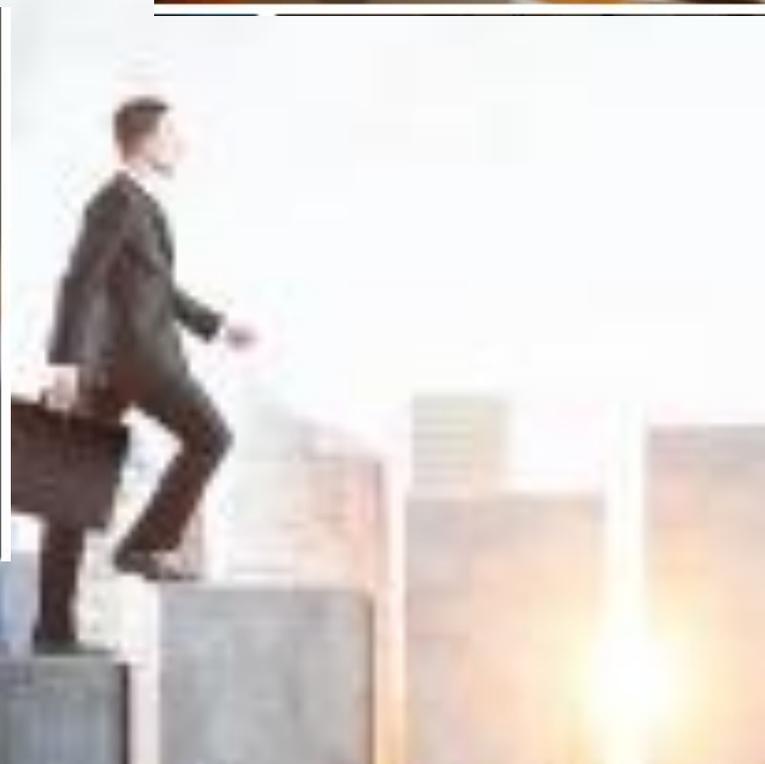
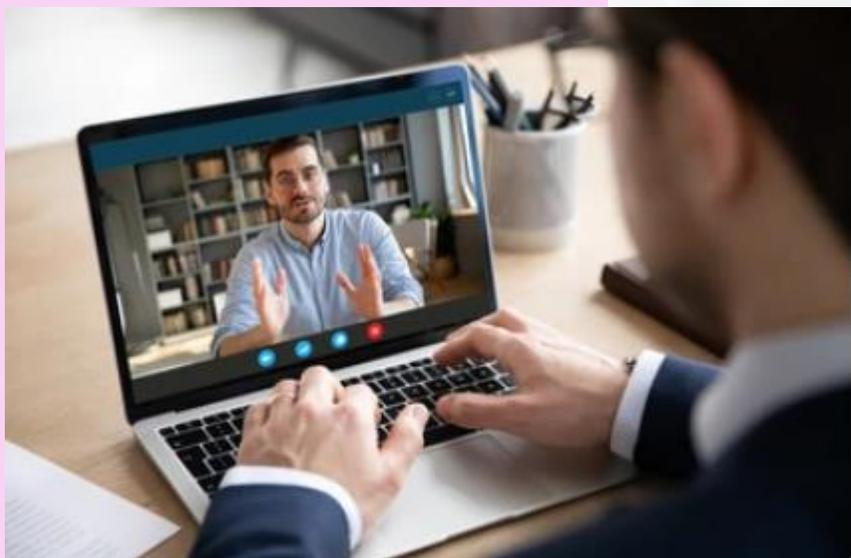
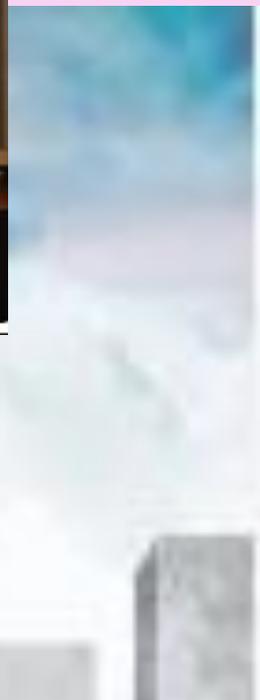


Components of Methodology



Importance of Methodology

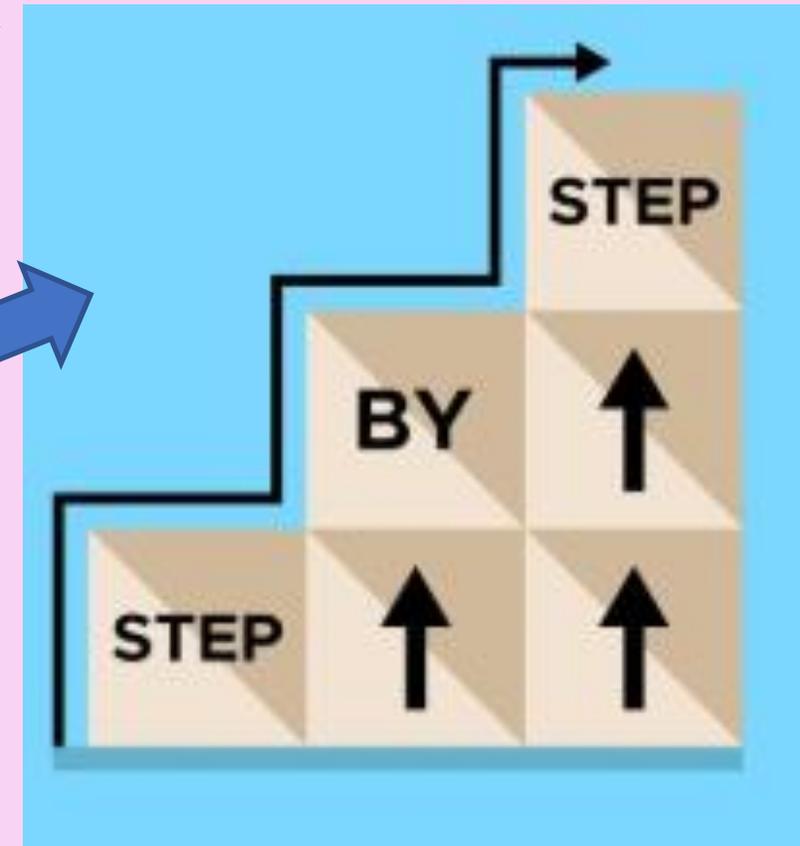
It is a work plan of a researcher.

- A researcher follows a theory or a principle or not.
- It is used as an example for research design.
- Principled methodology convinces readers about complete and logical results.

Structure of Methodology

Lead-in part

- Objectives and scopes of a study are described.
- A researcher tried to connect an overview understanding about a study to process of how a study was conducted.



Points of Consideration

- When research objectives were restated, both a dependent and an independent variable can be noticed in here.
- How did the researcher select the participants?
- Who were in the sampling group?
- How long did the implementation last?
- How often was the implementation?
- Timeframe can be varied due to a research problem, conditions of using instruments and other factors.
- What are the tools used in the study and are there any explanation?

CHAPTER III

METHODOLOGY

The purpose of the study is to study the effectiveness of task-based learning on improving English listening and English speaking abilities of Mattayomsuksa 1 students. This chapter describes the key elements of the research methodology of this study, namely:

- a) Research Design;
- b) Population and participants;
- d) Data collection; and
- e) Data analysis

Research Design

The study was the quasi-experimental, one group pre-test - post-test design.

Population and Participants

The researcher was granted permission to conduct the research with the Mattayomsuksa 1 students of Piboonprachasan School. The school has five Mattayomsuksa 1 classes totaling 190 students, with each class being a good balance of low to high achievers. The participants were 30 students chosen by convenient sampling. As a guest of Piboonprachasan School, the researcher grouped this sampling method due to the convenience it offered the school and researcher in terms of teaching schedule and minimal disruption caused to the students.

Duration

The study was conducted over seven weeks in the second semester of the 2011 academic year. The four hours of instruction each week were split into two equal lessons. The first week included a two hour introduction lesson comprising an explanation of the purpose of the study, learner roles, assessment and method. The second lesson was comprised entirely of a two hour pre-test. Lessons were then conducted from week two until the first lesson of week seven. The two hour post-test took place during the last lesson of week seven. Thus the total face-to-face teaching time was 22 hours.

Variables

The variables in this study are as follows:

- (a) Independent variable is task-based learning
- (b) Dependent variables are English listening and speaking abilities

Procedures

- In general, there are planning, data collection, and data analysis.
- Research studies differ in instruments, process of creation, practices, assessment, and statistical treatment.

Points of Consideration

Generally,.....

- How is the detail arranged in the methodology? (Logical order?)
- What principle does the methodology depend on?
- Does the methodology lead to research objectives' answers?
- Were the tools selected properly or developed through reliable process?

- In planning, adequate knowledge leads to effective instruments. A draft version is edited to make an improved version.
- All the instruments were introduced and how they were created was elaborated.
- Check whether the tools were assessed or not and how they were assessed.

Instrument and Methodology

Planning and Instrument Design

The planning and instrument design of this study was conducted as follows:

1. The researcher reviewed theories, principles, research studies, and scholarly work on assessment and evaluation principles, inquiry-based learning, and Miller's Model.
2. The researcher reviewed the course description, its objectives, and the content together with the allotted timeframe.
3. The researcher drafted a course syllabus and designed a full range of the inquiry-based learning activities, encompassing the integration between the 7E Cycle and Miller's Model, paper tests for Knows and Knows How, evaluation criteria for Shows How, and an attitude survey questionnaire.
4. The researcher submitted the instruments to three experts to evaluate, and the IOC result was 0.66–1.00.
5. The researcher improved the instruments as advised.

- In data collection, how principles, innovation, and tools were implemented was presented here.
- Process of teaching, frequency of implementation, survey, interview, and testing are explained here.

Data Collection

The researcher followed the instructional sequence based on the planned integration between inquiry-based learning and Miller's Model. The process started with the cognition domain development in which the sequence of 6E (elicitation, engagement, exploration, explanation, elaboration, and evaluation) out of 7E were mixed into Knows and Knows How. For the final step of the 7E Cycle, the extension was divided into two parts to meet Shows How and the Does. The instruction was as follows:

1. Knows stage

1.1. Elicitation step: The researcher raised questions about the preservice teachers' prior knowledge or experiences about testing and evaluation from their practicum in schools.

1.2. Engagement step: The researcher presented problems and specimens and assigned the preservice teachers to brainstorm making questions. All the questions were categorized and voted in order to set the main points.

1.3. Exploration step: The preservice teachers worked in groups to explore the relevant information from resources to answer all the main points.

1.4. Explanation step: Each group presented and discussed about the information in all the main points.

Miller's Model

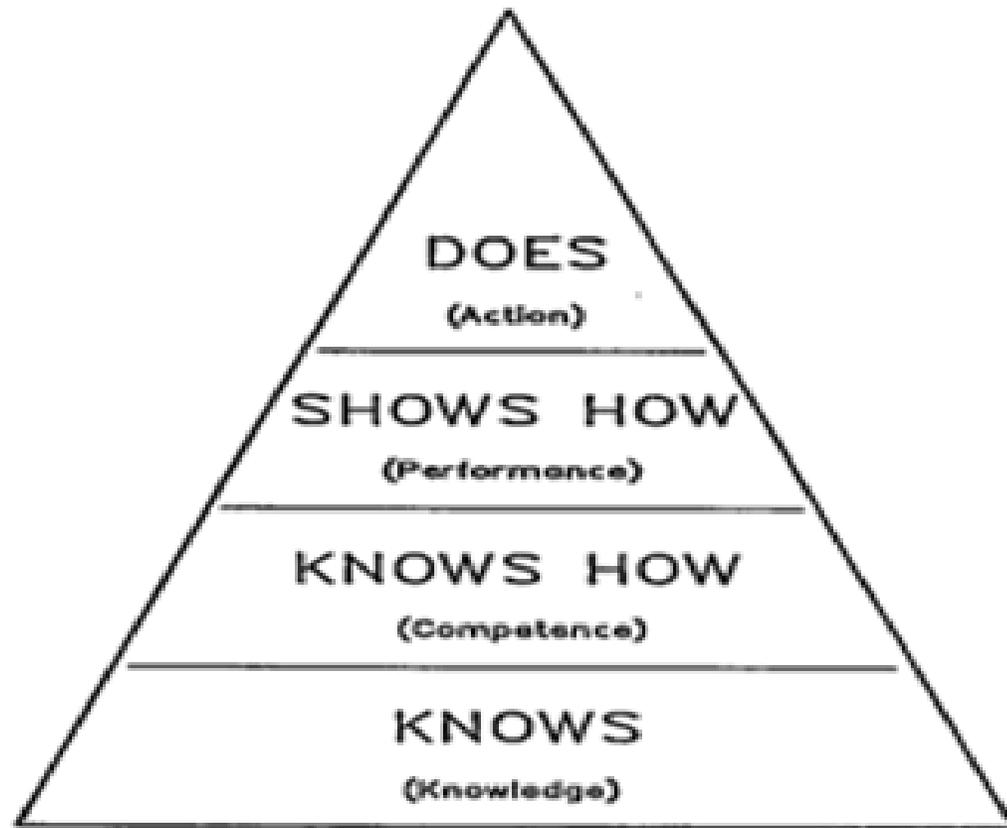


Figure 1. Framework for clinical assessment.

Miller, G.E. (1990)

Does - combining a class to the real world
- more self-preparation experiences for the future work.

Shows how - demonstrate some task in a controlled environment

Knows how - expressing outlooks to the knowledge application
- accuracy and misconception are investigated

Knows - giving or grounding knowledge
- assessing what learners remember and understand

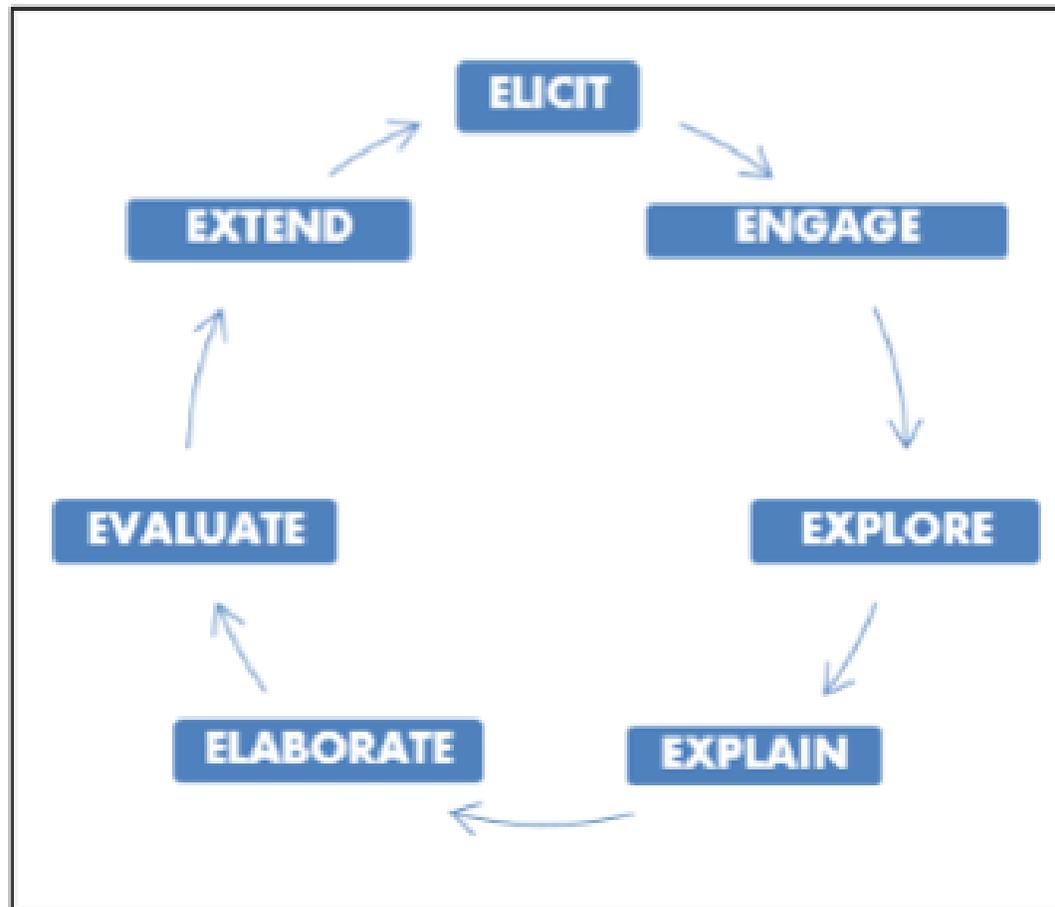


Fig 1: Diagrammatical Representation of 7-E Learning Cycle

Elicitation

- asking about existing knowledge
- Grounding new knowledge

Engagement

- raising an issue which can be questioned

Exploration

- seeking for information to answer

Explanation

- analyzing, filtering and sharing information

Evaluation

- checking understanding through tests, tasks or questions.

Extension

- linking the learnt knowledge to different situations

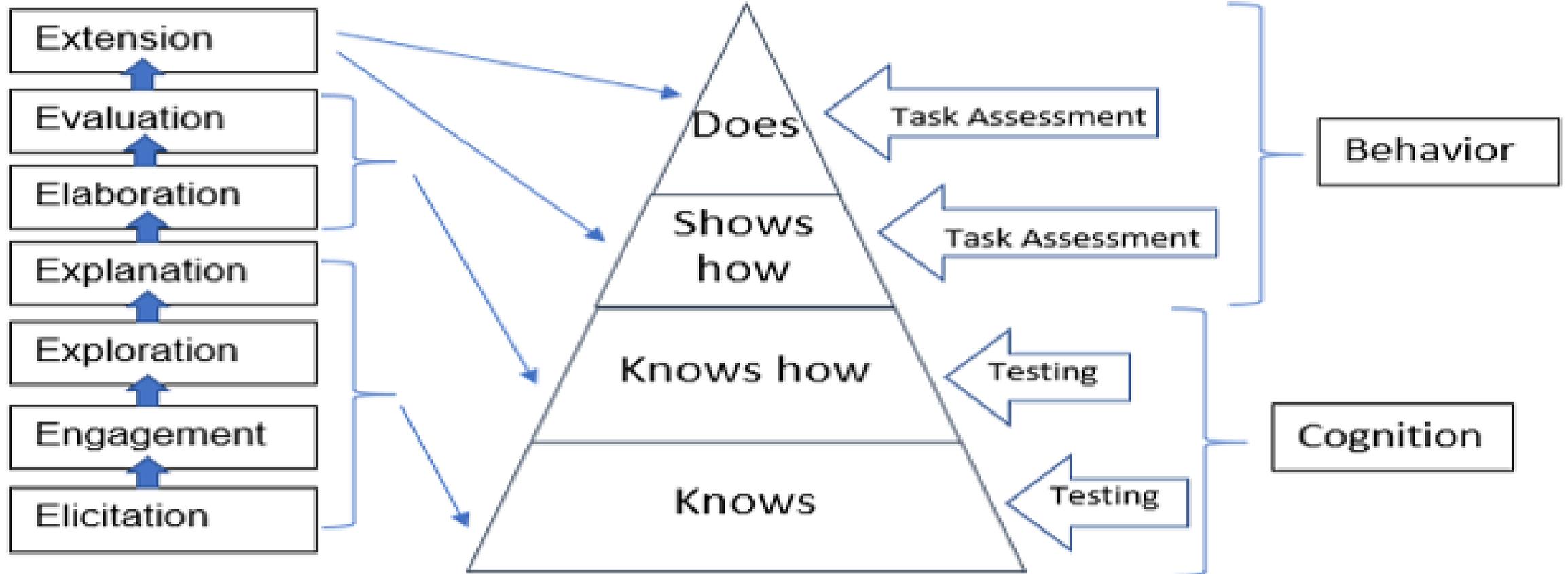
George, G. (2016)

Eisenkraft, A. (2003)

Methodology

Cognitivism/ Inquiry-Based Learning

Miller's Model



The Combination of Miller's Model and Inquiry-Based Learning

- In data analysis, statistical treatment and formulae were presented here as the information here comes in step by step.
- Formulae used for calculating and analyzing results are always shown.

Data Analysis

The raw scores were calculated into mean and the differences between the results of Knows, Knows How, Shows How, and Does were compared for development analysis. In addition, the results of attitude investigation were calculated by frequency of each item.

Please consider the following research topics and draft the possible methodology and compare with the original work.

**Using task-based learning focusing on Thai culture to promote
English writing ability of tenth grade students**

Maythinee Kaikaew ¹, Asst. Prof. Dr. Thanachart Lornklang ²

¹Master's degree in Teaching English as Foreign Language, Nakhon Ratchasima Rajabhat University

<https://www.academia.edu/download/86204483/98.pdf>

Dararat Prom-D. (2012). *The Effect of Jigsaw II Technique on Reading Comprehension of Mattayom Suksa 1 Students*. Master's Project, M.A. (Teaching English as a Foreign Language). Bangkok: Graduate School, Srinakharinwirot University.
Project Advisor: Dr. Prapaipan Aimchoo.

[http://thesis.swu.ac.th/swuthesis/Tea_Eng_For_Lan\(M.A.\)/Dararat_P.pdf](http://thesis.swu.ac.th/swuthesis/Tea_Eng_For_Lan(M.A.)/Dararat_P.pdf)

References

ชวลีกร ธนธิตกร และ ณัฐรัฐ ธนธิตกร (2564). กลยุทธ์การเขียนบทความวิจัยเพื่อเผยแพร่ในวารสารวิชาการ. *Journal of Roi Kaensarn Academi*, 6(12), 387-400. <https://so02.tci-thaijo.org/index.php/JRKSA/article/view/251311>

วรรณิ แกมเกตุ. (2551). *วิธีวิทยาการวิจัยทางพฤติกรรมศาสตร์*. กรุงเทพฯ : โรงพิมพ์แห่งจุฬาลงกรณ์มหาวิทยาลัย.

Baron, M. A. (2008). *Guidelines for Writing Research Proposals and Dissertations*.
https://www.regent.edu/wp-content/uploads/2020/12/dissertation_guidelines.pdf

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed). Routledge.

Faryadi, Q. (2019). PhD Thesis Writing Process: A Systematic Approach—How to Write Your Methodology, Results and Conclusion. *Creative Education*, 2019(10), 766-783. <https://doi.org/10.4236/ce.2019.104057>

Gonzalez, A., He. Y., & Sturm. J. (2019). *A Guide to Writing a Senior Thesis in Linguistics*.
https://scholar.harvard.edu/files/auoregonzalez/files/a_guide_to_writing_a_senior_thesis_in_linguistics_2019.pdf

Hine, G. S. C. (2013). The Importance of Action Research in Teacher Education Programs. *Issues in Educational Research*, 23(2), 151-163. <https://www.iier.org.au/iier23/hine.pdf>

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). *Methods in Educational Research: From Theory to Practice*. Jossey-Bass.

Pandey, P. & Pandey, M. M. (2015). *Research Methodology: Tools and Techniques*. <https://www.euacademic.org/BookUpload/9.pdf>

Patel, M. & Parel, N. (2019). Exploring Research Methodology: Review Article. *International Journal of Research and Review*, 6(3), 48-55. https://www.ijrrjournal.com/IJRR_Vol.6_Issue.3_March2019/IJRR0011.pdf

Promruang, J. (2012). *The Use of Task-based Learning to Improve English Listening and Speaking Abilities of Mattayomsuksa 1 Students at Piboonprachasan School*. [Master Thesis, Srinakharinwirot University]. Bangkok. [http://thesis.swu.ac.th/swuthesis/Tea_Eng_For_Lan\(M.A.\)/Jidapa_P.pdf](http://thesis.swu.ac.th/swuthesis/Tea_Eng_For_Lan(M.A.)/Jidapa_P.pdf)

Unnanantn, T. (2019). Effects of Integrated Inquiry-based Learning to Improve the Evaluation Ability of Thai Preservice Teachers of English. *The International Journal of Assessment and Evaluation*, 26(1), 21-31. <https://doi.org/10.18848/2327-7920/CGP>