study was conducted to explore the possibility of integrating this application in the students' education process and examine if there were any problems in using this software. This study was carried out on sophomores of the English Department of the University of Foreign Languages Studies (UFL) – University of Danang (UDN), Vietnam. The study also considers the impact of the use of the application on the sophomores' listening skills.

Keywords: listening skill, digital tools, mobile learning

INTRODUCTION

Computer-assisted language learning (CALL) has been around and developed together with computer technology ever since the 1960s (Beatty, 2003). Initially, CALL programs originated from the audio-lingual method and were, comparatively only alternate options for what could be easily done with pen and paper. The programs of that time were also deemed as conservative and unimaginative. However, with the advent of the Internet, CALL started taking its first steps out of language experiments and into the world. Since the Internet allowed CALL to be used as a method to engage language learners in communicative tasks outside of the classroom, many recent studies on CALL have focussed on learners' self-study or in particular, distance-learning. In the last decade, with the increase use of mobile devices, the potential of mobile-assisted language learning (MALL) has been taken into consideration. MALL allows students to gain access to

their language learning materials and contact their teachers or classmates whenever and wherever needed. With such flexibility, MALL has opened new directions in CALL and showed the possibility of exceeding all non-mobile CALL.

Following the trend, more and more students in Vietnam have started using mobile devices for language learning purposes and it has become increasingly popular among students of the English Department of UFL-UDN. However, the use of mobile devices has not been as widely integrated into the teaching and learning process. Little consideration has been given to see how mobile learning can be utilised to improve students' English learning progress in the context of this university.

To reach a certain level of fluency in a foreign language in general and English in particular, the listening skill is undoubtedly one of the most important to be mastered. In fact, it is said to be the most frequently employed skill among the four language skills (Jou, 2010). In Lu's study (2008), 93.8% of the students agree that listening is more important than the other three skills. However, most teachers only focus on writing and reading skills before college so most students are unaware of how they should develop this skill (Jou, 2010). In 2007, Kenny (2007: 105) suggested that information and communications technologies (ICT) could help learners control their own learning while teachers could individualize their teaching. With that being said, MALL, as a method that focuses on learners' self study that offers high flexibility, could be considered an appropriate method for teaching and learning listening skills.

In addition, in the English Department, UFL-UDN, Vietnam listening is a subject with only two periods per week. With such a small amount of time spent on this subject, sophomores cannot be good at listening through homework and materials used during their first year alone. As a result, they find other sources of knowledge and most of these sources come from the Internet. However, a laptop or a computer might be too expensive for a portion of students, especially those who live far from their home since they have to consider their daily expenses, tuition fees and other kinds of bills. A smart mobile device, on the other hand, is affordable to most students since it only costs about half the price of a computer. Therefore, it would be beneficial to most students in general and sophomores in particular if their mobile devices can be exploited as a learning resource.

However, despite the popularity and potential of M-learning and the importance of the listening skill, most of the sophomores of the English Department of UFL only know how to look up new words from the dictionary in their mobile devices. Therefore, this study will focus on how to make use of a mobile application to enhance the listening skills of the second year students of this school. Due to the popularity of the Android operating system in mobile technology and the reliability of the BBC channel, the chosen application is "BBC 6 Minute English" developed by Kavin.flee available on Android devices.

LISTENING IN LEARNING

According to Ausra (2012), listening is one of the most basic areas of communication skills and language development and much of the educational process is based on skills in listening. In a class, students have to spend most of the time listening to what a teacher says, for example, during a lecture. As a result, listening plays an important role in the development of other language skills. Baker (1971: 35) says that listening can also help learners build vocabulary, develop language usage and improve language efficiency. Furthermore, developing proficiency in listening comprehension is the key to achieving proficiency in speaking (Dunkel, 1986). It is also said that listening develops faster than the other three skills and can affect reading and writing abilities (Scarcella & Oxford, 1992; Vandergrift, 1997).

In short, listening is an important part of learning, and in developing and obtaining a new language, particularly English. It is not only the basis of other skills but also one of the channels through which learners can communicate with the target language and its culture (Curtain et al. 1988: 89).

MOBILE LEARNING AND MOBILE APPLICATIONS

Mobile Learning

Early generations of mobile learning often proposed formally-designed activities, carefully crafted by educators and technologists using emerging technology that was not widely spread (Agnes, Hulme & Shield, 2008). Currently, with the popularity of mobile and wireless devices, learners can take the lead and engage in activities suitable for their personal needs and circumstances thanks to the greater mobility (Kukulska- Hulme, Traxler & Pettit, 2007; Pettit & Kulsaka-Hulme, 2007). Typically, mobile learning is identified both by being available "anytime, anywhere" (Geddes, 2004) and by the tool used: mobile devices. 'Mobile learning' also refers to learning mediated through handheld or portable devices and potentially being available anytime, anywhere. Such learning may be formal or informal (Agnes et al., 2008).

Definition of Mobile Applications

According to the Mobile Marketing Association (2008), mobile applications consist of software that runs on a mobile device and performs certain tasks for the user of a mobile device.

The Association also states that these applications are also known as downloadable and are common on most phones, including inexpensive, entry-level models. Their wide

use is due to the many functions they perform, from basic telephony and messaging services to advance services such as games and videos.

Mobile Applications in Learning

With the appearance of the iTunes Apps Store in 2008, a large number of applications were developed for the iPhone, from games and utilities to instant messaging and word processing (Godwin-Jones, 2008: 5). Yet, Godwin-Jones (2008: 5) also noted that only a few apps for language learning had been released, including dictionaries, phrasebooks and flash cards. The main reason that led to the popularity of these few language references and practice apps is due to the simplified presentation needed for mobile devices (Godwin-Jones, 2008: 5).

Three years later, Godwin-Jones pointed out that newer hardware and software had allowed enhanced functionality (Godwin-Jones, 2011: 4). In his discussion on mobile apps for language learning, Godwin-Jones (2011: 4) had experienced several reviewed and blog-listed applications. Since not all of them were of the highest quality, he briefly discussed the best and most popular developers for language apps such as Word reference, a dictionary app, and Quizlet, a vocabulary flashcard app, among others.

Aside from applications specifically designed for educational purposes, Godwin-Jones (2011: 5) also distinguished a new category of apps called "repurposed apps" – general purpose applications that can be used for language learning, including e-mail, audio recording, and games. Android's "Talk to me" and "Listen and Speak" are two typical apps with voice recognition functions.

ANDROID OPERATING SYSTEM AND 'BBC 6 MINUTE ENGLISH'

Android Operating System

Android is an open-source mobile operating system that is supported by Google Corporation. The major reason for the pervasive adoption of Android in the mobile market is that mobile applications developed through Android development technology are more efficient and effective compared to those of other technologies such as Windows Phone and Symbian operating systems, producing fast, user friendly and appealing applications. With the rapid advancement in mobile technology, students can now seek informal education through applications in their smart phones (Hanafi, 2012).

A General Look on "BBC 6 Minute English" Application

This application was chosen for two main reasons. First, it provides users with a lot of different topics with subtitles and transcripts to improve their listening skill. Second, it is the mobile version of the famous "BBC 6 Minute English" web tool. As a result, this software's reliability is ensured.

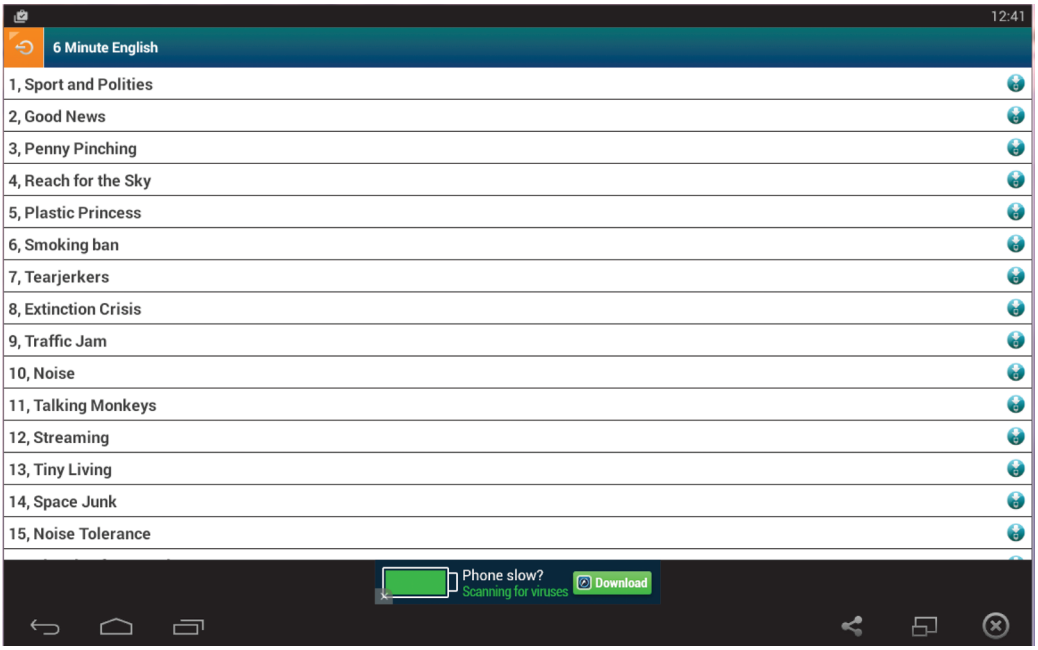

Figure 1 Main screen of "BBC 6 Minute English" on a mobile device

This software can be downloaded from the Google Play Store. It provides users with twenty eight audio tracks with different topics. All of them are downloadable and all come with a transcript for listeners to review. At the end of each topic, the speakers also review new words that are mentioned in the talk.

SCOPE OF THE STUDY

This study mainly focuses on the impact of "BBC 6 Minute English" on improving the listening skills of sophomores at the English Department, UFL-UDN, Vietnam. This is because the second year at college is the time when students need to equip themselves with study skills to succeed in the upcoming years. One of these skills is self-study, an important skill for which a mobile application would be a great support. Secondly, due to time limitation, the study does not concentrate on teaching English with said application.

RESEARCH QUESTIONS

Specifically, the study seeks to answer the following research questions:

- How does "BBC 6 Minute English" impact sophomores?
- What are the factors affecting the effectiveness of using this application to improve the listening skill of sophomores?

RESEARCH DESIGN

The study is designed to examine the effect that "BBC 6 Minute English" has on improving learners' listening skills. Choosing sophomores as research subjects, some limits were placed on the design of this study. For example, with regards to the length of the study, all participants were asked to use "BBC 6 Minute English" for two months. The study is multi-method since both qualitative and quantitative methods were utilised. The hypotheses were tested with the help of questionnaires and tests. Finally, all the collected data was analysed in a qualitatively and quantitatively.

DESCRIPTION OF POPULATION AND SAMPLE

In order to collect data for the research, the researcher selected a sample of sophomores. Eighty sophomore students whose major is English at UFL-UDN formed the sample of the study. All of these second year students were randomly chosen and each of them possessed at least one mobile device with the Android operating system to ensure the same software was downloaded and installed. Sophomores were selected as research subjects because they had passed the initial stage of college and had obtained a more advanced level of English proficiency compared to freshmen.

DATA COLLECTION

Since most of the students chosen were not familiar with the "BBC 6 Minute English" application, data collection was divided into two stages: before students had used the application and after they had used it. In addition, in the first stage, the author delivered a brief talk and distributed handouts that presented an overview of mobile learning, the Android operating system and the "BBC 6 Minute English" application. Instructions on how to use the application was also presented.

INSTRUMENTS OF DATA COLLECTION

Questionnaires and tests were used as instruments for this research. The pre–usage questionnaire consisted of personal information, students' methods of self-study on listening, skills in using mobile devices and students' attitudes towards applying mobile applications in studying listening. The post-usage questionnaire, which was carried out two months later, consists of students' first impressions about the "BBC 6 Minute English" application, students' self-study of listening with the application, students' assessment of the application, and once again, their attitudes towards using the application in studying the listening. Besides the questionnaires, a listening test was designed to evaluate students. It consisted of two sub-parts: a pre-use test and a post-use test.

DATA ANALYSIS

The process of data analysis of both stages of the research was primarily "content analysis". All data gained were read several times and as the analysis proceeded, themes related to the research questions were modified to reflect categories emerging from the data. The themes were then interpreted and categorised into major areas. Careful attention was also given to any modification of emergent themes so that an iterative process was established. Finally, the outcomes were written in descriptive, interpretative, and analytical ways (Patton, 1990). These are presented in percentage distribution tables.

FINDINGS

1. How does "BBC 6 Minute English" impact the sophomores?

This part is divided into such three parts: the impact on listening skills, the impact on learners' attitudes, and the impact on the duration of learning the listening skills.

The Impact of "BBC 6 Minute English" on Listening Skills

On being questioned whether the "BBC 6 Minute English" application was helpful in improving listening or not, 72 students answered "Yes" and 8 students answered "No". Students who answered "Yes" were required to rate the effectiveness of "BBC 6 Minute English" on the skill. The results are shown in Table 1.

Table 1 The effectiveness of "BBC 6 Minute English" on listening skills rated by students

Scale	Listening		Total
	Frequency	Percentage	
To a great extent	20	27.8	
Somewhat	42	58.3	72
Very little	10	13.8	

Based on the data in Table 1, the first impact of "BBC 6 Minute English" is that it helps develop listening skills. Although data from the tests do not corroborate this assertion, using this software is still recognised as an effective method by 66.25% of participants in Table 2.

Table 2 Students' attitudes towards "BBC 6 Minute English" in the second stage

Statement	Scale	Frequency	Percentage	Total
Applying "BBC 6 Minute English" mobile application is an effective way to improve listening skill.	(1) Strongly disagree	0	0	80
	(2) Disagree	3	3.75	
	(3) Neither agree nor disagree	24	30.00	
	(4) Agree	43	53.75	
	(5) Strongly agree	10	12.50	
It does not require a high level of mobile devices understanding to apply "BBC 6 Minute English" mobile application in studying Listening	(1) Strongly disagree	5	6.25	80
	(2) Disagree	22	27.50	
	(3) Neither agree nor disagree	25	31.25	
	(4) Agree	23	28.75	
	(5) Strongly agree	5	6.25	
It takes a lot of time when applying "BBC 6 Minute English" mobile application to improve listening skill.	(1) Strongly disagree	5	6.25	80
	(2) Disagree	46	57.50	
	(3) Neither agree nor disagree	20	25.00	
	(4) Agree	8	10	
	(5) Strongly agree	1	1.25	
"BBC 6 Minute English" mobile application motivates students to study harder	(1) Strongly disagree	3	3.75	80
	(2) Disagree	5	6.25	
	(3) Neither agree nor disagree	28	35	
	(4) Agree	41	51.25	
	(5) Strongly agree	3	3.75	

Applying "BBC 6 Minute English" mobile application is a method more preferable than books and CDs to improve listening skill to Vietnamese students	(1) Strongly disagree	2	2.5	80
	(2) Disagree	17	21.25	
	(3) Neither agree nor disagree	44	55	
	(4) Agree	15	18.75	
	(5) Strongly agree	2	2.5	
It is not necessary to practise listening skill with "BBC 6 Minute English"	(1) Strongly disagree	16	20	80
	(2) Disagree	21	26.25	
	(3) Neither agree nor disagree	30	37.5	
	(1) Agree	10	12.5	
	(2) Strongly agree	3	3.75	

This number is much higher than the number of those with opposing opinions (3.75%). Furthermore, from Table 1, it is clear that 72 students (90%) agree that "BBC 6 Minute English" is helpful for their study on listening to a certain extent. Besides this, this application helps students to practise listening in a variety of ways. The students can replay the soundtracks multiple times to get used to native speakers' pronunciation. With the subtitles and the transcripts, the students can also learn new words by memorising the spelling on the screen with the appropriate pronunciation, which will lead to easier meaning grasping in listening comprehension in the future. With the variety of topics provided, learners can also learn many things from the talks.

The Impact of "BBC 6 Minute English" on Students' Attitudes towards Applying Mobile Applications

In general, students show no clear opinion of which method they prefer in improving their listening skills. However, their attitudes towards applying mobile applications changed in some ways after using "BBC 6 Minute English" for two months.

First, in the pre-use questionnaire, no students strongly disagree with the idea that applying mobile application is time consuming. However, 5 students are strongly against the statement that "BBC 6 Minute English" is time consuming. Second, no students strongly agree with the statement that "applying mobile applications motivate students to study harder" in the pre-use questionnaire. Yet, 3 students are strongly in favour of the idea that "BBC 6 Minute English" motivates students to study harder. Since "BBC 6 Minute English" is an application itself, the positive responses it receives might be a good sign for other mobile applications since people will start thinking about the effectiveness of other learning mobile applications after having a good time with "BBC 6 Minute English". Moreover, when asked whether "BBC 6 Minute English" mobile

application is more preferable than books and CDs or not, most students (55%) responded with "Neither agree nor disagree" and the portion of students who are in favour of books and CDs is 23.75%, only slightly higher than that of students who prefer "BBC 6 Minute English" (21.25%). This suggests that most students are still considering the advantages of a mobile application like "BBC 6 Minute English" when comparing it to traditional methods such as books and CDs.

The impact of "BBC 6 Minute English" on the duration of listening self-study

After using "BBC 6 Minute English", the number of students who spent 3 to 5 hours a week to practise listening increased from 28 to 37. Therefore, it can be concluded that "BBC 6 Minute English" encourages students to spend more time on practising listening as it can be seen from Table 2 where 55% of students agree that "BBC 6 Minute English" motivates learners to study harder.

2. What are the factors affecting the effectiveness of using this application to improve the sophomores' listening skills?

There are two main factors which will be discussed.

Subjective Factors

First, the poor effectiveness of "BBC 6 Minute English" mobile application use comes from learners' negative attitudes. Students' first impression about this tool is as follows.

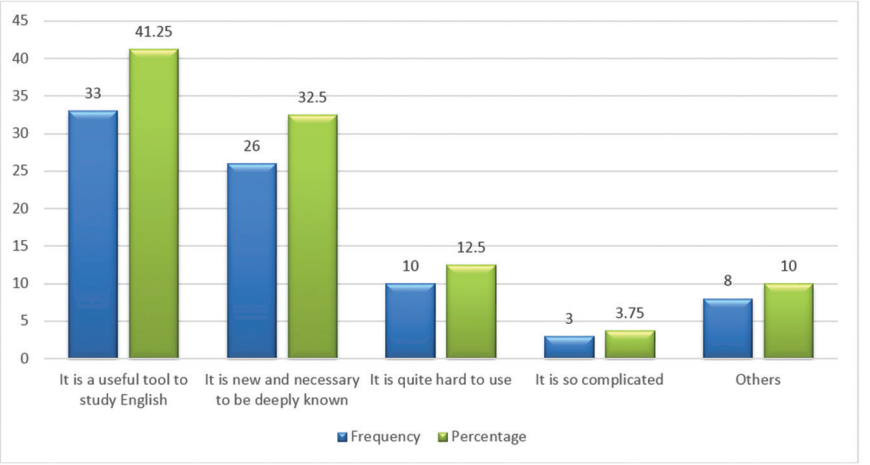

Figure 2 Students' first impression about introduced "BBC 6 Minute English" mobile application

From the chart, it can be seen that a portion of learners (16.25%) conclude that the software is too hard to use or too complicated. Five students claim that "BBC 6 Minute English" is not as effective as other sources despite not having used it before, and out of the five, three of these students obtained a lower score in their second listening test compared to the first; the other two showed no improvement in their scores.

Second, the frequency of using the software is also a factor affecting the effectiveness of "BBC 6 Minute English".

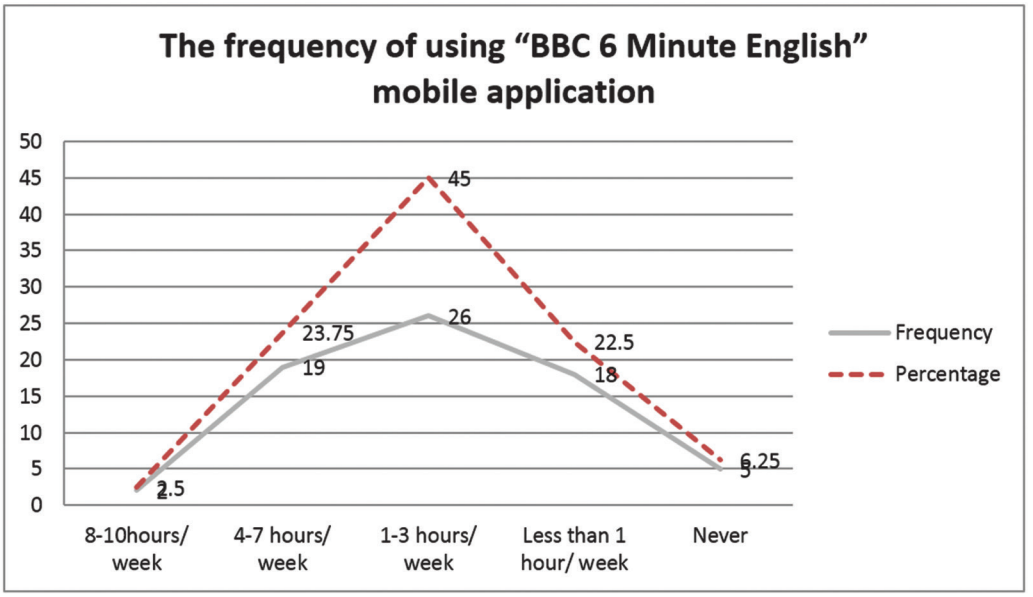

Figure 3 The frequency of using "BBC 6 Minute English" mobile application

According to Chart 2, only two students practise using "BBC 6 Minute English" from 8 to 10 hours a week. Interestingly, these two students later obtained a significantly better score in the second test compared to the first. The majority of students (45%) only use this application between 1 to 3 hours a week. These students make up 40% of those who only attained a slightly better score in the second test while 32% showed no improvement. There are also 18 students who practise less than 1 hour a week with the software. 60% of those who obtained a lower score in the second test consisted of these students. Therefore, the researcher believes it is safe to conclude that the more times the learners practised with the software, the larger the benefits gained.

Last but not least, students' skills in using mobile devices also affect the effectiveness of "BBC 6 Minute English". From Table 2, we can see that 33.75% of students state that using "BBC 6 Minute English" requires a high level of mobile device

understanding and 97% of these students are from the groups of students with poor or fair mobile devices using skills in Table 3.

Table 3 Students' skills in using mobile devices

Score	Frequency	Percentage	Total
From 7 to 13	11	13.75	80
From 14 to 20	36	45	
From 21 to 27	25	31.25	
From 28 to 35	8	10	

Figure 3 shows the good points of 'BBC 6 Minute English'.

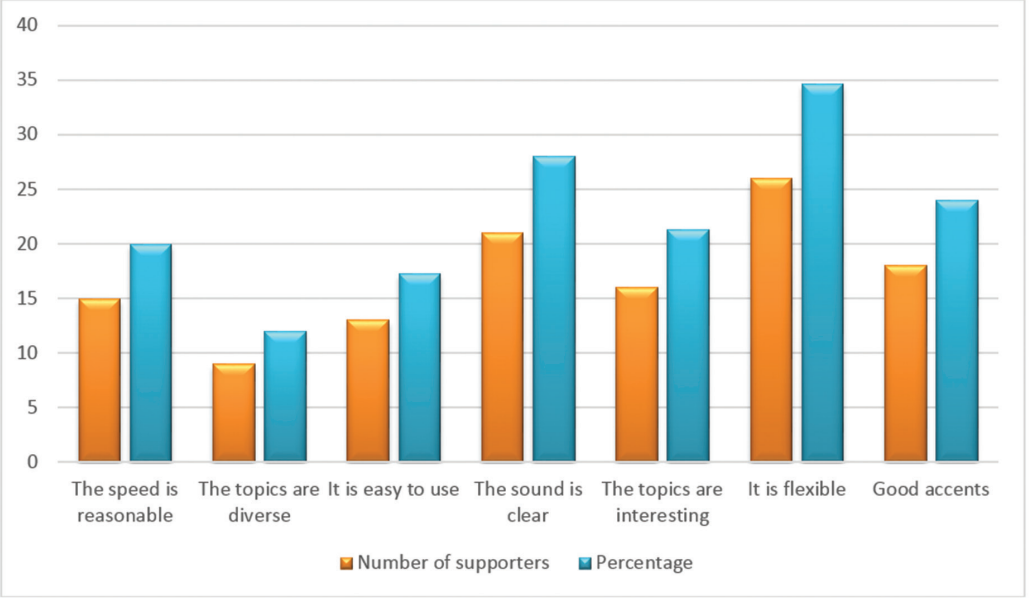

Figure 4 Good points of "BBC 6 Minute English"

In this chart, the simplicity of the software is one of the good points listed by users and 35% of participants agree that "BBC 6 Minute English" does not require a high level of mobile devices understanding. In conclusion, the problems are mainly from the users' mobile devices using skill, not the complexity of the software.

Objective Factors

The ineffectiveness of the software might also come from its own limitations.

Table 4 Bad points of "BBC 6 Minute English"

Bad point	Number of critics	Percentage	Total of user
1. The speed of some audio is too fast	7	9.3	
2. It is difficult to use	6	8	
3. The speed of downloading is too slow	20	26.7	
4. The quality of audio is not high	13	17.3	75
5. Its topics are limited	15	20	
6. It is time – consuming	5	6.7	
7. It is not updated	5	6.7	

As seen in Table 4, 20% of the users think that the number of topics is limited and they sometimes feel tired of practising the same topics repeatedly. This problem might be due to the limited resources of a mobile device.

Another considerable limitation listed in Table 4 is the download speed. 26.7% of users complain that some of the audio clips take too much time to finish downloading and this slowness makes them frustrated. However, this problem might not just be the software's fault alone but it might also be because of the poor Internet connection at that moment.

SUMMARY

Thanks to the data collected from the questionnaires and the tests, students' learning of listening with "BBC 6 Minute English" can be viewed from various angles. Clearly, the data shows that the use of "BBC 6 Minute English" mobile application has some effects on students. The factors affecting the effectiveness of using "BBC 6 Minute English" to improve listening skill has been pointed out so that we should reconsider them to search for solutions.

CONCLUSION

The study was carried out to investigate the impact of using the "BBC 6 Minute English" mobile application on the listening skills of sophomores of the Department of English of UFL-UDN. Furthermore, it aimed to explain the possible factors influencing the

effectiveness of "BBC 6 Minute English". From the data analysis and interpretation, some following fundamental conclusions can be drawn.

Mobile learning is a potential method of language learning due to the flexibility of mobile devices allowing it to be utilised anytime and anywhere. The advanced technology available allows students to access resources from the Internet through a mobile device instead of using an expensive laptop or computer. With the development of mobile operating systems, a lot of language learning applications have been created. Due to its accessibility, Android is one of the most prominent operating systems of mobile devices and there are a lot of language learning applications that operate on this system. However, in the context of UFL-UDN most students only use mobile devices for dictionaries instead of exploiting the full potential of a mobile device through other applications.

"BBC 6 Minute English" mobile application on the Android operating system does help students improve their listening skills and its effectiveness is confirmed by many students. After having a clearer view about this mobile application, students using "BBC 6 Minute English" in learning listening do not require a high level of mobile devices using skills. However, as with the development of any skill, the investment of time in practice is crucial. Although the majority of students conclude that using "BBC 6 Minute English" in practising listening skills is an effective method and it is necessary to practise with it, they are still unsure if this method is more preferable than more traditional methods such as books and CDs.

Nothing happens without any cause and so it is with this case. With regards to the ineffectiveness of using "BBC 6 Minute English", the researcher realises that it is caused by some factors. Firstly, students cannot improve their skills because of their negative attitudes towards this application. Next, their infrequent of use of the software and their limited mobile devices using skills are also considerable factors. Additionally, there are also obstacles coming from the software's own limitations.

In order to use "BBC 6 Minute English" effectively, students should have a positive attitude towards this software. They should be eager to use the tools so that they can put in real effort and not give up when they have difficulties. Judgments should be made only after trying the application for some time. Secondly, we realise that students need to practice with "BBC 6 Minute English" frequently. The more they practise, the easier it is for them to use the tools and the more effective the tools are. This also helps them improve their mobile devices using skills as well. They can search reviews about the software and read its tutorial on Internet so that they will not be overwhelmed at the first time of use. Another way is that they can make friends with other users and ask them for useful advice.

However the point is that it is not easy to make students willing to use the software. Thus, it is necessary for teachers to encourage students to use it. Teachers can

review the software and give students advice during class time. Since students always put their trust in their teachers' abilities as well as experiences, the review of teachers will be more reliable and convincing.

ACKNOWLEDGEMENTS

I am particularly indebted to the sophomores of the Department of English, University of Foreign Languages Study, Da Nang University for their willingness to complete the questionnaires and the tests.

My thanks are finally given to my beloved family and friends who have granted me support during my research.

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Learning English Language with Technology: Case Study of a Primary School in Kota Belud, Sabah

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ABSTRACT

Teaching English Language in rural primary schools using Information and Communications Technology (ICT) has often been seen as a challenge for language teachers. In an attempt to better understand the difficulties faced, a yearlong study was conducted to investigate how 40 voluntary student teachers of a public university in Sabah use ICT and the multisensory approach to teach English. The study employs The Learner Centric Ecology of Resources Framework (Luckin) as a guide to observe knowledge scaffolding of students learning. Focus group interviews were employed to elicit qualitative data with some selected student teachers who participated in the selected primary schools in Kota Belud, Sabah. The results show that the majority of the student teachers were motivated to teach English using the multisensory approach because it helped them to connect English with the outside world via visual aids (multimedia). The student teachers' reflective journals also indicated that they were able to align the ICT materials with the proficiency levels of the students, create interactive teaching and learning materials, and use ICT to improve class control. All the actions taken by the student teachers prove that they are frequently updating each other in teaching akin to the Luckin framework. If this method of learning is practised by more schools, it would make language learning more interesting.

Keywords: language learning, learner centric ecology of resources, scaffolding, multisensory, technology

INTRODUCTION

The use of ICT in Malaysian schools dates back to the 1970s. Since then, both government and non-government agencies have implemented numerous ICT-related initiatives. However, standing at 33%, Sabah remains the state with the lowest rate of Internet penetration (Borneo Post, 2011, December 18). The *Teaching For Change Using ICT*

project was initiated by a group of educators in Universiti Malaysia Sabah. The project commenced on October 2012. The project aimed to improve learning through an ICT-based multisensory approach. The project involved three subjects: English, Science and Mathematics. This paper focuses on the English language teaching and learning of the student teachers.

The specific objectives for the English component of the project are:

- to extend pupils' phonic knowledge
- to introduce the rudiments of grammar
- to teach spelling systematically
- to improve vocabulary and comprehension

Lessons planned and conducted in this project were aligned with the Primary School Standard Curriculum (KSSR). Six modules and six compilations of lesson plans were prepared and handed to the school. Each of the students also received a module and a stationery kit. The modules contained notes, exercises and games for English learning. The funder, Yayasan Sejahtera Malaysia sponsored two LCDs, four laptops and four amplifiers for the school.

The project was participated by 40 student teachers who were pursuing their Bachelor of Education (TESL). Prior to this project, the students did not have any experience teaching in a public school. A series of training sessions involving the ICT-based multisensory approach was conducted with the student teachers. The training involved these areas: introduction to phonics, letter sounds, blends, songs and actions, the use of different teaching aids, games, grammar, readers, lesson-planning and microteaching.

A diagnostic test was conducted on November 2012. The teaching and learning activities commenced on January 2012. The English student teachers visited the school once every three weeks. Every class was assigned two student teachers. The first phase of the project is completed.

THE PROJECT SITE

The project was conducted at a primary school named Sekolah Kebangsaan Suang Punggor in Kota Belud. The school is located about 70 kilometres from the state capital, Kota Kinabalu. The school is located in a rural village, Kampung Suang Punggor. This school has a population of 207 students, and over 30 teaching staff. The majority of the population in the school belongs to the Bajau ethnic group. The main occupations in this village are fishermen and farmers. The enrolment of the school is shown in Table 1.

Table 1 Number of students in SK Suang Punggor

Class	Enrolment
Year 1	35
Year 2	39
Year 3	35
Year 4	32
Year 5	32
Year 6	34
Total	**207**

FRAMEWORK OF THE STUDY

This study employs the learner centric ecology of resources (Luckin, 2008). The learner centric ecology of resources consists of four major elements; skills and knowledge, curriculum, resources and administration. Luckin (*ibid*) defines skills and knowledge as the substance learned, while resources refer to tools or people to learn the skills and knowledge. This paper only focuses on skills and knowledge, and resources. In this study, skills and knowledge are defined as the ICT skills and knowledge of the student teachers. This study sought to explore beyond the student teachers' ability to use ICT tools. Skills and knowledge also refer to the student teachers' ability to digitize the language learning process. Resources refer to the ICT hardware and software needed to develop learning materials and to implement the teaching and learning process. ICT resources used by the student teachers included video-sharing sites, photo-sharing sites, audio-sharing sites and presentation tools.

Studies (Hadi Salehi & Zeinab Salehi 2012, Saadiyah Darus & Ho Wai Lin, 2008) show that using ICT the right way in learning and teaching is also a crucial factor for successful ICT integration in language learning. Existing literature reviews on teachers' ICT competency mostly focus on ICT literacy (Narasuman, Md. Rizal & Azlan, 2011; Lau & Sim, 2008, Samuel & Zaitun, 2007). Although little is known about how teachers use ICT to transform English language learning activities, Samuel and Zaitun (2007) reported that English teachers lacked the ability to use ICT for language learning. In addressing this issue, this project attempted to integrate ICT into multisensory approach to improve language learning.

Multisensory approach in language learning involves the use of senses to learn English. Multisensory learning suggests that students learn through visual learning, audio learning, tactile learning and kinesthetic learning. Some of the learning activities included in this project were singing songs, playing games, playing salt dough, air writing, learning through flash cards, playing hopscotch and watching videos.

DATA COLLECTION

This paper focuses on the qualitative data collected from the student teachers and the students. The study employed reflective journal writing and observation as the main methods of enquiry. A total of seven student teachers submitted their reflective journals for data analysis. Observations from time to time were also conducted to collect evidence in the forms of photos and videos. Documents such as students' work were also collected. The data sought to answer two research questions:

(a) What are the ICT skills and knowledge demonstrated by the student teachers?

(b) How was the ICT-based multisensory approach used in language learning?

The data obtained were analysed through coding and grouping to find emerging themes. Findings obtained through reflective journal were triangulated with observation and document analysis.

FINDINGS

ICT Skills and Knowledge Learned

Firstly, student teachers demonstrated the ability to align the ICT materials with the proficiency levels of the students. The materials also needed to be relevant to the rural context of the school. ICT materials for language learning available on the Internet do not usually fit the local context. As Student Teacher 7 recalls "we searched for teaching ideas using ICT online and modified them in order to fit them into our lesson plans". Therefore, student teachers had to ensure that the materials used were appropriate for the local context.

> When we planned for the lesson, we took into account the students' background, the syllabus for the lesson…We tried not to dwell too much on what we thought would be best or bad for the students in the rural area because we didn't want to end up creating materials that were completely foreign to them and thus hindered their learning process.
>
> *Student Teacher 2*

Secondly, student teachers learned the skills and knowledge to create interactive teaching and learning materials. Interactive activities avoid dull and monotonous lessons. Interactivity helped the student teachers to manage the flow and pace of the lessons as they could "easily pause, play or rewind the videos or slide show" (Student Teacher 3). By creating interactive materials, students became actively engaged. As Student Teacher

1 recalls, "the use of songs also encouraged them to participate actively during the lesson as they could sing along to the songs."

> We searched for materials that would suit the students' interest and needs. When we taught the topic of Sounds Around Us, we used popular nursery rhymes to make the students more engaged in the classroom. We also inserted some pictures to help them understand the topic more.
>
> *Student Teacher 2*

Thirdly, student teachers learned about class management in ICT-based language lessons. Class management was challenging especially for classes with a large number of students. Student Teachers 2, 3 and 6 expressed that using ICT helped them to control the students easier as the graphics and sounds attracted their attention. However, Student Teacher 1 faced problem controlling her class as the students became disorganised when participating in the ICT-based activities.

> The number of students was quite big and the students at the back were not able to see the video clearly. We asked them to come forward. The students then started to push each other as every one of them wanted to go near the computer and speaker. It took time to control them because they became too 'active' when they saw the computer and LCD. The problem was not because of the technology used but more to the students.
>
> *Student Teacher 1*

ICT-based Multisensory Language Learning

The use of ICT in the multisensory approach helps to improve the delivery of abstract knowledge, especially to young learners. ICT helped especially in the explanation stage of new knowledge. Due to the rural setting of the school, Student Teacher 1 expressed that it was challenging for the students to "imagine things they have not seen or things that they are not exposed to." ICT enabled student teachers to provide concrete examples to teach them knowledge which they had not known before.

> I feel better in using ICT in the classroom because with all the colours and clearer wordings, it complements my teaching as well as delivers a clearer message to the students, especially the animation, which helps in giving them exercises and they will be able to remember it better.
>
> *Student Teacher 7*

The use of ICT in the multisensory approach also allowed the student teachers to bring the outside world to the classroom. ICT allowed students to experience new things which could not be "obtained through reading a book" (Student Teacher 1). As Student Teacher 4 recalls ICT could "give them some insight of how the outside world can be" (Student Teacher 4).

The use of ICT in the multisensory approach helps to establish language practice opportunities. In introducing new vocabulary and explaining new knowledge, student teachers did not have to resort to translation. Instead, student teachers could rely on the ICT tools to present the meaning of the new vocabulary and knowledge through pictures and videos.

> For Primary 1, we used ICT to teach them vocabulary related to animals by showing them video and pictures of animals instead of just using translation in the classroom. This helped in controlling the use of mother-tongue in the classroom.
>
> *Student Teacher 4*

Students are able to relate to the new knowledge learned through ICT and sensory-based activities. Students are able to make the connection between the new English vocabulary and the ICT-based audio-visual aids. In studying "Animal Sounds" students listened to the student teacher's explanation, saw the picture and listened to the actual sounds. The students were able to remember and recall the new knowledge when doing the activity.

> The pictures, videos and sounds produced from the ICT materials attracted the students and enhanced their understanding. This was because, they were not only hearing the teacher's explanation but they could also refer to the pictures provided. They could easily visualise the idea. The sounds also enhanced their understanding and made them more alert during the lessons. For example, when we taught them 'Sounds Around Us', we needed to introduce to them the sounds of animals. Using ICT made it easier for us to explain the sound as they could see the pictures and hear the animal sounds.
>
> *Student Teacher 3*

Making a connection through visualisation helped the students to retain the information and apply the knowledge in their activity. As Student Teacher 7 recalls:

> They tend to remember better when they see and listen. What I do to make sure if they are still able to recall and apply what they have learned from the previous lesson is to give them some questions or ask them to be the teacher and recap what I have taught them earlier.
>
> *Student Teacher 7*

CONCLUSION

Student teachers demonstrated and learned ICT-related skills and knowledge previously unknown to them. In teacher education programmes, student teachers are taught to devise ICT-based learning materials. However, they have limited opportunities to experience teaching using ICT-based materials in real classrooms. Participation in community projects enables student teachers to develop pedagogical, technological and content knowledge using the resources available in the community.

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Engaging Children in Story-writing Activities through Kidblog and WhatsApp

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ABSTRACT

Narrative writing is any kind of writing that recounts a story. While the love of stories among children is innate, getting them to put the stories down in writing can be perceived as a daunting task, especially when the task is associated with a high-stake test. The use of story prompts through the integration of technology and writing pedagogy can make this task less daunting for children. This paper aims to present findings based on a project involving 31 Year 6 students in one suburban primary school. The strategy was to engage digital-native children in story-creating process through the use of blog and mobile apps like WhatsApp and editing software for images, videos and sounds. Students used mobile devices to create a story prompt (an image, a video or a sound clip) for writing a story. The students used the story prompt to stimulate ideas about the setting, the characters, the mood and the plot of a story. The stories and the story prompts were shared on the class blog and the class WhatsApp group. The students' personal reflections in their reflective journals demonstrate the positive effects story prompts have on reluctant writers' attitudes towards narrative writing. The students' scores in pre-test, progress test and post-test also suggest that story prompts have a role to play in improving the students' performance in narrative writing tests.

Keywords: story writing, blogging, mobile learning, reluctant writers

INTRODUCTION

Creating stories should be something that children find joy in. The joy may be killed, however, if the act of creating stories is turned into a test. Understandably, there are various different reasons why test builders would want to choose writing a story as one the ways to assess children's ability to write. A language learner who is able to write a good story would be able to display the ability to use words and phrases creatively, construct a variety of different sentence structures, use the language to provide descriptions, relate an event and express ideas. Stories are flexible because they can be used for different levels of learners, ranging from beginners up to more advanced language users. Despite that, it is also important to retain the joy of creating stories among children.

The love for stories among children is innate. Substantial bodies of researches have shown how stories can be beneficial for children's language development, creativity, literacy and character building. In an education system where testing and evaluation are put on a high pedestal, it is sometimes difficult to separate the act of creating stories from the associations with any form of assessment. Having stated that, assessing students' ability to create stories need not be perceived as something negative. There are perhaps ways for language teachers and educators to bridge the gap between testing and evaluations with creativity and meaningful language learning.

The main aim of this research is to explore the ways of making story-writing fun and interesting, even if learners are aware that it is tested in a national examination. It is an attempt at exploring how the fear of failing the writing test can be eliminated by building up the confidence level of the students through various story-making activities which include the use of technology, collaborative activities and experimenting with different platforms and media. The final target is for the students to derive satisfaction from the act of creating stories while scoring well in the examinations at the same time.

BACKGROUND

Literature Review

Resources have the potential to create a learning environment that supports students' language learning. However, in order for this potential to be fully realised, students need to be involved in making, using and managing the resources (Moon, 2005). A story prompt is a learning resource, and in this project students were expected to make the story prompts, to use the story prompts to create stories and to manage the story prompts by sharing them with others through Whatsapp and blog posts.

Narrative writing falls under the creative writing genre. May and Tabachnick (1966) experimented with several different types of stimuli to examine the effects on children's ability to write creatively. Their research findings show that the greatest degree of creativity can be achieved when a mixture of stimuli is offered to the students (May & Tabachnick, 1966). When students are engaged in the story prompts project, they would be presented with a variety of stimuli that would capture their imaginations and enhance their levels of creativity to write stories.

According to Wright (2010), it is much easier to invent a totally imaginary story with limited language than it is to describe real experiences. In the story prompts project, students were encouraged again and again to tap into the power of their imaginations to produce imaginary stories based on story prompts. Creating story prompts allow the students to learn language by attaching meanings to images and other digital stimuli. The experience of meeting new language can be heightened if it is accompanied by memorable and engaging images (Keddie, 2009).

Keddie (2009) also states that because we are living in the age of the mediated image, many learners claim to be visual thinkers and this in turn may affect their learning approaches. Advances in technology have also consolidated the role of image as a highly effective medium of communication (Keddie, 2009). Through the story prompts project, these advances in technology were utilised to the fullest. Smart phones and computers were used to share images through platforms like WhatsApp and blog. This approach provides a more engaging learning experience for my students who are mostly digital natives and visual thinkers.

Engaging in storytelling activities is a way to motivate even the most reluctant reader or writer. This pedagogical strategy capitalizes on students' desire to talk and interact with others. Some researchers have found that the weakest readers and writers are often most adept at storytelling. Citing Alex (1988); Craig, Hull, Haggart and Crowder (2001); and Phillips (1999), Miller and Pennycuff (2008) states that storytelling as a pedagogical strategy can strengthen reading comprehension by helping students develop of (sic) a sense of story. According to Mart (2012), stories are motivating for young learners, and stories can create a happy and enjoyable learning environment. Stories are the most ideal sources for young learners in effective language learning. Children like stories, and they find stories easy to access and understand. Stories provide an outstanding opportunity for young learners to master the foreign language. This view is supported by Martinez (2007) in affirming that children enjoy listening to stories in their first language and are more likely to transfer that desire when listening to books read in a second language. Therefore, motivation and interest increase. Furthermore, stories are a great way of introducing, practising, revising, and improving pronunciation skills and teaching culture using the target language.

Reluctant writers often have difficulty expressing their thoughts coherently because they spend too much time rummaging through the dictionary, or get trapped in the endless act of writing a line and then scratching it out again and again (Sledd, 1993). Also, according to Sledd, a reluctant writer who is asked to revise his or her writing would normally "conduct an uncertain error patrol and resubmit essentially the same piece" (p. 29). Sledd also identifies reluctant writers as those who have difficulty working collaboratively. According to Graves (1995: 36), reluctant writers "begin to associate the act of writing with their struggles with mechanical skills such as handwriting, spelling and punctuation."

How do reluctant writers compensate for their writing problems? They do so by avoiding the task. Rather than risk failure, reluctant writers simply give up (Mather & Lachowicz, 1992). According to Carignan-Belleville (1989), the motivation to write comes from successful first experiences. But what happens when previous school experiences bring only failure? Students then often continue to experience failure in writing because of a lack of self-confidence (p. 57).

According to Yancey (2004), helping writers develop fluency and competence in a variety of technologies is a key part of teaching writing in this century. According to a study by the National Literacy Trust, children who write on blogs, use text messages or engage in social networking websites are more confident about their writing skills compared to children who have limited access to these technology platforms (Clark & Dugdale, 2009). This research combined the potential of technology with the use of writing prompts to help the students to be more creative in creating stories. A writing prompt in this research refers to any stimulus that can assist students in writing stories. It can be in the form of an image, a sound clip or a video. Another important way technology can help in making writing more engaging is through its ability to provide platforms for students to give and receive feedback on their writing, both synchronously as well as asynchronously (Scott, 2009). In this research, synchronous feedback was given and received through the class WhatsApp group while asynchronous feedback was given and received through the class blog.

METHODOLOGY

Research Context

The students who were involved in this research would be sitting for a national examination called UPSR (Primary School Achievement Test). It is a compulsory test to be taken by all Malaysian students by the end of their sixth year of primary schooling. The UPSR examination consists of five subjects, and English language is one them. The English language test for UPSR has two papers. Paper 1 is a multiple-choice test where students would be assessed on vocabulary, grammar, spelling, punctuation and reading comprehension. Paper 2 is a writing test.

Based on the analysis of the students' previous test results, most scored lower in Paper 2 compared to Paper 1. Most students find that the most challenging item in Paper 2 is Section C, where students are required to write a short story (around 100 words). Although they do have the basic proficiency required to score reasonably well on the item, most of the students have very little confidence in their ability to answer the question. The maximum mark is 15, yet the students' average score is only around 2 to 3.

The students have so much potential to write better stories, but most of them would limit their writing to the minimum, focusing only on completing the task rather than doing it well. The stories that the students write have no interesting beginning, no climax and are not ended properly. The characters are often not introduced and developed. Most of the stories read more like a description of sequences rather than a proper narrative. The setting is not explained clearly and the plot is blurry. The attempt to include feelings and emotions in the story is also very minimal. Through the researcher's observations, it was obvious that most of the students have very little or no interest in writing. They find no joy in it. Writing is perceived as dull, boring and burdensome.

Also noticeable was the fact that a large number of the students spend most of their time on their smart phones. They use their smart phones to take pictures, record videos and sounds, chat with their friends, surf the Internet and play games. They would prefer playing with their smart phones to enjoying a good story book and engaging in storytelling or story-writing activities.

In spite of it all, the researcher can also see a lot of opportunities in this obsession with smart phones and gadgets among the students. Technology can be used to ignite the students' creativity, nurture their imaginations and fill their minds with amazement and wonder.

Through this research, the researcher hopes to be able to explore the ways smart phones can be utilised to nurture the love of writing stories among the students. By integrating classroom writing activities with the use of technology, the researcher hopes to be able to improve the students' engagement in learning how to write and help them become better story writers.

THE STUDY

Project Description

A story prompt refers to any stimulus (digital or non-digital) that can assist students in writing stories. A good story prompt or stimulus for story-writing should be able to ignite students' creativity in producing stories by prompting them to be more imaginative. The stimulus for story-writing can be presented in the form of images, videos or audio files. For the purpose of this research, the researcher would be focusing on story prompts that are created digitally and provide students with multisensory learning experiences. The rationale of focusing on digital stimuli is to attract the students' interest. As explained in earlier sections, the students targeted in this research are mostly obsessed with smart phones and electronic gadgets. This research aims at utilising this obsession to the fullest by experimenting with the many different ways smart phones and electronic gadgets can be used to create digital stimuli for story writing.

Before getting the students to create the story prompts, they would be introduced to what a story prompt is and how it can be used to brainstorm ideas for a good story. They would learn that a story should have a beginning, a build-up, a climax, a resolution and an ending. After the students were familiar with what a story prompt is and how a good story should be constructed, they would proceed to the second stage of the project. Creating story prompts would require the students to look for a stimulus (an image, a sound, a video clip, etc.) that can trigger the feelings of suspense, excitement or conflict, which are keys to the climax of a story. Through this project, the students would be geared towards thinking about the setting, i.e. the time and the place where the story takes place.

It also trains the students to think about the mood, i.e. the feelings and emotions involved in the story. These help them to think beyond merely describing sequences of events with stiff characters.

In the third stage, the students would share their story prompts with one another. They would use the story prompts to outline their stories. It should help them think about the setting (time and place), the characters and the mood (feelings and emotions). It should also guide them to think about the beginning, the build-up, the problem/dilemma/conflict (climax), the resolution and the ending of the story. It should be noted that a story prompt is not a complete story by itself. It only serves as a prompt, or a stimulus for writing. The main focus of this research is to get the students to put the story into writing, either on paper or on a word processor in a computer. The digital media should not take the place of the student as the storyteller. After outlining the stories and determining all the elements, the students would proceed to writing the story down. The stories and story prompts would be shared with everyone in the class. Students who wrote based on the same story prompt would have the opportunity to compare stories with one another. There would also be opportunities to discuss each other's stories and story prompts, to provide and receive feedbacks, and to work on improving one's work based on the feedback received. Figure 1 shows the three stages involved in this project, the procedures and platform as well as the method of data collection.

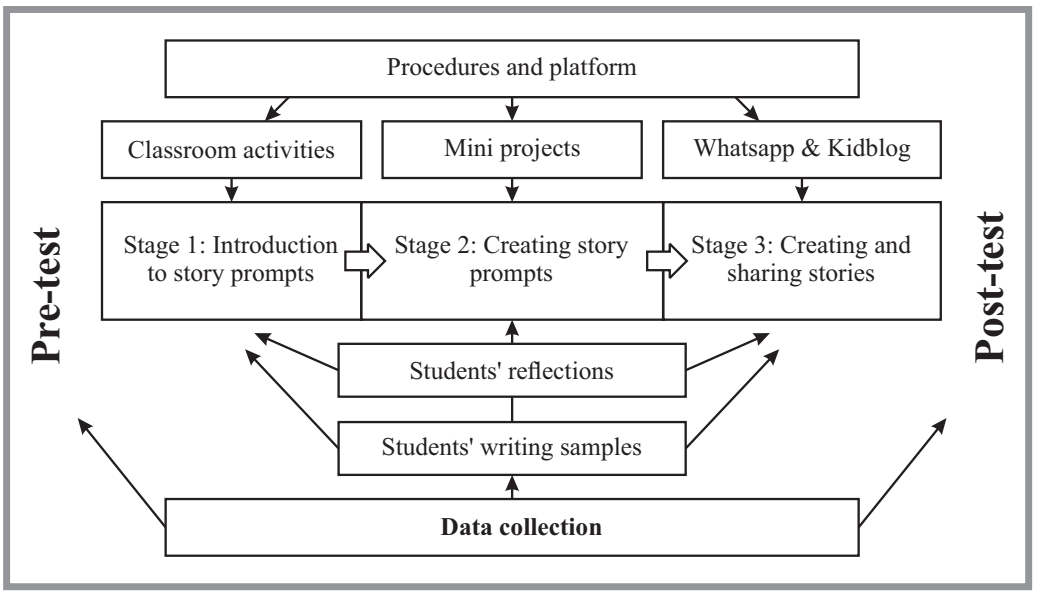

Figure 1 The stages involved in the 'The Story Makers' project

Sample Activity: The Pandographer (Mental Picture Dictation)

The teacher told the students that she had a very interesting image in her smart phone, and that she was going to show it to them. The students were eager to see the image, but the teacher told them that she would show it to them later. Before they could see it, they would have to listen to a description of the picture. They would have to use their power of imaginations and try to picture the image in their heads.

Next, the teacher read out a brief description of the picture. The students listened to the description. The teacher then divided the students into small groups of four or five. The students had to write a few sentences about the picture, based on the description that they had just heard.

The next step required the students to compare the descriptions that they had written with other groups. The teacher would then reveal the picture and elicited feedback from the students. The students wrote their reflections on the activity in their reflective journals. (Adapted from 'Mental Picture Dictation' in 'Images' by Jamie Keddie, 2009, pp. 15 – 16).

Figure 2 The Pandographer' by Bert Hardy (http://thephotographersgallery.org.uk/berthardy)

The students clearly enjoyed the activity. The researcher could observe positive attitudes and more interests towards writing after the activity was conducted. The image, which served as a story prompt in this activity, had managed to attract the students' interests and captured their imaginations. Before they knew that the photographer in the picture is actually a panda, the students were able to come up with various interesting descriptions about the photographer. This activity had been able to train the students to use the power of their imaginations to create interesting descriptions for a character and a setting.

The researcher purposefully kept the story prompts till the end of the lesson and did not reveal it during the first stage. This was done because the researcher wanted the children to train themselves to tap into their power of imaginations. By doing this, the students would be able to practise not only to use the images and describe them as they are, but also to look beyond the images and create imaginative stories in their heads.

Stage 2: Creating Story Prompts

The second stage started when students were already familiar with the use of a variety of interesting stimuli as prompts for writing stories. The students would create images, videos and sound clips like the ones that they had been using to help them write stories for the past few weeks. For the purpose of this research, the word 'create' would be used rather loosely. The story prompts did not have to be original; the students were allowed to use available images, videos and sounds that they could find either online or offline. The main aim was to train the students to look for a stimulus that can help spark their imaginations and prompt the creation of stories.

Mini Project 1: The Scream

The first mini project in this stage was done together as a class. The students wanted to create a set of story prompts that they could present to their juniors in Year 5. To do this, the students used their smart phones to download a short video and then to use a mobile application to extract the sounds from the video and created an audio file out of it.

In this mini project, students used their smart phones to find a video on YouTube (app used: YouTube for Android). They downloaded the video using their smart phones (app used: AVD Download Video Downloader). The students then extracted the sound from the video by converting it into mp3 format (app used: MP3 Video converter for Android).

After all the steps were done, the students conducted a mini lesson with their juniors in the Year 5 class. The students played the audio and asked their Year 5 juniors to imagine what was happening. The Year 5 juniors worked in pairs and created a story

based on what they heard and shared their stories with everyone in the class. Then, they played the video and asked for their juniors' feedback. The students wrote their reflections on the mini project in their reflective journals.

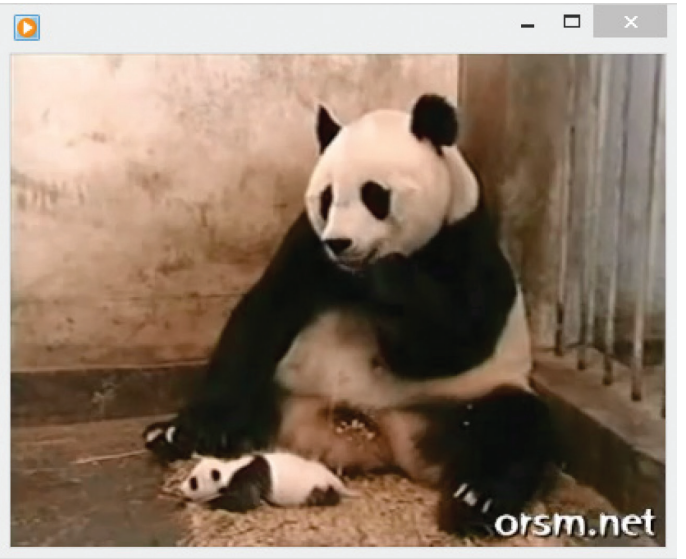

Figure 3 A screenshot of the video that the students used in Mini Project 1

The students enjoyed the process of creating the story prompts very much, but it was obvious that they enjoyed the mini lesson with their juniors even more. Through this mini project, the students were able to see how the story prompts that they created had managed to help their juniors create interesting and imaginative stories.

*Note: This project was inspired by an activity shared by Jamie Keddie in his talk 'Taking Video Apart' (British Council's ELTDP Symposium, 4 – 6 March 2015 at Kuching, Sarawak, Malaysia).

Mini Project 2: A Tour Around the School

Prior to conducting this mini project, letters to the students' parents were sent out asking them for permission to allow their children to bring smart phones to school for one day, for their English language lesson. The parents were very cooperative and almost all the students who owned smart phones were able to bring them to school on that day. For this mini project, the class was divided into small groups of four or five. The students went on a tour around the school. The students were expected to use their smart phones to capture images, take videos or record sounds that they think could tell an interesting

story. Students walked in their groups for a short tour around the school. They used their smart phones to capture images, take videos or record sounds that they think could tell an interesting story.

Then, the students went back to the classroom and worked with their groups. They shared with each other what they had captured on their smart phones. Each group selected an image, a video or an audio file and created a story out of it. Representatives from each group shared their stories with the rest of the class. The students wrote their reflections on this mini project in their reflective journals. Figure 4 below is an image that was selected by one of the groups:

Figure 4 An image captured by one of the students

Here is the story that they had created based on the image:

There were three friends. They were sitting together on one bench. They had long hair. They wore red dress. They were beautiful, but plain. They wanted more colours. They were bored because they were green. They wanted to sit on grasses. Yes, they were sitting on grasses now but the grasses were not real! They wanted to run away but they had no legs. They had no arms, too. They had nothing.

It was amazing to see how creative the students were. The researcher expected images of events and activities around the school, and perhaps straight-forward descriptions or explanations on them. The students were able to exceed the expectations. The group that had selected the image as shown in Figure 4 had decided to emulate the way their teacher presented story prompts in the previous lessons – they revealed it at the end. They read their stories to the class and asked their classmates to guess what image

it was and where they had taken it from. Their classmates guesses were equally creative (and hilarious, too!). Some of the guesses: the puppets in the English room, the cover of one of Miss Cynthia's storybooks, the ladies at the canteen, the school janitors, some mysterious things in the toilet. The students were starting to realise how creative and imaginative they are, and how exciting it is to use their creativity and imaginations by creating interesting stories and sharing them with others.

Stage 3: Creating and Sharing Stories

To make sharing stories easier, three platforms had been set up for the students to communicate and interact with the teacher and each other.

Platform 1: WhatsApp Group

The students had a WhatsApp group that they called 'The Story Makers.' The students used it to share story prompts and brainstorm ideas for stories based on the prompts. They also used it to discuss mini projects based on story prompts. These screenshots show some examples of how discussions went on in the WhatsApp group:

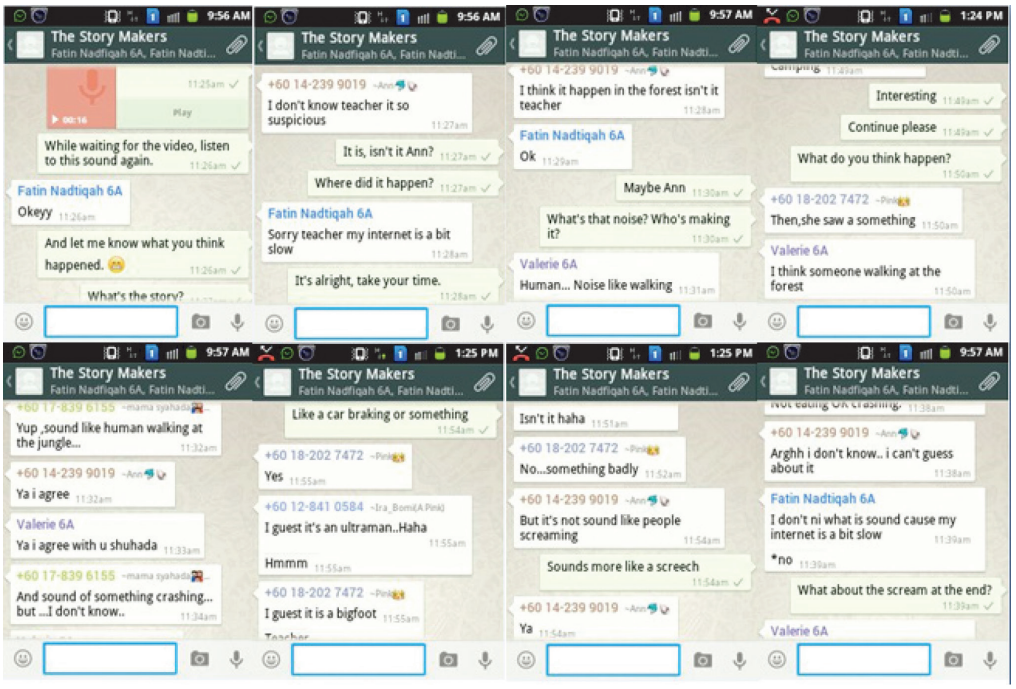

Figure 5 Screenshots from 'The Story Makers' WhatsApp group

Here is an extract from the conversation:

Teacher: (Uploading an audio file) While waiting for the video, listen to this sound again
Student 1: Okay
Teacher: And let me know what you think happened. What's the story?
Student 2: I don't know teacher it so suspicious
Teacher: It is, isn't it Ann? Where did it happen?
Student 1: Sorry teacher my internet is a bit slow
Teacher: It's alright, take your time.
Student 2: I think it happen in the forest isn't it teacher
Student 1: Ok
Teacher: Maybe Ann. What's that noise? Who's making it?
Student 3: Human...Noise like walking
Student 4: Camping
Teacher: Interesting. Continue please. What do you think happen?
Student 4: Then she saw a something
Student 3: I think someone walking at the forest
Student 5: Yup, sound like human walking at the jungle...
Student 2: Ya i agree
Student 3: Ya i agree with u shuhada
Student 5: And sound of something crashing...but...I don't know
Teacher: Like a car braking or something
Student 4: Yes
Student 6: I guess it's an ultraman..Haha. Hmmm
Student 4: I guess it is a Bigfoot. Teacher...
Student 6: Isn't it haha
Student 4: No... Something badly
Student 2: But it's not sound like people screaming
Teacher: Sounds more like a screech
Student 2: Ya
Student 4: Not eating ok. Crashing

The Whatsapp group was mainly used as a platform for sharing story prompts and for brainstorming ideas about stories. The researcher also used it to revise what the students had learnt about the elements of a story, i.e. the characters, the setting, the mood etc.

Platform 2: Class Blog

Kid blog (http://kidblog.org/) was used as the platform for the classroom blog. It was also called 'The Story Makers' (https://kidblog.org/class/TheStoryMakers/). The students used the blog to share their stories and story prompts. The students were encouraged to read and comment on each other's blog posts. Through this platform, students were able to not only share their stories with one another, but also to give and receive feedback on their work.

The students were given the freedom to post any stories they liked. Once in a while, the blog would also be used to conduct follow-up activities based on the lessons that had been done in the classroom. For instance, the students would be asked to post a story based on a story prompt that they had used in the classroom earlier.

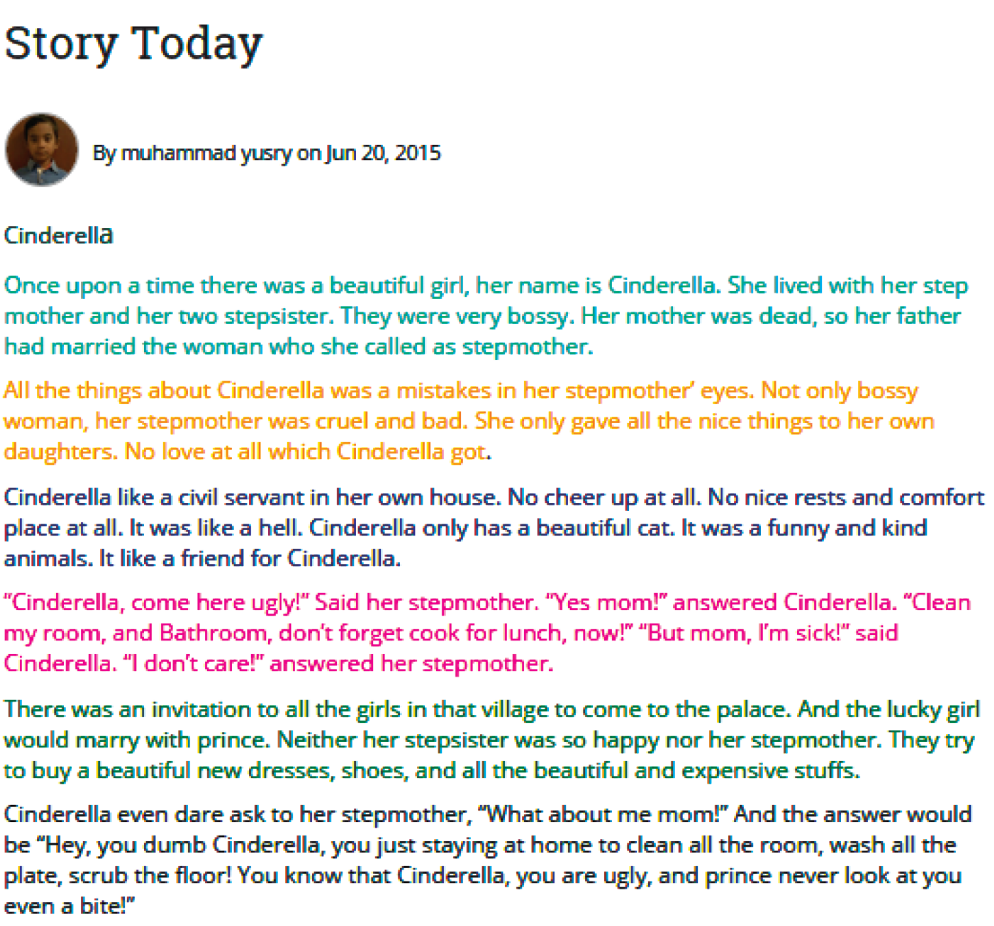

Figure 6 Another screenshot of a student's blog post

RESULTS AND DISCUSSION

Throughout the research, students were engaged in a variety of story-creating activities, both inside and outside the classroom, which gave them the opportunities to explore, to experiment, to share and to give and receive feedback. The main activity was writing and the main tools used were digital resources and technology devices. The overall aim was to reduce reluctance to write among the students by making writing activities more personal, interactive and meaningful. The impacts of these intervention strategies were examined through the students' attitudes towards writing and the students' performance in pre and post-tests.

Students' Attitudes towards Writing

The students' attitudes towards writing were examined through their written reflections. To guide the students in writing down their reflections, a sheet containing one or two questions to consider was provided, normally right after they completed an activity or a mini project. The questions were in English, but the Malay translations were provided. The students had the choice of whether to respond in English or in Malay.

Figure 7 summarises the students' responses towards the question: *How do you feel about writing?* Categorised based on common themes derived from the responses. The students were asked to reflect on this question at the beginning of the project, before conducting any the intervention strategies.

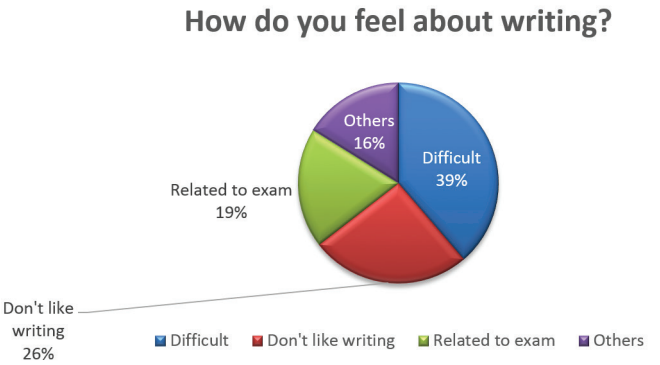

Figure 7 How the students felt about writing before the project

Most of the students' reflections contained words and phrases like 'difficult', 'hard' and 'don't like writing'. They also associated writing with Section C and the UPSR test. Here are some excerpts from the students' reflections:

I don't like Section C because it too hard for me. I don't know how to write stories. Very difficult.

I like play games COC on my phone but I don't like writing. But writing is important for learning so I have to do for UPSR.

Figure 8 summarises the students' responses towards these questions: *How do you feel about today's writing activity? Did you enjoy it?* These questions were asked right after the students completed the mini project outside the classroom.

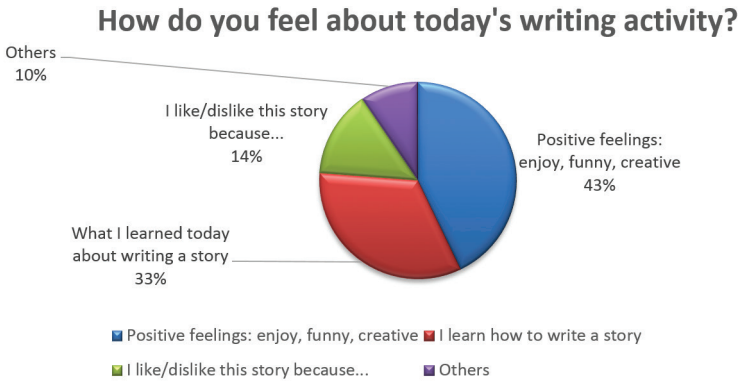

Figure 8 Students' reflections while interventions were going on

There were more positive words like 'enjoy', 'interesting', 'funny', and 'creative.' The students were also displaying better understanding about stories and the elements that make the stories pleasurable. For instance, a few students could explain that a story must have a beginning, a climax and an ending, and that in order for a story to be interesting it must have 'elements of surprise', 'suspense', etc. The reflections also showed that some students were beginning to acquire the ability to analyse and evaluate a story. They could state why they like a particular story. For example, a student explained that a story is good when it 'affects her emotions' and that a story is bad when it has 'no moral value'. Here are some excerpts from the students' reflections:

What I learn today, I know a story must have intro, build up, climax, resolution and ending. When I listen to the sound teacher play, I make a story in my head with intro, build up, climax. But I don't write the resolution yet and the ending yet because I am still thinking.

My favourite story is from Natasha's group. I think they are very creative. The story has elements of surprise. The story is not yet finished, but I really like it. Maybe I can write my own ending for the story. I can make it like a fairy tale.

Figure 9 shows the students' responses towards these questions: *How do you feel about your experience with 'The Story Makers' project? How do you feel about your writing ability now?* These questions were asked towards the end of the research, when the students were about to complete their final project on the class blog.

Figure 9 Students' reflections after interventions were carried out

The students could describe, in their own words, the process of writing a story. They understood the steps that they had to take. They could also explain why they chose to include certain things in their story. The reflections also indicated that the students no longer perceived Section C as being 'difficult' and 'hard.' There are also indications that the students were starting to enjoy writing and creating stories. Here are some excerpts from the students' reflections:

> *Today we do practise UPSR and teacher give Section C to us. I'm so surprise because it was so easy for me, not hard like before this. I write introduction for my story and one paragraph for one picture. My story has three pictures so I write three paragraph. And of course the closure. I end my story with describing the character emotions.*

> *The part about the stranger want to kidnap Anna was not in the question paper, but I still write it in my answer because it will make the story more interesting.*

> *I'm surprise when teacher say we can write in section C, we can use our imagination like when we do our story prompts. When I use my imagination my story become longer. It make me so happy.*

Pre-test and Post-test

Table 1 Students' Scores in pre-test, progress test and post-test

Student	Pre-test (max. 15)	Post-test (max. 15)
1	2	8
2	2	7
3	3	6
4	3	7
5	3	6
6	2	7
7	1	5
8	2	6
9	3	5
10	2	7
11	5	10
12	4	5
13	3	6
14	4	6
15	3	6
16	4	6
17	2	5
18	1	4
19	3	5
20	5	5
21	3	6
22	2	6
23	1	7
24	3	7
25	4	8
26	3	8
27	3	8
28	3	8
29	3	7
30	6	11
31	2	8
Average	2.90	6.65

The marking for the tests (Section C writing exercises) was based on the official UPSR marking scheme provided by the Malaysia Examination Board. In order to enhance the

validity of the scores, the researcher sought the assistance of two other teachers who are also experienced UPSR examiners for the English language paper. The markings were done in three stages. The researcher did the first round of marking while the other two examiners did the second and third rounds. The final scores were the average of the scores from the three rounds. Table 1 shows the final average scores in pre-test and post-test for the 31 students involved in this research. The pre-test was conducted before any of the intervention strategies were conducted. The post-test was conducted at the end of the research, after all the intervention strategies had been carried out.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	2.90	31	1.165	.209
	Posttest	6.65	31	1.518	.273

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	. n	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pretest - Posttest	-3.742	1.483	.266	-4.286	-3.198	-14.053	30	.000

Statistical test (Dependent T-test) conducted shows a significant difference between the pre- and post-test means ($t = 14.053$, $df = 30$. $p<.05$) indicating the difference in the mean scores is statistically significant. In other words, the intervention strategies helped to enhance the pupils story writing.

CONCLUSION

At the beginning of the research, the students had very little interest in writing. Due to past failures in previous practice tests, most had become reluctant writers. They associated writing activity with difficult and impersonal examination tasks with little sense of communication. The students' reflections before the interventions were carried out indicated that they had low motivation to write in English. The students seemed to be lacking the confidence to answer the writing task in the UPSR English paper. Story-writing was seen as something difficult and hard.

As the research progressed, some shifts in the students' attitudes towards writing could be seen. The evidence for this can be clearly observed in the students' reflections. The students were beginning to understand the process of creating stories, and they were starting to be more open about learning how to do it well. Towards the end of the research, the students' reflections displayed deeper engagement in story-writing activities. The way the students wrote their reflections clearly suggests that they were starting to enjoy it more. There is enough evidence in the students' reflective journals to conclude that the use of digital resources and the Internet to engage students in story-creating activities had positively impacted the students' attitudes towards writing. After participating in all the intervention activities, the students had become less reluctant and were more willing to take on the task of writing stories.

Analysis of the students' test scores shows that the students' performance had improved throughout the project. The maximum score for UPSR Paper 2 Section C is 15. In the pre-test, the average score was only 2.90. In the post-test, the students were able to achieve an average score of 6.65. The difference in mean was statistically tested and the dependent T-test conducted showed that there was a significant difference in the scores, implying the use of technology coupled with the use of stories in writing pedagogy had to a large extent improved students writing performance on the whole.

The students' scores in the actual UPSR test also showed significant improvements compared to the scores in the January test. It was the school's best result in the UPSR English paper in three years.

Based on the findings and discussion, it can be concluded that the use of stories in writing pedagogy can help reluctant writers to be more enthusiastic writers. The love of stories among children is innate, and this research succeeded in utilising this to a certain extent. Stories give a lot of opportunities for the students to be imaginative, creative and innovative. This research had used stories as tools for motivating reluctant writers to write by creating a happy and enjoyable learning environment.

Through the use of technology tools like WhatsApp and Kidblog, this research had helped the students develop fluency and competence in technology. According to Yancey (2004), this should be a key part of teaching writing in this century. The findings from this research suggest that the competence in technology had positive impacts on the students' writing skills. The students had become more motivated writers. Their performance in writing tests had also improved. When the students were given the opportunities to write on blogs and use WhatsApp to interact with each other both synchronously and asynchronously, their confidence in writing improved.

Suggestions for future research include exploring the many different ways mobile technology like smart phone apps can be utilised to help boost students' potentials in creative writing and other genres of writing.

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Collaborative Writing among Second Language Learners Using Google Docs in a Secondary School Context

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ABSTRACT

This study investigates the use of web-based, task-oriented and collaborative writing for academic purposes. Twenty Form 5 students of proficiency levels ranging from moderately proficient to weak used Google Docs to construct an argument of a given topic in pairs. The duration for this study was one month. The purpose of this study was to explore the nature of collaborative writing in a Web-based writing context. Details of the students' writing processes and their perceptions of the online collaborative writing were examined via a questionnaire and interviews. Coding's were created via document analysis of students' written texts; while a survey was conducted to explore students' perceptions. Findings suggest that students' collaborative writing were focused more on forms than on meanings. A great deal of grammatical changes was made but not all errors were correctly revised, indicating a lack of mastery of grammatical accuracy. Survey results indicated that the students participated positively to the ease of using Google Docs. This study proves that the nature of ESL writing can experience change in a positive manner and students can be directed to experience a more autonomous learning.

Keywords: Google docs, collaborative, writing, scaffolding, Vygotsky's ZPD

INTRODUCTION

In the secondary school context, the concept of the 21st century classroom is heavily emphasized: learning objective boards to share their goal of the day, parking lot section to 'park' questions, a 21st century sitting arrangement are among the few methods to facilitate this. All of these new techniques serve as an 'invitation' for students to collaborate more. By adopting 21st century learning practices, individuals can have adaptive problem-solving skills, be global thinkers and have digital fluency.

The term collaboration is generated from Vygotsky's elaboration on the role of social interaction in learning and the concept underlying the communicative approach in L2 Learning. One of the opportunities for collaboration during lesson is collaborative writing. It provides an opportunity for students to write as part of a community whereby support and guidance can be obtained from one another.

This study focuses on the effects of using Google Docs on students' collaborative writing: its perception and the nature of collaboration. Google Docs is selected due to its easy accessibility to the teacher and learners, its free use and the features that it provides which include word documents, spreadsheets and the availability of web forms for data analysis.

To meet the challenges of the 21st century, collaborative practice using Web-based word-processing tools is being promoted as mentioned in the Malaysian Education Blueprint 2013 – 2025 whereby 1Bestarinet is the proposed platform for all virtual educational purposes. Collaborative writing, which relies largely on theories of social interaction, is believed to give learners a better sense of audience as they work with each other or in groups.

This study is based closely on Kessler, Bikowski and Bogg's (2012) work on using Google Docs to promote collaborative writing among students, particularly on the following two objectives:

- How do students engage in the collaborative writing process using Google Docs?
- What is the nature of participation in Web-based collaborative writing?

In Malaysia, students generally respond well to the use of ICT in learning given that appointed schools in this country have passed the Key Performance Indicator (KPI) of utilising 1BestariNet in their lessons. This shows that Malaysian students generally respond to the use of technology in learning English and a search of literature reveals that technology has influenced ESL writing process and practices.

Collaborative writing using an online tool as a platform helps students see writing as a dynamic process and helps them focus more on meaning in their writing very early on as opposed to the final product. Newer technologies have also enhanced the use of these tools to go beyond just online writing as they often take place within discussion boards and online chats. Applying collaborative writing using an online platform is certainly a necessary step that gears education to the needs of the 21st century.

Scaffolding is necessary for this implementation as students have different proficiency levels. Feedback becomes a collaborative dialogue between students in pairs. There will be many versions of the first draft which will eventually lead to the construction of the first draft. When the first draft is completed in pairs, it will be revised

once again by peers. Feedback can also represent comments given by peers. After that, students will contribute to their first drafts and make necessary changes. Finally, a revised draft is produced. This is all done in a web-based context that allows real time computer-mediated instruction to take place.

LITERATURE REVIEW

Learner Autonomy

The core of the notion of autonomy according to Lev Vygotsky (1996) are learners' abilities and willingness to make choices independently. The term 'autonomy' started in foreign language teaching when it was acknowledged that language learning requires the active involvement of learners. Littlewood (1996) began his definition of autonomy with two components: **ability** and **willingness**. As of late, learner autonomy is frequently associated with an online learning environment as it has the potential or affordances to promote it, including access, storage and retrieval, sharing and recycling of materials, cost efficiency, authenticity, interaction, situated learning, multimedia, new types of activities, non-linearity, feedback, monitoring and recording learning behaviour and progress, control and empowerment. Also associated are the teachers' and learners' role in promoting this autonomy where there are specific suggestions on teachers' pedagogy.

Learner Autonomy and Technology

Technology's role in fostering autonomous learning has been vaunted over the years. Deborah Healy of Oregon University has outlined some of the considerations when planning and implementing learning with technology: independent learning, learner needs, what technology can provide, and facilitator's role.

In terms of independent learning, metacognitive skills are necessary. These include the awareness of learning styles and the ability to track one's own progress. ESL learners have different needs which are influenced by culture, first language development and second language skill building. ESL learners have an expectation in regards to student's and teacher's role mainly teacher as the giver of knowledge and students as the receivers. Although the paradigm of learning has shifted towards a student-oriented approach, issues on outlining and employing this approach still exist. For many ESL learners, the teacher's duty is to impart knowledge and their duty as students is to memorize it.

Differentiated instruction is derived from the knowledge of the different needs of learners. These needs are categorised into linguistic, metacognitive, psycholinguistic and social. For the linguistic side, Krashen's i+1 theory is the core whereby learners must have language data and the opportunity for practice in order to acquire or learn a language.

Language data should be within the i+1 comprehension level. Instruction following a certain sequence as well as providing rules for deductive learners are considerations for learning to take place or language to be acquired.

For the metacognitive aspect, learners are 'learning how to learn'. It is believed that learners do well if they know their learning style, understand their path through the materials to be learned, and have a way to assess their learning progress.

For psychological factors, a learner's self-validation, motivation and engagement with the material should be taken into consideration. Self-validation is especially important as learners may come from marginalized social groups. Healy adds, where the learner's first language and culture are respected, he is likely to be less afraid of losing self when learning a second language. For social factors, learners need a sense of community with their peers and home to be receptive of learning.

This study also reveals that students can operate technology and shows their development in learning how to learn skills. They do this by emulating what is done by students with higher proficiency. However, Malaysian students in this study show a dependency on the teacher and teachers themselves are not prepared to let students be autonomous. Also, the fact that the curriculum is a guideline on what students need to build on, it poses the question if it should be recognized as autonomous learning when the definition of autonomous learning is for students to construct knowledge on their own.

Based on the belief that learners require knowledge and skills to acquire knowledge via interaction, collaboration has been extensively analysed for its potential in this area. Collaborative practices are being increasingly advocated in second language classrooms largely in response to the collaborative potential of Web 2.0 features.

Theoretical Framework

The main theoretical framework underpinning this study is Vygotsky's Social Development Theory, which emphasises social interaction in learning. This study attempts to expand this practice to a Web-based context that is heavily influenced by Kessler's (2010) work. Vygotsky believes that community plays a central role in the process of 'making meaning' and that 'learning is a necessary and universal aspect of the process in developing culturally organised, specifically human psychological function.' Vygotsky (1978) has also stressed every function in the child's cultural development appears twice: first, on the social level**,** and later the individual level.

Assumptions on learning come in many but almost similar forms (Piaget, Binet, Koffka). The first view asserts that a developmental cycle precedes learning, maturation precedes learning and instruction lags behind mental growth. The second view states

that both learning and development occur simultaneously. It is based on the view of conditioned reflex or habit formation. But both views agree that development is conceived as the elaboration and substitution of an innate response. There is also a third view that expresses development as based on two different but related processes and both has influence over the other.

Vygotsky believes that because all three viewpoints on learning are closely related, there must be a missing link. He asserts that link is interactivity which was left unexplored in all three assumptions.

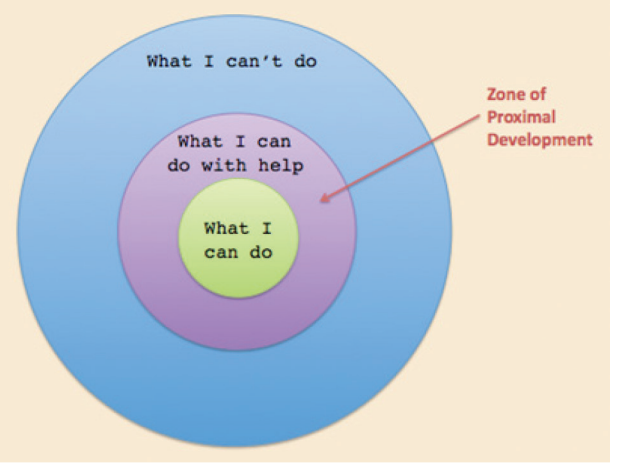

Figure 1 Vygotsky's (1978) Zone of Proximal Development

Basically, Figure1 above points out that the range of skill that children can develop with adult guidance or peer collaboration will exceed that what is obtained alone. The analogy of a child learning from his father before entering preschool was used by Vygotsky to show that interaction actually plays a crucial role in a child's learning and development.

Alan Rivera (1999) in his study of Collaborative Writing Instructions and Communities of Readers and Writers expanded on the importance of social interaction when he announced that collaborative writing provides opportunities for students to write as part of a community where one can refer to each other for support and guidance. The author states that students often learn more effectively when asked to perform tasks in pairs, small groups, and teams than when working alone.

Besides that, in the domain of ESL writing instruction, which is the domain of this current study, collaborative learning is receiving growing interest as it promotes a

path for learners to be autonomous as they can assess and compare their current and previous work, receive constructive comments to guide them and give authentic feedback to another's views.

Collaboration involves certain social skills that can lead any party involved to have an opinion or a decision. Previous researches on collaboration, specifically collaborative writing, concur that sustained interpersonal engagements are likely to include strain and conflicts (Fung, 2010; Mulligan & Garofalo, 2011).

Collaborative writing to increase students' sense of responsibility in learning can be understood by looking into collaborative writing features. Yong (2011) suggests two features in collaborative writing, which are the **defining** (mutual interaction, negotiations, conflict and shared expertise) and **facilitating** features (affective factors, use of L1, backtracking and humour). Facilitating features, if not handled properly by teachers, will hinder successful collaboration. These two features will also work hand in hand when students are made aware of their role as contributors. It is also important that there is no authoritative role in a collaboration as in this case study whereby one student has better proficiency compared to his two team members. Weaker students can share their ideas while enhancing the syntactical element of language can be done by more a proficient student.

The reason why features of collaborative writing in ESL and EFL were explored in this section was to provide 'guidance' on positive behaviour for students' collaboration. These studies basically support a similar premise: collaborative writing allows students to have a better sense of responsibility so that they can grow through academic interaction.

The contributions in collaborative dialogue in the blogosphere were studied by Yu-Chih Sun and Yu-Jung Chang (2012) by analysing collaborative dialogue among seven graduate students. Their study viewed blogs as a social medium for knowledge and identity construction and aimed to explore the types of writing-related topics students blogged about and, most importantly, to determine how collaborative dialogues facilitated its process. This mixed method analysis of seven EFL students collaborative dialogues on blogs allowed them to:

1. Scaffold each other in navigating their writing tasks.

2. Negotiate and understand identities as academic writers.

3. Process academic writing knowledge.

Therefore, from Yong's (2011) and Yu's (2012) studies, the results of their observations of students' collaborative product and the collaborative dialogue created echo the social constructivist theory in language learning. The social constructivist

theory proposes that the development of knowledge should require learners to have active engagement and social interaction. This social process serves as a means of internalizing newly encountered ideas or concepts which will result in successful learning.

Understanding one's identity as a writer to serve a specific purpose is also stressed on by Bush and Zuidema in their 2013 study on Professional Writing in the English Classroom: Professional Collaborative Writing: Teaching, Writing and Learning Together. The authors state that writing collaboratively is significant as students will eventually write professionally when they enter the workforce. Writing as an individual is not simple as it requires carefully choosing audiences, purposes, genres and rhetoric. If writing is considered an individual act, as it is in most ESL secondary classes, learning to write professionally as representing an organisation is missed.

For online collaborative writing, most of the researches are developing a deeper understanding on the use of wiki. Most of the researches are descriptive, reporting on teachers' and learners' experiences of wikis implemented in L2 writing classrooms. For example, Kessler and Bikowski (2010) developed an online writing collaboration framework which involved observing students' behaviour in a shared wiki page. The results of the observation showed that the characteristics of successful autonomous collaborative learner include the ability to use language and appropriate strategies as well as the willingness to display these abilities within a group. The framework developed by Kessler and Bikowski is as follows:

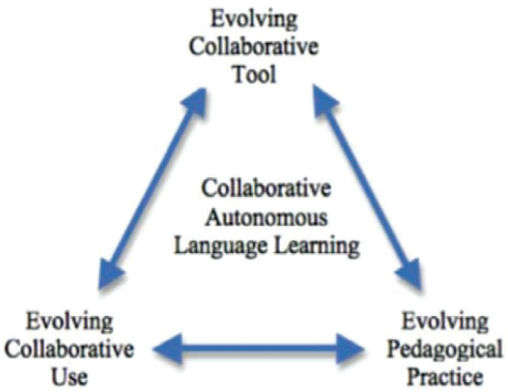

Figure 2 A framework for the co-evolution of collaborative autonomous pedagogy

Another study by Kessler (2009) conducted with 40 EFL adult learners reported on students' lack of attention to language use when collaborating in a wiki project. Kessler analysed learners' attention to accuracy in a 16-week project. Based on the analysis of learners' revision activities, it is shown that learners' attention to Language

Related Episodes (LRE) or languaging (Swain, 2001) were mostly on content and style rather than form. When corrections to form were made, learners focused on word choice and spelling rather than on grammatical accuracy.

Previous research in an ESL context generally show that online collaboration in writing promotes active learning, improves writing skills, cultivates a sense of audience, enhances the importance of feedback and revision, reduces the stress of writing, promotes mutual help, develops higher order thinking skills and enhances interactivity.

A more precise view by Kessler (2013) is that collaborative language learning allows learners to co-construct in social media or in this case, a Web 2.0 tool. Web 2.0 plays an indispensable role as the platform for it. As we move forward by utilising social media to promote a participatory culture, one of the most important things is the manner in which the writing has been constructed and disseminated.

For instance, Jessie Choi Wai Ching's 2008 study examined the role of online collaboration in promoting ESL writing. The samples for her study were clearly defined (36 intermediate level students) as this was important to do a comparison with the current study. The fourteen weeks duration given was also relevant as three tasks were involved and intermediate ESL students needed time to hone their willingness and ability, as was the case in this current study. What was revealing in terms of motivation was that students acknowledged that they could learn from their peers but did not perceive that online collaboration could increase their motivation in writing. This reveals that more study is needed on the relationship between online collaboration and students' proficiency levels.

Storch (2011) in his review of articles regarding the processes, outcomes and future directions of collaborative writing in L2 contexts said that the common consensus was that collaborative writing allows learners to reflect on language use. Besides that, the mode of communication also had a bearing on learners' attention to language in a writing task.

Google Docs and Online Collaborative Writing

Kessler et al. (2012) conducted another study, this time in the use of Google Docs in a project-oriented and many-to-many collaboration, as an extension to their previous research. The study provided a detailed description on how the study can be replicated, the types of contributions that could emerge from students' data and the observations of students' participation in this web-based setting.

In the study, details of students' writing processes, perceptions and experience were explored. The information was gathered from students' scripts in Google Docs, the revision history and post-implementation questionnaires. The results showed that all students had

participated in the collaborative writing project via the number of Language Related Contributions (LRC) and Non-Language Contributions (NLRC) that were obtained. Based on students' produced scripts, meaningful contributions (55.7%) were mostly made by students in terms of LRC while NLRC only recorded a total of 17% of exchanges. The only restriction this study had was that, without a control group and an experimental group, determining the extent of the benefits of collaborative writing was difficult. Nevertheless, this is an informative research and its procedures and data analyses are emulated in the current study to explore the nature of students' collaborative writing.

Along the same vein of adopting Google Docs is Zhou, Simpson and Domizi's (2012) study involving 35 undergraduate students over a six-week period. This study employed two assignments and a questionnaire to explore students' experiences. The results showed that all students responded positively to the use of Google Docs as it gradually became one of the means of communication when students were out of class.

In Thailand, a study (Suwantarathip &Wichadee, 2014) was undertaken to assess, via pre-test and post-test using a quasi-experimental design, the effect of collaborative writing activities using Google Docs had on students' writing abilities. The writing abilities of two groups were compared where one group employed Google Docs for out-of-class task while the other worked in groups in a face-to-face classroom. The instruments used were the students' written task, and pre- and post- questionnaires. The results indicated that there was a significant difference between the two groups' writing mean scores. Students in the Google Docs group gained higher mean scores than the latter. Similar to previous studies, students responded positively to towards the collaborative writing activity. Another revelation, which is absent in Zhou, Simpson and Domizi's study, is the evidence that the vivid contribution by peers in Google Docs documents actually serves as motivation for students to put more effort in their work.

The three articles were compared in terms of procedures, research instruments and results for this study so that the researcher could anticipate and be prepared for the navigation in this study. While Kessler et al. provided an outline for the types of contributions that learners would make, the two other articles did not provide extensive details on this aspect. However, the novelty of Zhou, Simpson and Domizi's study was the out-of-class collaborative writing activity as opposed to being treated as a conventional essay. Also for Suwantarathip and Wichadee's (2014) study in Thailand, two group were created to compare extent of the benefits that Google Docs had on students' learning.

In general, all of the studies agreed that the use of Google Docs to promote collaborative writing has much potential. In the field of Second Language Acquisition (SLA), a number of researches have shown that scaffolding can be provided by peers in pair or group work, where the role of the expert is said to be fluid or shared by learners pooling their expertise. This is a process referred to as collective scaffolding (Storch, 2010). In spite of the numerous benefits, there are concerns which need to be taken into consideration.

Concerns about Online Collaborative Writing

Some consideration that should be looked into when observing learners' development using online tools are learners' metacognitive skills in discovering learning styles, their ability to reflect on one's own learning progress, their motivation for greater responsibility's in learning, and learners' needs. ESL teachers should also evaluate the technicalities before implementing collaborative online tasks such as the sequence of instruction, offer language data according to Krashen's i+1 level as well as provide explicit instructions for weaker or deductive learners before assigning tasks. Cooperative learning, be it online or off, can achieve maximum success when teachers and students are fully aware of their role (Wang, Tzeng & Cheng, 2000; Fung, 2010).

The teacher's explicit instruction is vital in this study, especially so for learners with lower proficiency. An area to be looked into is differentiated online tasks for different levels of learners. Learners in this study will eventually be exposed to online collaboration tasks when they enter tertiary education. Therefore, it is up to the teacher's discretion to weave through delicate emotions which form the motivation for learning.

METHODOLOGY

This research employs a qualitative methodology to describe and answer questions about the participants and context of study. This study aims to explore the development of the collaborative writing process using a Web-based word processing tool. The first research question posed was examined through the triangulation of data obtained from my observation, participants' writings through Google Docs, and post-event questionnaires for a deeper insight to learners' collaboration. The questionnaire developed for this study aimed to gather learners' perceptions of collaborative writing in an ESL environment. The second research question was examined analytically based on learners' contributions to their collaborative writing. Learners' contributions were then categorised according to their writing and revision activity.

As seen in Table 1, the majority of students scored Bs and Cs. Prep class for the actual intervention was done for three weeks whereby students worked collaboratively on paper with hopes that the skills adopted could be transferred once they moved on to the online task. Students were also exposed to the features of Google Docs prior to the actual implementation.

Table 1 Participants' demographic information

Participant	Gender	Mid-Sem Test Score	Grade
1	F	74	A
2	F	64	B
3	F	78	A-
4	F	60	B
5	F	88	A
6	M	61	B
7	M	66	B+
8	M	36	G
9	M	69	B+
10	M	35	G
11	M	85	A
12	M	17	G
13	F	36	G
14	F	52	C
15	F	50	C
16	F	68	B+
17	F	61	B
18	F	77	A-
19	F	76	A-
20	F	59	C+

Table 2 Data collection activities

1st Week	• Teacher distributed task sheets to learners. • Brief discussion on thesis statement, topic sentence and elaboration as review. • These three aspects of argumentative writing were discussed and practised prior to task implementation. • Learners were required to draft their writing using the argumentative writing framework as guidelines. • Teacher facilitated the conciseness of learners' output in face-to-face collaboration.
2nd week	• Lesson continued. • Teacher continued to facilitate in face-to-face collaboration. • End of Week 2, learners' draft in the writing frame used was commented on.
3rd week	• Learners made necessary corrections to their drafts and rewrote them in essay form. • Teacher encouraged learners to vary vocabulary and employ more complex. sentence structures by showing examples on PowerPoint. • The purpose was to expose students to utilising information from online sources instead of just copying and pasting. • Students' work was collected and commented on.
4th week	• Teacher allowed students to review their peers' work. • Together with the teacher's comment and peer review, learners make their final edit. • Questionnaire distributed. • Teacher analysed data obtained from learners' collaborative scripts and questionnaires.

Quantitative Data Collection

Learners' perception towards the use of Google Docs as a collaborative means was examined through the distribution of the questionnaire. This questionnaire consists of three parts which are related to the task's instruction, suitability of the task and online collaboration. Finally, participants were also given an open-ended question regarding the potential of collaborative online tasks for future lessons.

Qualitative Data Collection

Learners' collaborative writing behaviour was analysed in order to determine the degree of learner participation in the collaborative writing process. Learners' writings and use of Web space was then categorised according to their contribution types throughout the writing and revision process.

RESULTS AND DISCUSSION

Students' Perceptions on Online Collaborative Writing

Based on what was observed, weaker students used L1 to express their ideas while their partner translated those ideas. The majority also stated that they felt motivated to complete the task knowing that their partner and teacher were available for assistance in creating structurally correct sentences that reflected their intention. In this instance, positive collaborative writing happened through negotiation and comprehension checks. When asked how the task was helpful, one student gave the following response:

> "*Because dapat tolong menolong dengan partner dan dapat meringankan beban"*

Littlewood (1996) explains that both the ability to take control of one's learning and the willingness to do it are vital for autonomous learning. To help achieve this, student's need to be confident of their abilities, and confidence was something many of them lacked. So it was important that the teacher provided enough encouragement and support.

Choi (2008) asserts that good comments are not necessarily helpful comments. To make their comments beneficial, students were briefed on aspects that they could comment on so that they had a clear guideline on how to assess writing. At the same time, they could also revise and assess their own writing as well. Also, at least one student thought that Google Docs was not easy, and preferred the more conventional writing task. The student felt that there was no advantage in using Google Docs and thought that it was easier to discuss face-to-face. The is probably because of the was poor internet

connection during lessons which caused frustration for students who could not log into their account to contribute as much as they wanted to. One of the ways taken to deal with this was to allow students to take turns contributing using one Chromebook or account. The teacher too played the role as a facilitator to remind or prompt students on what they needed to add or revise in their essays.

Students' Feedback on Online Collaborative Writing

The purpose of this section is to give insights on the two main research questions of this study, which are:

Research Question 1:
How do students engage in the collaborative writing process using Google Docs?

Research Question 1 was posed to find out the types of contributions made by students to their argumentative texts. The data from each pair were analysed and summarised. Data analysis from the questionnaire was used to provide answers as well and were relevantly linked to the contributions done by students.

From the data analysis, there were more meaningful LRCs made than NLRCs. In some cases, both contributions occurred simultaneously in the same sentence.

> *He was studied in lawyer's major to fulfil his family's generation tradition (?)…*

Sample 5.2.1a LRCs and NLRCs that occurred in the same sentence.

The question mark was included in that sentence as a note for the writer to either look for an appropriate term or for his partner to pick up where he left off. The partner will either correct or suggest a correction to the question.

The revision history, a feature in Google Docs, also showed that the writing activity was a dynamic process for each pair with each having at least 10 versions of their essays before the final drafts were established. Thus, Google Docs can be seen as an informative and flexible tool for teachers and students in the process of collaboration and writing. It was also easy to use as mentioned by students in the open-ended questionnaires. With regards to LRCs, the most changes were made on punctuation in terms of the placement of the apostrophe. This was followed by singular-plural changes, and then the addition of modal verbs to complete the sentence. Amendments due to grammatical errors were also frequent especially when more complex structures were used, for instance, the present perfect tense and the passive voice. However, during the revision process, students were more capable of correcting more simple errors of form such as spelling,

singular to plural verbs or nouns without prompting, but less capable of making changes in complex structures and meaning even though they could always access information online for more clarification. There were also instances where students did not respond to the comments given. For example the abbreviation 'SPM' used in one of the scripts was not changed even though a comment was given to use the full name. Kessler (2009) explains that this could be due to students being able to make changes to form correctly but did not do so at some instances as they found the errors to be less important.

Another characteristic noticed in this study was that although students could collaborate with their peers they still needed a teacher to be present to direct them. A teacher's intervention was needed especially with less proficient students to make sense of information online and usually to finish sentences. This also reveals that ESL students' dependency on the teacher is hard to shake off. However, students could complete task successfully when given consistent prompting.

On a more positive note, collaborative activities are able to draw out more proficient students who are able to act as facilitators to assist other members from other pairs. This sort of collaboration allows for not just pair discussion but also group discussion. An important point to take note is the assigning of roles to students especially when a student tries to take charge instead of collaborating and negotiating meaning. Shared expertise is important in this case as weaker student can give ideas while the more proficient writer will use the ideas and improve on the language. Through this, the topic or idea development is meaningful to all parties involved and they are exposed to better ideas, words and forms.

These findings are similar to those found by Elola and Oskoz (2010) in their study with students working in a collaborative wiki space. Through collaborative dialogue, not only were the learners in their study able to complete the task, but through exchanges of alternative scaffolding, they also achieved results beyond what they would have achieved on their own. In the ESL or EFL learning context, the tendency to revise and edit has mainly stayed at the sentence level which is probably due to the learner's limitation or expertise. They think that accuracy carries more weight. In this study, the researcher has seen a transformation in students' questions from 'What is the simple past form for affect?' to 'Which will affect parents' choices and how?' It is evident that students paid attention to meaning in their contribution.

The script's language accuracy definitely improved between the first draft and the final draft. However it could not be determined if students will perform better in a subsequent task, whether individually or collaboratively. Most of the mistakes made were commented on by peers and the teacher before corrections were made. There were also overlooked mistakes which were not commented on and not corrected even though they were similar mistakes that had already been commented on.

Besides that, parents have more experience. We must know that parents are much more [9]experienced than the children. They have seen the world [10]longer than their children. [12]Thus, their decision would be better and [13]more justified. Parents must have more [15]experience to take care of their children and to give a good guidance.

[20]Therefore, while parents have more experienced and are more mature than their children, it is still important to consider children's interest and wishes so that children will never regret with their decision.

Sample 5.2.1b: Students' sample text

The last instance of the work 'experienced' in sample above shows it as a verb rather than the correct form as a noun. It was not corrected by students when not prompted. However, students have generally improved their editing skills, as evident in their revision activities after prompted by teacher.

With regards to Non-Language Contribution, the changes were not obvious. This could be due to the task's format where scaffolding was provided before and during the writing stage. The scaffolding provided was the writing frame which students used to organise their content before converting them to essay form. Students' engagement with tools, their peers, resources and ideas were given more priority over changes to format.

Research Question 2:
What is the nature of participation in Web-based collaborative writing?

In this study, students worked in pairs and 2 groups worked in groups (three in a group, as there were an additional 2 new students who came in the second week of implementation). It was observed that the distribution of work during the first draft came at varying levels for each team: one person drafted in point form and another converted it to essay form. In the essay form, most of the students took turns to create a paragraph to ensure work was distributed more fairly. In some cases, students with lower proficiency were seen typing the content while more proficient students read the content out loud for his partner. When it came to making changes, there were two participation levels. In this study, the participation level involved a member who made approximately half of the team's changes and another member who only made 15 – 25% of the changes. It is unclear why participation varied among individual students. For that reason, the grades of students in this study were taken into account as a rough estimation of students' proficiency levels. In one of the groups made up of three students with a wide gap in grades, the student with the better grade completely altered the text made but retained its meaning and added more elaboration points as shown in the two samples below.

After that, every children have their own interest if the children choose a career according to their parent wish, they will have a boring academic life as they would facing a lack of interest and will get more pressure in their daily life. Beside, do the parent known about their children hidden talent? Sometime the parent just ignore their children talent because their think that the talent is useless in their children career but do their realize that the talent itself is unique and has it own traits. the talent can be polished and make their children became popular and have it own job.

Sample 5.2.2a: Earlier draft done by weak writer

Moreover, every human is special, some can do things easily while others find it hard to do the same thing. If we put that into account, wouldn't it be better for parents to utilize their natural talents so that they could achieve something? Most parents think that hidden talents like being able to recognize musical notes with their ears easily or being able to memorize a lot of numbers with little effort are useless. However, if they allow their children to pursue a career based on their talents, that presumably useless talent might actually make the person in question more successful in life than the average person. Parents' should realize that every person has their own talent and they should be taking advantage of it instead of dismissing it.

Sample 5.2.2b: Revised draft

In this collaboration, the writer in the revised draft did not dismiss ideas from his team members completely but reused some words like 'talent' and 'useless' and rewrote some ideas with more specific examples. Therefore, I believe one aspect that affected students' participation in making changes throughout the online writing process was their level of proficiency.

The result of this study is similar in certain aspects to the results found in Kost's (2011) study investigating writing strategies and revision behaviour. Students' proficiency levels in her study focused on formal changes (form) more than stylistic changes. In this study, moving sentences and placing them at different parts of the essay occurred but there was more substitution of meanings of words or sentences than in the current study. When comparing the results of these two studies, one interesting similarity was observed regarding revision made by peers and teacher. The data shows that the total revisions are higher when one of students in a pair has a lower proficiency, hence there were more meaning related changes made. In one of the samples, there were up to 36 revisions as opposed to 10 – 15 revisions made in the others. It was not an easy task to isolate contribution types as they overlapped in one sentence.

Another possibility for differing participation rates could be due to students working together on the same computer. Although students were given the flexibility to use the same account due to logistics, they had to use a different coloured font to indicate which writer contributed to which part. While each text showed the workmanship of different writers, it could not show how it affected the perceptions of ownership.

All students agreed that they worked well with their partner (Questionnaire Q19: Appendix) and the documents themselves showed no evidence of conflict when previous versions of the texts were analysed. In both drafts, there were topic sentences, elaboration and examples. The writer of the revised version made sure to retain the main ideas by explaining in greater detail. This is one example where negotiation of meaning occurred. The writers also performed comprehension checks with one another after revising the earlier draft. This is one of the important features of writing collaboratively.

Another aspect that was informative to the researcher was the **teacher's role** in facilitating the online collaborative writing task to promote autonomous learning. In this study, students were given a topic that was suitable for their level and were allowed to search for relevant information online. This allowed students to develop their ideas. However, less proficient students relied on their teacher's remarks before making any changes. This dependency was only apparent when students were contributing to their first draft. Later during the implementation, students were able to make contributions to their scripts and their peers' scripts without much intervention from the teacher.

As mentioned by Storch (2011), when implementing collaborative writing tasks, the nature of the task, the proficiency of the learners, and the mode of communication (face-to-face and computer-mediated interaction) need to be taken into consideration. Some collaborative writing tasks may not be suitable for low proficiency L2 learners. He also suggested that in any collaborative task, lower proficiency L2 learners should be paired with higher proficiency L2 learners and the nature of the relationship formed by pairs of different proficiency levels should be monitored closely by teacher/facilitator/designer.

CONCLUSION

This study has revealed that secondary ESL students with low to intermediate proficiency who were engaged in a collaborative writing task using Google docs focused on form over meaning. Overall, students successfully developed their own process towards writing as they evolved during collaboration with their peers. With regards to the tool used in this study, Google Docs was well accepted by all students as most students agreed that it was easy to use. The colour code was very helpful in detecting students' level of participation and contribution. Most students also found it easier to access Google Docs via their personal Gmail Account rather than Yesmail account which was established by Ministry of Education. Yesmail account is associated with 1Bestarinet. Despite the urge

by Ministry of Education to use it as the main platform for virtual classrooms, it was not easy to access with the limited bandwidth provided.

The results of this study also shows a contradiction to the statement that learners who can collaborate, have higher motivation levels which in turn, makes them more successful in L2 acquirement. In this research, students who had good proficiency in ESL did not completely show the **defining** features of collaborative writing but they still performed better than those who had lower proficiency in ESL. However, judging by the results between Pair 4 and 5, Pair 5 who had been more cooperative, showed better cohesion and rhetorical structure in their argumentative writing.

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Science Teachers' Acceptance towards Microcomputer-Based Laboratories

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ABSTRACT

A microcomputer-based laboratory (MBL) has shown that it enhances the learning of science students by offering various pedagogical and psychological advantages. With the use of MBLs, real-time data collection and analysis can be performed seamlessly in the laboratory resulting in meaningful learning, especially of abstract concepts. Research shows that the unique capability of MBLs is more than simply motivating students as MBL can also improve students' abilities such as graph interpretation and higher-order thinking skills. Despite the extensive use of MBLs in Western countries, the affective aspect of this technological application in school is still relatively unexplored. Therefore, a study was conducted to determine the level of acceptance of in-service teachers towards MBLs using the Technological Acceptance Model (TAM) with regards to the perceived usefulness of MBL in teaching and learning science, its perceived ease of use, and the likelihood of using MBLs. The survey involved 38 in-service science teachers. The outcome indicates that the in-service teachers have a positive view towards the usefulness of MBLs in learning science and are very likely to use the system in schools. However, perceptions towards the ease of use of MBLs are not as favourable. This implies that MBLs should be promoted in schools as it can potentially enhance the quality of science education in Malaysia. Thus, the use of MBLs among science teachers needs to be promoted through intensive professional development.

Keywords: science teacher, microcomputer-based laboratory, technological acceptance

INTRODUCTION

The microcomputer-based laboratory is a technology application in teaching and learning science. It is also used for scientific experiments in real-world applications. MBLs, also referred to as probeware, calculator-based laboratory or computer-based laboratory (CBL) or data logger, is said to be the most significant contribution of computer technology to science education (Tinker, 2000). MBLs are essentially ones where a microcomputer (or

any device like a tablet or smartphone) is interfaced with laboratory sensors and actuators that enable users or students to conduct automated experiments and collect, process and represent data (Hartsuijker, Friedler, & Gravenberch, 1991). In practical science, this computer application differs from a multimedia application that provides presentations, explanations and explorations of scientific principles and processes using audio, video, animation, and simulations. The MBL application in the science laboratory consists of various sensors that measure temperature, pH and pressure which are connected to an interface that is an analogue-digital converter (see Figure 1 MBL Set Up). The interface is connected to a computer through the use of software that allows the programming of the frequency of measures and data format to be presented on the computer screen or print output (Tortosa, 2012).

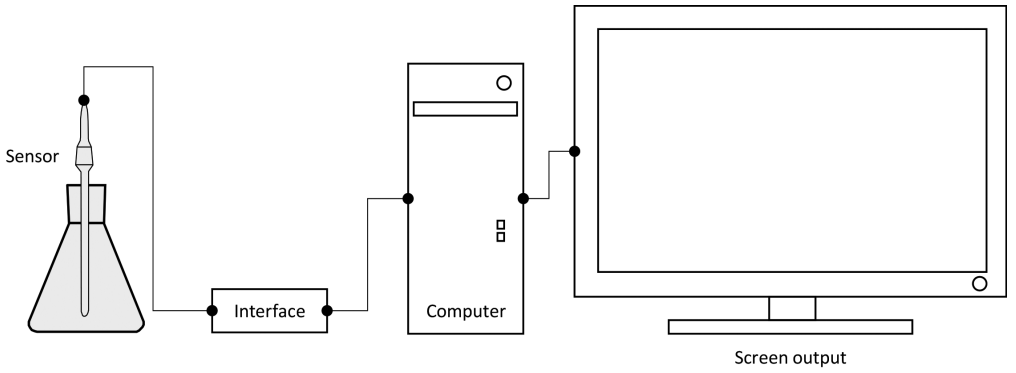

Figure 1 MBL Set Up

Initially, the main power of MBLs is the real-time data collection capability (Park, 2008). However, now with the advancement in computers and software, MBL technology offers various technological advantages. For example, the new generation of MBL systems enable users to watch events (through video capture) and collect data simultaneously; perform time and event-triggered data collection; and carry out live data presentation and analysis with the use of remote controlled sensors and wireless data interfaces (Hartsuijker et al., 1991; Park, 2008). With these capabilities, an MBL is seen to have advantages over the standard laboratory apparatus. MBLs provide opportunities to students to explore experiments that cannot be readily conducted in secondary school laboratories as MBLs can be used in micro-scaled reactions, fast or slow events, and with multiple parameters (Aksela, 2011). Through these opportunities, MBLs are also said to have many pedagogical benefits in science lessons. These advantages include encouraging students to become actively involved in science lessons, by making them engaged with ideas and processes rather than mere data collection. By reducing the routine work in laboratory, MBLs provide more time for students to discuss ideas, have more opportunities to suggest explanations for their observations, and also to test their ideas (Barton, 2004; Newton, 2000; Rogers, 2002).

For a successful integration of any new technology in education, there is a need to examine the readiness, acceptances, and mindset of all that are to be involved with the technology. So it is with MBL, especially the teachers. This examination is necessary for the proper preparation for teachers which includes training and attitude change. However, studies related to MBL integration are scant. The little literature related to this is reported by Heck (1990) which indicates that teachers reacted positively to the potential benefits of MBL in enhancing laboratory experiences for students. This finding is also echoed in other studies where pre-service teachers perceive MBL technology as a powerful way to facilitate learning, teach responsibility, and enhance problem-solving skills. (Gado, Ferguson, and van't Hooft (2006); Robert, 1998). Despite the positive acceptance of MBL, Heck (1990) also indicated the challenges for MBL integration in a curriculum, such as, using an MBL for traditional drills and practices, and limited resources. These challenges were also indicated in Gado et al. (2006).

Despite that, MBLs have been developing since in the 1970s and can be regarded as essential for secondary schools in the West. However, MBLs are quite foreign in many countries including Malaysia. With the current emphasis on Science, Technology, Engineering and Mathematics (STEM), there is a need for promoting the use of MBL in schools (Trumper & Gelbman, 2001). Therefore, this study is to explore acceptance of in-service teachers towards MBL integration in secondary schools in Malaysia.

METHODOLOGY

The teachers' acceptance of MBL was examined based on the Technology Acceptance Model (TAM) (Davis, 1986; Davis, Bagozzi, & Warshaw, 1989). This model consists of various variables including perceived usefulness, perceived ease of use, attitudes towards use, behavioural intention to use and actual system use. As the use of MBL in Malaysian schools is still limited, only three variables were explored to gauge teachers' reactions towards this technology: perceived usefulness, perceived ease of use and behavioural intention to use. Each of the variables were examined using questionnaire items which were modified from Gardner and Amoroso (2004). The response format of the questionnaire was the five-point Likert scale and the alpha Cronbach of the questionnaire was calculated as 0.88. The survey was administered to 38 in-service science teachers who are pursuing their postgraduate studies at Universiti Malaysia Sabah. The in-service teachers were introduced to the PASCO MBL system and were given the opportunities to utilise the system briefly. Most of them teach Science at secondary level.

RESULTS

Perceived Usefulness of MBL in Teaching and Learning Science

Table 1 Perceived usefulness of MBL in teaching and learning science shows the perception of in-service teachers on the usefulness of MBL in teaching and learning science. It indicates that most of the teachers strongly agree or agree that MBL can be useful in students' acquisition of scientific knowledge and skills. Only two participants disagree. All the in-service teachers agree that MBL provides fast and timely data collection.

Table 1 Perceived usefulness of MBL in teaching and learning science

Item n		Strongly agree		Agree		Neither agree or disagree		Disagree		Strongly disagree		Mean score
		%	n	%	n	%	n	%	n	%		
1	MBL helps students to develop data interpretation skills.	16	42.1	22	57.9	0	0.0	0	0.0	0	0.0	4.42
2	MBL helps all students learn scientific concepts.	14	36.8	20	52.6	3	7.9	1	2.6	0	0.0	4.24
3	MBL helps students learn new concepts.	14	36.8	21	55.3	2	5.3	1	2.6	0	0.0	4.26
4	MBL helps students learn scientific skills more effective.	16	42.1	21	55.3	1	2.6	0	0.0	0	0.0	4.39
5	MBL helps students develop higher order thinking skills.	17	44.7	20	52.6	1	2.6	0	0.0	0	0.0	4.42
6	MBL would enhance the quality of teaching of STEM in Malaysian schools.	24	63.2	12	31.6	2	5.3	0	0.0	0	0.0	4.58
7	MBL provides fast and timely data.	31	81.6	5	13.2	2	5.3	0	0.0	0	0.0	4.76
Mean total score												4.44

Perceived Ease of Use of MBL

The responses on the ease of ease of MBL are shown in . Although the teachers regard the usefulness of MBL highly, they do not consider the ease of use of MBL in the same way, as indicated in the mean score of this domain (mean total score = 3.88). The lowest scored item is the elimination of preparation of practical work (mean score = 3.26). However, the teachers seem to perceive that setting up MBL equipment is easier than conventional practical work and that MBL is useful in the teaching of science.

Table 2 Perceived ease of use of MBL

	Item n	Strongly agree		Agree		Neither agree or disagree		Disagree		Strongly disagree		Mean score
		%	n	%	n	%	n	%	n	%		
1	Learning to operate MBL devices would be easy for me.	3	7.9	24	63.2	9	23.7	2	5.3	0	0.0	3.74
2	My interaction with MBL devices would be clear.	5	13.2	25	65.8	8	21.1	0	0.0	0	0.0	3.92
3	MBL would eliminate my preparation for practical work.	5	13.2	13	34.2	9	23.7	9	23.7	2	5.3	3.26
4	MBL is easier to set up compared to conventional practical work.	10	26.3	19	50.0	8	21.1	1	2.6	0	0.0	4.00
5	I find MBL equipment useful teaching science.	18	47.4	20	52.6	0	0.0	0	0.0	0	0.0	4.47
	Mean total score											3.88

Intention to Use MBL

Consistent with the very positive perception towards the usefulness of MBL, the teachers also indicate that they have a strong inclination to use MBL in teaching science. This dimension scored 4.49 on average. Most of the teachers (more than 90%) responded that they would use MBL in their school for different approaches to science teaching and learning such as project-based and inquiry-based learning. Similarly, they also responded that they are eager to change and enhance their teaching and learning by using MBL. So great are the teachers' enthusiasm about MBL that they also responded that they will share what they know about MBL with their colleagues.

Table 3 Intention to use MBL

	Item n	Strongly agree		Agree		Neither agree or disagree		Disagree		Strongly disagree		Mean score
		%	n	%	n	%	n	%	n	%		
1	I will use MBL in my school if it is available.	26	68.4	12	31.6	0	0.0	0	0.0	0	0.0	4.68
2	I want to use MBL for my student project-based learning.	23	60.5	15	39.5	0	0.0	0	0.0	0	0.0	4.61
3	I want to use MBL for student inquiry-based learning.	16	42.1	22	57.9	0	0.0	0	0.0	0	0.0	4.42

4	I will share what I learned about MBL with my colleague.	17	44.7	19	50.0	2	5.3	0	0.0	0	0.0	4.39
5	I want to use MBL for STEM instruction in school.	14	36.8	21	55.3	0	0.0	0	0.0	0	0.0	4.40
6	I want to use MBL to enhance my teaching.	21	55.3	17	44.7	0	0.0	0	0.0	0	0.0	4.55
7	I am eager to change my teaching by using MBL.	14	36.8	23	60.5	1	2.6	0	0.0	0	0.0	4.34
	Mean total score											4.49

DISCUSSION

The results indicate that the in-service teachers hold a positive view towards the usefulness of MBL in teaching science in school. This finding is consistent with a previous study that teachers perceive MBL as a very useful means in enhancing the teaching and learning of Science (Gado et al., 2006; Heck, 1990; Robert, 1998). The results were expected since the MBL offers various capabilities that enhance a science lesson. Real-time data collection, instant output display and flexibility are some of the main features of MBL that in-service teachers can identify as having great potential to enhance learning in practical science lessons. Besides that, these in-service teachers would also realise that MBL is not only a powerful tool in the laboratory but also allows students to conduct data collection in the real-world situations out of the typical Science lesson setting. This supports active learning and promotes higher-order thinking in science education.

Although the teachers are less partial towards the ease of use of MBLs, it still scored above 3.00 for all items. Despite being unaware of the existence of such technology before their postgraduate study, the in-service teachers agree that they would able to utilise the MBL system quite easily. Using current-generation MBLs does not require too much technical skill. The MBL "plug and play" feature and familiar software interface provided in the system are possible reasons for the teachers' positive perceptions on the ease of use. Moreover, the teachers also see an MBL as being easier to set up than a conventional laboratory, although teachers see that this does not necessarily equate to a reduction on the amount of preparation required.

Consequently, it is not surprising that most of the teachers want to use the technology for their teaching and learning. They consider an MBL as a very useful tool in teaching Science and it is, at the same time, easy to use. The positive acceptance of the MBL may not only be because of the features that it offers. The call to provide active and meaningful learning in their Science lessons by the Education Ministry in response to the demand to improve science education and STEM education is also a probable cause.

CONCLUSION

The findings suggest that the in-service Science teachers have positive attitudes towards MBL technology as indicated in their recognition and awareness of the opportunities offered by the technology. Therefore, something needs to be done to promote the integration of MBLs in schools in Malaysia for the enhancement of learning of science and STEM education. Besides training in the use of MBLs, it is also necessary to explore ways of reducing the cost of setting up an MBL system in schools.

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Using the Technology Acceptance Model for Exploring Pre-service Teachers' Perception towards Online Learning

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ABSTRACT

E-learning has a positive impact on both teachers and students in terms of their willingness to learn and train, and their perceived attitudes towards an e-learning environment. The purpose of this paper is to examine the behaviour of pre-service teachers towards the use of e-learning in a social science subject via the Technology Acceptance Model (TAM). The dimensions explored were perceived usefulness (PU), perceived ease of use (EU) and their influences on satisfaction (SN) and intention to use (IN) an online modern LMS named Course Networking (thecn.com). Data was collected via a survey and analysed quantitatively to support the investigation. The study involved 69 pre-service teachers pursuing their Bachelor of Education programme in a public university in Sabah, East Malaysia. The results reveal that there is moderate level of acceptance in the observed PU (mean = 3.82), EU (mean = 3.52), SN (mean = 3.35) and IN (mean = 3.82). A further examination on the relationships between the dimensions show that PU influences the intention to use online courses strongly (r = .63). On the other hand, EU also has a strong influence on SN (r = .68). As predicted, the mean score for PU (3.82) is higher than EU (3.52). The study shows that the design, pedagogical and navigational aspects of a course are important to obtain good SN and IN scores from the users.

Keywords: perceived usefulness, perceived ease of use, satisfaction, intention to use, e-learning, acceptance of technology

INTRODUCTION

E-learning involves the use of the Internet to improve the quality of learning via various resources. E-learning provides learners with personalised and self-directed learning via various online engagements for gaining knowledge. It helps learners to retain learning, attention and motivation (Ozdamli & Uzunboylu, 2014).

Online learning such as 'just-in-time' learning is popular nowadays due to its flexibility in accessing learning materials at anywhere and anytime (Pena-Ayala, Sossa,

& Mendez, 2014). The growth of e-learning needs especially in developing countries prompts the need to research the factors that affect the adoption of e-learning such as quality, satisfaction and the intention to use it. With regards to e-learning adoption, many researchers use the Technology Acceptance Model (TAM) as the foundation for studying the factors of adopting e-learning systems.

This study will investigate the level of technology acceptance via components in the model of TAM by Davis (1989, 1993). It attempts to fill a research gap by addressing the influence of perceived usefulness (PU) and perceived ease of use (EU) on the features of an e-learning system (a social science course) that uses online collaboration and interaction. This was measured via satisfaction (SN) and the intention to use (IN) the online course for e-learning. The research questions are:

1. What are the pre-service teachers' level of PU, EU, SN and IN towards online learning in a social science course?

2. Are there influences of PU and EU on pre-service teachers' SN and IN in a social science course?

LITERATURE REVIEW

E-learning

The use of Information and Communication Technology (ICT) for educational purposes increased rapidly in the 21st century and have changed the scope of education radically (Hsu, Hwang, & Chang, 2013). E-learning can be defined as the use of electronic devices such as mobile computers that serve as technological mediating tools for creating readily available information online for effective interactions and learning.

E-learning is considered as online learning because the Internet is used for the interaction between the learners and the instructor. E-learning is used mainly for sharing resources and learners' contributions and efforts to achieve greater success in learning. Therefore, understanding the learners' perceptions of adopting e-learning systems in schools, colleges and universities will provide an understanding of the intention for using e-learning.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was first proposed by Davis (1989, 1993). The theory of TAM explains the ways learners accept and use a new e-learning system. When encountering new technology, the TAM looks at the learners' decisions on using it

and the ways it is used. The TAM studies two factors, namely PU and EU. It explores the behaviours of the learners by analysing the positive or negative behaviour when adopting new technology.

In the TAM, two main factors discussed are:

(a) PU – in what ways is productivity or performance enhanced by the e-learning system

(b) EU – the level of difficulty in using the e-learning system

Therefore, the widespread use of the TAM for exploring learners' behaviour will enable us to predict and understand the levels of e-learning acceptance.

Perceived usefulness (PU)

According to Davis (1993), PU is defined as the learners' perceptions regarding the outcome of the experience after using the e-learning system. If a new technology is useful and effective, it will enhance or improve the learners' job performance.

According to Shroff, Deneen, and Ng (2011), a system with sound, quality online learning materials determines the positive PU of an e-learning system. For example, building in more multimedia features to attract learners' attention and encourage the responsiveness of teachers to learners' queries will increase the level of perceived usefulness of the system.

Perceived ease of use (EU)

According to Donkor (2011), EU is the degree to which a new technology is easily understood or used. It is also regarded as how much lack of effort is needed by the learner to adopt the new technology. In other words, the degree to which users perceive a new product as better than its substitutes is known as EU (Davis, 1989).

Influence of Perceived Usefulness and Perceived Ease of Use on Attitudes towards E-Learning

Many studies show that PU and EU influence how learners accept a new innovation or system (Dousip, 2016). The results of these studies indicate that a high level of EU would result in a greater intention to use and implement the system.

The PU will affect whether a user intends to use a new technology. It can be said that technology that is more innovative, more user-friendly and gives greater freedom will see higher levels of user PU, EU and satisfaction. Online learning content must be well designed to achieve the highest quality. According to a study by Zacharis (2012), quality e-learning services, together with high levels of the PU and EU positively affect learners' intentions to use the innovation. This is supported by Shroff et al. (2011) whose findings prove that good quality web-based products significantly influenced learners' satisfaction in the product. The study further shows that this has a significant effect on the PU of the innovation. Hence, the level of user satisfaction is a factor that can determine a user's intention towards the use of any e-learning product.

METHOD, INSTRUMENTATION AND SAMPLING

This is a quantitative study using a survey to gather data from respondents. A survey is defined as a brief interview, discussion with individuals or the asking questions of respondents about a specific topic to collect information. A survey is often used to assess thoughts, opinions, and feelings (Shaughnessy, Zechmeister, & Jeanne, 2011). This study used questionnaires via a series of close-ended questions. This was done via a group-administered questionnaire approach to ensure a high-response rate. If the respondents were unclear about the meaning of a question they could ask for clarification.

The questionnaire used was adopted from the Technology Acceptance Model (TAM) by Davis (1989) to investigate respondents' perceptions related to perceived usefulness (9 items), perceived ease-of-use (6 items), satisfaction (3 items) and intention to use (3 items). The researcher defined school teachers' attitudes towards online learning in a social science course as both the satisfaction of the users and the intention to use online learning (6 items). All the items are scored using a 5-point Likert Scale. The Cronbach's alpha reliability for the constructs in this study is shown in Table 1.

Table 1 Reliability coefficients of the TAM's constructs

No.	Constructs	Cronbach's Alpha
1	Perceived Usefulness (PU)	0.81
2	Ease-of-Use (EU)	0.68
3	Satisfaction (SN)	0.56
4	Intention to Use (IN)	0.84
5	Attitude towards Online Learning (ATT)	0.78

Other researchers reported Cronbach's alpha reliability for perceived usefulness (PU) as 0.95 (Shroff et al., 2011) and 0.89 (Masrom, 2007) respectively while perceived ease-of-use (EU) was reported as 0.95 (Shroff et al., 2011) and 0.93 (Moon & Kim, 2001) respectively.

This study involved 69 students taking their Bachelor of Education in Social Science. They took a 14-week multimedia course which provided them with skills on designing and developing multimedia-based online learning materials with the support of Web 2.0 technology. After attending 7 weeks of lessons and hands-on sessions, each group of 3 – 4 students began materials development. Each group leader nominated students from any of the other three groups to use and assess their developed materials beginning from Week 11. On Week 14, the survey was given to all students for their feedback. Quantitative data was analysed via SPSS Version 21. The type of statistical tests are shown in Table 2.

Table 2 Data analysis techniques

No.	Research question	Type of test
1	What are the pre-service teachers' level of perceived usefulness, perceived ease of use, satisfaction and intention to use towards online learning in a social science course?	Descriptive statistics (percentage, mean & standard deviation)
2	Are there influences of perceived usefulness and perceived ease-of-use on pre-service teachers' satisfaction and intention to use in a social science course?	Correlation test (Pearson)

This study also adopted the guidelines for establishing relationships according to Fraenkel and Wallen (2006) as shown in Table 3 below.

Table 3 Relationship according to correlation values

Correlation index	Relationship interpretation
0.00 – 0.19	Very weak, Very low
0.20 – 0.39	Weak, Low
0.40 – 0.69	Moderate
0.70 – 0.89	Strong, High
0.90 – 1.00	Very strong, Very high

Source: Fraenkel & Wallen (2006)

To analyse the level of perceived usefulness, ease of use, satisfaction, intention to use and attitudes towards online learning, the study would report using three levels namely high, moderate and low. The range is the difference between the highest and the lowest values in a normal distribution (Gravetter & Wallnau, 2012). The formula for range is:

Range = (maximum value – minimum value)

This study divided perceived usefulness, ease of use, satisfaction, intention to use and attitudes towards online learning to three levels, hence each level would be equally separated (by the range/3) and are shown in Table 4.

Table 4 Values for the three levels for PU, EU, SN, IN and ATT

Constructs	Maximum	Minimum	Range	Range/3	Levels		
					Low	Moderate	High
PU	4.89	2.89	2.00	0.67	2.89 – 3.56	3.57 – 4.23	4.24 – 4.89
EU	4.67	2.17	2.50	0.83	2.17 – 3.00	3.01 – 3.83	3.84 – 4.67
SN	5.00	2.00	3.00	1.00	2.00 – 3.00	3.01 – 4.00	4.01 – 5.00
IN	5.00	2.00	3.00	1.00	2.00 – 3.00	3.01 – 4.00	4.01 – 5.00
ATT	4.83	2.17	2.66	0.89	2.17 – 3.06	3.07 – 3.95	3.96 – 4.83

FINDINGS AND DISCUSSION

Pre-service Teachers' Level of Perceived Usefulness, Perceived Ease of Use, Satisfaction and Intention to Use towards Online Learning

The survey on pre-service teachers using the TAM questionnaires showed teachers are positive towards online learning. The 69 respondents were undergraduates who are pre-service teachers from the Faculty of Psychology and Education, Universiti Malaysia Sabah majoring in social science subjects (history and geography). Using Table 4 for interpreting the mean scores, the levels of perceptions for perceived usefulness, ease of use, satisfaction and intention to use towards online learning are shown in Table 5.

Table 5 Perceived usefulness, ease of use, satisfaction and attitudes towards online learning of the respondents

TAMs constructs	N	Mean scores	SD	Level
Perceived usefulness (PU)	69	3.82	0.42	Moderate
Ease of use (EU)	69	3.52	0.54	Moderate
Satisfaction (SN)	69	3.35	0.58	Moderate
Intention to use (IN)	69	3.82	0.42	Moderate

Table 5 shows that the PU mean scores of the 69 respondents was 3.82 (SD = 0.42) and were at a moderate level. The mean scores for ease of use (EU) was 3.52 (SD = 0.54) and was also at a moderate level. The mean scores on SN and IN were 3.35 (SD = 0.58) and 3.82 (SD = 0.42) respectively and were also at a moderate level.

These moderate levels on PU, EU, SN and IN found in this study are in agreement with the findings from other researchers, i.e. a well-designed e-learning system is a big factor influencing user satisfaction (Dousip, 2016).

The findings clearly indicate that learner satisfaction and intention to use the implemented e-learning could be improved if the quality of the online materials delivery and online services were improved. In other words, users' attitudes towards online learning would be continuously positive if their confidence in the e-learning services could be assured.

The Influences of Pre-service Teachers' Perceived Usefulness and Ease-of-Use on Satisfaction and Intention to Use Online Learning

The results of the correlation analysis between PU and SN and EU and SN are shown in Table 6 below.

Table 6 Relationships between PU, EU and SN

Relationships between the TAMs constructs	Pearson correlation (*r*)	Significance ($p < .01$)	Relationships interpretation
Perceived usefulness (PU) vs Satisfaction (SN)	.43	Significant	Moderate
Ease of use (EU) vs Satisfaction (SN)	.68	Significant	Moderate

According to Table 6, the relationship between PU and SN was considered to be moderate, r = .43 and was significant at 99% confidence level. The relationship between EU and SN was also reported to be moderate, r = .68 and was significant at 99% confidence level. The relationship between PU, EU and SN is shown in Figure 1.

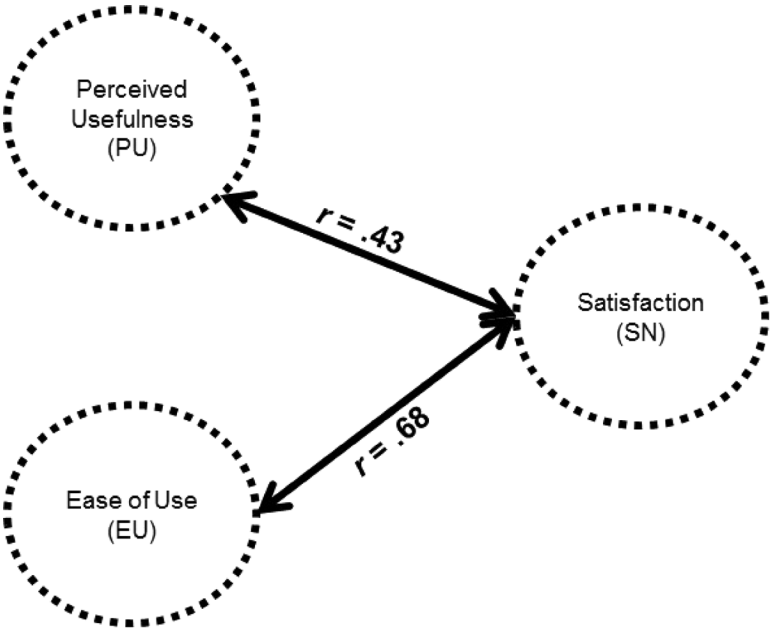

Figure 1 Relationship between PU, EU and SN

The findings show that the quality of the delivery platform and its services are important because they affect PU and EU. These must be maintained consistently because it shows considerable positive influence on SN (the moderate and strong correlation as shown in Figure 1). Zacharis (2012) also had similar findings on the influence of learner satisfaction towards the usage of e-learning systems.

Users' satisfaction was found to be high if the information quality of the e-learning system was high. This fact was supported by Shroff et al. (2011) and Donkor (2011) who discovered that information quality and satisfaction were positively related. Therefore, to maintain high quality e-learning, a feedback mechanism must be established to make the learning process more helpful and engaging.

Table 7 Relationships between PU, EU and IN

Relationships between the TAMs constructs	Pearson correlation (*r*)	Significance ($p < .01$)	Relationships interpretation
Perceived usefulness (PU) vs Intention to Use (IN)	.63	Significant	Moderate
Ease of use (EU) vs Intention to Use (IN)	.53	Significant	Moderate

According to Table 7, there is a moderate relationship between PU and IN, r = .63 and was significant at 99% confidence level. The relationship between EU and IN was moderate, r = .53 and was significant at 99% confidence level. The relationship between PU, EU and SN can be illustrated in Figure 2.

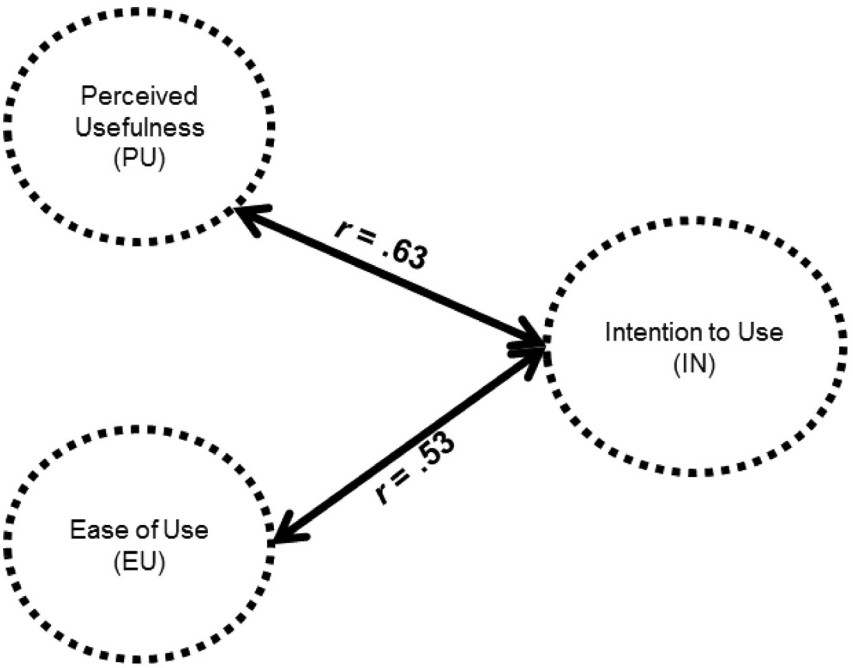

Figure 2 Relationship between PU, EU and IN

Figure 2 shows that PU and EU did affect the learner's acceptance of online learning implemention in this study. The e-learning provider must provide e-learning services according to the preferences of learners so that learners would be motivated to use it. Learners need to access interfaces that are easy to use to complete e-learning activities in order to ensure they maintain the intention to use the system.

The finding that the service quality of the e-learning influences the intention to use it is similar to findings by Shroff et al. (2011), Donkor (2011) and Zacharis (2012). Furthermore, Dousip (2016) also confirmed that PU has a strong effect on the intention to use e-learning. Due to the dynamics of the relationships between PU and EU on SN and IN that were proven in this study and also by other researchers, all e-learning providers should ensure the quality of the e-learning system and its functions during the planning and designing stages in the future.

RECOMMENDATION AND CONCLUSION

This study proved that learners' acceptance of an e-learning system for learning depends on many factors especially on the satisfaction factor and also the learners' PU and EU of the system. Student teachers who participated in this study demonstrated and learned ICT-related skills and knowledge previously unknown to them. In teacher education programmes, student teachers were taught to devise ICT-based learning materials. However, they had limited opportunities to experience teaching using ICT-based materials in real classrooms. Participation in community projects enabled student teachers to develop pedagogical, technological and content knowledge using the resources available in the community.

According to Jordan (2013), the teachers' way of designing and orienting the online learning experience influences students' learning behaviours. In other words, a successful e-learning course must be well-designed and must engage students with technology. Leeds (2014) suggests that an e-learning programme must also cater to students who are pioneer users so that they do not experience culture shock that can affect their PU, EU and satisfaction. Therefore, they must design lessons to be effective for online learning in order to raise the levels of user satisfaction, PU and EU first, and then only can the intention to use the system be raised.

This study proved that learners' perceptions in learning is important for e-learning providers, teachers and lecturers. Therefore, e-learning systems in the future must focus along the concepts of user collaboration and networking. Providers must offer hybrid courses that blends face-to face classroom instruction and web-based learning with an automated feedback mechanism to maximise learning performance.

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The Use of Web-Based Text-to-Speech Tool in Improving English Pronunciation and Changing Perception of Error Correction among Young Learners

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ABSTRACT

Text-to-speech is a web-based tool that has the potential to improve English as a Second Language (ESL) learners' spoken production. This research explored the role of that tool in helping reluctant speakers to improve their pronunciation. It also explored its role in changing their perception of error correction. The research was conducted in a Malaysian primary school in a small village. It was targeted at 9 children who had been identified as proficient writers but reluctant speakers. In the first cycle of the research, the text-to-speech tool was used as a method of instruction. It was used to assist them in pronouncing words correctly by producing conversation scripts and converting them into spoken output through a web-based text-to-speech tool (http://www.ivona.com). In the second cycle, the same activity was carried out but a more playful approach was applied. Throughout these two cycles, the respondents' pronunciation and perception of error correction were observed and evaluated. The data in this research were gathered through audio recording, transcription, observation, interviews, and journal entries. The findings of this research reveal that the use of a web-based text-to-speech tool can improve children's pronunciation because it enables them to use authentic and conversational language. Secondly, the use of this tool can improve children's perception of error correction by means of a non-threatening, self-regulated learning environment. This research also reveals that the use of a web-based text-to-speech tool can be developed if it is combined with various strategies such as gamification, positive reinforcements, and cooperative learning.

Keywords: text-to-speech, pronunciation, error correction, young learners

INTRODUCTION

According to MacCarthy (1998) and Nunan (2001), mastering speaking abilities is the ultimate goal of acquiring a foreign or second language and the other skills are overshadowed by its significance. Along similar lines, Bygate (1987) states that it is by this skill that learners are judged as it is the vehicle par excellence of social solidarity, of social ranking, of professional advancement and of business.

Despite that, speaking has become a neglected skill in Malaysian classrooms. Most ESL teachers would rather focus on reading and writing as their students' performances in these skills are tested in formal examinations such as Ujian Pencapaian Sekolah Rendah (UPSR), Penilaian Menengah Rendah (PMR) and Sijil Pelajaran Malaysia (SPM) (Hassan & Selamat, 2002). The consequence of this is that most Malaysian students become good writers but poor speakers of English. As revealed by The Cambridge Baseline Study (2013), speaking emerged as the weakest skill for Malaysian students at all school grades. Along similar lines, The Malaysian Insider (2004) reported that there existed a big number of job seekers with *A* in SPM English but could not speak a word of it.

Another reason why most ESL teachers avoid speaking lessons is that they do not want to demotivate their students by providing too much error correction. Their view on this matter is consistent with that of Ur (1996) who argues that, while error correction may be valuable to language learning, too much of it can be discouraging and demoralising. Likewise, Parnell (1989), Wadensjö, Dimitrora, and Nilsson (2007), Mishra (2005), and Budden (2009) argue that teachers need to provide error correction at the end of any speaking-related activity so as to avoid undue interruption which might produce a demotivating effect on students.

In view of these issues, it is about time teachers found an appropriate form of intervention to improve their students' oral proficiency and to help develop their students' perception of error correction. Taking into account Barron's (2002)'s view that technology has become an integral and viable part of learning for today's students, the use of a web-based tool can be seen as the appropriate intervention because 'online learning provides flexibility of access to material anywhere anytime, allowing learners to collapse time and space' (Cole, 2000). Moreover, given Buckley and William's (2010) view that 'the use of web technologies provide an opportunity for students to explore their own understanding within a supportive and non-threatening environment', it can be seen as an effective strategy to develop the students' positive perception towards error correction.

On the whole, this action research aimed at examining the strategy that I could employ in my speaking lessons. Having chosen a web-based text-to-speech tool as my intervention, it was my interest to examine the extent to which it had an impact on my students' pronunciation. This research also sought to determine how the web-based text-to-speech tool influenced my students' attitudes towards error correction. Specifically, this research addressed the following three questions:

RQ1: What impact does a web-based text-to-speech tool have on children's speech the segmental and suprasegmental?

RQ2: How does a web-based text-to-speech tool influence children's perception of error correction?

RQ3: How can a web-based text-to-speech tool develop children's pronunciation and change their perception of error correction?

BACKGROUND

This research focused on the respondents' speech accuracy. The British Council (2014) defines accuracy as 'the correct use of the language system, including the use of grammar, pronunciation and vocabulary.' For the purpose of this research, I only focused on the respondents' pronunciation. I chose to focus on pronunciation for a number of reasons. Firstly, it appeared to be my students' most significant weakness when it came to their spoken production. Secondly, as pointed out by Rizvi (2005), good pronunciation is one of the aspects that should be taken into account in order to improve self-expression and achieve the desired clarity and fluency.

For the purpose of dealing with my students' pronunciation, I chose to focus on two aspects, namely segmental (vowels, consonants and diphthongs) and suprasegmentals (word stress and sentence intonation). This is in line with Pascoe, Stackhouse and Wells's (2006) view that both segmental and suprasegmental factors influence one's intelligibility in speech.

It is worth noting though that, on the subject of speech segmental, time constraints made it impossible for me to address all the 24 consonants, 14 vowels and 7 diphthongs in the English language. Hence, the respondents' speech segmental was addressed only when they committed errors in their pronunciation. Likewise, when dealing with their speech suprasegmentals, I only highlighted the elements of word stress and sentence intonation when the respondents produced any type of stress or intonation errors in their speeches.

Given that all the elements of segmental and suprasegmentals were addressed on an 'as-it-happens' basis, error correction is bound to happen frequently over the course of this research. For this reason, it was also my interest to focus on the respondents' perception of error correction. This means that, throughout the process of implementing my intervention, the respondents' reactions when discovering their own mistakes by means of the web-based text-to-speech tool were closely observed and evaluated.

THE STUDY

Target Group

This research involved 9 Year Six students aged 12 years old. Based on their writing ability, the students were identified to have average to high English language proficiency. Hence, the academic performances of the students ranged from good to excellent. Out of the 9 students, 6 were boys and 3 were girls. The parents/guardians of the children involved in this research were in the medium-income group. The highest academic level of the parents/guardians of the respondents were either secondary school or tertiary education.

Research Method

This research was conducted for a duration of two weeks and involved two cycles. The first cycle was conducted to examine the impact of a web-based text-to-speech tool on the respondents' speech segmental and suprasegmentals whereas the second cycle was conducted to examine whether the slightly different approach used had any impact on the respondents' speech segmental and suprasegmentals. Throughout the two cycles, the respondents' perception of error correction and the inherent features of the intervention were also investigated. This research was conducted based on Susman's Model of Action Research which involved 5 stages, i.e. Diagnosing, Action Planning, Taking Action, Evaluating and Specifying Learning. The diagram (Figure 1) below illustrates the structure of implementation for my research.

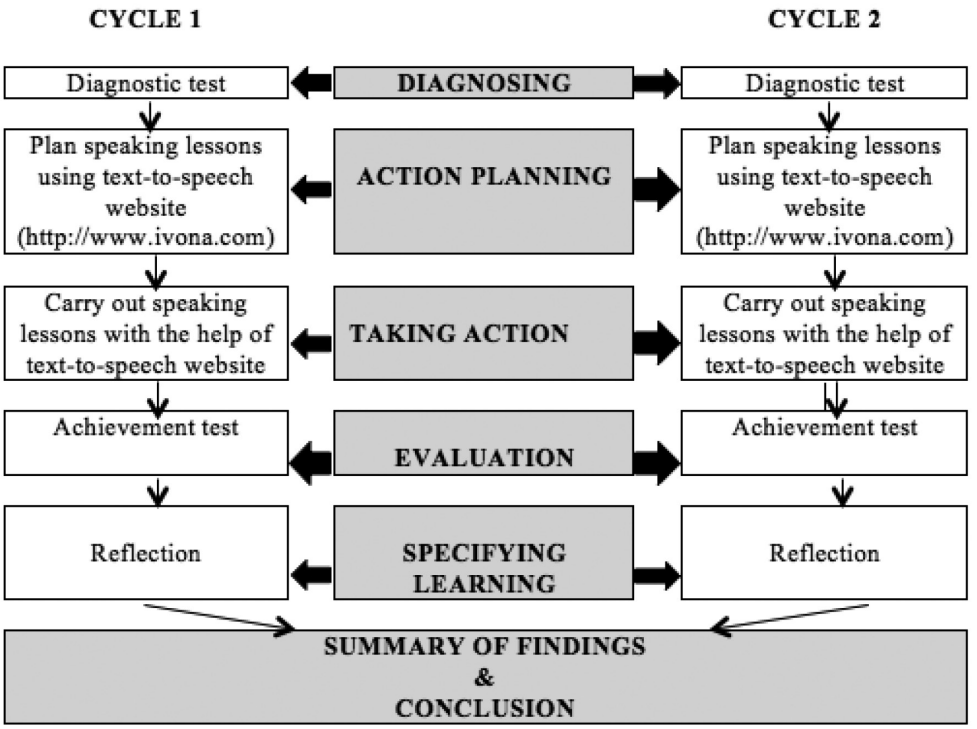

Figure 1 Structure of Implementation for Research (based on Model Susman's, 1983)

Data Collection and Analysis Method

RQ1: *What impact does a web-based text-to-speech tool have on children's speech segmental and suprasegmentals?*

Table 1 Data collection and analysis methods for RQ1

Data collection methods	Data analysis methods
Audio recording	The respondents' speeches were recorded to enable me to gather data related to the first research question. To ensure the validity and reliability of my audio recording, I used a digital audio-recording device which had a much higher signal to noise ratio. In the event that the clarity of the recording was deemed insufficient (e.g. the /θ/ sound could be misheard as the /f/ sound), I got the said respondents to utter the required words and validated his/her pronunciation by paying close attention to the position of his/her tongue, teeth or mouth. To analyse the audio recording, the method that I employed was data reduction. This means that, I simplified the data by only transliterating the respondents' erroneous utterances, i.e. speech patterns that contained segmental and suprasegmentals mistakes.
Transcription	For the purpose of facilitating my analysis of the respondents' speech segmental and suprasegmentals, the recording of the students' erroneous utterances were transcribed. For speech patterns that contained segmental mistakes, the transcription consisted of phonetic alphabets; whereas for speech patterns that contained suprasegmental mistakes, their word stress and intonation were marked. The validity and reliability of my transcriptions were established by making sure that the International Phonetic Alphabet (IPA) was used. Since the IPA is internationally recognised, my transcriptions would provide valuable evidence for my research since the data would be accessible to anyone interested in verifying my findings. Besides, all my evaluations were based on trustworthy, reputable resources, i.e. The Oxford English Dictionary, The Cambridge Advanced Learner's Dictionary, and J.C. Well's (2006) English Intonation. To analyse the respondents' speech transcripts, the method that I employed was codifying. This means that the data were segregated and grouped according to their types of mistakes, i.e. for segmental mistakes – consonants, vowels and diphthongs; while for suprasegmental mistakes – word stress and sentence intonation.
Journal entry	My journal entry consisted of my observations, feelings and insights on each of the respondents' speech segmental and suprasegmentals. To analyse the data from my journal entry, the deductive constant comparison method was employed. This involved chunking my reflective accounts into smaller meaningful parts, and transferring those chunks to a checklist containing a number of criteria and descriptors. The validity and reliability of my journal entry were established by making sure both the checklists for speech segmental and suprasegmentals were adapted from a reputable source, i.e. www.english-grammar-revolution.com. Besides, all the data were collected strictly based on the data gathered earlier from the audio recording and speech transcripts.

RQ2: *How does a web-based text-to-speech tool influence children's perception of error correction?*

Table 2 Data collection and analysis methods for RQ2

Data collection methods	Data analysis methods
Observation	One of the methods I used to gather the data related to Research Question 2 was observation. This means that the respondents' perception towards error correction was monitored closely throughout the implementation of my intervention strategies. For the sake of validity and reliability, the observation was conducted by three people – me and two of my colleagues, both of whom were nicknamed Colleague 1 and Colleague 2. The data from both my and Colleague 1's observation were recorded in written form. Colleague 1's written account was analysed using the inductive analysis method, in that her observation notes were read thoroughly and any significant chunk, phrase or sentence was underlined. Then each of those chunks/phrase/sentences were assigned a code. In the final stage, the codes were combined and the connections between them were identified based on Spradley's (1979) Universal Semantic Relationships.
Journal entry	This was my written account. It consisted of my feelings and insights on the respondents' perception of error correction. To analyse the data from my journal entry, the deductive constant comparison method was employed. This involved chunking my reflective accounts into smaller meaningful parts, and transferring those chunks to a checklist containing a number of criteria and descriptors. The validity and reliability of my journal entry were established by making sure the checklist was adapted from a reputable source, i.e. the International Centre for Leadership in Education's Student Engagement Walkthrough Checklist.
Interview	As previously discussed, only Colleague 1 and my observations were recorded in written form. Colleague 2's observation, on the other hand, was discussed through my interview sessions with her. My interview questions centred on her opinions on the respondents' perception of error correction as well as the observation notes written by Colleague 1. In order to enable me to obtain richer information from Colleague 2, the type of interview that I employed was semi-structured. I believed this type of interview gave me more flexibility as I had the freedom to ask her to explain further when her answer prompted me to learn more about a certain issue. For analysis purposes, our interview sessions were transcribed and analysed using the inductive comparison method as explained above.

RQ3: *How can a web-based text-to-speech tool develop children's pronunciation and change their perception of error correction?*

For the purpose of answering Research Question 3, I chose to apply the same data collection methods as Research Question 2, i.e. observation, journal entry and interview. However, there were two differences. Firstly, all of my, Colleague 1 and Colleague 2's observations not only centred around the respondents' perception of error correction, but also on the inherent features of the web-based text-to-speech

tool. Secondly, all the data from Colleague 1's written account, my journal entry, and the transcripts of my interview with Colleague 2 were analysed using the previously-explained inductive comparison method.

RESULTS AND DISCUSSION

Cycle 1 – Web-based Text-to-Speech as a Method of Instruction

RQ1: *What impact does a web-based text-to-speech tool have on children's speech segmental and suprasegmentals?*

Based on the audio recording, transcription and journal entries' findings in both Cycles 1 and 2 (see Tables 3 and 5), it is found that web-based text-to-speech tool can indeed improve children's word stress and sentence intonation. Thus, it can be concluded that teachers can utilise it if they wish to develop their students' speech suprasegmentals. As for speech segmental, it is found that web-based text-to-speech tool has the potential to improve children's pronunciation of vowel, consonant and diphthong sounds. However, there are several things that teachers should bear in mind prior to implementing it in their speaking lessons.

Firstly, it cannot be carried out as simply a method of instruction. The reason is that it might only develop their students' pronunciation of segments with which they are familiar (e.g. vowel sounds). Besides, they might create a demotivating learning environment which, in due course, would affect their students' willingness to improve themselves.

Secondly, teachers cannot expect their students to improve their pronunciation by merely instructing them to use the web-based text-to-speech tool. It is because there is a high possibility that their students might forget what they have been taught and resort to making the same mistakes again. This, in turn, might cause teachers to give an excessive amount of corrective feedback and thereby demotivating their students.

These findings are consistent with the view put forward by Clark (2003) that the success of a web-based instruction is directly proportional to the success a classroom instruction.

Based on these realisations, teachers should take several measures in order to utilise the web-based text-to-speech tool to its fullest potential.

Creating a motivating learning environment is one of the measures that can be taken. This can be done by gamifying the use of the web-based text-to-speech tool. Kapp (2012) defines gamification as the application of typical elements of game playing like

point scoring, competition with others and rules of play. With reference to the web-based text-to-speech tool, teachers could divide their students into several groups, encourage them to compete with each other, and reward the best-performing group. The data collected from this research have proved that, by doing all these, children are able to improve their pronunciation of segments which they initially find difficult. It is because they would have a stronger desire to perform to the best of their ability. In addition, they are less likely to make the same mistakes when they are highly motivated. This, to a great extent, supports the view put forward by Gordon (2005) that students will learn better when they help teach one another than they will in completely teacher-directed classrooms.

Table 3 The impact of a web-based text-to-speech tool on children's speech segmental and suprasegmental (Cycle 1)

	Audio recording	Transcriptions	Journal entries
Segmental	Web-based text-to-speech tool has a **positive impact** on children's speech segmental	Web-based text-to-speech tool has a **positive impact** on children's pronunciation of **vowel sounds** (a) Web-based text-to-speech tool has a **negative impact** on children's pronunciation of **consonant sounds** (b) Web-based text-to-speech tool has a **mixed impact** on children's pronunciation of **diphthong sounds**	(a) Web-based text-to-speech tool has **a positive impact** on children's pronunciation of **vowel sounds** (b) Web-based text-to-speech tool has **little/ no impact** on children's pronunciation of **consonant sounds** (c) Web-based text-to-speech tool has a **mixed impact** on children's pronunciation of **diphthong sounds** (d) Children make mistakes when they are overexcited
Supraseg-mentals	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**

Table 4 The ways in which web-based text-to-speech tool influences children's perception of error correction

Journal entries	Observation	Interview
Web-based text-to-speech tool contributes much to the positive perception of error correction among children	Web-based text-to-speech tool contributes much to the positive perception of error correction among children	Web-based text-to-speech tool contributes much to the positive perception of error correction among children

Cycle 2 – The Playful Approach of Speaking Lesson with the Help of Web-Based Text-to-Speech Tool

Table 5 The impact of web-based text-to-speech tool on children's speech segmental and suprasegmentals (Cycle 2)

	Audio recording	Transcriptions	Journal entries
Segmental	Web-based text-to-speech tool has a **positive impact** on children's speech segmental	Web-based text-to-speech tool has a **positive impact** on children's speech segmental	Web-based text-to-speech tool has a **positive impact** on children's speech segmental
Supraseg-mentals	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**	Web-based text-to-speech tool has a **positive impact** on children's **word stress** and **sentence intonation**

Table 6 The way in which Web-based Text-to-Speech Tool can develop children's pronunciation and change their perception of error correction

Journal entries	Observation	Interview
The respondents' improvement in oral proficiency and perception of error correction is a result of the use of web-based text-to-speech tool through motivating activities	Web-based text-to-speech tool can improve children's oral proficiency and perception of error correction because it exposes them to authentic and conversational language in a non-threatening manner	1. Web-based text-to-speech tool can improve children's oral proficiency and perception of error correction because: (a) children are exposed to authentic and conversational language (b) children's confidence in speaking is developed (c) children can enrich their vocabulary through incidental learning (d) it promotes self-monitoring and self-correction 2. The effectiveness of scripted role play can be enhanced by means of motivating activities, cooperative learning, and positive reinforcements

Last but not least, teachers should make a constant effort to give positive reinforcements to their students by approving, encouraging and praising them accordingly. Based on the findings of this research, it is found that children will try harder to improve themselves when their correct utterances are acknowledged and praised. One potential problem that might arise, however, is that teachers might disrupt their students' conversations. Therefore, to avoid undue interruption, teachers can use 'non-

verbal reinforcers' as suggested by McNamara (2014) such as eye contact and friendly expression; standing close to a pupil, nodding while scrutinising work; and a 'thumbs up' sign or other esoteric signals.

RQ2: *How does web-based text-to-speech tool influence children's perception of error correction?*

The data gathered from my journal entries, observation, and interview (see Table 4) suggest that the web-based text-to-speech tool contributes much to the positive perception of error correction. This is because, by means of self-regulated online learning, children can improve themselves through self-correction rather than teacher-correction. This finding is consistent with a previous study conducted by Agudo in 2014. In the study, it was discovered that a high percentage of the participating respondents believed that self-correction would make a greater contribution to reducing their stress and anxiety as opposed to peer-correction and teacher-correction.

Having said that, children's perception of error correction can further be improved if:

(a) their teacher knows how to organise his classroom activities efficiently
(b) their teacher gives them positive reinforcements on a regular basis
(c) they learn in a playful and motivating environment

RQ3: *How can the web-based text-to-speech tool develop children's pronunciation and perception of error correction?*

The findings of this research (see Table 4) reveal that web-based text-to-speech tool can develop children's oral proficiency and error correction because it enables them to use authentic and conversational language confidently by means of a non-threatening learning environment, as well as to enrich their vocabulary through incidental learning.

In order to further improve children's perception of error correction, their teachers must incorporate motivating activities, cooperative learning and positive reinforcements in the lessons.

CONCLUSION

In summary, this research has enabled me to see that a web-based text-to-speech tool indeed has the potential to improve children's oral proficiency because it enables students to use authentic and conversational language in a non-threatening learning environment, as well as enrich their vocabulary through incidental learning. Besides that, children's

perception of error correction can be improved because, by means of self-regulated online learning, children have the ability to correct their own mistakes without the interference of their teachers or peers.

However, when it is executed solely as a method of instruction, teachers might not be able to utilise it to its fullest potential because, in the absence of a motivating learning environment, their students might eventually forget what they have learned. On the other hand, by incorporating the elements of motivation (e.g. gamification and positive reinforcements), and cooperative learning (e.g. competition with others), the effectiveness of a web-based text-to-speech tool can be significantly enhanced and, in addition, children will have a better perception of error correction.

Overall, it can be theorised that: (a) the use of a web-based tool can enhance children's oral proficiency; (b) self-regulated online learning improves children's perception of error correction in that it promotes the practice of self-correction in a non-threatening environment; and (c) the degree of motivation is directly proportional to the quality of learning.

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Debbie Lawrence is an English teacher currently residing in Federal Territory of Labuan. Having earned a BEd TESL in 2013, she continued to to pursue her MEd TESL in Universiti Malaysia Sabah and graduated in 2016. Her interest in the nature of writing and collaboration between/amongst L2 learners have been consistent, as they were the focus of her dissertation throughout the course of her studies and work.

Denis Lajium (PhD) is a Senior Lecturer in Universiti Malaysia Sabah. He obtained his PhD from University of Waikato, New Zealand. His research interests are in the fields of science education, particularly in mental modelling in science education, qualitative research, and the use of technology in teaching and learning science. He can be reached at https://www.researchgate.net/profile/Denis_Lajium

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Acknowledgments, if any, should be placed at the end of the text before the references. Skip a line after the main body of the text.

References

References mentioned in the text should be numbered serially throughout the paper with Arabic numerals following the APA 6th Edition.

Below is an example of the required format.

Title of Manuscript (font 11, Bold, Centred)

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Abstract (font 11, Centred and Bold)
All abstract must clearly indicate the purpose of the research and important findings of the research. Abstract should not exceed 250 words. At least 4 keywords must be shown after the abstract. Abstract must be indented.

Keywords: keyword1, keyword2, keyword3, keyword4 (at least 4 keywords provided)
(Indented left 0.5", right 0.5")

INTRODUCTION

After the first heading there must not be any line spacing. This must be consistent for all others Level 1 Heading. After each paragraph ends, the next paragraph should be continued without any line spacing too.

This is an example of content after the first paragraph. Please remember that you must not leave any line spacing. However, you need to provide 1 single line spacing when you go the next Level 1 Heading (for example next one is Literature Review).

LITERATURE REVIEW

Concepts of E-Learning (Example of Level 2 Heading)
This is an example of literature review on the concepts of e-learning as practised by most researchers…

Table 1 Title

Figure 1 Title

Level 3 Heading (Example of Level 3 Heading)

This is another example on the use of Level 3 Heading which must be Italic to differentiate between the headings for level 1 and 2…

METHOD AND SAMPLING

Please remember that after a Heading you must not leave a line. This must be consistent throughout the manuscript…

FINDINGS AND DISCUSSIONS

CONCLUSION

ACKNOWLEDGEMENTS (if any)

REFERENCES

Blyth, C. S., & Davis, J. N. (2007). Using formative evaluation in the development of learner-centered materials. *CALICO Journal, 25 — 39.* Retrieved from https://www.calico.org/a-669.html

Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11*(2), 671 – 684.

APPENDIX (if any)