

Assessing Roles of Vocabulary and Grammar in Listening and Reading Comprehension Aligning with CEFR Test

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Abstract

The article purposes to reveal that vocabulary and grammar play important roles of language proficiency on a CEFR placement test. The research also showed that most of Thai volunteering Bachelor undergraduates from education field achieved A2 level based on CEFR scale. Moreover, this explained that vocabulary and grammar has correlation with listening and reading by using Bivariate Correlation. The result indicated that both vocabulary and grammar were positively correlated with reading same as both vocabulary and grammar were positively correlated with listening. Moreover candidates who had high score in vocabulary and grammar tended to have higher score in reading and listening skills.

Keywords: CEFR test, Correlation, Vocabulary, Grammar, Listening and Reading

Introduction

Since Thai Ministry of Education announced of using Common European Framework of Reference for Languages (CEFR) as a framework for identifying English Language Proficiency of Thai people, many institutions have started to organize their staff and learners testing English and finding out the language proficiency level as the whole organization. The language test has been set by language institutions such as British Council in Thailand or recommended language organizations, the concept in test especially tests based on CEFR has been justified in every skills of language usage; as language proficiency level ranged from A1 to C2. CEFR focuses on a detailed analysis of communicative contexts, themes, tasks and purposes as well as scaled descriptions of the competences on which we communicate (Language Policy Unit, n.d.). Therefore, sub-skills of language; vocabulary and grammar is also be tested separately and inclusively in

reading and listening. As language learners, vocabulary and grammar can be very important to be learned and taught because these helped the second language acquisition learners to understand and comprehend the target language like as a native speaker. Chun-mei (2007) and Gokhan (2012) had viewed that vocabulary is very important part of language learners because their researches were revealed that vocabulary can help learners or language test-takers to figure out the meaning of words and sentences and create a meaningful way for them in making responses to the items in a contextualized way. Especially, Chun-mei said that without grammar, little can be conveyed; without words nothing can be conveyed. However, grammar also played a major role in language, Rafajlovicova (nd.) said that grammar is an essential component of language because it is an integral part of language we use in everyday communication. Language without grammar would be chaotic and would certainly leave us seriously handicapped. Pranculienė A. (2013) had found out on his research that while assessing the test-takers' language ability inferences on the person's language knowledge and strategic competence are made. Knowledge of vocabulary, grammar and spelling are essential in language proficiency. Without elementary knowledge of language one will not be able to show the other competences or skills in the target language.

This research would like to recognize the bachelor students' language proficiency based on CEFR scales and assess the important role of vocabulary and grammar in listening and reading comprehension aligning with CEFR language proficiency test using the population of Bachelor undergraduates.

Objectives

This research aims to study:

1. Language proficiencies of Bachelor undergraduates based on CEFR scales
2. The correlations between the knowledge of grammar and vocabulary in reading and listening skills based on The Council of Europe's Common European Framework of Reference for Languages (CEFR).

Research Questions:

1. What is the weakest skill of the candidates?
2. What are the predominating CEFR levels in each skill?
3. Do Vocabulary and Grammar have positive correlation with Listening and Reading Skills?

Concept theory framework

Common European Framework of Reference for Languages (CEFR)

CEFR is a framework that has been used for reference language proficiency of language learning, teaching and assessment. Language Policy Units (nd) has explained that this framework provides a common basis for the elaboration of language syllabus, curriculum guidelines, examinations, textbooks, and so on. This describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively. The CEFR describes foreign language proficiency at six levels: A1 and A2, B1 and B2, C1 and C2 to exist standards, tests and examinations in order to facilitate comparisons between different systems of qualifications.

Vocabulary Skill

Vocabulary, as one of the knowledge areas in language, plays a great role for learners in acquiring a language (Cameron, 2001). Researchers such as Laufer and Nation (1999), Maximo (2000), Read (2000), Gu (2003) and Nation (2011) and others have realized that the acquisition of vocabulary is essential for successful second language use and plays an important role in the formation of complete spoken and written texts. Many researchers in education suggested that vocabulary knowledge and reading comprehension are closely connected and numerous studies have shown a strong correlation between the two (Thornbury, 2002, Nagy 1988, Nelson-Herber 1986). The high density of unknown words would probably hinder the comprehension in the text. There are many researches on the correlations among vocabulary size, vocabulary knowledge and the reading comprehensive levels.

Grammar

Grammar as one important sub-skill of language that has to be realized when learning and assess language proficiency. English club (2017) defined grammar as the system of a language. This skill help learners to learn a language more quickly and more efficiently. Zhang (2012) concluded his concept of grammar knowledge in L2 reading comprehension from many researchers that grammatical knowledge is important to the comprehension of text in that it is essential to coherence building as well as to word integration for establishing propositional meaning that enable text model construction and integration. Researchers such as Jung (2009), Sarem and Malmir (nd) and Shokrpour, Mahboudi and Kargar (2014) agreed that grammar skill is helping the learners to produce language comprehension ability in terms of reading and listening. Moreover, the research result of Sengul and Sunbul (2015) supported that students learning Turkish as a foreign language are generally successful at comprehension skills and grammar. The result

regarding the significant medium positive correlation between grammar and listening comprehension indicates that both dimensions of the language support each other.

Listening

Listening is one of four important language skills. This skill is primary language skill of learning language. Listening involves identifying the sounds of speech and processing them into words and sentences (English club, 2017). Sarem and Malmir (nd) has also summarized of Goh and Rost that listeners is not only knowing sounds, understanding words and sentences but it also includes a process of receiving what the speaker actually says and representing meaning. Therefore, to gain listening ability in language, language learners must have other skills to be components. Bozorgian (2012) had examined the Relationship between Listening and Other Language Skills in International English Language Testing System (IELTS), so the result indicated that the listening comprehension and the overall language skills had the close correlation.

Reading

Reading skill is another type of four important language skills. Wikipedia has defined reading is a complex cognitive process in order to construct or derive meaning. Good readers are competent in three areas: auditory (word attack), visual (sight words) and language (vocabulary, syntax, semantics) (. Many researchers such as Kim and Cho (2015), Sarem and Malmir, (nd.) and Zhang, 2012 have proved that to get better of reading ability, other language skills have to be used in reading skill because each language skill has correlation with each other.

Methods

Participants

41 volunteers who have been as Bachelor undergraduates took CEFR Test at Hatyai University. The age of participants ranged range approximately from 25 to 45 years, so there were 9 male and 32 female. This participants were in Educational field such as lecturers and staff from a university and teachers and staff from a school.

Research Instruments

Placement test had been aligned with Europe's Common European Framework of Reference for Languages (CEFR). The test includes listening, reading, vocabulary, and grammar and language practice. Each test of language skill contains from Level A1 to Level C.2 and they are one hundred twenty multiple choice items.

- Listening test consists of thirty questions in six parts, from simply personal conversation to complex and specific conversation.
- Reading test consists of thirty questions in six reading passages, from general and personal texts to complex texts.

- Grammar and vocabulary test consists of thirty questions in each. Each test of these two skills has tested knowledge and comprehension.

Data Collection and Analysis

41 volunteers took a placement test based on Europe's Common European Framework of Reference for Languages (CEFR). The test consisted of four parts as listening, grammar, vocabulary and reading. Each skill had 30 items. After volunteers took the test, the researchers marked the test and grouped volunteers' test score like as language proficiencies into CEFR scale ranged from A1 to C2.

The researchers used SPSS 20 to analyze the data in following;

- General test score as language proficiencies had been used Frequency to analyze the percentage of how many volunteers achieved as language proficiencies on CEFR scale ranged from A1 to C2. Then Descriptive used for finding mean (\bar{x}) and standard derivation (SD).
- Bivariate Correlation used for finding the correlation of vocabulary and grammar with reading and listening.

Results

Table 1 What is the weakest skill of the candidates?

	N	Mean	Std. Deviation
Listening	41	12.29	3.995
Vocabulary	41	12.51	5.3857
Grammar	41	10.76	6.629
Reading	41	12.54	6.535
Valid N (listwise)	41		

The table1 illustrates the mean of four macro (listening and reading skills) and micro language skills (grammar and vocabulary skills). The total amount had aggregate of 41 candidates. Despite grammar part, listening and reading's scores were in line with vocabulary's score, constituting at approximately 12.00. Shown as the weakest skill, grammar was relatively low at 10.76; however, it was slightly lower than other skills.

Table 2 What are the predominating CEFR levels in each skill?

Frequency Table

CEFR Level	Frequency Listening	Percent Listening	Frequency Vocabulary	Percent Vocabulary	Frequency Grammar	Percent Grammar	Frequency Reading	Percent Reading	Frequency Overall	Percent Overall
A1	1	2.4	2	4.9	7	17.1	4	9.8	-	-
A2	11	26.8	11	26.8	15	36.6	11	26.8	19	46.3
B1	18	43.9	17	41.5	7	17.1	8	19.5	7	17.1
B2	9	22.0	6	14.6	6	14.6	12	29.3	11	26.8
C1	2	4.9	4	9.8	6	14.6	4	9.8	4	9.8
C2	-	-	1	2.4	-	-	2	4.9	-	-
Total	41	100.0	41	100.0	41	100.0	41	100.0	41	100.0

The table 2 demonstrates the frequency of level achievement of the sampling group. The majority of candidates attained at the A2 level (46.3%), and followed by the B2 level (26.8%). No one received overall level at the A1 and the C2 levels though they were at the A1 and C2 levels in some skills. To ensure the mentioned consequence of table 1 that grammar was the lowest part, the percentage predominated in the A1 and A2 level at 17.1 percent and 36.6 percent respectively. The majority of the sampling group attained the B1 level in listening (43.9%) and vocabulary (41.5%), the reverse is true in grammar (17.1) and reading (19.5%). The highest proportion of the B2 level contributed to reading skill whereas percentage of people whose level of grammar and vocabulary were identical at 14.6%. Surprisingly, despite the result that grammar was relatively low comparing to other skills, the largest sampling group of the C1 level constituted 14.6 which was nearly three-time higher than listening skill. There were three people who received the C2 level: one was in vocabulary and the rest was in reading. It was implied that the skills that best in reading and vocabulary. In spite of grammar, listening skill was another part that no one could reach the C2 level. All in all, the highest frequencies of each skill are explained as follows: (1) listening skill and vocabulary were in the B1 level at 43.9% and 41.5% respectively; (2) grammar was in the level A2 at 36.5; and (3) reading skill was in the B2 level at 29.3%.

Table 3 the correlation between micro skills, vocabulary and grammar, and listening comprehension

		Listening	Vocabulary	Grammar
Listening	Pearson Correlation	1	.757**	.715**
	Sig. (2-tailed)		.000	.000
	N	41	41	41
Vocabulary	Pearson Correlation	.757**	1	.753**
	Sig. (2-tailed)	.000		.000
	N	41	41	41
Grammar	Pearson Correlation	.715**	.753**	1
	Sig. (2-tailed)	.000	.000	
	N	41	41	41

** .Correlation is significant at the 0.01 level (2-tailed).

The table 3 shows the correlation between micro skills and listening comprehension. There was a positive correlation between listening and vocabulary at .757; listening and grammar are also positively correlated which was marginally lower by .042. Moreover, it was shown that vocabulary and grammar are significantly correlated at .001.

Table 4 the correlation between micro skills, vocabulary and grammar, and reading comprehension

		Vocabulary	Grammar	Reading
Vocabulary	Pearson Correlation	1	.753**	.790**
	Sig. (2-tailed)		.000	.000
	N	41	41	41
Grammar	Pearson Correlation	.753**	1	.852**
	Sig. (2-tailed)	.000		.000
	N	41	41	41
Reading	Pearson Correlation	.790**	.852**	1
	Sig. (2-tailed)	.000	.000	
	N	41	41	41

** .Correlation is significant at the 0.01 level (2-tailed).

The table 4 depicts the correlation between micro skills and reading comprehension. It revealed that both vocabulary and grammar were positively

correlated with reading. Grammar had higher correlation in reading than vocabulary by .062 and showed statistical significance at .001; nonetheless, grammar is considered as having a high correlation in reading at .852.

In a summary, as per table 3 and 4, all language skills were positively correlated. More specifically, grammar tended to have way higher correlation in reading rather than in listening. In reading comprehension also had higher correlation with vocabulary than listening by .075. To render the final verdict, candidates who had high score in vocabulary and grammar tended to have higher score in reading and listening skills. Although vocabulary and grammar play as a crucial role in both macro skills, they were more important in order to comprehend the text. Due to the result of micro skills, vocabulary was positively correlated with grammar at .753.

Conclusions and Discussion

Eunjou, O. (2016) disputed that grammar and vocabulary are not the key indicator for reading comprehension. Moreover, students who had been taught reading techniques were able to predict the text; that is to say, it proved that there is no relationship between vocabulary breadth and reading comprehension. (Promduang, 2016) With regard to the findings, grammar is considered as the lowest skill of all skills, reflecting that it is subordinate in English language teaching. The result echoes the findings of researches conducted by Thitiphong (2015, 2016), Promduang (2016), Chongdarakul (2015) and Sinlapachai et. al. (2016). Weerawong (2011) revealed her findings to Manager Online that teacher focuses on reading and grammar and push students to memorize in order to pass the exam, resulting in inability in communicative skills. The interesting thing is that Thai education has been viewed that English language classrooms heavily gives emphasis on grammar but grammar part evidences as the lowest proficiency in the present study. Ministry of Education imposed new policy for educational reform in 2013 which will be correlated with 20-year national strategic plan 2017-2036 by means of focusing on communicative skills and prioritizing listening and speaking skills. (Thairath Online, 2013) Hence, teachers have no cognizant of the importance of grammar. Contrary to the result found that most candidates were weak at grammar, it was revealed that the role of grammar had the strongest relationship with reading which was slightly higher than the role of vocabulary. Due to Dole et. al. (1991) mentioned that decoding written work to comprehend the text, readers need to have sufficient knowledge of word, structures, grammar, and language format. This points out that the role of grammar is equivalent with vocabulary in order to comprehend the text. The result endorsed several studies that grammar is an integral part to better students to comprehend the text. (research grammar and reading)

Turning to vocabulary knowledge, it was widely accepted that there is a close affinity between vocabulary and reading comprehension. Most researches related reading comprehension to vocabulary knowledge in terms of breadth and depth. Milton (2010) confirmed that vocabulary size measurement can be tied to the level of the CEFR with some confidence. Then, the present study employed CEFR test to measure vocabulary breadth to examine in which level students were attainable. The findings of the present study are congruent with previous researches vocabulary is a predictor of reading performance. (Schoonen cited in Milton, 2013, Sengul and Sunbul, 2015)

With listening skill, the consequences indicated that vocabulary showed more vital role in listening rather than grammar which was in line with the result of Sarem and Malmir (nd.). Many scholars then just merely paid attention to the role of vocabulary knowledge and listening skill, revealing the significant relationship between them. Nonetheless, previous researches' result which was predominantly focused on the relationship between grammar and listening showed that knowledge of grammar helps EFL to perform listening comprehension. (Zhang, Hong-yan, 2011, Shokrpour, Mahboudi and Kargar, 2014)

It is suggested that vocabulary and grammar knowledge are the essential linguistic skills as the important pieces of jigsaw. Without one of them, language learners are unable to effectively perform productive and receptive skills. As these days, English language classroom pays less attention to complex grammar but encourage students to speak English and exert a lot of effort on vocabulary without realizing that words alone are not sufficiently to comprehend the text or listening clearly.

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References

- Bozorgian, H. (2012). The Relationship between Listening and Other Language Skills in International English Language Testing System. *Theory and Practice in Language Studies*. 2(4). 657-663.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Chongdarakul, W. (2015). The Development of the Curriculum of Listening Development Aligning with CEFR for English Language Teachers under the Supervision of the Office of the Basic Education Commission. Retrieved from http://tdc.Thailis.or.th/tdc/browse.php?option=show&browse_type=title&titleid=428592&

query=cefr&s_mode=any&d_field=&d_start=0000-00-00&d_end=2560-02-11&limit_lang=&limited_lang_code=&order=&order_by=&order_type=&result_id=1&maxid=2

- Chun-mei, GAO. (2007). Influence of Contexts on Vocabulary Testing. *US-China Review*, 4(7),42-46. Retrieved from <http://files.eric.ed.gov/fulltext/ED502898.pdf>
- Dole, J. A. Duffy, G. G., Roehler, L. R., and Pearson, D. D. (1991). Moving from the old to the new: research on reading comprehension instruction. *Review of Educational Research* 61
- English Club. (2017, March 9). What is Grammar?. Retrieved from <https://www.englishclub.com/grammar/what.htm>
- English Club. (2017, March 9). What is Listening?. Retrieved from <https://www.englishclub.com/listening/what.htm>
- Eunjou, O. (2016) Comparative Studies on the Roles of Linguistic Knowledge and Sentence Processing Speed in L2 Listening and Reading Comprehension in an EFL Tertiary Setting *Reading Psychology*, 37(2). P.257-285 2016
- Gokhan, O. (2012). The Effect of Context in Achievement Vocabulary Tests. *Journal of Educational and Instructional Studies in World*. 2(4). 126-134. Retrieved from <http://www.wjeis.org/FileUpload/ds217232/File/15.ozturk.pdf>
- Gu, Y. (2003). Vocabulary learning in second language: person, task, context and strategies. *TESL-EJ* 7(2). 1-26.
- Hong-yan, Zh. (2011). Identifying Information Focuses in Listening Comprehension Online Submission. *US-China Education Review*. p.53-57
- Jung, J. (2009). Second Language Reading and the Role of Grammar. *TESOL & Applied Linguistics*, 9(2). p.29-48.
- Kim, J. and Cho, Y. (2015). Proficiency Effects on Relative Roles of Vocabulary and Grammar Knowledge in Second Language Reading. *English Teaching*, 70(1), 75-96. doi:10.15858/engtea.70.1.201503.75
- Language Policy Unit. (nd). Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Retrieved from http://www.coe.int/t/dg4/linguistic/cadre1_en.asp
- Laufer, B. & P. Nation. (1999). A vocabulary size test of controlled productive ability. *Language Testing* 16, 33- 51.
- Maximo, R. (2000). Effects if rote, context, keyword, and context/ keyword method on retention of vocabulary in EFL classroom, *Language Learning*, 50, 2, 385-412.
- Milton, J. (2010) The Development of Vocabulary Breadth across the CEFR Levels. *Communicative Proficiency and Linguistic Development: Inter sections between SLA and Language Testing Research*. EuroSLA retrieved on March 8, 2017 from <http://eurosla.org/monographs/EM01/Em01home.html>.

- Milton, J. (2013). Measuring the contribution of vocabulary knowledge to proficiency in the four skills: L2 Vocabulary Acquisition, Knowledge and Use new perspectives on assessment and corpus analysis. *Eurosla Monographs Series, 2*, 57-78.
Retrieved from <http://www.eurosla.org/monographs/EM02/EM02tot.pdf>
- Ministry of Education. (2013). Thairath Online. Ministry of Education imposed 6 new policies to enhance English language, embracing new semester. Retrieved on 8 March 2016 from <http://www.thairath.co.th/content/404166>
- Nagy, W. E. (1988). "Teaching vocabulary to improve reading comprehension." ERIC Document Reproduction Service No. ED 298471.
- Nation, I. S. P. (1990). Teaching and learning vocabulary. Boston, Mass.: Heinle & Heinle Publishers.
- Nelson-Herber, J.. (1986). Expanding and refining vocabulary in content areas. *Journal of Reading 29*. p. 626-633.
- Pranculienė, A. (2013). Testing Language in the NATO STANAG Context. *Studies about Languages*. 119-123. Retrieved from <file:///D:/research%20papers/2969-14070-1-PB.pdf>
- Promduang, P. (2016) Assessing Language Skills of DRIC Freshmen to Design an English Intensive Course underlying CEFR. SRU International Conference Facilitating Autonomous Learning via Research-Based Approaches (FCAL). Rajabhat Suratthani University.
- Promduang, P. (2016). Assessing Roles of Vocabulary Knowledge Predominating in Contextual Clues to Enhance Reading Comprehension. The 14th International Conference on Developing Real-Life Learning Experience: STEM Education and Lifelong Learning Skills in the 21st Century. King Mongkut King Mongkut's Institute of Technology Ladkrabang.
- Rafajilovicava, R. (nd). The Status of Grammar within the Process of Teaching and Testing [epub paper]. Retrieved from http://www.pulib.sk/elpub2/FF/Ferencik2/pdf_doc/26.pdf
- Read, J. (2000). Assessing vocabulary. Cambridge: Cambridge University Press.
- Sarem, S. N. (nd). The Impact of Vocabulary Preparation, Grammar Preparation, and Activating Background knowledge on Iranian EFL Learners' Listening. Bushehr English Language & Literature Group: The 2nd Regional Conference on English Literature & Applied Linguistics.
Retrieved from https://www.academia.edu/14177344/TheImpact_of_Vocabulary_Preparation_Grammar_Preparation_and_Activating_Background_Knowledge_on_Iranian_EFL_Learners_Listening_Comprehension

- Sengul, K., Sunbul, A.M. (2015). An Investigation into Comprehension Competence and Grammar Achievements of Learners of Turkish as a Foreign Language in Turkey. *Educational Alternatives: Journal of International Scientific Publications*. 13, 573-580. Retrieved from <https://www.scientific-publications.net/bg/article/1000966/>
- Sinlapachai, R., Surasin, J., & Augkanurakbun, R. (2016). The use of online standardized tests as indicators of English proficiency according to the common European Framework of Reference (CEFR) at the English program of Chonkanyanukoon School, Chon Buri, Thailand. *HRD journal*. 7(1). 63-72.
- Shokrpour, N., Mahboudi, A. and Kargar, E. (2014). The Impact of Explicit Knowledge of Grammar on Iranian EFL Learners' Listening Comprehension Performance. *International Journal of English and Education*. 3(3), 74-89.
- Thairath. (2013). People the Big Focus on Development to Drive Thailand's Economy. Retrieved on <http://www.thairath.co.th/content/874767>
- The Relationship between Spelling, Writing, Reading and Comprehension. (nd). Retrieved from <http://4elg2g4d0mn744vgudl6z63v.wpengine.netdna-cdn.com/wp-content/uploads/2010/04/The-Relationship-between-Spelling-Writing-Reading-Comprehension.pdf>
- Thornbury, S. (2002) *How to Teach Vocabulary*. Harlow: Longman.
- Weerawong, O. (2011). MGR Online. Research conducted by SWU Indicates that Thai students learning English just for Achieving Examination rather than Applying in Day-to- Day Lives Retrieved from [aspx?newsID=9540000155943](http://www.mgronline.com/news/9540000155943.aspx?newsID=9540000155943).
- Wikipedia. (2017, March 9). Reading (process). Retrieved from [https://en.wikipedia.org/wiki/Reading_\(process\)](https://en.wikipedia.org/wiki/Reading_(process))
- Zhang, D. (2012). Vocabulary and Grammar Knowledge in Second Language Reading Comprehension: A Structural Equation Modeling Study. *The Modern Language Journal*. 96(4). p. 558-575.