The Problems and Motivational Drivers in Teaching Technical Terms: A Study on Educators at an Institute of Higher Learning

Noraziah Mohd Amin
Academy of Language Studies
Universiti Teknologi MARA (UiTM) Pulau Pinang
Permatang Pauh, Pulau Pinang, Malaysia
noraziahm.amin@gmail.com / noraziahm@ppinang.uitm.edu.my

Wan Noorli Razali
Academy of Language Studies,
Universiti Teknologi MARA (UiTM),
Pulau Pinang, Malaysia.
wannoorli093@ppinang.uitm.edu.my

Noor Azam Abdul Rahman
Language & Social Science Unit
College of Computer Science & Information Technology
Universiti Tenaga Nasional, Putrajaya, Malaysia.
azamabdulrahman@gmail.com

Norhasni Mohd Amin
Sekolah Kebangsaan Seri Wangsa,
Bukit Selambau, Kedah, Malaysia.
norhasniamin@yahoo.com

ABSTRACT

In teaching vocabulary, it is common for instructors to face some difficulty especially in teaching low-frequency words like technical terms. Since teaching technical terms can be challenging for some teachers, it is significant to discover what could motivate or demotivate their teaching of technical words. To address this issue, the present study was conducted with the aims to investigate the problems faced by 29 educators who were appointed as the facilitators of the English Log Book Program at an institute of higher learning in Nibong Tebal, Penang, Malaysia. It was discovered that the majority of the respondents, 51.7% (M= 3.72, SD= 1.066) agreed that teaching technical terms would be easier if there were Malay equivalents of the same terms (item 7). The findings also indicated that most respondents, 21 instructors (72.4%, M= 4.17, SD= 0.602) revealed that it was their responsibility to ensure that their students were able to understand the technical terms taught as they chose the response option, "agree" for item 13. Having the mission to ensure their students' comprehension of the technical terms and feeling responsible for this task is obviously one of the instructors' motivational drivers in teaching their students this category of words.

Key Words: *technical terms, teaching problems, motivation, English*

INTRODUCTION

Technical words are argued by Nation (2001) should be treated as high-frequency words and they should be taught in various methods. Nation (2001) believes that technical terms involve possessing specialist knowledge of certain domains and teachers need to practice the strategies that can help their students understand and remember the words more effectively. It is thus vital to discover if there are problems or challenges faced by teachers in teaching technical words and

what could motivate them in doing this task. To determine the difficulty experienced by instructors in teaching technical terms, the present study was conducted on several lecturers from an institute of higher learning in Nibong Tebal, Penang, Malaysia. This study had the objective to investigate if the educators of this institute experience any problems in teaching their students technical terms and if they at any point of carrying out this task feel motivated or demotivated in doing this. The findings of the study can help decide the actions to be taken in improving the pedagogical methods of the educators in teaching technical vocabulary.

1.1. Problem Statement

The lack of vocabulary and self-confidence was identified as some of the factors leading to the students of the institute being so weak in English. One of the initiatives executed to improve the students' English language proficiency was the introduction of English Log Book Program. The main objective of this program was to expand the students' vocabulary knowledge in terms of improving their understanding of the meanings of the selected words in the log book and their competence in using the words. The program was conducted by some lecturers who were appointed as the facilitators of the program. Since teaching and learning technical words are part of the program, it is therefore important to investigate the possible difficulty faced by the facilitators in teaching that type of words.

1.2. Research Objectives

The objective of a particular study serves as the direction of the study. As for the present study, it attempted to achieve the following objectives:

1. To investigate the problems faced by the facilitators at the institute of higher learning in teaching technical terms.

2. To examine the motivational drivers of the facilitators at the institute of higher learning in teaching technical terms.

1.3. Research Questions

A research is incomplete without any issue to unravel or question to answer where the research revolves around. Thus, this study intends to seek the answer to the following research questions:

1. What are the problems faced by the facilitators at the institute of higher learning in teaching technical terms?

2. What are the motivational drivers of the facilitators at the institute of higher learning in teaching technical terms?

1.4. Significance of the Study

This study intends to highlight the issues of technical terms particularly with respect to the problems faced by some higher institution instructors in teaching technical words and the motivational factors in teaching this type of vocabulary. Besides, it is hoped that the insight obtained from this research can supply more knowledge with respect to the issues discussed. Also, with the data obtained, perhaps the institute could provide the materials or devices more effective or suitable to meet needs of the teachers in carrying out their tasks.

i-InTeLEC2019

International
Innovation in
Teaching and
Learning & Language
Education Conference

LITERATURE REVIEW

2.1. Definition of "Technical Terms" and Examples of Technical Terms

Vocabulary is classified into four levels which are high frequency words, academic vocabulary, technical vocabulary, and low frequency words Nation (2001). In his explanation of the types of words used in oral and written texts, a scholar, Nation (2001) elaborates that technical words are the words that are very closely related to the subject domains of the texts. Nation (2001) also explains technical terms as words that appear in specialized texts and their definitions are specific to certain domains in the academic area. "Technical words" are defined as words identified with a few features such as being described as low frequency words and being limited to a particular discipline, where they are used frequently (Nation, 2001; Chung & Nation, 2004) and the words are also a section of the taxonomy of information in a particular field (Chung & Nation, 2004).

Tongpoon-Patanasorn (2018), describe "technical terms" as "…words whose meanings are related to one specific and specialized subject area, such as Business English (BE)" (p. 45). Nation (2001) claims that technical words can refer to words that rarely appear in other subject areas (e.g: "cabotage", "amortization") or words that are in the category of high frequently words but they own specialized definitions such as "demand", "supply" and "cost" (used in the field of Economics). Some examples of technical words given by Nation (2001) are "indigenous", "regeneration", "podocarp", "beech", "rimu" (a New Zealand tree) and "timber" for technical words in the area of forestation. In explaining the vocabulary types that are common in Mathematics classrooms, Ernst-Slavit and Slavit (2007) describe "technical vocabulary" as academic language or terms associated with a specific Mathematical topic and some examples of words in the category of vocabulary are, "perfect numbers", "supplementary angles", "quadratic equations", "cosine", and "mode." As for "specialized vocabulary", it is explained as academic language or terms broadly associated with Mathematics such as "number", "angle", "equation", and "average." Some examples of technical terms are provided by Schmitt (2000) as presented below:

Table 1 Examples of Technical Terms (Schmitt, 2000)

Technical Terms	Specialized Field
• Habeus corpus • bail	Law
• pi • harmonic dissonance	Engineering
Source: Schmitt, N. (2000). Vocabulary in language learning. New York: Cambridge University Press.	

2.2. The Importance of Learning Technical Words

It is claimed by Tongpoon-Patanasorn (2018) that semantic nuances and pragmatic uses of technical words are important for learners to be well-versed in in order for them to be competent in a certain discipline. Being competent in using technical words appropriately can be the yardstick for the level of one's subject knowledge and this is argued can be the foundation in assessing a learner's subject competence (Gablasova, 2014). Besides, Gablasova (2014) argues that being well-versed in specialized or technical vocabulary has a higher chance to contribute to greater

impact on the learners' development academically. It is argued by Nation (2001) with respect to the number of technical words, it can be estimated that roughly technical dictionaries such as those of Geography, Biology and Applied Linguistics each consists of less than 1,000 words. Nation (2001) also mentions, "If we look at technical dictionaries, such as dictionaries of economics, geography or electronics, we usually find about 1,000 entries in each dictionary" (p. 12). Thus, clearly learning technical words can expand someone's vocabulary as there are numerous and various technical terms that can be learned.

2.3. Teaching and Learning of Technical Terms

Learning vocabulary incidentally can occur with regard to learning technical words concerning academic study and this frequently involves an activity which is reading to learn (Grabe, 2009). As for learning technical words from text books, different lexical familiarization techniques are used by textbook writers in the texts in order to familiarize such words to learners, thus making the words more understandable and learnable (Gablasova, 2014). In terms of learning technical words in textbooks and lectures, providing definitions of the words is a common method of lexical familiarization (Lessard–Clouston, 2009; Nation, 2001). It is argued by most textbook writers that learning the definitions of new technical terms is a fundamental part of learning new subject knowledge (Bravo & Cervetti, 2009; Woodward–Kron, 2008), and therefore obviously, learning about certain disciplines will require learning the meanings of new technical words that are perhaps unfamiliar to learners. As in the field of Mathematics, according to Slavit and Ernst-Slavit (2007), talking about this discipline does not only involve making use of specialized vocabulary (e.g: "logarithmic," "asymptotic," and "collinear"), but it also includes using a variety of words and phrases that mean one thing in Mathematics and another in everyday context usages (e.g.: "rational" and "circular").

Chung and Nation (2003) have the belief that learning common collocations and grammatical elements of the technical words can assist learners in their efforts in learning the words more productively. Some examples of techniques that can be employed by teachers in helping their learners deal with technical terms are providing the ways for the learners to obtain the skills of recognizing technical vocabulary, interpreting meanings, linking senses to central meanings, and learning fragments of words (Chung & Nation, 2003). According to McLaughlin and Parkinson (2018), in their study on some trainees at a polytechnic institution in New Zealand, with respect to their learning of specialized language of carpentry, it is inferred that this type of learning occurs as part of the learners' daily communications on the building site instead of formally learning the language itself in their classrooms.

2.4. Problems in Teaching and Learning of Technical Terms

It is argued by Chung and Nation (2003) that teachers basically face two main difficulties in their efforts to help learners learn technical terms namely; 1) teachers occasionally do not have specialist intelligence of their learners' technical fields and, 2) technical terms should be worked on in dealing with the specialized area. Nguyễn and Phạm (2016) claim that teaching English for Specific Purposes (ESP) is not effective due to the fact that teachers are not given training of specialized knowledge and many general English teachers cannot teach ESP because they themselves do not possess complete understanding of the specialized terminology involved. In a study conducted by Shizha (2007) on teachers' attitudes towards using an indigenous language, Shona in teaching Science at a rural primary school in Zimbabwe. In this qualitative research, one of the participants revealed that there was a possibility that teaching Sciences in an indigenous language involved some problems like lack of scientific terms in that language and insufficient resources of technical terms to express the meanings properly. Thus, the present study intended to discover if using the mother tongue of both the teachers and students would help technical word learning or the opposite. Lee and Fradd (1998) argue that learning Mathematic register can be complicated for English language learners as numerous words cannot be translated from English to

their native languages and across languages, equivalent terms as well as parallel behaviours of understanding ideas probably do not exist.

METHODOLOGY

3.1. Research Design

The study employed a descriptive and also quantitative research design through the execution of questionnaire survey on the teaching technical term problems faced by the lecturers of the institute studied and the motivational elements in teaching technical words to their students.

3.2. Participants

The respondents of the present study were 29 instructors teaching at an institute in Nibong Tebal, Penang, Malaysia. The teachers specialized in several fields and were involved in the English Log Book Program. The demographic details of the respondents are as follows:

Table 2 Demographic Background of the Respondents

Respondents (29)						
Specialization		**Gender**		**Years of teaching**		**Age**
		Male	**Female**	**Number of years**	**Number of lecturers**	
Multimedia	2			2	1	
Information Technology	3			3	3	
Manufacturing Engineering	4			4	4	
Mathematics	2			5	7	
Physics	1			6	2	
English	1			7	3	
Agriculture Engineering	3	11	18	8	5	21-47
Automotive	3			10	1	
Mechanical	1			12	2	
Welding technology	1			16	1	
Computer Technology	2					
General Studies	3					
Fashion Design	3					
TOTAL	**29**	**29**			**29**	

The design of the English Log Book was based on the objective of promoting vocabulary enrichment which required the students to complete the five levels of vocabulary learning included in the book throughout their duration of study at the institute. The English Log Book consisted of 5 levels with respect to the levels of difficulty of the selected words, while Level 6 contained some reading materials for the students. The division of the English log book is as follows:

i-InTeLEC 2019

International
Innovation in
Teaching and
Learning & Language
Education Conference

Table 3 Content of English Log Book

Level	Content/Types of Words	Number of Words
Level 1 & 2	Common words included in the general studies	100 (50 words for every level)
Level 3 & 4	Words related to instructors' respective fields (technical words)	100 (50 words for every level)
Level 5 & 6	Common phrases and conversations	Depending on necessity of use

3.3. Instrument

The instrument used in the present research was a 14-item questionnaire that contained self-reporting statements pertaining to the problems faced by the respondents in teaching technical words and the motivational drivers in teaching that category of words. Questions regarding the respondents' demographic profiles were also included in the questionnaire. The questionnaire developed for this research involved item measurement mainly in the form of percentages in terms of to what extent the respondents' level of agreement or disagreement with the statements (whichever that applied to them) could be revealed and admitted by them. The levels of their agreeing and disagreeing with the 14 statements in the questionnaire were represented by the 5-point Likert scale where the five response options and their values were as follows: Strongly disagree= 1; Disagree= 2; Undecided= 3; Agree= 4; and, Strongly agree= 5.

3.4. Data Collection Method

The respondents completed the questionnaire administered to them within the duration of one hour as the number of items in the questionnaire was small. There was the presence of the researchers should the respondents needed any explanation or clarification regarding the items in the questionnaire. Prior to the questionnaire completion, the researchers explained to the respondents the objective of the study and data collection in order to make sure the respondents were clear about the nature of the research and that they were prepared for answering the items in the questionnaire.

3.5. Data Analysis

The data obtained was computed into a software, Statistical Package for Social Sciences (SPSS) version 20 for numerical data generation and calculation. The data such as frequencies and percentages, mean scores and standard deviation scores were extracted from the software for a more comprehensive and detail statistical analysis of the findings of the present study.

FINDINGS AND ANALYSES

4.1. Internal Consistency of the Pilot Test

Table 4 Cronbach's Alpha Reliability Coefficient for the Construct Investigated and Reliability Statistics: Items about the Respondents' Problems in Teaching Technical Terms and Motivational Drivers in Teaching the Terms

i-InTeLEC2019

International
Innovation in
Teaching and
Learning & Language
Education Conference

N= 10

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.753	.782	14

A pilot test was conducted for the objective of testing the reliability of the items in the questionnaire which involved 10 respondents of 10 male and 10 female facilitators. The Cronbach's alpha value of 0.753 represented an acceptable value that it indicated the questionnaire was reliable to be utilized for the main study. Also, this value implied that the questionnaire was generally true about the items it intended to measure and that the items were comprehensible enough for the respondents, suggesting no adjustment to the wording of the items should be made. The alpha coefficient value for the 14 items is .753, signifying that the items have relatively high internal consistency. It is a standard and well-known benchmark that a reliability coefficient value of .70 or higher is considered "acceptable" in most Social Science studies. A scholar, Nunnaly (1978) claimed the value of 0.7 as an acceptable reliability coefficient but lower thresholds are occasionally used in the literature.

4.2. Frequency (f) Distribution (%) for the Items of the Respondents' Problems in Teaching Technical Terms and Motivational Drivers in Teaching the Terms

Table 5 Independent Samples Test

N=29

	Items	Mean	Std. Dev	Kurtosis		Skewness	
				Stat	Std. Error	Stat	Std. Error
No.	**Problems in Teaching Technical Terms**						
1	I often have trouble explaining in detail the meanings of technical terms taught in English.	3.00	0.964	-1.400	0.845	-0.257	0.434
2	Sometimes my students cannot relate the technical terms taught with the uses of the terms in real life when I ask them about the uses of the terms.	3.31	0.891	-0.049	0.845	-1.007	0.434
3	I find it hard to get references related to teaching technical terms.	2.41	1.086	-1.153	0.845	0.327	0.434
4	I think I need to improve my English language proficiency so that I can better teach my students technical terms.	4.21	0.819	1.969	0.845	-1.252	0.434
5	My students are easier to understand the technical terms taught in Malay than in English.	3.17	1.256	-1.334	0.845	-0.116	0.434
6	I am more comfortable using English in teaching my students technical terms.	3.83	0.848	-0.862	0.845	-0.027	0.434

i-InTeLEC 2019

International
Innovation in
Teaching and
Learning & Language
Education Conference

No.	Items					
7	I think technical terms are more easily taught if the same terms exist in Malay language too (eg: discrimination (English), diskriminasi (Malay)).	3.72	1.066	0.331	0.845	-0.922	0.434
8	I always make myself aware of the emergence of new technical terms because I probably need to link the new terms to the old ones that should be taught to my students.	4.10	0.489	1.456	0.845	0.293	0.434
	Motivation in Teaching Technical Terms					
9	I am happy that my students can understand well the technical terms explained to them.	4.48	0.688	4.525	0.845	-1.703	0.434
10	I am motivated to explain the technical terms to my students when the students pay attention to my teaching.	4.31	0.712	2.545	0.845	-1.177	0.434
11	I like to teach the technical terms that I find difficult for my students to understand because I like to challenge my ability to teach the terms to my students.	3.76	0.951	-0.750	0.845	-0.280	0.434
12	I'm disappointed if my students cannot remember the technical terms that they have learned.	3.66	1.173	-0.591	0.845	-0.687	0.434
13	I always feel responsible to ensure that my students are able to understand the technical terms that have been taught.	4.17	0.602	5.284	0.845	-1.126	0.434
14	I think the technical terms of my specialized field are difficult for my students to understand and for this reason I have no motivation to teach them the terms.	2.52	1.243	-0.793	0.845	0.557	0.434

Table 6 Independent Samples Test

N=29

		Response options								
	Items	SD		D		U		A		SA	
		f	%	*f*	%	*f*	%	*f*	%	*f*	%
No.	**Problems in Teaching Technical Terms**										
1	I often have trouble explaining in detail the meanings of technical terms taught in English.	1	3.4	10	34.5	6	20.7	12	41.4	0	0

#	Statement										
2	Sometimes my students cannot relate the technical terms taught with the uses of the terms in real life when I ask them about the uses of the terms.	1	3.4	5	17.2	7	24.1	16	55.2	0	0
3	I find it hard to get references related to teaching technical terms.	6	20.7	12	41.4	4	13.8	7	24.1	0	0
4	I think I need to improve my English language proficiency so that I can better teach my students technical terms.	0	0	2	6.9	1	3.4	15	51.7	11	37.9
5	I find that it is easier for my students to understand the technical terms taught in Malay than in English.	2	6.9	10	34.5	2	6.9	11	37.9	4	13.8
6	I am more comfortable using English in teaching my students technical terms.	0	0	1	3.4	10	34.5	11	37.9	7	24.1
7	I think technical terms are more easily taught if the same terms exist in Malay language too (eg: discrimination (English), diskriminasi (Malay)).	1	3.4	4	13.8	3	10.3	15	51.7	6	20.7
8	I need to always make myself aware of the emergence of new technical terms because I probably need to link the new terms to the old ones that should be taught to my students.	0	0	0	0	2	6.9	22	75.9	5	17.2
	Motivation in Teaching Technical Terms										
9	I am happy that my students can understand well the technical terms explained to them.	0	0	1	3.4	0	0	12	41.4	16	55.2
10	I am motivated to explain the technical terms to my students when the students pay attention to my teaching.	0	0	1	3.4	1	3.4	15	51.7	12	41.4
11	I like to teach the technical terms that I find difficult for my students to understand because I like to challenge my ability to teach the terms to my students.	0	0	3	10.3	8	27.6	11	37.9	7	24.1
12	I'm disappointed if my students cannot remember the technical terms that they have learned.	1	3.4	6	20.7	2	6.9	13	44.8	7	24.1
13	I always feel responsible to ensure that my students are able to understand the technical terms that have been taught.	0	0	1	3.4	0	0	21	72.4	7	24.1
14	I think the technical terms of my specialized field are difficult for my students to understand and for this reason I have no motivation to teach them the terms.	6	20.7	12	41.4	3	10.3	6	20.7	2	6.9

According to Hair, Hult, Ringle, and Sarstedt (2014), "Skewness assesses the extent to which a variable's distribution is symmetrical. If the distribution of responses for a variable stretches toward the right or left tail of the distribution, then the distribution is characterized as skewed. Kurtosis is a measure of whether the distribution is too peaked (a very narrow distribution with most of the

i-InTeLEC 2019

International
Innovation in
Teaching and
Learning & Language
Education Conference

responses in the center)" (p. 54). Table 4 shows the skewness values range from -1.703 to 0.557and the kurtosis values range -1.334 to 5.284. The values of skewness are within the recommended values of -2 to 2 to (Burns & Burns, 2008) and this implied that the respondents had given acceptable feedback in terms of the relationship between the items in the questionnaire and the variables investigated to form a bell curve. "For kurtosis, the general guideline is that if the number is greater than +1, the distribution is too peaked." (Hair, Hult, Ringle, & Sarstedt, 2014, p. 54). These scholars also explain that a skewness or kurtosis that exceeds the guideline of within the range -1 to +1 is considered non-normal. However, Hair, Hult, Ringle, and Sarstedt (2014) argue that "…nonnormality of data regarding skewness and kurtosis is not an issue." (p. 61).

Table 6 shows the results obtained for both Research Question 1 and 2. Based on the findings, there were some problems detected being faced by the teachers of facilitators in teaching technical words. In terms of explaining technical terms in detail to their students, the teachers revealed that the majority of them, 12 respondents (41.4%, M= 3.00, SD= 0.964) agreed that they had problems clarifying the words in English (item 1). 55.2% of the respondents agreed that their students could not relate the technical terms taught with their uses in real life (item 2). This obviously had made teaching the students for complete comprehension quite challenging. As for obtaining teaching technical term materials (item 3), surprisingly, the instructors in majority (41.4%, M= 2.41, SD= 1.086) did not agree that they had any problem finding such materials. Again, when it came to using English language in teaching technical terms, the teachers mostly (51.7% of the respondents, M= 4.21, SD= 0.819) admitted that they had to improve their competency of English for the purpose of improving their teaching of technical terms to their students (item 4). 37.9% or 11 respondents (M= 3.17, SD= 1.256) agreed that their students understood the technical terms taught in Malay easier than in English (item 5). However, a huge percentage, 34.5% (10 respondents) represented the data that showed the instructors were uncertain about being more comfortable or not to use English in teaching their students technical terms (item 6). Despite being unsure about being more comfortable to use English in teaching technical words, the respondents in majority, 51.7% (M=3.72, SD= 1.066) decided to agree with statement 7, "I think technical terms are more easily taught if the same terms exist in Malay language too (eg: discrimination [English], diskriminasi [Malay]) (item 7). Item 8 ("I always make myself aware of the emergence of new technical terms because I probably need to link the new terms to the old ones that should be taught to my students") received the biggest number of respondents who assigned the response option, "agree" to it as 75.9% (22 respondents) of them did this.

As for motivation to teach technical terms, more than half of the respondents, 15 lecturers (55.2%, M= 4.48, SD= 0.688) agreed that their students' good understanding of the technical terms explained to them could make them happy (item 9). The majority of the respondents, 51.7% (15 instructors) assigned "agree" to item 10 ("I am motivated to explain the technical terms to my students when the students pay attention to my teaching."). 37.9% (M= 3.76, SD= 0.951) of the respondents admitted that they favored teaching the technical terms that they thought were difficult for their students' comprehension because they liked to challenge their ability to teach the terms to their students (item 11).

As for item 12, it was discovered that 44.8% of the respondents or 13 instructors agreed that they would be disappointed or demotivated if their students could not remember the technical terms that they had learned. A huge percentage, 72.4% of the respondents (M= 4.17, SD= 0.602) agreed that it was their responsibility to ensure that their students were able to understand the technical terms taught to them (item 13). Most of the teachers, 41.4% (12 respondents) did not believe that the technical terms of their specialized fields were difficult for their students to understand and due to this fact, they were not demotivated by to their students technical words (item 14).

DISCUSSION

From the above data, it can be inferred that the majority of the respondents believe that the problems related to the teaching of technical terms can be overcome if they constantly improve their English language proficiency. Besides, there are some pedagogical problems of the teachers in teaching technical terms detected such as the ones related to explaining, using Malay translations and linking a one word to another. Apart from pedagogy, the teachers also face some problems in obtaining teaching aids such as reference books or other materials in teaching technical terms.

In terms of the motivational aspect, it is clear that the teachers are more motivated to teach the technical terms when their students can understand the terms even though students' ability to relate those terms with real life use is questionable. The teacher's awareness of their responsibility has also encouraged them to be more motivated to teach. Brown (2000) categorizes motivation two types namely, 1) intrinsic motivation (internal factors that are the results of one's psychological or mental influence like their own self-perceived needs) and, 2) extrinsic motivation (external factors that are contributed by other people such as getting a reward from someone). Such sense of responsibility is obviously a source of internal motivational driver for the teachers to teach technical terms. As for external motivational drivers, there are clearly some factors that can contribute to generating the teachers' motivation to teach technical words such as their students' focus in the teaching and their memory retention of the words. Besides, their students' understanding of the technical terms can also be another motivational driver for the teachers. This finding is in line with the results of the study conducted by Stockwell (2013) which found that teachers' motivation would increase when their students' understanding also increased.

CONCLUSION

In conclusion, the problem and motivation in the teaching of technical terms can be overcome if each teacher is willing to improve their English language proficiency. According to Lamb (2017), teacher's motivation is very important to increase the motivation of their students, especially in language teaching and learning. In addition, teachers' motivation improves as the students' focus on and understanding of the topic also increases. If more Malay equivalents of the English technical terms exist, the effort to teach the technical terms can be heightened as these versions of words possess the students' mother tongue influence particularly in terms of their sounds and spellings for better memory. Besides, the students' understanding of the technical terms should not be hindered by the instructors' inability to clearly explain the terms. The results also show that the majority of the respondents agree that the teachers should always be aware of the new technical terms existence so that they can be easily linked to the existing terms. Students' inability to see the usability of the technical terms learned may pose a challenge to the instructors in ensuring that students obtain complete understanding of the terms. The extent to which a student's opinion of the terms' usability can impede their effort in understanding the technical terms is yet to be discovered. Therefore, it is proposed that further studies can be conducted on the problems and motivation among the students in learning the technical terms.

REFERENCES

Bravo, M. A., & Cervetti, A. (2009). Teaching vocabulary through text and experience in content areas. In M. F. Graves (Ed.), *Essential Readings on Vocabulary Instruction* (pp. 141–152). Newark, NJ: International Reading Association.

Burns, R. B., & Burns, R. A. (2008). *Business Research Methods and Statistics Using SPSS*. Thousand Oaks, California: Sage Publications Inc.

Chung, T,M., & Nation, P. (2003). Technical vocabulary in specialised texts. *Reading in a Foreign Language*. *15*(2), pp. 103-116.

Ernst-Slavit, G., & Slavit, D. (2007). Educational reform, mathematics, and English language learners: Meeting the needs of all students. *Multicultural Education*, *14*(4), 20–27.

Gablasova, D. (2014). Learning and retaining specialized vocabulary from textbook reading: comparison of learning outcomes through L1 and L2. *The Modern Language Journal*, 98, 4, Wiley Periodicals, Inc. on behalf of the National Federation of Modern Language Teachers Associations, Inc.

Grabe, W. (2009). *Reading In a Second Language: Moving From Theory to Practice*. New York: Cambridge University Press.

Hair, Jr. J. F., Hult, T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.

Lamb, M. (2017). *The Motivational Dimension of Language Teaching*. Cambridge, England: Cambridge University Press.

Lee, O., & Fradd. S. H. (1998). Science for all, including students from non-English language backgrounds. *Educational Researcher*, *27*(4), 12–21.

Lessard–Clouston, M. (2006). Breadth and depth specialized vocabulary learning in theology among native and non-native English speakers. *The Canadian Modern Language Review/La Revue Canadienne des Langues Vivantes*, *63*, 175–198.

McLaughlin, E., & Parkinson, J. (2018). 'We learn as we go': How acquisition of a technical vocabulary is supported during vocational training. *English for Specific Purposes*, *50*, 14-27.

Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge, England: Cambridge University Press.

Nguyễn, T. T. H., & Phạm, T, T. M. (2016). Difficulties in teaching English for Specific Purposes: Empirical study at Vietnam universities. *Higher Education Studies*, *6*(2), 2016.

Nation, I. S. P. (2005). Teaching Vocabulary. *Asian EFL Journal*. Available at: http://www.asian-efl-journal.com/sept_05_pn.pdf

Nunnaly, J. (1978). *Psychometric Theory*. New York: McGraw-Hill.

Slavit, D., & Ernst-Slavit, G. (2007). Teaching Mathematics and English to English Language Learners Simultaneously, *Middle School Journal*, *39*(2), 4-11.

Shizha, E. (2007). Critical analysis of problems encountered in incorporating indigenous knowledge in science teaching by primary school teachers in Zimbabwe. *Youth and Children's Studies*, *5*.

Stockwell G. (2013) Technology and Motivation in English-Language Teaching and Learning. In: Ushioda E. (eds) *International Perspectives on Motivation. International Perspectives on English Language Teaching*. Palgrave Macmillan, London.

Tongpoon-Patanasorn, A. (2018). Developing a frequent technical words list for finance: A hybrid approach. *English for Specific Purposes*, *51*, 45–54.

Woodward-Kron, R. (2008). More than just jargon- The nature and role of specialist language in learning disciplinary knowledge. *Journal of English for Academic Purposes*, *7*(4), 234-249.