

**A *KIKIGAKI* METHOD FOR AGRIBUSINESS STUDENTS'
ENGLISH VOCABULARY MASTERY**

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POSTGRADUATE PROGRAM OF ENGLISH LANGUAGE STUDIES

FACULTY OF CULTURAL SCIENCES

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**A *KIKIGAKI* METHOD FOR AGRIBUSINESS STUDENTS' ENGLISH
VOCABULARY MASTERY**

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As one of the requirements for achieving Master Degree

English Language Studies Program

Written and submitted by

ZULWAHYUNI NAMRULLAH

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To

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Makassar, January 2024

Zulwahyuni Namrullah

ABSTRACT

ZULWAHYUNI NAMRULLAH. *A Kikigaki Method for Agribusiness Students' English Vocabulary Mastery (supervised by Nasmilah and Ria Rosdiana Jubhari).*

This research explores the impact of the *Kikigaki* method, an experiential learning approach on vocabulary mastery in English learning for Agribusiness, and the perceptions of first-semester Agribusiness students at Universitas Muhammadiyah Parepare, South Sulawesi. The research population consisted of 15 students with diverse ethnic backgrounds, including Buginese, Pattinjonese, and Durinese. The entire population of the first-semester Agribusiness students was included as the research sample using a saturation sampling method. The study employed a mixed-method design (Quan-qual model), combining pre-experimental quantitative approaches with qualitative data collection through questionnaires and interviews. The quantitative component used a one-group pretest-posttest design to assess vocabulary mastery, while interviews and questionnaires were used to detail quantitative findings. The research involved outdoor activities in villages in the Ajatappareng region, emphasizing experiential learning in the context of agriculture. The results indicated a very positive shift in vocabulary performance, with students expressing satisfaction and engagement with the *Kikigaki* method. However, the statistical significance of the observed changes required careful interpretation. Despite an increase in the mean score, statistically, there was insufficient evidence to accept H_1 . Consequently, H_0 is accepted. Overall, the *Kikigaki* method has proven valuable in enhancing vocabulary mastery, providing meaningful learning experiences related to agriculture through local wisdom, and enriching the learning experience for Agribusiness students.

Keywords: experiential learning, *kikigaki* method, vocabulary mastery, agricultural experience, local wisdom, ESP



ABSTRAK

ZULWAHYUNI NAMRULLAH. *Metode Kikigaki untuk Penguasaan Kosakata Mahasiswa Agribisnis* (dibimbing oleh Nasmilah dan Ria Rosdiana Jubhari).

Penelitian ini mengeksplorasi dampak metode Kikigaki dengan pendekatan pembelajaran eksperimental terhadap penguasaan kosakata pada pembelajaran bahasa Inggris untuk Agribisnis dan persepsi mahasiswa Agribisnis semester pertama di Universitas Muhammadiyah Parepare, Sulawesi Selatan. Populasi penelitian terdiri dari lima belas mahasiswa dengan latar belakang etnis yang beragam, termasuk Bugis, Pattinje, dan Duri. Dengan menerapkan metode penyampelan saturasi, seluruh populasi mahasiswa Agribisnis semester pertama diikutsertakan sebagai sampel penelitian. Penelitian menggunakan desain metode campuran (kuantitatif dan kualitatif), menggabungkan pendekatan kuantitatif preeksperimental dengan pengumpulan data kualitatif melalui kuesioner dan wawancara. Komponen kuantitatif menggunakan desain pra uji-pasca uji satu kelompok untuk menilai penguasaan kosakata, sedangkan wawancara dan kuesioner digunakan untuk merinci temuan kuantitatif. Penelitian melibatkan kegiatan di luar ruangan di desa-desa di wilayah Ajatappareng dengan menekankan pembelajaran eksperiensial dalam konteks pertanian. Hasil penelitian menunjukkan pergeseran positif dalam kinerja kosakata dengan mahasiswa menyatakan kepuasan dan keterlibatan dengan metode **kikigaki**. Namun, signifikansi statistik dalam perubahan yang diamati memerlukan Interpretasi dengan hati-hati. Meskipun terdapat peningkatan pada nilai rata-rata, secara statistik tidak terdapat cukup bukti untuk menerima H_1 sehingga H_0 diterima. Secara keseluruhan, metode **kikigaki** terbukti bermanfaat dalam meningkatkan penguasaan kosakata; memberikan pengalaman belajar yang bermakna terkait dengan pertanian melalui kearifan lokal; dan memperkaya pengalaman belajar bagi mahasiswa Agribisnis.

Kata kunci: pembelajaran berbasis pengalaman, metode kikigaki, penguasaan kosakata, pengalaman pertanian, kearifan lokal, ESP



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CHAPTER I

INTRODUCTION

This chapter consists of the background, problem statements, objectives, significance of the research, and scope of the research.

1.1 Background

Over time, human skills must be consistently upgraded to keep up with existing developments. The twenty-first century is known as the era of the industrial and knowledge ages, where all life components and skills need to be fulfilled by self-acustoming based on knowledge awareness (Mardhyiah et al., 2021). In general, twenty-first-century skills that teachers and students must possess are the skills to explore knowledge or literacy skills, life skills which include life and occupation skills, learning and innovation skills, and information and technology skills, which are specifically spelled out and abbreviated into 4C concept include Critical Thinking and Problem-Solving, Creativity and Innovation, Collaboration, and Communication (Astuti et al., 2019). Students should possess, at a minimum, all the essential components of twenty-first-century skills in order to apply them in their daily lives and make a positive impact on their surroundings, particularly for those students whose fields are interconnected with the community or society.

Significant changes are occurring in every sector, including education, information, and technology. While the positive impacts of Covid-19 have highlighted the importance of knowledge and technology-based learning in Indonesia, it is crucial not to overlook the need for character strengthening as outlined in the Indonesian Curriculum. This approach aligns with the demands of Twenty-first-century skills and ensures a comprehensive education system that prepares students for the challenges of the modern world. The learning method also needs to foster the students to have at least four elements of 4C to face the dynamic and unpredictable world (Astuti et al., 2019). Digital-based learning by utilizing existing technology is an evolution of culture from year to year which aims to adapt to the needs of existing conditions. However, the teacher-center approach used during digital or direct learning is more focused on the class situation, and learning the theory from the text or electronic book implemented during the

language class is not adequate in activating the students' motivation, construction, and absorption of the knowledge (Hung, 2019).

In addition, implementing online learning during a pandemic is challenging to students from every aspect of the learning process, including connectivity, poor interaction, less motivation, less participation, and less understanding (Zboun & Farrah, 2021). Another research also supported that face-to-face learning is still better; after all, the printed material is appropriate for learning and taking notes, and social distance unstimulated them in studying the language (Klimova, 2021). Alternatively, integrating technology into the learning process and leveraging it to explore social contexts, especially pertinent to students' specific majors in language learning, in real-world or authentic situations can be suggested as a method to infuse vitality into language classes in this century while also fostering the acquisition of the 4C skills.

The current national Curriculum known as the *Kurikulum Merdeka*, which was established by the Ministry of Education, Culture, Research, and Technology after previously using the Prototype Curriculum, demands that the educational institution does not deviate from the noble values of the Indonesian Nation. As mentioned by *Pusat Kurikulum dan Pembelajaran* (2021), the key features of the Kurikulum Merdeka include a project-based learning approach aimed at fostering students' soft skills and nurturing their Indonesian identity, a focus on essential content, and flexibility for teachers to adapt class organization to suit local contexts and content. As a result, Indonesia, with its rich cultural heritage, stands to gain significant advantages from these principles. This approach ensures that learning experiences are more closely aligned with students' daily lives beyond the classroom, preparing them for participation in Society 5.0 as members of the twenty-first century generation.

Knowing as a concept that focuses more on humans, Society 5.0 also requires some skills to deal with human interaction. Hence, twenty-first-century learning requires that educational institutions consider the connection between what is learned in school and the outside world to motivate and inspire students to do their best in education (Kuhlthatu et al., 2015). For students not majoring in English, English materials should be tailored to their specific academic needs. Hence, teachers must develop materials and teaching approaches that cater to the requirements of both the students and the Indonesian Curriculum. Furthermore, with advancing technology, geographical boundaries are becoming less significant

as people can connect virtually. However, a common issue encountered in this scenario is the language barrier. Despite English being recognized as the universal language, proficiency in English remains a common concern in higher education, particularly among non-English majors.

As the researcher found, one of the lecturers and deputy dean of the academic field at Universitas Muhammadiyah Parepare asked to hold an English language class for agribusiness students in 2021. The request of the lecturer leads to the availability of opportunities for implementing international cooperation for agribusiness students, such as student exchange, video presentation competition, sit-in classes, international student mobility, and or other independence programs in *Merdeka Belajar Kampus Merdeka*. The necessity for English as an international language is considered important as an effort to advance student language skills to support students' careers, as well as bring a positive influence on the Agribusiness's accreditation. Nevertheless, it cannot be denied, for non-English students, material related to their majors is vital.

As a result, the preliminary observation was conducted by addressing need analysis questionnaires of English for Agribusiness subject to the 29 agribusiness students, graduates, and lecturers in Universitas Muhammadiyah Parepare in 2021 to know the actual needs of Agribusiness students. It was found that 58% of the students chose that speaking is an important skill to be learned in English for the Agribusiness subject, followed by the reading ability, as well as the importance of the involvement of real-life topics and agricultural topic to the course in speaking material. The most wanted topics in English subjects are agriculture, research and publication, local wisdom and society, technology, and communication.

Then, the essential learning methods for students are role play, outdoor learning, and using full English with their friends. Unfortunately, according to the lecturers, the students tend to have less vocabulary and are somewhat not interested in the monotonous method. It was also revealed that 45% students often have less vocabulary as the most learning problem they faced. In line with the student's response, they were required that the lecturer could provide a non-monotonous method of learning, such as the learning method that suits agribusiness life as a worker in the future to drive agricultural, livestock, fishery, and forestry production businesses in order that the intended consumers can accept them. In addition to these preliminary observations, the head of Agribusiness departments agrees that the English language is essential to the

Agribusiness students as non-English major students, not only because of their future careers but also because the current curriculum support students with various international activities to improve their capacity as undergraduate students. That is how the *Kikigaki* method from Japan is offered in ESP for Agribusiness to enrich the student's knowledge about nature, society, and culture that are attached to their majors while learning English.

The title of this research is "A *Kikigaki* Method for Agribusiness Students' English Vocabulary Mastery." *Kikigaki* is a learning method used by Japanese students to learn about the life, local-custom skills, and works of the old generation related to culture and nature, then documenting and writing the interview transcript (Yoshino, 2016). *Kikigaki* is a cultural learning method that comes from Japanese vocabulary which means listening and writing. This method is used by the Japanese government to preserve the culture that exists in Japan given the lack of population growth in recent years. In higher education learning context in this research, Indonesian students may use this method to explore the learning context, conduct mini-projects related to their disciplines, and use it as language learning material, such as learning English agricultural terms from both indoor and outdoor activity. In addition, through Merdeka Belajar, students are currently required to learn directly from experts. Therefore, in English for specific purposes, *Kikigaki* is relevant because it is in line with the needs of Agribusiness students who seek to become food pioneers while preserving nature. In its implementation, the Agribusiness students meet the needs to deepen their knowledge. Along with it, the lecturer should actively control and manage the project to avoid misperceptions about the project.

Kikigaki, which means listening and writing in its treatment application to this study, focuses on the results of the student interview process or on written works (*Gaki*) from the *Kikigaki* method. In this project, students became interviewers, and they determined their own sources to be interviewed. *Kikigaki* presents clear steps to direct students to carry out the *Kikigaki* process well, such as the stages of preparing questions, preparations that need to be made before going to the field, and how to compile the results of interview transcripts into a *Kikigaki* written work. *Kikigaki* is a bridge to learn the terms used in the field of Agribusiness through the students' own findings. Through working on the *Kikigaki* project, students used works of their project to learn and find new vocabulary to learn. Besides providing vocabulary distractions in the learning process, students

was guided to translate their work. Thus, the inquiry process can occur in the process of learning English vocabulary through their *Kikigaki*'s work.

In line with the STEAM (Science, Technology, Engineering, Arts, and Mathematics) education in language learning which allows students to explore the core goals of the world language classroom (self-inquiry, dialogue, and critical thinking) (Broderick, 2016), the *Kikigaki* method for language learning was used and expected to help agribusiness students to discover various inputs of the vocabulary of English for specific purposes related to their fields. The students could also acquire twenty-first-century skills with the disciplines they have through experiential learning to travel their major, environment, social culture, and nature. As Kang (2019) found in several meta-analyses, STEAM practices positively impacted the student's cognitive and affective ability in learning. This method proposed by the researcher aims to involve the students in meaningful learning through the self-inquiry phase, which involves the actual situation of society's culture related to agriculture. Hence, non-English major students seem to need to learn about their disciplines deeply. Therefore, the *Kikigaki* method to support STEAM Education for language learning is proposed for agribusiness students' English vocabulary mastery.

1.2 Research Questions

After discussing some problems related to the research generally in the previous section, the researcher draws the issue of the research into a simple question like the following:

- a. To what extent does the *Kikigaki* method affect Agribusiness students' vocabulary mastery?
- b. How do the Agribusiness students perceive about the *Kikigaki* method in mastering English vocabulary and enriching their agricultural awareness?

1.3 Research Objectives

Based on the problems above, the researcher draws the objective of the research to find out the following:

- a. To identify the effect of the *Kikigaki* method on Agribusiness students' vocabulary mastery.
- b. To find out the Agribusiness students' perceptions about the *Kikigaki* method in mastering English vocabulary and enriching their agricultural awareness.

1.4 Significance of The Research

It is hoped that this research can give benefit in many ways, especially in English for Specific Purposes. The study is expected to be a helpful information for higher education to develop the English language to support students' ESP vocabulary and the mastery of twenty-first-century skills. It is also hoped that the result of the research is expected to contribute to the efforts in using and involving the local custom, culture, and specific disciplines of agriculture in English learning.

Moreover, it is also expected to be used by educators who are involved directly or indirectly in the learning process. The research result can be used as an alternative method for non-English major students learning English that involves their real-life situations and disciplines. It also can familiarize the students to get involved in society and learn directly from them, increase their awareness of their disciplines in real-life, and experientially learn the language. For the researcher, it can be used as a comparative study and can enhance knowledge and experience about educational considerations as the prospective educator.

1.5 Scope of the Research

The scope of the research is focused on applied linguistics in English language teaching on exploring the effect of the *Kikigaki* method on English Vocabulary mastery of Agribusiness students in Universitas Muhammadiyah Parepare. By discipline, this research is limited to the applied linguistic field, especially in English for Specific Purposes, which discusses the teaching of the ESP subject in terms of vocabulary mastery using the *Kikigaki* method. It is also restricted to the non-English major student from Agribusiness major who learned English for Agribusiness.

This research is not limited to indoor learning, but also outdoor exploration. The basic competence of this research is about how the student can learn language from the context given, understand and explore the project to get meaningful learning by acquiring 4C skills, also how to get new terms about their specific disciplines during documentary and presentation phase to build their interest in learning English, significantly to improve their vocabulary mastery.

However, the project is restricted to the *Kikigaki* works, which means the students only learn English vocabulary from their translated work from *Gaki* process. The data collected during the project was limited in the form of written vocabulary from the students' works, which consist of students' note field that is known as *Kikigaki* works.

CHAPTER II

LITERATURE REVIEW

This part contains previous related studies, theoretical reviews, conceptual framework, and research hypothesis. The literature review provides information about specifically related studies during a particular period. The summary and the comparison are also provided in the sections below.

2.1 Previous Related Studies

Some researchers have researched the *Kikigaki* method and other similar research in environmental education, English language teaching and vocabulary mastery. However, the literature related to the *Kikigaki* or other related methods in ELT, especially for vocabulary mastery, is still limited during the last ten years. Therefore, some previous related studies found are described as follows:

First researcher, Azano (2011), led the related research about "The Possibility of Place: One Teacher's Use of Place-based Instruction for English Students in a Rural High School." It investigated how one teacher considered place in making instructional choices for eighth-grade English scholars in a countryside high school and students' insights of this teacher's place-based instruction. The research focused on students' experiences in their local wisdom of where they lived. The result of this research was the teacher used his understanding of place to activate students' previous knowledge. When the teacher used place-based content in poetry to facilitate instruction rather than his personal experience, students could construct their perceptions of place. However, the researcher also suggested that critical pedagogy must be involved in English classrooms during learning about the place. It has limited experience, which allows students to explore the social phenomena that are happening in the environment where they live.

Doganay & Yergaliyeva (2013) then directed research in finding "The Impact of Cultural-based Activities in Foreign language teaching at Intermediate (B1) level." The research was conducted in Kazakhstan to find out the attitudes of students in using cultural-based activities and tasks in classroom, as well as to figure out how they got progress and affected by the use of culture-based activities in teaching a foreign language. The researcher found that the cultural-based activities gave an effective influence on the development of learners' linguistic and

communicative competence. Since the activities were planned step by step, it could bring a successful and understandable way to students. Nevertheless, it was limited to the B1 level students in Kazakhstan which already have good prior English knowledge. The result might be different for the A1 level student in Indonesia which needs more suitable and related specific major treatment.

The other supported research was conducted by Munawir & Rafiq (2017) by the title "Mandar Culture-Based English Education." This study showed that the local culture could be a learning option for ELT. This study incorporates elements of Mandar culture in English learning with the aim that students could understand and preserve their own culture and enhance their English vocabulary. The outcome of this research maintained the previous research that applying Mandar culture in English language learning could improve the English vocabulary of language students. They also could preserve Mandar culture and increase their interest in learning English and critical thinking skills. Though, the research was limited to English Education students which may have different basic knowledge from non-English major students. It is also limited to several themes about Mandar culture, which did not allow the student to explore a broader cultural awareness toward Mandar culture.

Another supported research by Donovan (2018) entitled "Learning the Language of Home: Using Place-based Writing Practice to Help Rural Students Connect to Their Communities" aimed to investigate the impact of place-based writing practices on rural middle school students' America and the use of language to understand how those connections to their community. The result showed that place-based writing could be effectively used to supplement and enhance a standardized curriculum to better serve the needs of students in improving their writing skills. The students can also explore their identities through writing assignments informed by their living environment. However, because the research was conducted in English native speaking country, the researcher involved targeted culture to the students who want to improve their writing skills. The purpose of the study may be different for non-English major students or non-English native speaker who wants to learn English for specific purposes.

Kanoksilapatham & Channuan (2018) also explored the research titled "EFL Learners' and Teachers' Positive Attitudes towards Local Community-based Instruction." They would like to document EFL learners' and teacher's attitudes toward local community instruction in which young Thai students studied English

while being urged to take pride in their local culture. Even though the research was limited to the indirect project for elementary school students which conducted in virtual mode, the result shows that students and teachers have highly positive attitudes towards the local community-based instruction, which leads to substantial effects related to combining aspects of local cultural identity into ELT practices that support this research.

Similarly, the supported research also was led by Haerazi, Irwansyah, Juanda, & Azis (2018) about: "Incorporating Intercultural Competencies in Developing English Materials for Writing Class," which aimed to develop English materials based on intercultural language learning for writing classes. The result found that the instructional model was valuable for English department students in the writing class. The researcher was involved in several stages of the writing course, including noticing, comparing, reflecting, concluding tentatively, constructing, and presenting. The researcher used both targeted and local cultures to enrich students with various cultures and learn the difference between each culture. The use of this intercultural-based language learning for teaching writing skills was responded to positively by students. Yet, the research was aimed at English department students in writing class. It was not presented how the non-English major students could use the same method in ESP class. Since the material not involved specific material about specifically related disciplines, it cannot be used for ESP class.

Still in 2018, Wijaya Mahardika (2018) also conducted a research with title "Incorporating Local Culture in English Teaching Material for Undergraduate Students". The research was focused on Hinduism Education Department which aims to develop English material. The study found that the use of cultural familiar materials is beneficial for the students in learning process. The researcher also highlighted that the students' prior knowledge and needs are the main factors to be considered when developing teaching material. The cultural-based material is essential to non-English major students to understand the nature of their specific major, and also learn outside of classroom enable them to learn and master other skill that they will need in their future career. Nevertheless, the researcher did not provide clear information on how the material related to HED is implemented in English learning for specific skills. It is also limited to students' motivation and involvement in the learning process.

Effendi (2019) then conducted research entitled "Local Wisdom-based Environmental Education through *Kikigaki* Method: Japan Experience and Lesson for Indonesia." The research purpose was to discuss the environmental education that may be implemented in Indonesia, where Indonesia has rich local wisdom, to transfer the local wisdom from the old generation to the young generations in its implementation in Japan. According to the researcher, the *Kikigaki* method solves the problem where the local wisdom is left in the context of modern Indonesian society. Its implementation aims to promote and archive Indonesia's environmental education and local wisdom in English language learning. However, research on *the Kikigaki* method in ELT practices has not been conducted yet in Indonesia since implementing this method was only used in environmental education.

Zuchdi & Nurhadi (2019) also directed the research entitled "Culture-based teaching and learning for Indonesian as a foreign language in Yogyakarta" to investigate some cultural aspects in the practice of teaching and learning Indonesia as a foreign language. This research had figured out the lack of the use cultural-based material in Indonesian language learning in several higher education in Yogyakarta. The results show that the program management and learning implemented limited cultural-based material. As well as the learning media used, method, approaches and strategies. Even though the learning process involved cultural festival, however there was no specific assessment for cultural-based learning provided. As the result, the evaluation was not carried out to evaluate the program achievement on the aspect of cultural awareness and experiences. Even if the research not focus on ELT, but putting the cultural-based material to language learning can be an option to deepen the understanding of language, since the language is used in daily life. Due to the various local language that Indonesian have, the cultural-based material can bring difference on how the Indonesian language use in different area in Indonesia.

Salazar Jaramillo & Espejo Malagon (2019) also conducted research in rural place with title "Teaching EFL in a rural context through place-based education: Expressing our place experiences through short poems". The research aimed to explore, identify and describe the role of place-based education on fourth grade EFL students. The outcome showed that the PBE played important role to the students in rural context. The special attention to their place be a main focus for students to build confidence and enthusiasm in learning English. Even though the researcher provided books as students' learning outcome, yet the research is

limited to poem making. The active learning such as directly visited the place is not become a prior activity due to the primary level students that researcher took as object of study.

Prayati et al. (2020) led research on “Developing culture-based English instructional materials to improve students’ thinking, ELT achievement, and classroom interaction”. This research was conducted to provide students’ learning and target needs of incorporating culture-based English instructional materials in enhancing their critical thinking, ELT achievement, and classroom interaction. The researcher was involved many students and teachers to gain various data collection about students’ needs to develop cultural material. The outcome provided information that the cultural material was needed by the target learner as well as the appropriate learning approach to guide them be an autonomous learner. Thus, since the research inadequate to the exploration where the need analysis was not proceeded yet into the ELT practice or in the form of textbook to gain broader information about how the material implemented, the further research needs to be executed.

Simonenkova et al. (2021) in their research entitled “Environmental education of students of higher educational institutions” was aimed to study the impact of variable learning in the system of environmental education of agricultural university students. This research was focusing on the implementation of environmental education to Agricultural students with the result that the environmental education is considered to be a moral concern for future generation. It needs to guarantee the requirement of the professional level for future specialist which the Agricultural students need as the basis to reform and modernize higher education. However, due to the research focus on how the importance of the implementation of environmental education in Agricultural students, this research was limited to survey study which have no integration to language learning to EFL.

Meanwhile, Hikmawati & Handayani (2021) directed the research about “Developing cultural-based English textbook based on total physical response method for elementary school students” which explained that the textbook was feasible for the students. The researchers able to put Indonesian culture to the textbook which can give real experience and cognitive from what they have been through in their daily life. Despite the fact, the researchers put some notes that the book did not include multicultural perspective since the research was conducted in Bangka Island, Indonesia. In-depth analysis also was not conducted to gain

information about how the book used, and how their feelings when using it. Therefore, the research cannot represent Indonesian culture as a whole for English learning.

Permatasari & Andriyanti (2021) also led research entitled “Developing students’ intercultural communicative competence through cultural text-based teaching” which aimed to improve intercultural communicative competence of metallurgy students as they found that the cultural contents in English material was still insufficient. After conducting three-cycles of classroom action research, the result showed that there was an improvement in their intercultural communicative competence and their English skills. The learning helped students to understand the cultural differences which shown through provided pictures, mind maps, passages and videos. The cultural exploration was happening due to the discussion process related to the cultural differences. Even if the research employed digital material, the research was still restricted to classroom activities. The inquiry process was inadequate due to indirect experience.

Lastly, Akharraz (2021) with his research in finding “The impact of Project-Based learning on students’ cultural awareness” tried to measure the effect of PjBL on second-year-Baccalaureate students’ cultural awareness. The researcher found that the PjBL was useful to incorporate cultures in EFL class. Yet, since the research subject was high school students, the research was focused on exposing the students with English culture, not on a specific field. Therefore, the cultural context project used in this research was restricted.

Based on several studies about the *Kikigaki* method or similar related research to improve English skills and vocabulary mastery of students above, the researcher found that the literature on the *Kikigaki* method is still limited in its implementation to English Language Teaching practice to vocabulary learning for non-English major students. The previous research used terms like place-based, cultural-based, local community-based, local culture, intercultural competencies, project-based learning on cultural awareness, etc. which similar to the *Kikigaki* method that mainly focus on local wisdom in society. Besides, all the local-based material term used according to the previous researcher can be a good innovation for English and non-English majors to sharpen their understanding of the real-life context in society.

Some previous research above putting aspects of local cultural identity into ELT practices has a similar purpose in using cultural content in *Kikigaki*. *Kikigaki*

method itself preserves direct experience during the class project. Meanwhile, some of the previous research was restricted to the classroom activities due to the subject of their study. Since the higher education students have more chances to explore outside classroom environment, *Kikigaki* method can bring them to learn direct from environment and society. Even all the previous study also tried to use culture in their project to improve students' cultural awareness, the ELT research must be improved by combining cultural material with English specific aspects for non-English major students. The purpose is not only restricted to enhancing non-English students' English skills, but also to give them a new perspective on learning close to their daily life, specifically on their future works environment.

2.2 Theoretical Review

The researcher draws two concepts of research. They are English vocabulary mastery and the *Kikigaki* method, with some references to pertinent ideas as follows:

2.2.1. English Vocabulary Mastery

a. Defining Vocabulary

Vocabulary is the most crucial part of the language. According to Richards & W. Schmidt (2010), vocabulary is a set of lexemes in the form of single words, compound words, and idioms. Vocabulary may be defined as the list of words as a basic unit of language with its definition, but rendering to Alizadeh (2016), even though the vocabulary is known as a set of words in linguistics with several aspects, including its properties, features, meaning, grammar, written form, pronunciation, and frequency, the definition of vocabulary is more complex than what it seems. He stated that the nature of vocabulary, including all the concerns, is somehow learned by language learners (Alizadeh, 2016). This statement can be seen since, without a foundation-named vocabulary, humans cannot create various types of sentences, from simple to complex sentences, and they cannot clearly carry the message to others.

Having a rich vocabulary can minimize barriers to learning a foreign language. Afterward, humans will learn the rules for assembling words into meaningful sentences. Asyiah (2017) stated that vocabulary in a foreign language is unavoidable. The rich vocabulary will support students in learning English and its four primary skills (Listening, Reading, Writing, and Speaking). Without

sufficient vocabulary, someone will face many problems in understanding a foreign language, whether in hearing, speaking, reading, or writing.

In general, vocabulary is divided into two: oral and written (Kurniawan, 2016). Oral vocabulary is commonly used in listening and speaking, while written vocabulary is in reading and writing. Kurniawan (2016) also mentioned that the word knowledge is divided into two forms: Receptive and Productive. Receptive are the words that we can see or hear. Meanwhile, Productive words are used when we speak or write. However, this limitation is too comprehensive for non-English majors to learn even if this research is focus on vocabulary in written form. Therefore, the vocabulary mastery to ESL/EFL for non-English majors focus on their specific needs as students with particular fields of study and vocabulary in general English.

b. EFL Vocabulary Mastery

Vocabulary mastery may not be a central topic for non-English majors to focus during learning Academic English in higher education since they need to acquire four core skills in English. However, the wide range of information can be a learning source to non-English majors as an appeal to learn more about their specialization. One solution to understanding the matter is to fulfill the basic vocabulary needs of students. The total vocabulary mastered by foreign language learners (EFL) is at least less than (<) 1500 words in A1 to a maximum of 5000 at the C2 CEFR level (Milton & Alexiou, 2009). This basic vocabulary can be a concern due to the abundance of information in the English language coming as a massive wave in this twenty-first century.

EFL, especially from non-English primary students, needs at least a B1 level to acquire more detailed information on specific topics related to their future job or specialization following the standard provided by CEFR (Common European Framework of Reference). Therefore, vocabulary mastery for EFL students' needs 2750 to 3250 words to get a B1 level which can deal with various unprepared topics in spoken interaction, connecting phrases to describe an experience or narrate a story in vocal production, understand the main points of legal matters in daily activity such as in work place, write simple text on a familiar topic or personal interest, and understand the text that consists of high-frequency every day or job-related language conferring to the standard of CEFR (North et al., 2010). This statement is correlated to today's job career in the state or private institutions or companies that prefer to choose prospective workers with a minimum score of 450

to 500 on TOEFL ITP, which is equivalent to A2 to B1 CEFR level according to the TOEFL test provider, ETS (TOEFL, 2021). Nevertheless, vocabulary mastery should be learned by EFL learners starting from the essential part of the vocabulary.

c. Teaching Academic English Vocabulary

Teaching non-English major students is categorized as teaching English for a Specific purpose which aims to teach them exact English material such as daily life, traveling, or job-related material. Yafeng (2018) stated that Hutchinson and Waters first familiarized General English, and they divided it into Specific Purpose English (ESP) and General Purpose English (GE). Then, the specialized use of English results from English for Academic Purposes (EAP) and English for Occupational Purposes (EOP).

Based on historical development, the ESP (English for Specific Purposes) is subject that is related to Academic English that needs to be set up based on the specific need of the learner, while General English is instead involving English used in college life or called basic English without any particular purpose (Qian & Wang in Yafeng, 2018). Sutarsyah et al. (1994) also supported that English for Specific Purposes (ESP) prepares learners to focus on one academic discipline, area of expertise, or employment. Based on this enlightenment, the ESP in higher education (HE) focuses on academic fields related to students' majority, for instance, English for Agriculture for Agribusiness students, English for Business Management for Economic Students, or English for Nursery for Pre-School Education students, etc.

Even though Yafeng (2018) concluded that the General English and Academic English limitations are still discussed, the differentiated curriculum strategy and appropriate learning model need to be adjusted based on students' conditions. English for Specific Purposes teaching in Indonesia to ESL/EFL students should not only focus on General English. The students, especially from non-English majors as language learners, should be given specific technical vocabulary in Academic English that is related to their discipline to improve the study result.

Regarding vocabulary learning in HE, Nation & Anthony (2013) have divided the vocabulary level into high-frequency (1000–2000-word family), Mid-frequency (3000–9000-word family), and Low-frequency (10.000-on word family). The high-frequency vocabulary represents general vocabulary that commonly

appears in everyday communication, texts, and phrases that students mostly use in regular life, covering 90% of word families from spoken, TV/movies, children reading, and novels. In comparison, mid-frequency vocabulary, mostly known by adult native speakers, covers 5% of word families in various genres, and low-frequency vocabulary, which is up to 25th 1000 words, consists of a tiny portion (1-2%) of the running words in technical terms for various subject areas and words that rarely meet in the use of everyday language (I. S. P. Nation, 2022; I. S. P. Nation & Anthony, 2013). Consequently, vocabulary learning in Academic English should not only be limited to the high-frequency level but also requires mid-frequency and low-frequency vocabulary that focuses more on the specific subject area to enrich student word knowledge.

Academic words can be found in diverse types of literary texts. The well-known list of these Academic Word Lists (AWL) has been compiled by Coxhead (2000) as a solution to vocabulary learning and teaching in English for Academic Purposes (EAP). The Academic vocabulary list plays a vital role in setting mastery goals for language courses, guiding students in self-study, and forming material and learning models to adjust the text and learning activities (Coxhead, 2000). The vocabulary list can help the lecturer to select proper discipline-related vocabulary according to the student's study background.

Besides academic words, there are also technical words that contains different words from subject area to subject area. Technical terms can include high-frequency, mid-frequency, and low-frequency words that can make up 20% to 30% of the running words in the text (I. S. P. Nation, 2022). The technical words in specific fields are relevant to help ESL/EFL students cope with their discipline topic since it contains various vocabulary levels. In addition, technical vocabulary can be found in academic textbooks related to a specific subject. Meanwhile, it distinguished itself from the other textbook disciplines. That means technical terminology is mainly found in specialized text rather than outside the area. For instance: the topic of Agriculture is typically found in books about Agriculture or text related to farming, etc. Therefore, the lecturer can regulate the EAP for Agriculture material based on studying technical vocabulary from various related texts/sources.

d. Assessing Vocabulary Mastery

Language testing has many kinds of purposes, such as to assess how the learning has been through by the learners, decide the next step to be emphasized by the

teacher in further teaching, diagnose student strengths and weaknesses, progress estimation, examination preparation, and as student's picture on where the knowledge will be applied (Allison, 1999). Allison (1999:74) also mentioned various types of testing activity in the examination, such as multiple-choice, short answer, fill-in-the-blank, oral-interview, discussion, and computer-based tests. In addition, for evaluation procedures, there are pre- and post-testing, experimental and control group comparisons, questionnaires, interviews, feedbacks meeting, classroom observation, portfolios of work, profiles of students' abilities, teacher's diaries, student's diaries, follow-up studies, and others. These models of language testing can be adjusted based on the need of the evaluator.

Before coming to the vocabulary assessment, the crucial thing should be known before giving the test that behind all different kinds of tests given in conducting the testing activity, the reliability, validity, and usefulness must be clarified to fulfill the standard of good assessment. Allison (1999:85) explained that reliability is focused on the accuracy and trustworthiness of the test result, the idea of validity concerns measuring if the test is relevant to the issues, and usefulness means the test given has a purpose, whether the test or the result of the test. In conclusion, regarding the testing activity, to achieve the core value of good assessment, the teacher or lecturer needs to focus on the item difficulty and students' ability. The test's reliability, validity, and usefulness will be adequate if the test is fair to the students.

Concerning the vocabulary assessment, P. Nation & Beglar (2007) developed a Vocabulary Size Test that can measure native and non-native speakers' vocabulary with word references up to the 25th 1000-word family lists from the British National Corpus (BNC). The test is developed based on excellent assessment criteria by utilizing 1st 1000 to the 14th 1000 word families of English, which aims to measure how much the vocabulary learners know—differing from another Vocabulary test which represents only a high-frequency word list, the VST by Nation consisting an Academic Word list from a high-frequency to low-frequency word list that involves a wide range (P. Nation & Beglar, 2007). In addition, the model of the VST displays multiple choice, which makes it easier for the test-takers to choose the answer. Besides, they also differ in the test for the native and non-native speakers from the difficulty level of the word list used.

However, the test model by Nation was developed by Webb et al. (2017) by using an advanced multiple-choice model in a table, known as the updated

version. The updated version, called Vocabulary Level Test, is developed by utilizing three number points of the question with six similar multiple-choice in the same table. Each 1000-word list consists of 10 multiple-choice tables with 30 questions to 5000 vocabulary level. Webb et al. (2017) developed and validated the new forms of VLT to provide a valid and reliable measure of linguistic knowledge.

Interpreting the test result is a set of packages that Nation also explains. In the Nation's version, 140 total items the students have answered need to be multiplied by 100 to find the total vocabulary size (P. Nation & Beglar, 2007). For instance, when students get a 25 score out of 140 means their vocabulary size is in 2.500-word families. The results was adjusted to the most vocabulary level students can answer, whether they are at high-, mid-, or low-frequency levels. However, Webb et al. (2017) proposed that the mastery score for each level (from 1000-3000) must get 26 correct answers from 30 questions to proceed to the next level, while levels 4000-5000 must get 24/30. The higher score in levels 1000-3000 is determined in a great value since the levels consist of frequent word families. Then, if the score is classified as lower than the determined score, the learner should focus on further learning before proceeding to the next level.

2.2.2. *Kikigaki* Method

a. Post Covid Learning Method

The learning method is a normal process by educators in conveying material to their students. Agreed to Munawaroh (2020), remembering information is not enough to understand the information. It needs to be applied. Therefore, students not only comprehend the theory but are also involved in using their knowledge in daily practice. The learning method is expected to help students understand the material provided so that learning does not seem monotonous and one-way. However, before delving further into the *Kikigaki* method, it should be noted that the appropriate method is a vital part that influences student learning in the learning process.

Taking an example of the new era of learning that emerged during the Covid-19 pandemic forced teaching staff and researchers to sort out the types of practical learning methods to apply. However, online education is considered less effective in its implementation based on some students' perspectives because of limited interaction (Hamid et al., 2020). Although the results obtained can be categorized as good, the correlation with the learning outcomes achieved by

students is very low. As a result, the transition period results in increased stress, anxiety, and difficulty concentrating for students (Lemay et al., 2021; Sesmiarni et al., 2021).

From this study, former researchers courage that there should be better planning for online learning, and teachers or lecturers should take more into the social and affective dimensions (Khan et al., 2021; Lemay et al., 2021; Nikou, 2022). Consequently, educational institutions and policymakers need to bring the online learning process to a better level for post covid implementation. Concerning this matter, since limited interaction is not enough to help students acquire knowledge, the combination of both online and offline learning can be a consideration to maximize the learning output of students and also enrich students with social and affective experiences.

b. What is *Kikigaki* Method?

Understanding blending online and offline learning will support comprehension of how this modified *Kikigaki* method worked in the classroom and social setting. *Kikigaki* is a Japanese language consisting of two words: '*kiki*' (listening) and '*gaki*' (writing). As stated by Yoshino (2016), the Executive Director of the *Kyouzon-no-Mori Network*, *Kikigaki* is a method to explore and document someone's life journey through direct discussion. Also described in a book compiled by the *Kyouzon-no-Mori Network* (2016), which implemented the "*Kikigaki Koshien*" program in Japan, *Kikigaki* is a program that the Japanese Ministry of Agriculture routinely carries out, Forestry and Fisheries by selecting around 100 *meijin* (Japanese older generations who protect and pass on local wisdom to the next generation) as source person. The *meijin* mainly works as a farmer, craftsman, or fisherman, utilizing natural resources like forests, paddy fields, and the sea to live. However, the utilization is not simply working as it is. The *meijin* also puts local wisdom in managing the fields, forest, and marine products to conserve nature as a continuity process. Then, the students learned about this from them.

The program was implemented in 2002 in Japan, followed by 100 high school students, and supported by state and private institutions. The students learned from *meijin* about their customs, life, and work and then document it in *Kikigaki's* work manuscript (Kyouzon no Mori Network, 2016). The program is dedicated to the old generation for a reason. The Japanese government paid attention to the program since the Japanese are facing a decline in inhabitants in Japanese rural areas. Besides being caused by persistently low fertility, the

modern era also attracts young Japanese to slow living from villages to cities to pursue better careers since 1960 (Nursari & Fitri, 2017; Tsuya, 2022). As a result, Japanese towns are in danger of disappearing due to the lack of population since the remaining people in the rural area live only with the old generation.

Similarly, in Indonesia, massive changes have also occurred in village communities. Drastic lifestyle changes cause the rapid flow of urbanization. Natural resources on which life depends are experiencing severe problems. As a result, this has directed to the uprooting cultural roots, customs, and regional languages closely related to natural resource-based traditional life (Yoshino, 2016). Finally, the *Kikigaki* program was adopted in Indonesia through its implementation at Kornita High School, Bogor Agricultural Institute, Indonesia.

c. *Kikigaki* Method as an Experiential Learning

The application of the *Kikigaki* program in learning in Indonesia is still infrequent in the existing literature. However, teachers in Indonesia may carry out culture and nature-based learning. They only use different terms, for example, local-based study. The *Kikigaki* method in Japan is widely applied in research and academic fields, especially in ethnology, sociology, and education (Yoshino, 2016). The *Kikigaki* participants visited various sources (*meijin*) who are generally from the older generation and live in rural areas. They interviewed the source person regarding work related to using land, forest, river, and sea resources. The *meijin* job is not limited to farmers or fishermen. They could be tree planters, charcoal craftsmen, paper makers, and weavers whose jobs depend on the availability of natural products.

The *Kikigaki* method can be considered experiential learning since it involves students in indoor and outdoor exploration. Experiential learning is where the students get involved, engaged, and active in the process (Munge et al., 2018). According to Morris (2019), the fascinating thing about learning is experience; that life experience is a vital and essential part of the learning process. Agree with the idea there is a relationship between learning, experiment, and transformative capacity in experiential learning. Understanding the mechanism of the experimental process, the growing literature is now focusing on the field (Beukers & Bertolini, 2021). Experiential learning was introduced by Kolb (1984) with four learning cycle models (Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation) as in figure 2.1.

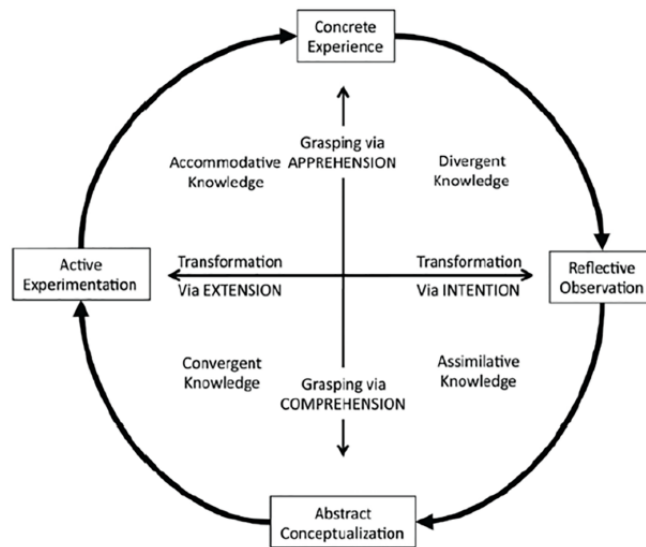


Figure 2.1 Experiential Learning cycle by Kolb (1984)

However, associated with Kolb's theory, Morris (2019) stated that the Concrete Experience in Kolb's theory is still confusing since Kolb did not give an explicit limitation of what is meant by 'Concrete Experience.' The substantial experience might be listening to a lecture or reading a book, but some educators did not consider this activity. Morris's (2019) confusion is answered through his research. He tried to explain that experience is when learners attend physically, collaborate with others, engage socially, and present at the moment the contextual learning environment happens. The vital thing in treating the learning process physically is that the students participate in the learning process, making interaction and eye contact and allowing them to think deeply and critically about the situation. The importance of presenting events as experiences in learning is to facilitate students in what they are looking for and, at the same time to help them reflect on the causal components associated with the natural world (Rahardjo, 2018).

Furthermore, Smith & Segbers (2018) also supposed that attending the various cultural background environment can teach students to learn from and live with others to assist them in appreciating different cultures. Thus, the community engagement that is happening through the *Kikigaki* method is a process of experiential learning where the students engage in the social context, learn from the source person's daily life directly through observation, interview, listening to *meijin's* story, feel the natural sensation of where they live and work, then they make documentation about the project.

The *Kikigaki* method consists of four steps (Yoshino, 2016) they are *Preparation*, where the students find a *meijin* to be interviewed, arrange the schedule, find general information about them, make a list of interview questions, and prepare the interview tools such as recorder, battery, camera, and notes. The second is about the *Interview Day*; this process take some time for the student to plan the interview and arrange the place and time. After having a deal, the interview is conducted using the list of prepared questions to collect the information. The third part is *writing a transcript and interview results*. In this process, the student utilizes the interview recording and learn how to select the information from the interview section to create a relevant result of their *Kikigaki*'s work. The last step would be *finalization*. After finishing the interview transcript and summary, they learn to arrange the text structure, write it chronologically, and choose the best word to modify into an exciting work. All the challenging processes in the *Kikigaki* method ensure students think deeply about how all the procedures is conducted and documented, which make sure they learn by doing.

d. *Kikigaki* Method Relevancy to the 21st Century in Supporting STEAM Education

Looking at the 4C soft-skill needs in the 21st century; the *Kikigaki* method can be said to be relevant to meeting this need. The 4C is the abbreviation of Critical Thinking and Problem Solving, Creativity and Innovative Skills, Collaboration, and Communication skills (Triana et al., 2020) which is expected to be possessed by 21st-century individuals. In the 21st century, the *Kikigaki* method provides a relevant project to meet the 4C skills. Although the *Kikigaki* method fundamentally presents phases that are carried out directly in the field, this method may be modified according to the involvement of technology without eliminating the natural stages. Consequently, the *Kikigaki* method can involve a broader mix of skills in its application rather than just focusing on one particular topic or skill.

In supporting the STEAM education in language learning, the *Kikigaki* method also fulfills the goals since most of the essential subjects in Agriculture are related to the STEAM subject. STEAM itself is an abbreviation of an didactic method to learning that apply Science, Technology, Engineering, Arts, and Mathematics as entree points for controlling student inquiry, dialogue, and critical thinking (Broderick, 2016). There is only a STEM term before putting "A" for "Arts" in STEAM until the world language educators feel that the Humanities are disadvantaged. Arts in STEAM believed as the right move to make language

learning better and more inclusive. Broderick (2016) also added that the STEAM classroom is naturally student-centered since it focuses on project-based and hands-on learning. Hence, the STEAM subject is trying to facilitate learners in the mastery of scientific content related to their major while focusing on language literacy and proficiency, but not limited to developing the necessary skills to understand the scientific experiences and form solutions to problems as the expected future skill (Sultana et al., 2021).

In its practice, all 4C skills is involved in preparing the project plans for its finalization. Students is directly involved with the community, look for sources that fit the criteria, and can be invited to collaborate. Indirectly, Critical thinking and problem-solving skills is used at this stage. Meanwhile, problem-solving is a significant component of the STEAM approach (Broderick, 2016). Triana et al. (2020) also found that STEM-Project Based Learning is increasing students' critical thinking because the project connects the student to real-world situation where they can learn and involve. In compiling the list of interview questions, creative and innovative processes are also used. How students can provide relevant questions to consent, train students to be able to dig up more specific information, and prepare students' abilities to explore new, unexpected things out of the plan. Student creativity can be developed because they learn to imagine how the activity is carried out and find some ideas to provide the solution when the problem arises (Triana et al., 2020). Tortuously, in this process, students collaborate with resource persons, local residents, lecturer as a facilitator, and their classmates which involve communication skills so that the information hunted is right on board. As the outcome, *Kikigaki* method is a possible answer to acquire 4C skills in supporting STEAM education.

2.3 Conceptual Framework

The conceptual framework is provided by the figure below:

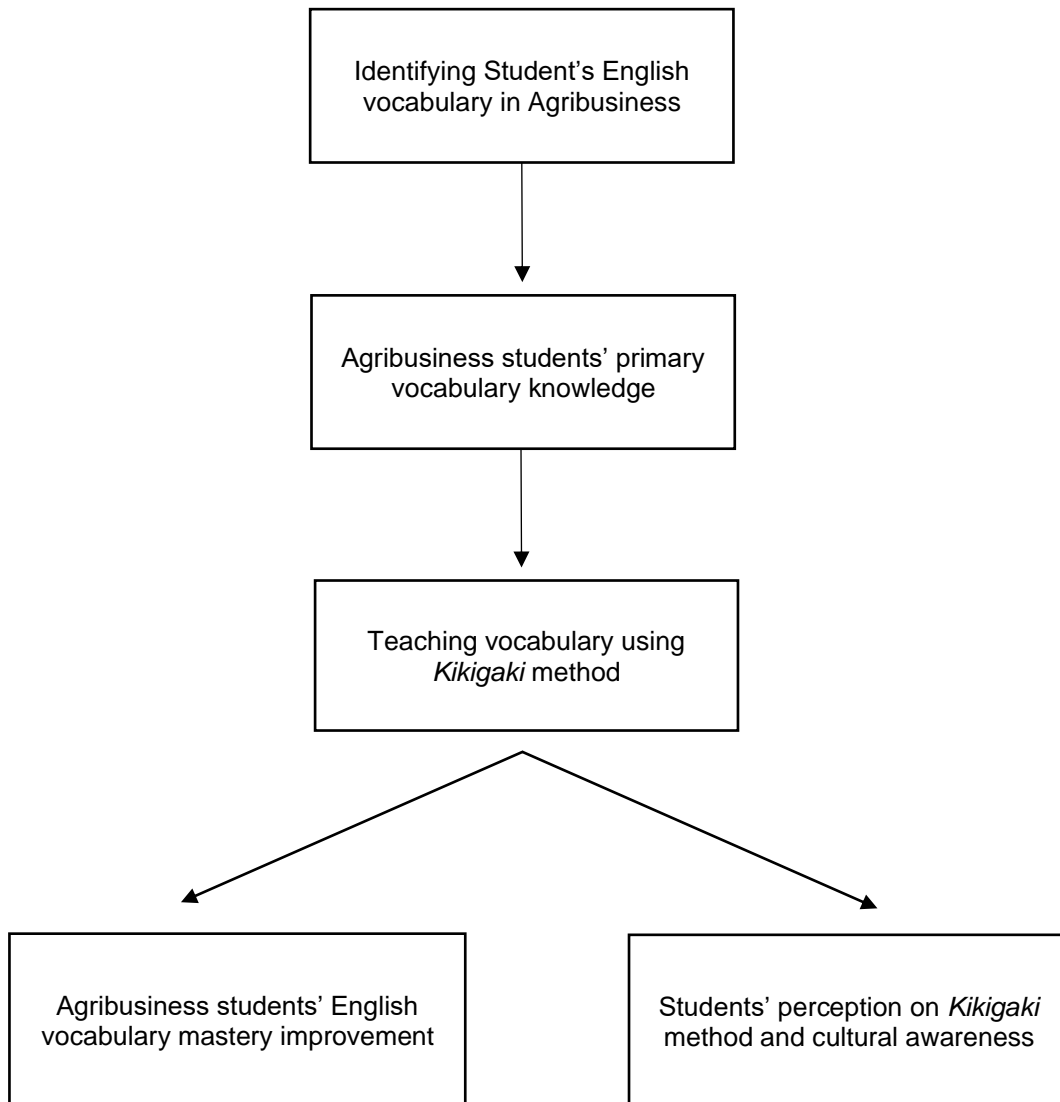


Figure 2.2 Conceptual Framework

In this conceptual framework, the vocabulary mastery of Agribusiness students is expected to enhance with the *Kikigaki* method. In the input section, the researcher determined students' prior knowledge by analyzing their needs. After that, the test and material were arranged and adjusted based on their need analysis answer. In the process section, the altered vocabulary material was given to the students by introducing parts of speech and learning to categorize each word. The *Kikigaki* method was also introduced to them, including the steps of conducting the project and the benefit of the project for their future. Then, the

student was given a specific context related to their grounds through a project which involves them in 4C skills, self-inquiry, and other self-soft skills. They learned to examine the source person (*meijin*), managed the interview, created creative writing from the project as documentation of *Kikigaki* work and learned to categorize the introductory word class (noun, verb, adjective) from their work. The ability to manage the project given make language learning meaningful and interactive for students.

The output was presented through a sharing session that performs a project compilation video. The *Kikigaki* method's effect on student's vocabulary mastery was examined after conducting the process. The *Kikigaki* method was expected to improve student's vocabulary mastery also familiarize students with agricultural terms to increase their cultural awareness. It is also hoped that the students enjoy the learning process to maximize the output.

2.4 Research Hypothesis

Based on previous related findings, theoretical reviews, and conceptual framework, the research formulated two hypotheses as follows:

H₀: there is no significant improvement in Agribusiness students' vocabulary mastery after being taught using the *Kikigaki* method.

H₁: there is a significant improvement in Agribusiness students' vocabulary mastery after being taught using the *Kikigaki* method.