A STUDY OF CONTEXT CLUE USE OF EFL POSTGRADUATE STUDENTS THROUGH SELF-ASSESSMENT

BY

MR. TEERADON KARDUDOM

AN INDEPENDENT STUDY PAPER SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR MASTER OF ARTS IN CAREERS ENGLISH FOR INTERNATIONAL COMMUNICATION

LANGUAGE INSTITUTE

THAMMASAT UNIVERSITY

ACADEMIC YEAR 2020

COPYRIGHT OF THAMMASAT UNIVERSITY

Ref. code: 25636121040437MVR

A STUDY OF CONTEXT CLUE USE OF EFL POSTGRADUATE STUDENTS THROUGH SELF-ASSESSMENT

BY

MR. TEERADON KARDUDOM

AN INDEPENDENT STUDY PAPER SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR MASTER OF ARTS IN CAREERS ENGLISH FOR INTERNATIONAL COMMUNICATION

LANGUAGE INSTITUTE

THAMMASAT UNIVERSITY

ACADEMIC YEAR 2020

COPYRIGHT OF THAMMASAT UNIVERSITY

Ref. code: 25636121040437MVR

THAMMASAT UNIVERSITY
LANGUAGE INSTITUTE

INDEPENDENT STUDY PAPER

BY

MR. TEERADON KARDUDOM

ENTITLED

A STUDY OF CONTEXT CLUE USE OF EFL POSTGRADUATE STUDENTS THROUGH SELF-ASSESSMENT

was approved as partial fulfillment of the requirements for
the degree of Master of Arts in Career English for International Communication

on May 27, 2021

Chairman _____
(Nantikarn Simasangyaporn, Ph.D.)

Member and Advisor _____
(Assistant Professor Pattama Sappapan, Ph.D.)

Director _____
(Associate Professor Supong Tangkiengsirisin, Ph.D.)

Ref. code: 25636121040437MVR

Independent Study Paper Title	A STUDY OF CONTEXT CLUE USE OF EFL POSTGRADUATE STUDENTS THROUGH SELF-ASSESSMENT
Author	Mr. Teeradon Kardudom
Degree	Master of Arts
Major Field/Faculty/University	Career English for International Communication Language Institute Thammasat University
Independent Study Paper Advisor	Assistant Professor Pattama Sappapan, Ph.D.
Academic Year	2020

ABSTRACT

Context clues have an important role in language acquisition as implied words or phrases or stated which help second language readers understand uncommon words in context. Therefore, this study aimed to investigate what type of context clues post-graduate students found most helpful. The participants of this study were 36 EFL post-graduate students who were taking a reading course in the first semester of academic years 2019 and 2020. A self-assessment form was used as an instrument. Statistical data analyses, including frequencies, percentages, standard deviations, and mean scores were applied in this study. The results showed that the participants rated themselves as having a good to excellent performance in guessing the meaning of unknown words using the five types of context clues. Overall, participants found the restatement clue type to be the most helpful while reading, as evidenced by the mean score of 4.37, followed by punctuation, definition clues, contrast clues, and inference clues with mean scores of 4.27, 4.16, 4.14 and 3.92 respectively.

Keywords: Context clue type, Post-graduate student, Vocabulary knowledge

Ref. code: 25636121040437MVR

ACKNOWLEDGEMENTS

Throughout the writing of this independent study paper, I have received a great amount of support and supervision for assistance.

First, I would like to express my gratitude to Assistant Professor Dr. Pattama Sappapan, my independent study advisor, whose expertise was invaluable, and who provided support and advice throughout the paper. Your astute feedback guided me in critical thinking and encouraged me to bring my work to a higher standard.

I would also like to extend my thanks to Dr. Sichon Koowuttayakorn and Dr. Nantikarn Simasangyaporn for their suggestions and assistance on my research paper. Moreover, I appreciate and kindly thank the EFL post-graduate students who were enrolled CR603 taking the assessment and the LITU staff for providing important information on the research, format, and timeline of this research paper.

Finally, I would like to thank my parents and my friends, who always provide encouragement and support me in my pursuit of success, making this research possible.

Mr. Teeradon Kardudom

Ref. code: 25636121040437MVR

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	vi
CHAPTER 1 INTRODUCTION	1
1.1 Background	1
1.2 Statement of the Problem	3
1.3 Objective of the Study	4
1.4 Research Question	4
1.5 Definition of Terms	4
1.6 Scope of the study	5
1.7 Significance of the Study	5
1.8 Organization of the Study	5
CHAPTER 2 REVIEW OF LITERATURE	6
2.1 Vocabulary and Its Definitions	6
2.2 Context Clue and Its Definitions	8
2.3 Types of Context Clue	9
2.4 Vocabulary and Context Clue Assessment	11
2.5 Relevant Previous Research Studies	13

Ref. code: 25636121040437MVR

CHAPTER 3 RESEARCH METHODOLOGY 16

3.1 Research Design 16
3.2 Participants 16
3.3 Instrument 16
3.4 Validity and Reliability 17
3.5 Procedures 20
3.5.1 Data Collection 20
3.5.2 Data Analysis 20

CHAPTER 4 RESULTS/FINDINGS 22

4.1 Demographic Information of the Participants 22
4.2 Level of Understanding of Context Clue Type 24

CHAPTER 5 DISCUSSION, CONCLUSION AND RECOMMENDATIONS 31

5.1 Summary of the Study 31
5.1.1 Objective of the Study 31
5.1.2 Subjects, Materials, Procedures 31
5.2 Summary of the Findings 31
5.2.1 Demographic Information of the Participants 31
5.2.2 Level of Understanding of Context Clue Type 32
5.3 Conclusion and Discussion 33
5.4 Recommendations 35

Ref. code: 25636121040437MVR

REFERENCES 36

APPENDICES

APPENDIX A 43
APPENDIX B 48
APPENDIX C 51

BIOGRAPHY 56

Ref. code: 25636121040437MVR

LIST OF TABLES

Tables	Page
3.1: Overview of Types of Context Clue	18
3.2: The Example of IOC Form	19
3.3: The Level of Comprehension and Interpretation from Mean Score	21
4.1: Participants' Personal Information	22
4.2: Definition Clue Type	25
4.3: Restatement Clue Type	26
4.4: Contrast Clue Type	27
4.5 Inference Clue Type	28
4.6: Punctuation Type	29
4.7: Restatement Clues Type	30

Ref. code: 25636121040437MVR

CHAPTER 1
INTRODUCTION

1.1 Background

Vocabulary has an important role in language learning. Learners are often given vocabulary as an important aspect for second language learners since the limitation of in a second language in vocabulary hindered successful conveying message in communication which leads to the taught and learned methods (Umirov, 2018) and is a contributor to understanding, fluency, and accomplishment for obtaining substantial vocabulary knowledge achieved by learners' (Bromley, 2007), and more punctually in reading contexts. In addition, to achieve reading and understanding abilities, the vocabulary knowledge also facilitates enhance ability and language use (Nation 2001, cited in Alqahtani, 2015) leading to a successful understand in reading (Boldan and Yavuz, 2017). In addition, provide supportive for the learners while examined words in context where implications ended up more clear or be able to theorize about new word implications. (Iqbal and Komal, 2017). For learners to master scholarly perusing more successfully, language learners have to get significant vocabulary learning abilities to consider word synonyms and meaning more precisely and accurately. (Ahmad et al., 2018). Nyikos and Fan (2007) also, observed three important aspects of vocabulary acquisition, irrespective of categories or learning strategies adopted by learners, as vocabulary learning can be determined upon (1) the required time to obtain words in memory extended from remote learning, the more technique that a learner acquired, the greater is learners' vocabulary learning; (2) awareness of the linguistic words features, and (3) the target vocabulary context. Moreover, reading for a specific purpose requires learners to obtain a sizeable vocabulary to enhance learners' reading ability and for expertise in required knowledge (Ahmad et al., 2018). As for the assessment of vocabulary, Nation (2008) clearly indicates the aim of vocabulary assessment in the following:

> "The aim of vocabulary assessment is to work out what needs to be taught, to monitor and encourage learning, to place learners in the right class, to measure

Ref. code: 25636121040437MVR

> learners' achievement by giving a grade, and to measure learners' vocabulary size or proficiency" (as cited in Kılıçkaya, 2019, p. 144).

However, fully depending on or concerning the related text meaning, may result in selecting the false word meaning as learners may have a poor understanding of word meanings. (Admad, Muhammad and Kasim, 2018). Reading problems also emerge when there are numerous complex words to acquire which learners cannot recognize extensively and heavily depend on dictionaries. One of many major issues for learners regarding vocabulary is to recognize the words (McCarthy, O'Keeffe, & Walsh, 2010) and while recognizing words includes differentiating words from others and recalling the meaning, producing the words might incur serious issues since it includes not only forming and writing words but also memorizing the meaning. (Kılıçkaya, 2019). Previous studies of context clue strategy in the potential use done in other countries were significant in creating additional interest in investigating how students or learners utilize context clue strategies while reading in English language. In accordance with the English language arts anchor standards, learners ought to be able to discover the word meanings that are obscure or have several meanings from applying context clues (Common Core State Standards, 2010). The context clues use has an important part in language acquisition and are "the clearly stated or implied words or phrases which help to comprehend and understanding unfamiliar words in context because they can activate the corresponding context to clarify the contextual meanings of the words that are concerned" (Orawiwatnakul, 2011 as cited in Sun & Zhou, 2005, p. 49). Several types of context clues are categorized depending on certain criteria and individuals; restatement, contrast, definition, and comparison, are included in several context clue examples (Orawiwatnakul, 2011). Another study from Swanson et al. (2016) showed that context clues can be used to improve literacy and text vocabulary instruction in ELA classes, which help for middle grade students in learning vocabulary and previewing texts. However, some vocabularies may have extent synonyms and meanings, the context clues technique may prove to be effective in cases when a general meaning of vocabulary is proper and acceptable. When the synonym or general words are unfamiliar, the unequivocal implications are required to make a proper understanding. Unless, when a key word is the word in question statement, it is possible that relying on context clues is not a good option. Some studies also indicate the

Ref. code: 25636121040437MVR

importance of context clues for understanding in reading, but there is a research gap in terms of the application of the different types of context clues (Forbes and Buchanan, 2018).

1.2 Statement of the problem

Following from the previous topic, Thai learners are struggling to learn vocabulary because of the limited skill in their academic studies as they lack the required proficiency for proper understanding in English reading to apply context clues. A study of the English language skills levels of Thai university learners has been investigated and discovered that learners' reading skills need improvement; they are struggling with difficulty in reading (Saitakham, 2010). Another study involved the investigation of Thai students' attitudes towards studying English revealed that many learners exhibited unfavorable views regarding learning English, and the study's findings revealed that learners struggled to comprehend context clues when reading English texts. (Saitakham, 2010, as cited in Chaibunruang and Karnphanit, 1993). A study conducted by Orawiwatnakul (2011) showed that during the first year of an undergraduate degree at Bangkok University, the freshmen struggle when they are given additional English reading assignments.

The advantage and usefulness of context clue to improve learners' understanding in reading English text and attitude towards the studying of English that hinders reading comprehension leads to the implementation of context clue study, for example, the reading course provided by universities in Thailand, the CR603 (English Reading Theory and practice) course is one of many courses provided for practicing reading main ideas and text analysis, including text interpretation and inferences skills and vocabulary provide skills for learners to understand theories and principles in both academic and professional life, interpret texts more effectively at the literal and analytical levels of comprehension, provide reflections on texts at the critical level of comprehension and apply reading and vocabulary strategies.

Therefore, the aim of this study is to explore what type of context clue the post-graduate students find most helpful.

Ref. code: 25636121040437MVR

1.3 Objective of the study

The objective of this study is to explore what type of context clue the post-graduate students find most helpful.

1.4 Research question

The present research is designed to answer the following question of, “What type of context clues does the post-graduate students find most helpful?”

1.5 Definition of terms

In this study, there are some key definitions which need to be clarified for understanding this research as follows:

1.5.1 Context clue alludes to a figure at the meaning of an obscure word for synonyms, antonyms, definitions, cases, appositive words or expressions, and accentuation for clues to the obscure word’s meaning. In this study, the five types of context clue include: (1) definition clues, the term that an adequate description may be supported in the next sentence or inside the sentence if it is explicitly defined, (2) restatement clues, a type of clue in which a person will say the same thing twice: the first time with the more difficult term, and then the second time with the easier word in a simpler way and similar to appositive, except that restatement is here differentiated according to its separation by terminal punctuation, (3) contrast clues, the clue uses another phrase or word that has the opposite of an uncommon word meaning, (4) inference clues, the clue that have a uncommon word meaning which can be inferred from the situation description, and (5) punctuation, the clues that are hidden which are found in italicization, capitalization, parentheses, and quotation marks.

1.5.2 Vocabulary refers to an indispensable aspect of language teaching as the aim is to figure out what should be taught, as well as to monitor and promote learning. In this study, an assessment of vocabulary knowledge scale will be applied on the post-graduate students to investigate vocabulary and context clue type knowledge.

1.5.3 EFL Postgraduate students refer to two groups of EFL post-graduate students who studied CR603 (English Reading: Theory and Practice) course as a compulsory course offered by the program in the academic year of 2019 and 2020.

Ref. code: 25636121040437MVR

1.6 Scope of the study

This study was based on a self-assessment form to reflect the level of understanding of the five types of context clue. An investigation was conducted during 7-10 May 2021.

1.7 Significance of the study

The result of this study, from investigating the post-graduate students performing self-assessment to explore the most helpful context clue type use in English sentences will provide knowledge for post-graduate students to achieve an understanding of theories and principles for both academic and professional life, apply reading and vocabulary strategies, therefore, improving students' performance in vocabulary learning through context clue type. This study would be useful to learners and lecturers to understand the direction of students' perception in learning context clue type by observing through self-assessment, providing information on which post-graduate students may need further improvement. Moreover, this study could be used as a source for further information for those who are interested in enhancing reading skill abilities including context clue as a basis for researching and potential evidence to redesign the studying of context clue type.

1.8 Organization of the study

The organization of this study is divided in to five main chapters. Chapter one is an introductory part consisting of background information, statement of problem, objectives of the study, definitions of terms, scope, significance, and organization of the study. Chapter two consists of a review section of related theoretical concepts and previous related research. Chapter three consists of the research methodology, including data collection, procedures, and data analysis. Chapter four presents the data information and findings of the study and Chapter five presents a summary section including the conclusion, discussion, and recommendations for the future research.

Ref. code: 25636121040437MVR

CHAPTER 2
REVIEW OF LITERATURE

In this chapter, the theories, concepts, and previous related research studies are presented as follows:

2.1 Vocabulary and its definitions

2.2 Context clues and definitions

2.3 Types of Context Clues

2.4 Vocabulary and Context Clue Assessment

2.5 Relevant Previous Research Studies

2.1 Vocabulary and its definitions

Vocabulary has been defined and implemented in the studies by researchers and scholars. In this following section is the definition from different researchers' points of view:

In Cambridge Dictionary (Cambridge University Press, 2020), the word vocabulary is defined "all the words used by a particular person, or all the words that exist in a particular language or subject an important part of a speakers' of their language". More examples of vocabulary from the Cambridge English Corpus define this word as "Different societies have different color vocabularies, but that does not make the fact that the cloth in front me is magenta into an institutional fact" and "A concerted attempt to reconstruct the vocabularies of languages in prehistory has been underway for decades". Merriam-Webster (2021) also defined word "vocabulary" as "a list or collection of words or of words and phrases usually alphabetically arranged and explained or defined" and "a list or collection of terms or codes available for use (as in an indexing system)".

Following this definition, researchers have investigated "vocabulary" as an important part of speakers in their language as its structure and quantity are likely to differ significantly due to variations in life experience, interests, and abilities (Brysbaert et al., 2016). Furthermore, disparities in lexical knowledge should result in significant variance in the capacity of listeners and speakers to implement language in oral and written communication.

Ref. code: 25636121040437MVR

Anderson and Freebody (1981) mention that the ability to comprehend what one reads has a significant role in one's ability to succeed as a learner. Vocabulary knowledge, in turn, contains a critical affect on reading comprehension (as cited in McQuillan, 2019). Some studies have shown that providing learners with direct, systematic vocabulary training is the best method to help them enhance their reading comprehension and academic success (Beck, Perfetti, & McKeown, 1982; Biemiller & Boote, 2006; National Reading Panel, 2000; Stahl & Nagy, 2007; Stahl & Fairbanks, 1986). Vocabulary can also be implemented in instruction, as McQuillan (2019) state that “While vocabulary instruction typically leads to some gains in word knowledge, not all instruction improves reading comprehension.”

Moreover, vocabulary with proper instruction and acquisition can improve overall reading comprehension. Both experimental and correlational research agree with the thought that reading has an influence on vocabulary. For example, in “read-and-test” experiments (Swanborn & de Glopper, 1999 as cited in McQuillan, 2019) as well as many terms or phrases can be learned through sensorimotor experience (Picard et al., 2010) or context, but not all of them, like memorizing the Latin names of bones and muscles in Biology or the period table in chemistry (Rolletschek, 2020). The use of images as a teaching strategy in vocabulary seems to strengthen students’ performance in learning. (Bates, 2015). Wasilewska (2017) discussed how the developments of technological have consequence in understudies’ life in an overwhelmed world by illustrations, with visuals being utilized as a method of interaction by students (as cited in Bates, 2015 p.4). The picture quality has been illustrated with understudies learning EFL vocabulary, but the most important thing is whether the interest contribution in learning contextual clues strategies has become more autonomous and dynamic to language learners through vocabulary learning in self-regulation, as readers are seen as the "heart" or "core" of the entire reading professionalism (Griffith, 2004) and effective language learners are considered as qualified to utilize vocabulary procurement procedures and give it autonomously (Admad, Muhammad and Kasim, 2018). Pikulski and Templeton (2004, as cited in Bates, 2020) explain how vocabulary acquisition techniques are the most important "tool" aside from schools, and how language skills and word knowledge have a significant role in one's ability to operate in a diversified social and economic context. For English Learning Teaching (ELT), Tevdovska (2016)

Ref. code: 25636121040437MVR

explains that one of the foremost vital preferences in utilizing writing in language instructing and learning is that most materials and courses meant for language instruction include elements such as grammatical rules and vocabulary. Vocabulary also provides benefits for ELT, as Ivone and Renandya (2019) assert that utilizing straightforward writings, centering on limit themes at a time, and multimodal input in receiving, the chance for writings comprehend are given as learners understand most of the vocabulary within the content, more than once tune in to words utilized inside the contract subjects, and relate the spoken and composed forms of words displayed simultaneously.

Therefore, applying context clue techniques to learn vocabulary in ELT contexts provides learners a chance to understand words and sentences, as explained in the following section.

2.2 Context clues and definitions

Various definitions of context clue have been given as follows:

Context clues are “hints that an author gives to help define a difficult or unusual word within a book. The clue may appear within the same sentence as the word to which it refers, or it may follow in the next sentence.” Context clue is also defined as “a text which commonly found in nonfiction texts than in fiction, although they are sometimes found in children's literature, often with the goal of building readers' vocabulary” and “words can have multiple meanings” (Nordquist, 2020).

Following these definitions, context clue is one of the most often used expressions while addressing the learning process, which is a principle that facilitates readers in understanding unfamiliar words. Context clue is an essential technique for indicating the meaning of unfamiliar vocabulary, and it is frequently used to rapidly clarify the meaning of a term (Harley, 2014, p. 4). Learners can rapidly understand a word’s meaning from the context. Reading and interpreting sentences not require as much conscious thinking as people progress through the phases of cognitive development. There are many theories on context use and sorts of contexts, as well as many models that have been developed to try to characterize context and the processes that are utilized to generate and comprehend contexts (Forbes & Buchman 2017 as cited in Beck, McKeown, & McCaslin, 1983; Askov & Kamm, 1976). The research

Ref. code: 25636121040437MVR

demonstrates that context clues are important for several components of reading comprehension that constitute significant context; however, there is a gap in the research about the technical application of various forms of context clues (Forbes & Buchman 2017).

Context clues assist learners in understanding the entire text. A context clue allows students to understand the unknown with simplicity. For instance, clues that assist a reader in identifying an unfamiliar or difficult term. They are hints to the pronunciation or meaning of an unfamiliar word based on the words, sentences, or phrases that founded it in the text. Utilizing context clues is an important reading approach for learners, as it provides opportunities for them to discover new terms (Uzer, 2018). As a result, context cues assist students in determining the meaning of new terms without the need for a dictionary. Synonyms, antonyms, example-illustrations, contrast, logic, root words, affixes, and grammar are a few examples of context clues. Whenever students recognize the meaning of a word in a collection of words or a phrase, they have understood it. Synonyms are when students use a term with a similar meaning, whereas antonyms are when a student uses a word with virtually the opposite meaning (Uzer, 2018).

2.3 Types of context clues

The types of context clues in this research will include definition clues, restatement clues, contrast clues, inference clues and punctuation, based on the context clue classification system of Humes (1978) (as cited in Dowds, Haverback, and Parkinson, 2016), and, described as follows:

First, the definition clue is the term that an adequate explanation may be supplied in the next sentence or inside the sentence if it is explicitly defined (Dowds, Haverback, and Parkinson, 2016), with the definition clues signals including “that is,” commas, dashes, and parentheses. Wasatch County School District (2010) states that “Sometimes a word's or phrase's meaning is explained immediately after its use which the author provides a direct (explicit) definition of an unknown word in the sentence.” The reader is provided the meaning of the word in the form of an explanation. The author may use extremely precise terms to indicate the advent of an explanation. These might contain sentences such as “in other words” or “that is” or “which means”. For

Ref. code: 25636121040437MVR

example, - “Martha is a curator, a person who is responsible for looking after a museum’s collection,” “-Entomology is the study of insects,” And “- Archeology is the scientific study of prehistoric cultures by excavation of their remains.”

Second, restatement clue is a type of clue in which a person will express the same thing twice: once with the more difficult term, and then again in a simplified way, frequently in the same sentence, and the author may also use a word that has the similar or practically the same meaning as other words in a sentence or individual word. Restatement is similar to appositive, except that restatement is here differentiated according to its separation by terminal punctuation (Humes, 1978). For example, "Lou was sent to the haberdashery to find a new suit. He needed to wear one for his uncle’s wedding."

Third, contrast clue is a clue that utilizes a word or phrase with the opposite connotation of an unknown terms (Dowds, Haverback, and Parkinson, 2016). The words used are however, unlike, but, on the contrary, although, unless, instead of, otherwise, on the other hand, and while. For example, “-Mike’s parrot was loquacious, but Maria’s said very little. “-The gentleman was overweight, but his wife was thin.” “-While Luis is hardworking, his indolent brother spends most of the time watching TV or sitting around with friends.”

Fourth, regarding inference clues or general context clues, Beck, McKeown, and McCaslin (1983) state that these clues enable the uncommon word meaning to be inferred from the situation description (as cited in Daugaard, Nielsen and Juul, 2020). The author may provide non-specific clues, often using in number of sentences or over the sentence. For example, “-The monkey’s vociferous chatter made me wish I had earplugs.” “- Katie’s belligerence surprised everyone. She threw her book across the room, glared at Chris, and then pushed him to the floor.”

Finally, punctuation is a clue hidden in italicization, capitalization, parentheses, and quotation marks. Humes (1978) mentions that this type of clue is differentiated according to its separation despite being similar to restatement clue. These clues inform the reader that the term might be a book title's name or, in the case of parentheses, the word is being defined. Readers can infer meaning from type style and punctuation clues, such as italics (indicating the term will be explained), quotation marks (showing the phrase has a particular meaning), and dashes, parentheses, or brackets, according to

Ref. code: 25636121040437MVR

Lower Dauphin School District (2010)..For example, “Tom's father was a haberdasher, or men’s shop keeper, in the story.” “Tom's father was a haberdasher (men’s shop keeper) in the story.” or “In the story, Tom's father was a haberdasher-or men’s shop keeper.” or “Tom's father was a “haberdasher. He had a clothing store for men.”

These five types of context clue will be applied into the questionnaire in part 2 and 3, involving a self-assessment to determine post-graduate student’s vocabulary knowledge and the most helpful context clue types in reading.

2.4 Vocabulary and context clue assessment

For vocabulary assessment, a Likert scale—a psychometric scale used in study and research that is based on survey evaluation—was used in this study. While responding to a specific Likert assessment question, participants define their degree of disagreement or agreement on a symmetric scale of disagree-agree for an items sequence. Likert scale ranges portray the intensity of participants’ feelings regarding a given item. Nevertheless, the multiple items analysis result shows a scaled properties pattern (Likert, 1932, as cited in Barua, 2013, p. 35). As statement sets for a real or hypothetical event under investigation, the Likert scale is also provided (Joshi et al., 2015). The participant is asked to indicate their agreement level (from strongly disagree to strongly agree) on a metric scale. Singh explains that all the combinations of statements reveal the attitude towards the issue in terms of specific dimensions; therefore, it is necessary to connect these issues with each other (as cited in Joshi et al., 2015, p. 397). In terms of variation in Likert scales there are 5, 7 and 10 points scale in which 5 points scale will have less adjacent option than others, or significantly different from other variations (Dawes, 2008, as cited in Joshi et al., 2015, p. 398). The examples of 5-point scales are shown as follows.

- 5=highest,
- 4=high,
- 3=medium,
- 2=low,
- 1= lowest.

Moreover, Warmbrod (2014) mentions that a Likert scale in all statements has a continuum, which is a linear scale that indicates how much respondents disagree or

Ref. code: 25636121040437MVR

agree with every statements. For assertions favorable to the concept, a typical continuum of response is 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided or Neutral, 4 = Agree, and 5 = Strongly Agree. The monograph of Likert's scale defines that the construct of quantification is a totalized score for every individual score computed by computing an individual's response in each scale item. Kerlinger (1986) defines a Likert scale as a summated rating scale whereby an individual's score on the scale may be a entirety, or average, of the individual's responses to the distinctive things on the instrument (as cited in Warmbrod, 2014, p. 31).

The self-assessment techniques used in this study are based on the research of Orawiwatnakul (2011), İlter (2019) and Caspersz and Stasinska (2015). The measurement was set by implementing of prefixes, suffixes, word structures roots, and compound words and the context clues analysis where readers can assume and define the words meaning in five different ways: definition, restatement, contrast, interference and punctuation with example, and synonyms. (Orawiwatnakul, 2011). This study adapted the previously studied applied vocabulary assessments into a self-assessment form to explore what type of context clues the post-graduate students find most helpful.

The Academic Word List (AWL) is a collection of 570 word families used often in academic publications. This list was compiled by reviewing a large corpus (or collection) of written academic writings and identifying terms that appeared over 100 times in the corpus overall from all four academic faculty sections: Arts, Commerce, Law, and Science. The GSL contains common terms like "I," "home," and "do."

These guidelines assured that only terms that appeared often in a wide range of research areas were chosen. The AWL focuses on academic language that appears often in written documents. These terms appear in newspapers as well, albeit not as frequently as they do in textbooks. In fiction, the AWL terms appear much less frequently. In case of learner want to acquire academic vocabulary, learners are required read academic textbooks to explore how these terms are used (Coxhead, 2012).

Many studies have applied these quantitative research techniques to collect data from participants, which He (2018) defines as either analytical, descriptive, or empirical. It is essentially a hypothesis-testing method. Translation studies, clinical discourse analyses, and other applications of Systemic Functional Linguistics (referred to as SFL) research contain quite in-depth theory and have been commonly used in

Ref. code: 25636121040437MVR

implementation. In the view of Levin and Datnow (2012), the other important aspect is the consideration of the results from both qualitative and quantitative perspectives. First, educational regulations and technology developments have made it easier for researchers to acquire and evaluate quantitative data, to distribute their findings and suggestions. Second, changes in policy of educational have raised school leaders and research skills expectations for and quantitative data literacy (Hochbein and Smeaton, 2018).

2.5 Relevant previous research studies

Many research studies have been conducted with students that relate to the improvement of context clue performance but few of them were specifically done on context clue types of definition clues, restatement clues, contrast clues, inference clues, and punctuation. Some research studies focusing on the improving reading comprehension through context clues are reviewed as follows:

Shaaban (2007) examined the impacts of Jigsaw II agreeable learning on reading comprehension, vocabulary procurement and inspiration to read. The exploratory plan utilized a post-posttest-only control group. The discoveries shown measurably noteworthy contrasts in favor of the exploratory gather on the subordinate factors of the desire to read and its measurements, the esteem of reading, and reading self-concept, demonstrating that participants' generally motivation to read was related with a favorable self-perception and reading ability.

Saitakham (2010) examined the improvement of a web-based instructional show for improving English vocabulary learning capacity with context clues based on a meaning speculating strategy. The study sought to decide the efficiency of English vocabulary learning lessons through web-based instruction based on the 85/85 standard by comparing the exploratory and control groups' English lexicon learning capacities, and watching the students' demeanors around learning English vocabulary through web-based instructing employing a setting clues-based meaning speculating approach. As portion of the study, 80 understudies enlisted within the English III course at Suranaree University of Technology within the to begin with three semesters of the scholarly year 2010 took a demeanor test with asking for willingness and the instruction of vocabulary learning procedures, and the comes about uncovered that students' emphatically

Ref. code: 25636121040437MVR

concurred that's was useful. Two major approaches, context clue investigation and word structure investigation, were most likely to enhance vocabulary progress of students.

Shokoohi and Askari (2010) studied the influenced of speculating vocabulary on reading genuine writings and found that speculating from context is one of the foremost important aptitudes' understudies can learn and utilize both inside and exterior the classroom. In this ponder, understudies were arbitrarily assigned to one of two groups: context or no context. A pre- and post-test were utilized, with the most finding illustrating unambiguous learning from the relevant speculating approach.

Yen-Chi (2010) conducted a study of the comprehension procedure impacts on reading comprehension of EFL learners. This study was taking place at a university within the southern part of Taiwan. The survey comprised of 32 articulations on a Likert scale and one multiple-choice address. Participants were inquired to rate how emphatically they concurred with every explanation by selecting one answer after choices: (1) strongly disagree, (2) disagree, (3) no opinion, (4) agree, and (5) strongly agree. Two groups of participants were separated, the test and the control group. The guidelines assets and learning content were the same for both groups, with the exemption that the condition of not uncovered to reading strategies or group work was applied on the control group. The study's discoveries had academic suggestions for university perusing educating in an EFL environment.

Another study conducted by Kiani (2011) on the instructing vocabulary adequacy in terms of structural and contextual method shown a distinction between setting and structure. The understudies were separated into two groups in this study, one instructed utilizing the relevant method and the other utilizing the auxiliary strategy. The results of the study shown noteworthy contrasts in understudy execution whereas employing a contextual or structural educating style. When comparing the execution of high achievers who were instructed vocabulary utilizing the relevant approach with those who were instructed vocabulary utilizing the structural strategy, the contextual strategy fared superior. In addition, understanding the implications of words with the help of relevant prompts in a state and in a paragraph driven to a better execution in tall achievers (as cited in Rokni and Reza, 2016 p. 283).

Rokni and Reza (2016) examined on Iranian EFL learners' reading comprehension involved in context clues impacts with two intact classes comprising of 60 intermediate

Ref. code: 25636121040437MVR

understudies, the experimental group and the control group are the group for students were chosen and divided. As a pre-test, each group received an individual background survey, an English capability exam, and a reading test. The exploratory (setting) group then exercised different sorts of setting prompts for eight sessions as a treatment, while the control group got no training. Following that, both groups were given a posttest to see how the insights influenced their reading comprehension. The exploratory group shows better performance than the control group within the posttest, demonstrating that the context instructing approach encouraged the Iranian EFL understudies reading comprehension.

Dowds, Haverback, and Parkinson (2016) considered the context clues classification in student's content, pointing to decide which context clues type exist in student's writings and is conceivable for specialists to distinguish those clues dependably. The finding showed that the majority of clues found in children's account and descriptive text can be procured utilizing 15 setting clue types, which can be utilized in perusing inquire about those controls or considers for content components similar to the instructing reading techniques within the classroom. In this study, 5 of the 15 context clue types from the investigate were utilized.

This chapter has discussed the main theories and concepts including the of context clues five different types definitions—definition clues, restatement clues, contrast clues, inference clues and punctuation—which can be collected and interpreted through Likert scales' implementation. The research methodology will be described in the next chapter, including the research design, instruments, participants and the data analysis.

Ref. code: 25636121040437MVR

CHAPTER 3
RESEARCH METHODOLOGY

In this chapter, the design of the research, instruments, data collection procedure and data analysis will be discussed as follows.

3.1 Research design

This survey was quantitative research, based on a self-assessment form, aiming to exploring the context clue performance in post-graduate students to find out the most helpful of context clue type in reading. Convenience sampling was used in this study to obtain the participants from among EFL post-graduate students who were enrolled CR603 in the first semester of academic year 2019 and 2020.

3.2 Participants

The participants were EFL post-graduate students enrolled CR603, which is a reading development course, in their first academic year. There were 36 students who participated in the study.

3.3 Instrument

The instrument of this study was comprised of a 50-statement self-assessment adapted from Orawiwatnakul (2011), İlter (2019), Rokni and Reza (2016) and Saberi (2019), which was applied to explore the most helpful context clue types for post-graduate students. The self-assessment form consisted of two sections as follows:

The first section of the self-assessment form sought participants' personal information including year of study and TU-GET score to understand their background regarding vocabulary knowledge and context clues.

The next section survey participants' perceptions of the most helpful types of context clue from five types using a 5-point Likert scale with a total of 50 statements. The statements were derived and adapted from Dauphin School District (2010) and Wasatch County School District (2010). These 50 statements portrayed five different context clue types, including definition clues, restatement clues, contrast clues, interference clues and punctuation. The statements in the self-assessment form were randomly

Ref. code: 25636121040437MVR

shuffled. The list of sentences that were categorized into each context clue type is shown in Table 3.1 (see Appendix B for full information):

The context clue words used in this self-assessment form were based on the Academic Word List (AWL), which contains 570 words families. In this study, 10 words were used in the sentence statement by selecting one word randomly from each AWL vocabulary group (from the most to least frequent use word group) of a total of 10 groups (Coxhead, 2012).

3.4 Validity and reliability

The validity of this questionnaire was checked using Index of Item-Objective Congruence (IOC) to determine the validity of the sentences and the statements in the questionnaire. The IOC table was adapted from Sanitya and Sinjindawong (2017). For each sentence statement, the content validity was scored (see Table 3.2) (see Appendix Table B1-B5 for full information) based on the conditions as follows:

Ref. code: 25636121040437MVR

Table 3.1

Overview of Types of Context Clues

Context Clue Type	No. of Statements	Example Sentences
Definition clues	10	4.4) An **insignia** is something that stands for something else. 6.1) An **occupation**, such as that of a hatmaker or a postman, is important for anyone who wants to earn a steady wage. 9.4) Diane was **lethargic**; she didn't have the energy to get out of bed.
Restatement clues	10	2.3) My best friend **squandered** all his money, spent all his earning on drinking and gambling. 6.2) Cowboys often wore **chaps**, leather trousers without a seat, over their pants to protect their legs from thorns. 9.5) The student forgot the poem; **in other words**, she did not remember it.
Contrast clues	10	3.5) The gentleman was **portly**, but his wife was thin. 5.2) Although most of the students are sure that they pass the exam, a few of them are **dubious** that they will. 7.4) Sinta is usually energetic, but Dino is always **indolent**.
Inference clues	10	1.4) The monkey's **vociferous** chatter made me wish I had earplugs. 9.2) The girl who is in front of the building is my sister, she is **celibate**, does not marry yet. 10.3) No one ever believes that particular newspaper because it is famous for printing **canards.**
Punctuation type	10	5.4) Children are often **loquacious**—**very talkative**—and active. 6.5) Bigamy—**marriage to two spouses at the same time**—is not legal in the United States. 8.2) Sally Ride used a **shuttle** – a spaceship with wings –to go into space.

Ref. code: 25636121040437MVR

Table 3.2

The Example of IOC Form

Type of Context Clue and Its Meaning	Example Statement	Score			Total Score	Result
		-1	0	1		
Definition clues						
Formally defined, or sufficient explanation may be given in the following sentence or within the sentence.	4.1) A **symbol** is something that stands for something else.					
Restatement clues						
A person he or she will say the same thing twice: once with the more difficult word, and then again in a simpler way.	9.5) The student forgot the poem; **in other words**, she did not remember it.					
Contrast clues						
The clue which uses another word or phrase that have the opposite meaning of an unfamiliar word.	7.4) Sinta is usually energetic, but Dino is always **indolent**.					
Inference clues						
The clue that have a meaning of an unfamiliar word which can be inferred from the situation description.	10.3) No one ever believes that particular newspaper because it is famous for printing **canards.**					
Punctuation type						
Clue that hidden which are found in italicization, capitalization, parentheses, and quotation marks.	5.4) Children are often **loquacious**—**very talkative**—and active.					

Note. The score = 1, if the expert is sure that this item is really measured the attribute. The score = -1, if the expert is sure that this item does not measure the attribute. The score = 0, if the expert is not sure that the item does measure or does not measure the expected attribute.

Ref. code: 25636121040437MVR

To determine the reliability of the questionnaire, it was tested before launching the actual survey to prevent any misspelling or confusion; 10 students were asked to do a pilot study to check whether there is any unclear or difficult words or questions, which can lead to participants' misunderstanding. After the data was collected, SPSS (Statistical Package for the Social Sciences) program was used to check the reliability of the questionnaire in terms of a coefficient scale and analyze the data. An example of the questionnaire is attached in Appendix A.

3.5 Procedures

3.5.1 Data collection

The procedure of data collection involved in distributing and collecting the assessment 7 to 10 May 2021. The assessment was distributed using Google forms in the online platform. A total of 36 participants were required to finish three different sections of assessment, including personal information in the first part, and the level of understanding context clue types in the second section. After completion, all the assessment results were collected immediately. The participants were also asked for their willingness prior participating in the assessment and their personnel information will be kept confidential.

3.5.2 Data analysis

The data obtained in each section were analyzed using the SPSS program. In the first section involving the personal information of participants, the data were computed into frequency and percentage.

The second section regarding the most helpful context clue types in reading, the mean scores and standard deviations were calculated to determine the understanding of the context clue types: 1 being the least comprehension, and 5 as the most comprehension.

In second section, the collected data from the assessment were interpreted into five different levels as shown in Table 3.3:

Ref. code: 25636121040437MVR

Table 3.3

The Level of Comprehension and Interpretation from Mean Score

Mean Scores	Comprehension Levels	Levels of Interpretation
4.00-5.00	Excellent	Highest
2.99-3.99	Good	High
1.99-2.99	Average	Medium
0.99-1.99	Low	Low
0.00-1.99	Lowest	Lowest

The scores from analyzed data showed the participants' comprehension of the context clues that help a learner while reading. For example, a mean score of 4.21 means the participants have an excellent comprehension level of the context clue and the least misunderstanding in this data field. In contrast, a mean score of 1.85 means that the participant has a low comprehension level and might struggle to use this context clue type in reading.

In summary, Chapter 3 described the design of the quantitative research aiming to investigate the post-graduate students' perceptions of which context clues are most helpful in reading.

Ref. code: 25636121040437MVR

CHAPTER 4
RESULTS/FINDINGS

This chapter presents the results of the study after the self-assessment was conducted and the data from 36 participants were collected. The analyzed results on the participants' personal information, and types of context clue were assessed by the SPSS program and are presented in this chapter.

4.1 Demographic information of the participants

The results on the personal information of the participants including score range of TU-GET, knowledge of context clues and the frequency of use of context clue techniques while reading of participants were interpreted into frequency and percentage as follows:

Table 4.1

Participants' Personal Information

Personal Information	Frequency	Percentage
Gender		
Male	7	19.4
Female	29	80.6
Total	36	100
Academic Year of Study		
2020 (First Year)	15	58.3
2019 (Second Year)	21	41.7
Total	36	100
TU-GET Score Range		
550-700	29	80.6
701-850	5	13.9
851-1000	2	5.6
Total	36	100

Ref. code: 25636121040437MVR

Table 4.1 - continued

Personal Information	Frequency	Percentage
CR603 Grade		
A+	3	8.4
A	17	47.2
A-	3	8.3
B+	11	30.6
B	1	2.8
B-	0	0
C+	0	0
C	0	0
Other	1	2.8
Total	36	100
Knowledge of Context Clues		
Excellent	2	5.6
Good	17	47.2
Average	16	44.4
Fair	1	2.8
Poor	0	0
Total	36	100
Frequency of using context clues while reading		
Always	11	30.6
Usually	10	27.8
Often	12	33.3
Sometime	3	8.3
Never	0	0
Total	36	100

As seen in Table 4.1, most of the participants were female, accounting for 80 percent, while there were 7 male participants, or 19.4% of all participants. There were 15

Ref. code: 25636121040437MVR

students (58.3%) from academic year 2020 and 21 students (41.7%) from academic year 2019. Regarding TU-GET—test of English language proficiency required for both undergraduate and graduate students— the majority had a score ranging between 550-700 points, accounting for 80.6% of all participants, while 5 participants (13.9%) had a TU-GET score range of 701-850 points and 2 participants (5.6%) were between 851-1000 points, respectively. The results show that participant have a basic English language proficiency, suggesting competency in using context clues in English language.

The next table presents the CR603 grade; 17 students' grades were "A" or 47 percent, followed by "B+" with 30 percent. According to Table 4.1, most of the participants' knowledge of context clues was at the "Good" and Average" level as shown by the percentage of 47%, followed by an "Average" level; this signifies that the participants had decent to excellent context clue knowledge prior to performing the self-assessment. The results on the frequency of using of context clue techniques while reading reported that 11 participants (30.6%) always use context clues while reading, followed by 27 participants (27.8%) who usually use this technique, and 12 participants, (33.3%) who often use this technique respectively.

4.2 Level of understanding of context clue type

This section presents the exploration of what type of context clue that the participants (post-graduate students) find most helpful in reading statements. The assessment in this section consisted of 10 statements with five different statements in each representing the five different context clue types, randomized in every statement. The results on the level of understanding context clue types are analyzed as follows. (Full statements, see appendix B)

Table 4.2 shows the results on the level of understanding of the definition clue type with 10 different statements in terms of mean scores, standard deviations and the interpretation levels as follows.

Ref. code: 25636121040437MVR

Table 4.2

Definition Clues Type

Statement	Context Clue Word (in Statement)	Mean	SD	Level
Definition Clues Type				
1.1	Martha is a **curator**, a person who is …	4.61	0.84	Highest
2.2	… surrounded by a water-filled ditch called a **moat**.	4.00	1.06	Highest
3.3	She hated and **detested** spinach, always feel…	4.20	0.98	Highest
4.4	An **insignia** is something that stands for…	3.75	1.05	High
5.5	**Sedentary** individuals, people who are not…	4.05	1.10	Highest
6.1	An **occupation**, such as that of a hatmaker or…	4.42	1.00	Highest
7.2	we visited the **arboretum**, a garden dedicated to…	3.64	1.20	High
8.3	…a weekly **inspection,** which is a methodical examination…	4.50	0.65	Highest
9.4	Diane was **lethargic**; she didn't have the energy…	4.00	1.35	Highest
10.5	…was utterly **illegible**; no one could read those…	4.50	0.94	Highest
Total		4.16	1.02	

With reference to Table 4.2, statement 1.1, “Martha is a **curator**, a person who is responsible for looking after a museum’s collection”, had the highest score of 4.61, SD = 0.84. It should be noted that 8 out of 10 statements were rated highest (mean scores between 4.00-5.00) and 2 as high (mean scores between 2.99-3.99), which suggests that the participants have little problem understanding the meaning of these words when they are defined in the context. Overall, the participants found this context clue technique to be a helpful method while reading, presented by the mean score of 4.16.

The next part presents the restatement clue type in the following Table 4.3, which shows the level of understanding, mean scores, standard deviations and interpretation levels in the following table.

Ref. code: 25636121040437MVR

Table 4.3

Restatement Clues Type

Statement	Context Clue Word (in Statement)	Mean	SD	Level
Restatement Clues Type				
1.2	**Carnivores**, that is, meat eaters,…	4.70	0.82	Highest
2.3	…friend **squandered** all his money, spent all his…	4.11	1.06	Highest
3.4	…seeing the picture of the starving children, we all felt **compassion…**	4.55	0.73	Highest
4.5	…time, **glaciers**, or slowly moving rivers of ice,…	4.22	1.10	Highest
5.1	…but his brother is **boisterous**.	4.22	1.10	Highest
6.2	Cowboys often wore **chaps**, leather trousers without a seat,…	4.10	1.08	Highest
7.3	The food was **bland.** In fact, everyone called…	4.25	1.08	Highest
8.4	…like to have his steak **well done** (cooked well).	4.61	0.80	Highest
9.5	…forgot the poem; **in other words**, she did not remember it.	4.64	0.76	Highest
10.1	…see many **glaciers**, or slow moving masses of ice.	4.38	0.97	Highest
Total		4.37	0.95	

As can be seen in Table 4.3, all 10 statements were rated at the "Highest" level (mean score 4.00-5.00), with the highest mean score for statement 1.2, "**Carnivores**, that is, meat eaters, are the top of the food chain—a mean score of 4.70 and a standard deviation of 0.82, followed by statement 9.5 and 8.4 with mean scores of 4.64 and 4.61 (SD = 0.76 and 0.80), respectively. It can be concluded that the participants understood the statements through the restatement clues. The total mean score of this context clue type was 4.37. It can be concluded that this type of context clue type has an important role in helping readers while reading.

Table 4.4 presents the contrast clues type including the results of the level of understanding, the mean scores, standard deviations and the level of interpretation as follows.

Ref. code: 25636121040437MVR

Table 4.4

Contrast Clues Type

Statement	Context Clue Word (in Statement)	Mean	SD	Level
Contrast Clues Type				
1.3	Mike's parrot was **loquacious**, but Maria's…	4.02	1.18	Highest
2.4	Henry's power was **robust**, but Maria's was…	4.52	0.84	Highest
3.5	…gentleman was **portly**, but his wife was…	4.50	0.77	Highest
4.1	While Luis is hardworking, his **indolent** brother spends…	4.05	1.06	Highest
5.2	…they pass the exam, a few of them are **dubious…**	4.20	1.11	Highest
6.3	…mother's recovery was **futile**, but her brother remained faithful…	3.90	1.17	High
7.4	…usually energetic, but Dino is always **indolent**.	4.22	1.20	Highest
8.5	…dressed **flamboyantly**, but I've never seen her wear…	3.83	1.21	High
9.1	Marty is **gregarious**, unlike his brother…	4.20	1.30	Highest
10.2	She was **virtuous,** unlike her evil…	4.03	1.06	Highest
Total		4.14	1.09	

Table 4.4 shows that 9 out of 10 statements were rated at "Highest" level. The highest mean score compared to all 10 statements was 4.50, from statement 3.5, "The gentleman was **portly**, but his wife was thin." (SD = 0.77). Both statements 6.3 and 8.5 were rated at a "High" level (mean score between 3.00-3.99) with a mean score of 3.90 (SD = 1.17) and 3.83 (SD = 1.21). The total mean score of 4.14 was interpreted at the "Highest" level . It can be concluded that this type of context clue type has an important role in helping readers while reading.

The results for the next context clue type, are shown in Table 4.5, including the understanding level, mean scores, standard deviations and levels of interpretation.

Ref. code: 25636121040437MVR

Table 4.5

Inference Clues Type

Statement	Context Clue Word (in Statement)	Mean	SD	Level
Inference Clues Type				
1.4	The monkey's **vociferous** chatter made me…	4.08	1.20	Highest
2.5	Katie's **belligerence** surprised everyone. She threw…	3.69	1.06	High
3.1	…share the same **vital** needs, such as food, water…	4.58	0.80	Highest
4.2	…so **famished** that people felt sorry for her,…	4.00	0.86	Highest
5.3	Ronda's **pugnacious** behavior in the boxing ring…	3.75	1.02	High
6.4	…at the edge of a **precipice**. Clinging to a…	3.50	1.05	High
7.5	…and housewife. She is a **versatile** woman.	4.20	0.88	Highest
8.1	…**multifaceted,** a good student, a top athlete,…	4.00	1.31	Highest
9.2	…is my sister, she is **celibate**, does not marry yet.	4.00	1.31	Highest
10.3	…because it is famous for printing **canards.**	3.47	1.16	High
Total		3.92	1.06	

According to the information in Table 4.5, 6 out of 10 statements were rated at the "Highest" level (mean score between 4.00-5.00), while the remaining 4 statements were rated at a "High" level (mean score between 3.00-3.99). Statement 3.1, "All animals share the same **vital** needs, such as food, water and shelter." had the highest mean score at 4.58 (SD = 0.80), rated as "Highest", while statement 10.3, "No one ever believes that particular newspaper because it is famous for printing **canards**." had a mean score of 3.47 (SD = 1.16), rated at a "High" level. It can be concluded that this type of context clue type has an important role in helping readers while reading, although the level of interpretation was lower than the previous three types with the mean score of 3.92, rated at the "High" level.

The results on the final context clue type, punctuation, are presented in Table 4.6, including the information on the understanding level, mean scores, standard deviations and interpretation levels as follows.

Ref. code: 25636121040437MVR

Table 4.6

Punctuation Type

Statement	Context Clue Word (in Statement)	Mean	SD	Level
Punctuation Type				
1.5	…father was a **haberdasher**, or men's shop…	3.75	1.27	High
2.1	Mary **retained**—kept the deed in…	4.19	0.92	Highest
3.2	…that fruit is **edible**, able to be eaten.	4.55	0.70	Highest
4.3	…going through many **transitions**—changes.	4.50	0.77	Highest
5.4	are often **loquacious**—very talkative…	4.33	1.20	Highest
6.5	**Bigamy**—marriage to two spouses at the same time…	4.30	1.30	Highest
7.1	**Tilling** (turning over the soil) leaves it loose…	3.63	1.10	High
8.2	…used a **shuttle** – a spaceship with wings…	4.50	0.73	Highest
9.3	…experience **blizzards/**snowstorms during…	4.44	0.91	Highest
10.4	…number of **beneficial**/positive results, reducing…	4.53	0.88	Highest
Total		4.27	0.97	

Table 4.6 shows that 8 out of 10 statements were rated at the "Highest" level, with four statements having a similar mean score: statement 3.2 (I wonder if that fruit is **edible**, able to be eaten.) (SD = 0.70); statement 10.4 (Reducing cholesterol has a number of **beneficial**/positive results, reducing the risk of heart disease.) (SD = 0.88); statement 4.3 (The company is going through many **transitions**—changes.) (SD = 0.77); and statement 8.2, (Sally Ride used a **shuttle** —a spaceship with wings—to go into space.) (SD = 0.73) with mean scores of 4.55, 4.53, 4.50, and 4.50, respectively. Two out of 10 statements (1.5 and 7.1) were rated at a "High" level with mean scores of 3.75 (SD = 1.27) and 3.63 (SD = 1.10). In conclusion, the punctuation context clue is another helpful type for participants, enabling them to understand the context while reading, as evidenced by the total mean score of 4.27.

The final table in this chapter, Table 4.7, provides a summary of the five different context clue types, including the mean scores, standard deviations and interpretation levels for all five different context clue types as follows.

Ref. code: 25636121040437MVR

Table 4.7

Summary of Context Clue Types

Context Clue Type	Mean Score	SD	Level
Definition	4.16	0.33	Highest
Restatement	4.37	0.32	Highest
Contrast	4.14	0.22	Highest
Inference	3.92	0.33	High
Punctuation	4.27	0.32	Highest

The results from Table 4.7 on all five different context clue types show that the restatement clue type was the most helpful type to apply during reading with the mean score of 4.37, followed by punctuation, definition clue, contrast clue, and inference clue as presented by the mean scores of 4.27, 4.16, 4.14 and 3.92 respectively. The restatement clue type is the context clue type which participants find most helpful in understanding a statement, as presented by the mean score of 4.37. In contrast, the inference clue type was the least helpful, as shown by the mean score of 4.14; although the inference clue type had the lowest mean, it was still interpreted at a “High” level, meaning that this type is useful for reading.

This chapter contained the results on the five different context clue types, with the data calculated into percentages, mean scores and standard deviations using the SPSS program to interpret the understanding level. The conclusion, discussion, and recommendations are found in the next chapter.

Ref. code: 25636121040437MVR

CHAPTER 5
DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, including the conclusion, discussion, and recommendations.

5.1 Summary of the study

In this part, objective, subjects, materials, and procedures are presented.

5.1.1 Objective of the study

This study investigated EFL post-graduate students' understanding of context clue types through a self-assessment. The main objective of this study was to explore what type of context clue the post-graduate students find most helpful.

5.1.2 Subjects, materials and procedures

The subjects of this study were 36 EFL post-graduate students who were taking CR603 in academic years of 2019 and 20. The research instrument of this study was a self-assessment form comprising three sections of close-ended statements. The period for distributing and collecting the questionnaire was from 7 to 10 of May 2021. The self-assessment was conducted through Google Forms in the online platform associated with participants who were taking the CR603 course.

The self-assessment was distributed to the participants in each academic year: 2019 and 2020 (first and second year). A total of 36 participants were asked to complete two sections of the self-assessment form, including demographic information on the participants, and responses to the five different context clue types. After completion, all assessments were collected immediately.

5.2 Summary of the findings

The findings of this study, including the demographic information of the participants, and the most helpful context clue types are presented as follows.

5.2.1 Demographic information of the participants

Summarizing the results of the previous chapter, of the 36 participants, 29 (80%) were female EFL post-graduate students and 7 (19%) were male ELF post-graduate students; These 15 (41%) participants were in the first year and 21 (59%) were

Ref. code: 25636121040437MVR

in the second year. A TU-GET score (1000 points as maximum score points) is a requirement prior to taking CR603; most of the participants, 29 (81%) participants had a score in the range of 550-700 points, 5 (14%) participants had a score in the range of 701-850 points, and 2 participants had a score in the range of 851-1000 score points, respectively. As far as their scores in CR603—a course in which participants practice reading for the main idea, text analysis making inferences, text interpretation skills, and using context clue techniques to get the meaning of vocabulary—17 participants (47%) had an "A", followed by "B+" with 11 (31%) participants, and "A-" and "A+" for 3 (9%) and 2 (6%) participants, respectively. Regarding context clue knowledge prior to conducting the self-assessment, most participants, 16 or 44%, had an "average" level, followed by "good", "excellent" and "fair" level at 17 (47%), 2 (6%) and 1 (3%). With respect to the frequency of applying the context clue techniques while reading, 12 (33%) and 11 (30%) participants "often" and "always" use this technique while reading, followed by "usually" for 10 (28%) and sometimes for 3 (9%) participants.

5.2.2 Level of understanding of context clue type

In this section, the study was conducted to explore what type of context clues the post-graduate students find most helpful. The results of the level of understanding context clue type are analyzed as follows. (Full statements, see appendix B)

According to the information in Table 4.2 involving the definition clue type, statement 1.1, had the highest score of 4.61, SD = 0.84. It should be noted that 8 out of 10 statements were rated highest and 2 as high, suggesting that the participants had less of a problem understanding the meaning of these words when they were defined in context. Overall, the participants found the definition clue type to be a helpful method while reading.

For the restatement clue type, the results in Table 4.3 show that all 10 statements were rated at the "Highest" level with a mean score of 4.70 and a standard deviation of 0.82, followed by statement 9.5 and 8.4 with a mean score of 4.64 and 4.61 (SD = 0.76 and 0.80), respectively. It can be concluded that the participants understood the statement through the restatement clue, which had a total mean score of 4.37.

Table 4.4 shows the results for the contrast clue type, revealing that 8 out of 10 statements were rated at the "Highest" level. The highest mean score was 4.50, and two statements were rated at a "High" level with mean scores of 3.90 and 3.83. Nonetheless,

Ref. code: 25636121040437MVR

contrast clues are another type that was helpful to participants while reading, as the mean score of 4.14. was interpreted at the “Highest” level.

According to Table 4.5 on the inference clue type, 6 out of 10 statements were rated at the “Highest” level, while another four statements were rated at the “High” level. Statement 3.1 had the highest mean score at 4.58, rated as “Highest”, while statement 10.3 had a mean score of 3.47, rated at a “High” level. It can be concluded that the inference clue type plays an important role in helping while reading, although the level of interpretation was not as high as the previous three types, with the mean score of 3.92, rated at a “High” level.

According to the results in Table 4.6, the punctuation type, it can be seen that 8 out of 10 statements were rated at the “Highest” level, and five statements had similar mean scores: statement 3.2, 10.4, 4.3, and 8.2, with mean scores of 4.55, 4.53, 4.50, and 4.50, respectively. Tow out of 10 statements were rated at a “High” level with mean scores of 3.75 and 3.63. In conclusion, the punctuation type is also another helpful of context clue type for participants to understand the context while reading, as evidenced by the total mean score of 4.27.

According to the Table 4.7, the results show that participant had “High” to “Highest” levels of understanding for all five context clue types. The participants found the restatement clue type as the most helpful type to apply during reading a statement, with the mean score of 4.37, followed by punctuation, definition, contrast, and inference clues, as presented by mean scores of 4.27, 4.16, 4.14 and 3.92 respectively. Based on the information according to result the Table 4.7, this could be implied that in terms of perception, the majority of participants are agreed that restatement context clue type is the most helpful type to apply in reading context.

5.3 Conclusion and discussion

This study was conducted to investigate how the post-graduate students assessed their perception to explore what type of context clues the post-graduate students find most helpful. The findings on the most helpful context clue types were also categorized into five different types: definition clues, restatement clues, contrast clues, inference clues and punctuation. The results of this study relate to the previous research studies as follows.

Ref. code: 25636121040437MVR

In terms of the most helpful context clue types in reading, the participants had high scores for both the means and interpretations. This indicates that, despite lacking some vocabulary knowledge, including synonyms, the participants performed well in reading contexts while using the context clue techniques. The participants found that all five context clue techniques helped them while reading, but the restatement clue type was the most helpful. This result is similar to Shokoohi and Askari (2010) studied the influenced of speculating vocabulary on reading genuine writings and found that speculating from context is one of the foremost important aptitudes' understudies can learn and utilize both inside and exterior the classroom. In this ponder, understudies were arbitrarily assigned to one of two groups: context or no context. A pre- and post-test were utilized, with the most finding illustrating unambiguous learning from the relevant speculating approach, showed that students who read authentic texts have a higher understanding level of context clues. The results are also in line with Orawiwatnakul (2010) who found that "vocabulary acquisition techniques" especially context clues, help learners recognize the contexts and word structures' necessity.

Furthermore, the results also conform to those of Kiani (2011), who studied the contextual and structural methods in terms of effectiveness in instructing vocabulary (as cited in Rokni and Reza, 2016 p. 283). According to the study results, high achievers who were taught vocabulary using the method of contextual performed better than high achievers who were taught vocabulary using the method of structural, indicating that respondents' find that context clues are helpful in reading statements in context.

The findings also conform to those of Saitakham (2010), who developed an enhancing English vocabulary learning ability, web-based instructional model for context-clues based on the meaning speculate method. The web-based instruction of English vocabulary learning was given for experimental group had a higher score than those taught face-to-face; although this study might not be directly related, it indicates that future study could look at how context clue techniques can be applied in the online teaching platform.

The results also agree with İlter (2019), who compared the context clue strategy instruction effectiveness, involved in impact on the students' vocabulary knowledge, read at frustration level. According to the findings, an exploiting context clues concerning in reading intervention focusing can help students who struggle with

Ref. code: 25636121040437MVR

comprehension improve students performance to learn from context and therefore expand their vocabularies.

In conclusion, the results imply that participants feel that applying the context clue technique may improve their reading skill, despite a lack of vocabulary knowledge. Moreover, the results suggest that all five context clue types can enhance reading skill. Nonetheless, these results only apply to the two groups of students who were enrolled this particular reading courses and may not be generalized to all Thai EFL post-graduate students.

5.4 Recommendations

This study aimed to explore the most helpful types of context clues for post-graduate students. Further study may employ qualitative methods by asking for participants' opinions on context clue types; alternatively, researchers could use an experiment group and control group to investigate the direct improvement in the understanding of vocabulary and reading skills through the use of context clues.

Ref. code: 25636121040437MVR

REFERENCES

Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education, 3*(3), 21-34. http://doi.org/10.52950/TE.2015.3.3.002

Ahmad, S.N., Muhammad, A.M. and Kasim, A.A.M. (2018). Contextual Clues Vocabulary Strategies Choice among Business Management Students. *English Language Teaching, 11*(4), 107-116. http://doi.org/10.5539/elt.v11n4p107

Barua, A. (2013). Methods for Decision-Making in Survey Questionnaires Based on Likert Scale. *Journal of Asian Scientific Research, 3*(1), 35-38.

Bates, D., Mächler, M. M., Bolker, B., and Walker, S.C. (2015). Fitting linear mixed-effects models using lme4, *Journal of Statistical Software, 67*(1), 1–51. http://doi.org/arXiv:1406.5823

Bates, J. (2020). English Vocabulary Learning with Simplified Pictures. *The Electronic Journal for English as a Second Language, 24*(3), 1-20.

Boldan M. N. and Yavuz F. (2017, May 22-24). *The Challenges of Vocabulary Learning for Turkish Students in EFL Context: A Literature Review.* [Paper Presentation]. Eurasian Conference on Language and Social Sciences, Antalya, Turkey. https://bit.ly/3deHuR9

Bromley, K. (2007). Nine things every teacher should know about words and vocabulary instruction. *Journal of adolescent & adult literacy, 50*(7), 528-537.

Brysbaert, M., Stevens, M., Mandera, P., and Keuleers, E. (2016). How many words do we know? Practical estimates of vocabulary size dependent on word definition, the degree of language input and the participant's age. *Frontiers in Psychology, 7*, 1-11. https://doi.org/10.3389/fpsyg.2016.01116

Calvin Ly, C. (2016, February 25). *Context clues: Interference Example. [PowerPoint slides]*. https://prezi.com/sf2xrgljemkd/context-clues-interferenceexamples/

Ref. code: 25636121040437MVR

Cambridge University Press, (2020). *Cambridge Academic Content Dictionary.* https://dictionary.cambridge.org/dictionary/english/vocabulary

Caspersz, D. and Stasinska, A. (2015). Can we teach effective listening? An exploratory study, *Journal of University Teaching & Learning Practice, 12*(4), 1-13.

Coxhead, A. (2012). A New Academic Word List. *TESOL Quarterly, 34*(2), 213-238. https://doi.org/10.2307/3587951

Daugaard, H.T., Nielsen A.V. and Juul, H. (2020). Context clue types and their prevalence in texts for Danish 3rd and 4th graders. *Language and Education, 34*(6), 487-502. https://doi.org/10.1080/09500782.2020.1782424

Dowds, P.S.J., Haverback H.R., and Parkinson M.M. (2016). Classifying the Context Clues in Children's Text. *The Journal of Experimental Education, 84*(1), 1–22. https://doi.org/10.1080/00220973.2014.919572

Exam English, (n.d). *Academic word list.* https://www.examenglish.com/vocabulary/academic_wordlist.html

Fan, Y.C. (2010). The Effect of Comprehension Strategy Instruction on EFL Learners' Reading Comprehension. *Asian Social Science, 6*(8), 19-29.

Frobes, F.J. & Buchanan, E. (2017). Getting "Clued" in: The Usage and Significance of Context Clues. [Unpublished doctoral dissertation]. Missouri State University.

Harley, T. A. (2014). *The Psychology of Language from Data to Theory.* (4th ed.). New York: Psychology Press. https://www.routledge.com/The-Psychology-of-Language-From-Data-to-Theory/Harley/p/book/9781848720893

Ref. code: 25636121040437MVR

Hochbein, C. and Smeaton, K.S. (2018). An Exploratory Analysis of the Prevalence of Quantitative Research Methodologies in Journal Articles. *International Journal of Education Policy& leadership, 13*(11), 1-17.

Iqbal, S.A. and Komal, S.A. (2017). Analyzing the Effectiveness of Vocabulary Knowledge Scale on Learning and Enhancing Vocabulary through Extensive Reading. *English Language Teaching, 10*(9), 36-48. http://doi.org/10.5539/elt.v10n9p36

Israel S. E., Block C.C., Bauserman K.L. and Kinnucan-Welsch K. (2006). *Metacognition in Literacy Learning: Theory, Assessment, Instruction, and Professional Development.* Abingdon-on-Thames: Routledge. https://www.routledge.com/Metacognition-in-Literacy-Learning-Theory-Assessment-Instruction-and/Israel-Block-Bauserman-Kinnucan-Welsch/p/book/9781410613301

IRA/NCTE Joint Task Force on Assessment, International Reading Association, National Council of Teachers of English. (2009). *Standards for the Assessment of Reading and Writing.* International Reading Association. https://www.amazon.com/s?k=9780872077768&i=stripbooks&linkCode=qs

Ivone, F. M. and Renandya, W. A. (2019). Extensive Listening and Viewing in ELT. *TEFLIN Journal, 30*(2), 237-255. http://dx.doi.org/10.15639/teflinjournal.v30i2/237-256

Joshi, A., Kale, S., Chandel, S. and Pal, D. K. (2015). Likert Scale: Explored and Explained, *British Journal of Applied Science & Technology, 7*(4), 396-403. http://dx.doi.org/10.9734/BJAST/2015/14975

Kılıçkaya, F. (2019). Assessing L2 vocabulary through multiple-choice, matching, gap-fill, and word formation items. *Lublin Studies in Modern Languages and Literature, 43*(3), 155-166. http://dx.doi.org/10.17951/lsmll.2019.43.3.155-166

Ref. code: 25636121040437MVR

İlter, İ. (2019). The Efficacy of Context Clue Strategy Instruction on Middle Grades Students' Vocabulary Development. *RMLE Online, 42*(1), 1-15. https://doi.org/10.1080/19404476.2018.1554522

Mangen A., Walgermo B.R. and Brønnick K. (2013). Reading linear texts on paper versus computer screen: Effects on reading comprehension. *International Journal of Educational Research, 58*, 61-68. https://doi.org/10.1016/j.ijer.2012.12.002

McCarthy, M., O'Keeffe, A., & Walsh, S. (2010). *Vocabulary matrix: Understanding, learning, teaching.* Heinle Cengage Learning. https://doi.org/10.1093/elt/ccq010

McQuillan, J.L. (2019). The Inefficiency of Vocabulary Instruction. *Iejee, International Electronic Journal of Elementary Education, 11*(4), 309-318. https://doi.org/10.26822/iejee.2019450789

Merriam-Webster, (2021). *Merriam-Webster Dictionary. In Merriam-Webster, Incorporated, Merriam-Webster.* https://www.merriam-webster.com/dictionary/vocabulary

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

Nation, I.S.P. (2008). *Teaching ESL/EFL Reading and Writing.* Routledge.

Nordquist, R. (2020, January 24). *Definition and Examples of Context Clues. How We Infer Meaning.* https://www.thoughtco.com/context-clue-vocabulary-1689919

Nyikos, M., & Fan, M. (2007). A review of vocabulary learning strategies: Focus on language proficiency and learner voice. In A. Cohen & E. Macaro (Eds.), *Language learner strategies: 30 years of research and practice* (pp. 251-274). Oxford University Press.

Ref. code: 25636121040437MVR

Orawiwatnakul, W. (2011). Impacts of Vocabulary Acquisition Techniques Instruction on Students' Learning. *Journal of College Teaching & Learning, 8*(1), 47-54. https://doi.org/10.19030/tlc.v8i1.985

Picard, O., Blondin Massé, A., & Harnad, S. (2010). Learning word meaning from dictionary definitions: Sensorimotor induction precedes verbal instruction. [Unpublished doctoral dissertation]. Université du Québec à Montréal.

Rokni, S.J.A. & Reza, H.N. (2013). The Effect of Context Clues on EFL Learners' Reading Comprehension. *ELT Voices – India, 3*(6), 54-61.

Rolletschek, H. (2020). The Effects of Odor on Vocabulary Learning. *Language Teaching Research,* 18, 21–39. http://dx.doi.org/10.32038/ltrq.2020.18.02

Saberi, L. (2019). Designing and Validating Teachers' Professional Development Scale: Iranian EFL Contexts in Focus. *International Journal of Instruction, 12*(1), 1609-1626. http://dx.doi.org/10.29333/iji.2019.121102a

Sanitya R. and Sinjindawong S. (2017). Design of Students' Evaluation of Teaching: The Case of Sripatum University. *International Journal of Information and Education Technology, 7*(5), 367-375. http://dx.doi.org/10.18178/ijiet.2017.7.5.896

Saitakham, K. (2010). The development of a web-based instructional model to enhance vocabulary learning ability through context-clues based meaning guessing technique for Thai English as a foreign language university students [Unpublished Doctoral Thesis,]. Suranaree University of Technology

Shaaban, K. (2007). An Initial Study of the Effects of Cooperative Learning on Reading Comprehension, Vocabulary Acquisition, and Motivation to Read. *Reading Psychology, 27*(5), 377-403. https://doi.org/10.1080/02702710600846613

Ref. code: 25636121040437MVR

Shokoohi, H. & Askari, H. (2010). The effect of guessing vocabulary in reading authentic texts among pre-university students. *Arizona working papers in SLA & teaching*, 17, 75-89.

Sporer N., Brunstein J.C. and Kieschke U. (2008). Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching. *Learning and Instruction*, 19, 272-286. https://doi.org/10.1016/j.learninstruc.2008.05.003

Tevdovska, E. S. (2016). Literature in ELT Setting: Students' Attitudes and Preferences towards Literary Texts. *Procedia - Social and Behavioral Sciences*, 232, 161 – 169. https://doi.org/10.1016/j.sbspro.2016.10.041

Umirov, O. (2018, March 30). *The Essence of Vocabulary in Language Learning and Some Techniques of Teaching Foreign Languages* [paper presentation]. International Conference STUDENT SCIENCE RESEARCH WORKS, San Francisco, USA. https://bit.ly/3xCbvSA

Uzer, Y.V. (2019). The Influence of Context Clues Strategy on Students' Reading Achievement. *Journal of English Study Programme, 2*(2), 1-89. http://dx.doi.org/10.31851/esteem.v2i2.2457

Warmbrod, J. R. (2014). Reporting and Interpreting Scores Derived from Likert-type Scales. *Journal of Agricultural* Education, 55(5), 30-47. http://dx.doi.org/10.5032/jae.2014.05030

Wasatch County School District, (2010). *Types of Context Clues.* https://www.wasatch.edu/cms/lib/UT01000315/Centricity/Domain/395/Context%20Clues%20-%20Types%20Chart.pdf

Ref. code: 25636121040437MVR

APPENDICES

Ref. code: 25636121040437MVR

APPENDIX A
SELF-ASSESSMENT FORM

This questionnaire is an instrument of the independent study for CR790 Independent Study course in partial fulfillment of the requirement for Master's Degree of Arts Program in Career English for International Communication, Language Institute, Thammasat University. The study aims to explore the post-graduate students' assess of what type of context clue the post-graduate students find most helpful. The data obtained from the participants will be confidentially kept.

The Questionnaire is divided into two sections as follows:
Section One: Participants personal information
Section Two: Types of context clue

Section One: Participants personal information
Direction: Please mark X in the box which will best describe your information and context clue knowledge

1. Gender ☐ Male ☐ Female
2. Year of Study (Academic Year)
   ☐ 2020 (First Year) ☐ 2019 (Second Year)
3. TU-GET Score Range
   ☐ 550-700 ☐ 701-850 ☐ 851-1000
4. CR603 Grade
   ☐ B+ ☐ B ☐ B- ☐ C+ ☐ C ☐ C- ☐ other……
5. How good your knowledge of context clue?
   ☐ Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor
6. How often do you use context clue technique while reading?
   ☐ Always ☐ Usually ☐ Often ☐ Sometime ☐ Never

Ref. code: 25636121040437MVR

Second Section: Types of context clue

Direction: Read the following statements and decide how well the context provided in each statement helps you to understand the meaning of the bold word. Please mark X in the box in the provided space in the following (1 as the least understanding, while 5 as the most understanding)

No.		Statement	Score				
			5	4	3	2	1
1.	1.1	Martha is a **curator**, a person who is responsible for looking after a museum's collection.					
	1.2	**Carnivores**, that is, meat eaters, are the top of the food chain.					
	1.3	Mike's parrot was **loquacious**, but Maria's said very little.					
	1.4	The monkey's **vociferous** chatter made me wish I had earplugs.					
	1.5	Tom's father was a **haberdasher**, or men's shop keeper, in the story.					
2.	2.1	Mary **retained**—kept the deed in her mother's house.					
	2.2	Most castles had high walls and were surrounded by a water-filled ditch called a **moat**.					
	2.3	My best friend **squandered** all his money, spent all his earning on drinking and gambling.					
	2.4	Henry's power was **robust**, but Maria's was very weak.					
	2.5	Katie's **belligerence** surprised everyone. She threw her book across the room, glared at Chris, and then pushed him to the floor.					
3.	3.1	All animals share the same **vital** needs, such as food, water and shelter.					
	3.2	I wonder if that fruit is **edible**, able to be eaten.					
	3.3	She hated and **detested** spinach, always feel disgusting whenever she saw it.					
	3.4	After seeing the picture of the starving children, we all felt **compassion** or pity for their suffering.					
	3.5	The gentleman was **portly**, but his wife was thin.					

Ref. code: 25636121040437MVR

No.		Statement	Score				
			5	4	3	2	1
4.	4.1	While Luis is hardworking, his **indolent** brother spends most of the time watching TV or sitting around with friends.					
	4.2	She was so **famished** that people felt sorry for her and gave her food to eat.					
	4.3	The company is going through many **transitions**—changes.					
	4.4	An **insignia** is something that stands for something else.					
	4.5	After a time, **glaciers**, or slowly moving rivers of ice, formed over many parts of the Earth.					
5.	5.1	Chad is calm and quiet, but his brother is **boisterous**.					
	5.2	Although most of the students are sure that they pass the exam, a few of them are **dubious** that they will.					
	5.3	Ronda's **pugnacious** behavior in the boxing ring made her opponent throw in the white towel.					
	5.4	Children are often **loquacious**—very talkative—and active.					
	5.5	**Sedentary** individuals, people who are not very active, often have diminished health.					
6.	6.1	An **occupation**, such as that of a hatmaker or a postman, is important for anyone who wants to earn a steady wage.					
	6.2	Cowboys often wore **chaps**, leather trousers without a seat, over their pants to protect their legs from thorns.					
	6.3	Sandy thought that her mother's recovery was **futile**, but her brother remained faithful to the course of his mother's restored health.					
	6.4	John burst out of the woods and found himself at the edge of a **precipice**. Clinging to a boulder, he gazed down dizzily at the blue ribbon of river below.					
	6.5	**Bigamy—**marriage to two spouses at the same time—is not legal in the United States.					

Ref. code: 25636121040437MVR

No.		Statement	Score				
			5	4	3	2	1
7.	7.1	**Tilling** (turning over the soil) leaves it loose until the spring planting.					
	7.2	On Friday, we visited the **arboretum**, a garden dedicated to the exhibition of trees and plants.					
	7.3	The food was **bland.** In fact, everyone called it tasteless.					
	7.4	Sinta is usually energetic, but Dino is always **indolent**.					
	7.5	Elvaridha is successful state woman, prime minister, and housewife. She is a **versatile** woman.					
8.	8.1	Dedy is Quite **multifaceted,** a good student, a top athlete, an excellent car mechanic, and a gourmet cook.					
	8.2	Sally Ride used a **shuttle** – a spaceship with wings –to go into space.					
	8.3	The manager wanted a weekly **inspection,** which is a methodical examination of all the equipment.					
	8.4	My grandfather would like to have his steak **well done** (cooked well).					
	8.5	Stella has always dressed **flamboyantly**, but I've never seen her wear a plain color.					
9.	9.1	Marty is **gregarious**, unlike his brother who is quiet and shy.					
	9.2	The girl who is in front of the building is my sister, she is **celibate**, does not marry yet.					
	9.3	Many places experience **blizzards/**snowstorms during the winter.					
	9.4	Diane was **lethargic**; she didn't have the energy to get out of bed.					
	9.5	The student forgot the poem; **in other words**, she did not remember it.					

Ref. code: 25636121040437MVR

No.		Statement	Score				
			5	4	3	2	1
10.	10.1	If you visit Alaska, you will likely see many **glaciers**, or slow moving masses of ice.					
	10.2	She was **virtuous,** unlike her evil and conniving brother.					
	10.3	No one ever believes that particular newspaper because it is famous for printing **canards.**					
	10.4	Reducing cholesterol has a number of **beneficial**/positive results, reducing the risk of heart disease.					
	10.5	The doctor's writing was utterly **illegible**; no one could read those scribbles.					

THANK YOU FOR YOUR COOPERATION

Ref. code: 25636121040437MVR

APPENDIX B

The list of statement that categorized into each context clue type (bold words are shown as context clue words) as follows:

Appendix Table B

The Statement with Context Clue Word

Statement No.	Statement
Definition Clues Type	
1.1	Martha is a **curator**, a person who is responsible for looking after a museum's collection.
2.2	Most castles had high walls and were surrounded by a water-filled ditch called a **moat**.
3.3	She hated and **detested** spinach, always feel disgusting whenever she saw it.
4.4	An **insignia** is something that stands for something else.
5.5	**Sedentary** individuals, people who are not very active, often have diminished health.
6.1	An **occupation**, such as that of a hatmaker or a postman, is important for anyone who wants to earn a steady wage.
7.2	On Friday, we visited the **arboretum**, a garden dedicated to the exhibition of trees and plants.
8.3	The manager wanted a weekly **inspection,** which is a methodical examination of all the equipment.
9.4	Diane was **lethargic**; she didn't have the energy to get out of bed.
10.5	The doctor's writing was utterly **illegible**; no one could read those scribbles.

Ref. code: 25636121040437MVR

Appendix Table B - continued

Statement No.	Statement
Restatement Clues Type	
1.2	**Carnivores**, that is, meat eaters, are the top of the food chain.
2.3	My best friend **squandered** all his money, spent all his earning on drinking and gambling.
3.4	After seeing the picture of the starving children, we all felt **compassion** or pity for their suffering.
4.5	After a time, **glaciers**, or slowly moving rivers of ice, formed over many parts of the Earth.
5.1	Chad is calm and quiet, but his brother is **boisterous**.
6.2	Cowboys often wore **chaps**, leather trousers without a seat, over their pants to protect their legs from thorns.
7.3	The food was **bland.** In fact, everyone called it tasteless.
8.4	My grandfather would like to have his steak **well done** (cooked well).
9.5	The student forgot the poem; **in other words**, she did not remember it.
Contrast Clues Type	
1.3	Mike's parrot was **loquacious**, but Maria's said very little.
2.4	Henry's power was **robust**, but Maria's was very weak.
3.5	The gentleman was **portly**, but his wife was thin.
4.1	While Luis is hardworking, his **indolent** brother spends most of the time watching TV or sitting around with friends.
5.2	Although most of the students are sure that they pass the exam, a few of them are **dubious** that they will.
6.3	Sandy thought that her mother's recovery was **futile**, but her brother remained faithful to the course of his mother's restored health.
7.4	Sinta is usually energetic, but Dino is always **indolent**.
8.5	Stella has always dressed **flamboyantly**, but I've never seen her wear a plain color.
9.1	Marty is **gregarious**, unlike his brother who is quiet and shy.
10.2	She was **virtuous,** unlike her evil and conniving brother.

Ref. code: 25636121040437MVR

Appendix Table B - continued

Statement No.	Statement
Inference Clues Type	
1.4	The monkey's **vociferous** chatter made me wish I had earplugs.
2.5	Katie's **belligerence** surprised everyone. She threw her book across the room, glared at Chris, and then pushed him to the floor.
3.1	All animals share the same **vital** needs, such as food, water and shelter
4.2	She was so **famished** that people felt sorry for her, and gave her food to eat.
5.3	Ronda's **pugnacious** behavior in the boxing ring made her opponent throw in the white towel
6.4	John burst out of the woods and found himself at the edge of a **precipice**. Clinging to a boulder, he gazed down dizzily at the blue ribbon of river below.
7.5	Elvaridha is successful state woman, prime minister, and housewife. She is a **versatile** woman.
8.1	Dedy is Quite **multifaceted,** a good student, a top athlete, an excellent car mechanic, and a gourmet cook.
9.2	The girl who is in front of the building is my sister, she is **celibate**, does not marry yet.
10.3	No one ever believes that particular newspaper because it is famous for printing **canards.**
Punctuation Type	
1.5	Tom's father was a **haberdasher**, or men's shop keeper, in the story.
2.1	Mary **retained**—kept the deed in her mother's house.
3.2	I wonder if that fruit is **edible**, able to be eaten.
4.3	The company is going through many **transitions**—changes.
5.4	Children are often **loquacious**—very talkative—and active.
6.5	**Bigamy**—marriage to two spouses at the same time—is not legal in the United States.
7.1	**Tilling** (turning over the soil) leaves it loose until the spring planting.
8.2	Sally Ride used a **shuttle** – a spaceship with wings –to go into space.
9.3	Many places experience **blizzards/**snowstorms during the winter.
10.4	Reducing cholesterol has a number of **beneficial**/positive results, reducing the risk of heart disease.

Ref. code: 25636121040437MVR

APPENDIX C

The list of Table of Index of Item-Objective Congruence (IOC) for each context clue type (bold words are shown as context clue words) as follows:

Appendix Table C

IOC Form

Statement No.	Statement	Score		
		-1	0	1
Definition clue type				
1.	Martha is a **curator**, a person who is responsible for looking after a museum's collection.			
2.	Most castles had high walls and were surrounded by a water-filled ditch called a **moat**.			
3.	She hated and **detested** spinach, always feel disgusting whenever she saw it.			
4.	An **insignia** is something that stands for something else.			
5.	**Sedentary** individuals, people who are not very active, often have diminished health.			
6.	An **occupation**, such as that of a hatmaker or a postman, is important for anyone who wants to earn a steady wage.			
7.	On Friday, we visited the **arboretum**, a garden dedicated to the exhibition of trees and plants.			
8.	The manager wanted a weekly **inspection,** which is a methodical examination of all the equipment.			
9.	Diane was **lethargic**; she didn't have the energy to get out of bed.			
10.	The doctor's writing was utterly **illegible**; no one could read those scribbles.			

Note. Definition clues means a word formally defined, or sufficient explanation may be given in the following sentence or within the sentence.

Ref. code: 25636121040437MVR

Appendix Table C - continued

Statement No.	Statement	Score		
		-1	0	1
Restatement Clues Type				
1.	**Carnivores**, that is, meat eaters, are the top of the food chain.			
2.	My best friend **squandered** all his money, spent all his earning on drinking and gambling.			
3.	After seeing the picture of the starving children, we all felt **compassion** or pity for their suffering.			
4.	After a time, **glaciers**, or slowly moving rivers of ice, formed over many parts of the Earth.			
5.	Chad is calm and quiet, but his brother is **boisterous**.			
6.	Cowboys often wore **chaps**, leather trousers without a seat, over their pants to protect their legs from thorns.			
7.	The food was **bland.** In fact, everyone called it tasteless.			
8.	My grandfather would like to have his steak **well done** (cooked well).			
9.	The student forgot the poem; **in other words**, she did not remember it.			
10.	If you visit Alaska, you will likely see many **glaciers**, or slow moving masses of ice.			

Note. Restatement clues means a person will say the same thing twice: once with the more difficult word, and then again in a simpler way.

Ref. code: 25636121040437MVR

Appendix Table C - continued

Statement No.	Statement	Score		
		-1	0	1
Contrast Clues Type				
1.	Mike's parrot was **loquacious**, but Maria's said very little.			
2.	Henry's power was **robust**, but Maria's was very weak.			
3.	The gentleman was **portly**, but his wife was thin.			
4.	While Luis is hardworking, his **indolent** brother spends most of the time watching TV or sitting around with friends.			
5.	Although most of the students are sure that they pass the exam, a few of them are **dubious** that they will.			
6.	Sandy thought that her mother's recovery was **futile**, but her brother remained faithful to the course of his mother's restored health.			
7.	Sinta is usually energetic, but Dino is always **indolent**.			
8.	Stella has always dressed **flamboyantly**, but I've never seen her wear a plain color.			
9.	Marty is **gregarious**, unlike his brother who is quiet and shy.			
10.	She was **virtuous,** unlike her evil and conniving brother.			

Note. Contrast clues means the clue which uses another word or phrase that have the opposite meaning of an unfamiliar word.

Ref. code: 25636121040437MVR

Appendix Table C - continued

Statement No.	Statement	Score		
		-1	0	1
Inference Clues Type				
1.	The monkey's **vociferous** chatter made me wish I had earplugs.			
2.	Katie's **belligerence** surprised everyone. She threw her book across the room, glared at Chris, and then pushed him to the floor.			
3.	All animals share the same **vital** needs, such as food, water and shelter			
4.	She was so **famished** that people felt sorry for her, and gave her food to eat.			
5.	Ronda's **pugnacious** behavior in the boxing ring made her opponent throw in the white towel			
6.	John burst out of the woods and found himself at the edge of a **precipice**. Clinging to a boulder, he gazed down dizzily at the blue ribbon of river below.			
7.	Elvaridha is successful state woman, prime minister, and housewife. She is a **versatile** woman.			
8.	Dedy is Quite **multifaceted,** a good student, a top athlete, an excellent car mechanic, and a gourmet cook.			
9.	The girl who is in front of the building is my sister, she is **celibate**, does not marry yet.			
10.	No one ever believes that particular newspaper because it is famous for printing **canards.**			

Note. Inference clues means the clue that have a meaning of an unfamiliar word which can be inferred from the situation description.

Ref. code: 25636121040437MVR

Appendix Table C - continued

Statement No.	Statement	Score		
		-1	0	1
Punctuation Clue Type				
1.	Tom's father was a **haberdasher**, or men's shop keeper, in the story.			
2.	Mary **retained**—kept the deed in her mother's house.			
3.	I wonder if that fruit is **edible**, able to be eaten.			
4.	The company is going through many **transitions**—**changes**.			
5.	Children are often **loquacious**—**very talkative**—and active.			
6.	**Bigamy**—marriage to two spouses at the same time—is not legal in the United States.			
7.	Tilling (**turning over the soil**) leaves it loose until the spring planting.			
8.	Sally Ride used a **shuttle** – a spaceship with wings –to go into space.			
9.	Many places experience **blizzards/**snowstorms during the winter.			
10.	Reducing cholesterol has a number of **beneficial**/positive results, reducing the risk of heart disease.			

Note. Punctuation clue means clue that hidden which are found in italicization, capitalization, parentheses, and quotation marks.

Ref. code: 25636121040437MVR

BIOGRAPHY

Name	Mr. Teeradon Kardudom
Date of Birth	August 24, 1993
Hometown	Bangkok, Thailand
Educational Attainment	2015: B.S. (Tropical Agriculture), Tropical Agriculture (International Program), Kasetsart University 2019: M.S. (Soil Science), Soil Science, Kasetsart University
Scholarship	2015: Asean International Mobility for Students
Work Experience	2019-2020: Education Officer, Practitioner Level at Social Policy and Development, Thammasat University

Ref. code: 25636121040437MVR