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Inquiry Learning Model to Develop Students' Learning Outcomes of English for Nursing Subject

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Abstract – The aim of the research is to improve the learning outcomes of students in the D III nursing study program at Akper Kesdam I/BB Padang in the English for Nursing course, especially in understanding the main idea of a reading source by using Inquiry learning. This type of research is classroom action research which aims to increase activity and ability to find the main idea of a paragraph through the application of inquiry methods in understanding reading material. Data collection was carried out by conducting observations, interviews, filling out check list sheets, and competency tests. The research was carried out in the odd semester of the 2022-2023 academic year. The research subjects were 41 nursing study program students who were taking the English for Nursing course. Each action taken in learning to read is recorded by the collaborator in a field note. During the action, student activities are always monitored and scored according to specified criteria. Meanwhile, to determine students' ability to find the main idea of a paragraph, a competency test was carried out. The results of this research showed that by applying the inquiry method in learning to read, there was an increase in activity and the ability to find the main idea of the paragraph. In pre-action learning, only 13 students (31.3%) had completed their learning, increasing to 29 students (70.73) in cycle I, and increasing again to 39 students (95.12%) in cycle II. Based on the results of this research, it was concluded that using Inquiry learning can improve English Learning Results. The implication of this research is that the Inquiry Method can not only be used as a way to improve English Learning Results but also helps students easily understand the main information from a reading.

Keywords: Inquiry model learning, learning outcomes, English for Nursing

1. INTRODUCTION

Entering the era of globalization or better known as the free market requires every individual has to prepare reliable resources, especially in the field of science and technology. In order to master technology well, adequate knowledge is needed so that we can utilize it in facing the demands of a global world that requires competition. It also cannot be denied that in this era the role of English is very necessary both in mastering communication technology and in interacting directly. As a means of global communication, English has a very strategic role in achieving career success. Therefore, the world of education, especially health universities, is competing to integrate the academic abilities of its students with English language skills.

In the current era of globalization, mastery of English is very important for nursing students. This is because being a nurse is a job that is closely related to global health services which results in many reasons that can be put forward why nurses must have English language skills. Mauraren (2015) claimed at least there are the first reason is, because English has become the lingua franca in the world of global health. A lot of literature, research, and nursing practice guidelines have been published in English, so nurses must be able to read and understand these sources in order to improve nursing practice. Second, effective communication with patients, families, and other health workers from a variety of cultural backgrounds is essential for success in nursing practice. Good English language skills enable nurses to establish better interactions and provide more holistic services. Third, along with developments in health technology, nurses must also be able to operate medical equipment, search for information, and document nursing care in English. Mastery of English is becoming increasingly important in facing the increasingly high demands of nursing professionalism. Therefore, English courses for nursing students play a vital role in preparing graduates who are competent and can compete in the era of globalization. Comprehensive and applicable learning is the key to developing the English language competencies needed in nursing practice.

The Kesdam I/BB Padang Nursing Academy as one of the health colleges with a nursing science study program has placed English as a mandatory skill that must be mastered by its students. The educational pattern at the Kesdam I/BB Padang Nursing Academy always prioritizes the importance of mastering English as an international language that must be mastered by students, so that in the future it is hoped that graduates of the Kesdam I/BB Padang Nursing Academy will be able to become professional nurses who are capable of global competitiveness. However, in reality, nursing students still often find obstacles in mastering English. Not achieving the Minimum Completion Criteria (KKM) is an indicator of low English language skills among nursing students. Not to mention that the lack of precise application of learning methods is also one of the factors causing this, apart from other factors, for example the lack of opportunities to repeat material due to limited face-to-face time and limited feedback services so that nursing students know their needs. Meanwhile, the ideal conditions for the results of a learning process are effectiveness, efficiency and good attractiveness.

One important thing to highlight in improving the quality of education in health colleges is regarding facilities and infrastructure in the form of learning modules, especially those concerning nursing English. The author views that modules are a very

important tool in the smooth running of a learning process because with modules the learning process is expected to run more focused and learning objectives can be achieved. To learn English subjects not only by providing facts and concepts, but students need to be trained to find these facts and concepts. Students not only know facts, concepts or principles, but are also skilled at applying their knowledge in dealing with problems in life and technology, this can improve students' process skills. One type of learning that provides experience and student involvement is inquiry learning because in inquiry students are required to carry out activities, observe, analyze and draw conclusions from the activities being observed. This means that the inquiry learning method provides opportunities for students to gain experience investigating problems themselves using skills that are in accordance with the scientific method.

Basically, inquiry comes from English, namely inquiry, which is defined as the process of asking questions and finding out answers to the scientific questions that are asked. Scientific questions are questions that can lead to investigative activities regarding the object of the question. In other words, inquiry is a process of obtaining and obtaining information by conducting observations and/or experiments to find answers or solve problems to questions or problem formulations using critical and logical thinking skills. Guided inquiry is usually used especially for students who do not have experience learning with an inquiry approach. The guided inquiry method is an inquiry learning model in which the teacher provides quite extensive guidance or instructions to students and most of the planning is made by the teacher, including problem formulation activities. Students carry out experimental activities to discover concepts or principles that have been established by the teacher one of the aims of which is to improve learning outcomes. The result of learning is that if someone has learned, behavior will occur in that person, for example from not knowing to knowing, and from not understanding to understanding. Behavior here has two subjective elements and a motoric element. Hamalik (2011) stated that the subjective element is the spiritual element while the motoric element is the physical element. Learning outcomes can be explained by understanding the two words that form them, namely results and learning. The definition of result (product) refers to an acquisition resulting from carrying out an activity or process which results in functional changes in input. Learning outcomes are things that can be viewed from two sides, namely the student's side and the teacher's side. From the student's perspective, learning outcomes are a better level of mental development compared to before studying, it is because the inquiry method can develop students' thinking skills, so students are required to be active in solving problems (Guo et al., 2021). In addition, the application of the discussion method is expected to be able to actively involve students and provide meaningful experiences for students so that learning objectives can be achieved well. In addition, students are able to implement the material learned in class into their daily activities.

Inquiry learning is a student-centered learning approach, where students are encouraged to be actively involved in the learning process through inquiry, exploration and discovery activities. This method emphasizes developing critical thinking abilities, problem solving, and scientific skills. In the inquiry learning approach, the teacher acts as a facilitator who guides and supports students during the learning process. Students are

given the opportunity to formulate questions, design investigations, collect and analyze data, and draw conclusions based on the evidence found. With the inquiry method, it is hoped that students will be able to discover concepts independently and be able to have science process skills. However, a very common problem is students' lack of interest in participating in the teaching and learning process. Especially English subjects because learning only uses conventional learning which has a tendency to be monotonous. Thus, students are less skilled in finding knowledge or information on their own and most students in taking lessons lack an active role so it is difficult to grasp the lesson material. In addition, students have the opportunity to construct their understanding of the material taught through inquiry learning so that in the end it will improve student learning outcomes. so that it will give rise to attitudes and actions that involve all students' abilities in searching and investigating systematically, critically, logically, analytically, so that they can formulate their own findings with full confidence.

In the Guided Inquiry type, the teacher's position in carrying out the learning process is very large. The teacher's function is to determine the topic that will be discussed or carried out, outline questions related to the topic that will be investigated, determine the steps or stages that will be carried out by students or learners, so that they then guide students in analyzing the data, provides worksheets for students and helps make conclusions. Meanwhile, for Open Inquiry, the teacher only acts as a facilitator in the learning process, as far as the student or learners wish. Then students or students are given the freedom and initiative to think about how to overcome the problems they face. By implementing Inquiry Learning, learning English for Nursing can include developing English language skills, mastering nursing content, as well as improving critical thinking and problem-solving abilities (Cheng et al., 2017). This can prepare nursing students to face the complex communication and academic challenges of global nursing practice.

Learning English for nursing students has unique challenges. In addition to developing general English language skills, students also need to master medical terminology, professional communication, and academic skills specific to the field of nursing (Basturkmen & Bocanegra-Valle, 2018). In dealing with this complexity, a learner-centered learning approach, such as Inquiry Learning, can be an effective solution. Inquiry Learning is a learning approach that encourages students to be actively involved in the learning process through asking questions, exploring and constructing knowledge independently (Aribawati et al., 2018). This approach is in line with the characteristics of nursing students who tend to be more proactive and have high motivation to learn (Nurfuadi & Farihah, 2020).

In general, these studies show that the implementation of Inquiry Learning in nursing students can improve critical thinking skills, application of the nursing process, understanding of concepts, and communication skills. Through the inquiry stage, nursing students are actively involved in the learning process and develop their professional competencies. The inquiry learning approach has proven to be effective in increasing student engagement and learning motivation, as well as developing critical thinking and problem solving abilities. By implementing inquiry learning, teachers can facilitate more meaningful learning and encourage students to become active and independent learners.

The application of Inquiry Learning to English language learning for nursing students can provide significant benefits. Here are some examples of implementation:

1. Medical Vocabulary Learning
 - a. Students can carry out investigations to identify medical vocabulary that is often used in nursing practice.
 - b. By searching for information from various sources, students can understand the context of use and meaning of the vocabulary.
 - c. Exploration and experimentation activities can help students remember and apply medical vocabulary in communication.
2. Learning to Read Medical Texts
 - a. Students may be provided with medical texts in English (e.g., case reports, procedures, or treatment guides).
 - b. With the Inquiry Learning approach, students can formulate questions, search for information, and analyze the contents of the text to understand the nursing concepts contained therein.
 - c. Discussion and presentation activities can facilitate students in practicing reading skills and discussing medical topics in English.
3. Communication Learning in Nursing Practice
 - a. Students can carry out simulations or case studies related to communication situations in nursing practice, for example when conducting patient assessments, providing education, or consulting with the medical team.
 - b. With the Inquiry Learning approach, students can design communication strategies, try various sentences in English, and reflect on the effectiveness of their communication.
 - c. This activity can improve students' verbal and non-verbal communication skills in the context of nursing practice.
4. Learning to Write Medical Documents
 - a. Students may be given assignments to write medical documents in English, such as nursing care reports or treatment plans.
 - b. Through the Inquiry Learning approach, students can examine the structure, writing style, and conventions that apply in writing medical documents.

This activity can help students develop effective writing skills in the context of the nursing profession.

2. METHODOLOGY

This type of research was classroom action research or classroom action research referring to the action research model developed by Kemmis and Mc. Taggart (1998, p.10), this research was carried out in four main stages, namely: plan (planning), act (action), observe (observation), and reflect (reflection) in the first cycle and second cycle. Research activities began with initial observations to obtain initial data regarding student activities when learning to read and the level of students' ability to find the main idea of a paragraph. The research subjects were third semester students of the Kesdam I/BB Padang Nursing Academy, consisting of 41 students.

The data collected in this research was qualitative data which was strengthened by quantitative data. Quantitative data was obtained through the results of tests carried out by students at the beginning of the research and at the end of each cycle, while the qualitative data in this classroom action research were in the form of sentences that described the activities of lecturers and students, as well as situations that occurred in learning. Qualitative data collection was carried out by carrying out several activities, namely: (1) observation to collect data in the form of student activities during reading lessons, both before the action and during the action. Other things that were also observed were a number of lecturers' actions in learning to read before and during the action, whether they had applied the inquiry method or not, (2) the check list given to fellow lecturers was used as an effort to strengthen the accuracy of initial research estimates, whether the lecturers had not used the inquiry method in learning to read or already., then a checklist for students before and after the action which is useful for obtaining data regarding the level of student activity in learning activities and students' opinions regarding learning to read before and after applying the inquiry method, (3) field notes (field notes) which are contains situations and conditions that occur during learning so that lecturers can carry out self-reflection, (4) interviews with fellow lecturers.

The data obtained can be used as a source of data regarding lecturers' knowledge of inquiry methods and the extent to which reading comprehension learning has been implemented, (5) documentation in the form of field notes, photos and videos containing events in learning, (6) competency tests to find ideas main paragraph. The competency test was carried out before the action, at the end of cycle 1, and at the end of cycle 2. The question material in the reading competency test to find the main idea of the paragraph includes: (1) questions related to the ability to find the main sentence and main idea. The ability to differentiate the main sentence from the main idea is very important because so far students still often equate the main idea with the main sentence, (2) questions related to general understanding of the main idea and matters related to the main idea. This understanding was obtained after students experience the process of thinking, innovating, and the process of trying to find the main idea, (3) questions that aim to measure students' ability to write paragraphs with variations of questions about writing paragraphs based on the main sentence and main idea that have been determined and writing paragraphs based on the main idea. from the students themselves. In this case, reading comprehension skills are combined with writing skills with the aim of knowing and ensuring that students really understand what is being taught.

In this research, data analysis was carried out using two types of analysis, namely: qualitative data analysis which was needed to describe the classroom atmosphere that has implemented the inquiry method. Data was obtained by observation and asking for opinions from both students and collaborators. Therefor, data analysis was carried out in several steps by identifying various things in the data, seeing patterns, and making interpretations. The qualitative data in this research describes expressions of student behavior, the views of students and collaborators as well as students' ability to read and understand to find the main idea of the paragraph. Data presentation was carried out by describing data that has been clarified according to the main problem. Conclusions were drawn at the final stage, (2) quantitative data analysis is used to provide an overview of

the progress of learning in the classroom and to see the development of activities and the value of student learning outcomes. This quantitative data was analyzed using quantitative descriptive analysis. Quantitative data obtained through initial tests and competency tests collected in each cycle were analyzed descriptively to determine the mean and percentage of learning outcomes at the end of each cycle.

3. RESULTS

a. Cycle I

The action in the first meeting of cycle I was a process of exploration as well as familiarizing the students with inquiry methods. Students who are accustomed to learning to read using the lecture method will begin to be introduced to and accustomed to learning using learning that applies the inquiry method. Furthermore, the actions in the second meeting of cycle I were a continuation of the actions of the first meeting of cycle I. Before implementing the first cycle actions, planning is carried out including: (1) determining the time for implementing the actions, (2) determining the material and preparing learning materials, (3) preparing student worksheets which are prepared based on the learning objectives and indicators to be achieved in the first cycle actions, (4) prepare process and results assessment tools, (5) prepare a learning implementation plan that contains the characteristics of the inquiry method.

The chronological description of the implementation of actions in cycle I includes: (1) The lecturer carries out orientation activities by conditioning students to learn actively in learning, (2) The lecturer carries out core activities in the form of: (i) formulating problems by means of the lecturer proposing a main problem, namely the main idea deductive and inductive paragraphs in the reading entitled "Signs and symptoms" then the lecturer assigns students to think to list data or find the main idea. So, in this case the lecturer did not explain in advance the meaning of the main idea. Students are given the opportunity to think critically and innovatively, (ii) propose hypotheses by means of the lecturer asking students to report the results of temporary answers regarding the main idea of the deductive paragraph, the lecturer encourages students to express their opinions or ask various questions regarding the main idea of the deductive paragraph, (iii) collect data by means of the lecturer asking questions related to the main idea of the deductive paragraph, (iv) testing the hypothesis, in this case the lecturer and the students determine the answer regarding the main idea of the deductive paragraph which is considered the most appropriate and accepted according to the data or information obtained, (4) Closing activities, by means of the lecturer doing the following things: (i) formulating conclusions, in this case the lecturer and students conclude the learning results and reflect on the learning process.

1) Observation Results regarding Student Activities in Cycle I Actions

In the cycle action, changes can be observed in students. Students seemed enthusiastic and enthusiastic about learning. Students are not tense, they dare to express their ideas, dare to answer, dare to respond to statements or opinions from the lecturer or from other students. This lively class atmosphere is of course influenced by the application of the inquiry learning method where the lecturer no longer lectures much, but the lecturer places more emphasis on activities to motivate to develop critical and

innovative thinking skills and activate students. Several learning stages that characterize the characteristics of the inquiry method have been implemented well in this first cycle. The stage of trying to find the main idea is the most interesting stage. At this stage, students seemed noisy, asking each other questions with their classmates and each student's answer turned out to be different. Lecturers always monitor student activities and position themselves as mentors and motivators for students.

Data from observations regarding student activities in the first cycle of action at the first meeting had an average value of 12.68 and the second meeting had an average value of 14.86. The results of observations regarding student activities while participating in the first cycle action learning process at the first meeting are presented in Table 1.

Table 1. Students' learning outcome before CAR

No	Score interval	Category	Total
1	90 – 100	Very good	6
2	80 – 89	Good	7
3	70 – 79	Enough	8
4	60 – 69	Not enough	15
5	≤ 59	Very less	7
Total			41
Class average			58.7
Category			Not
Enough			
Individual completeness students			21
Classical completeness			51.21%
Category			Incomplete

Based on the table above, it can be explained that there were 6 students who got scores in the 90-100 interval. The score interval was 80-89 for 7 students. The score interval was 70-79 for 8 students. There were 15 people in the 60-69 score interval and 7 students got a score ≤ 59. Before PTK the class average obtained was 58.7 in the poor category. Individual completion was 21 students out of 41 students. Classical completion was 51.21% in the incomplete category. It is said to be incomplete because it does not reach > 75% of students who reach the Minimum Score Enhancement. An overview of students' activities in learning to read in cycle I of the first meeting can be seen in the following circle diagram.

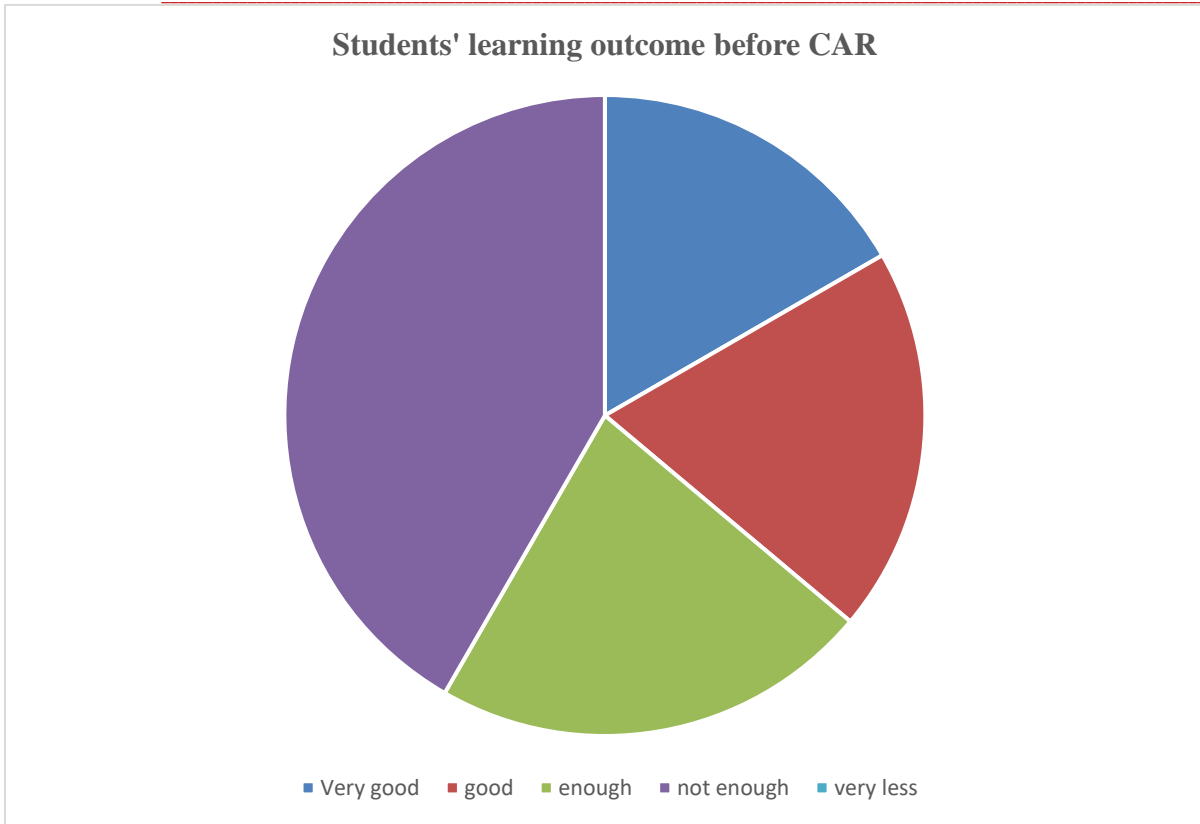


Figure 1 Diagram of Student Activities for Cycle I First Meeting

Table 2. Students' learning outcome after cycle 1

No	Score interval	Category	Total
1	90 – 100	Very good	9
2	80 – 89	Good	10
3	70 – 79	Enough	12
4	60 – 69	Not enough	8
5	≤ 59	Very less	2
Total			41
Class avarage			68.7
Category			Not Enough
Individual completeness			31 students
Classical completeness			75.60%
Category			Complete

2) Competency Test Results to Find the Main Idea of Cycle I Paragraphs

The competency test is carried out after the first learning cycle I meeting and the second meeting have been completed. Based on the results of the student competency test after the first cycle of action was carried out, it was found that the student's ability to find the main idea of the paragraph was better than the student's ability to find the main idea of the paragraph before the action. Based on table 2 above, it can be explained that there were 9 students who got scores in the interval 90-100. The 80-89 score interval was 10 students. The 70-79 score interval was 12 students. The score interval was 60-69 as many as 8 people and 2 students got a score ≤ 59 . In Cycle I the class average obtained was 68.7 in the sufficient category. Individual completion was 31 students out of 41 students. Classical completion is 75.6% in the complete category. Before PTK the average class obtained was 58.7 in the poor category. Individual completion was 21 students out of 41 students. Classical completion was 51.21% in the incomplete category. It is said to be incomplete because it has reached $<75\%$ of students who have reached the Minimum Score Enhancement.

3) Results of Student Assessment of Cycle I Actions

Data on assessment results or student responses to actions in cycle I were obtained from the results of answers to written questions given to students after the overall implementation of cycle I actions ended. Judging from the data on the answers to the check list, it can be concluded that according to the students, the lecturer in cycle I provided learning with a different method than before the action. Learning makes students more interested and enthusiastic in learning reading comprehension. Students have been involved in learning actively. This causes the class atmosphere to become lively, students are enthusiastic about participating in learning, students are given direct experience to develop the ability to think critically, express more active opinions, discover and formulate concepts of the material being studied.

4) Observation Results Regarding the Application of Inquiry Methods by Collaborating Teachers in the First Cycle Learning Process

The results of observations regarding the application of the inquiry method by the lecturer in the first cycle learning process can be seen from the results of filling in the check list sheet carried out by two fellow lecturers. From the data obtained it can be concluded that in the first cycle of action the lecturer has implemented several learning stages which show the characteristics of the inquiry method. The lecturer, at the introductory stage, does not explain much about the meaning and how to find the main idea, but the lecturer directs the students to try to find the main idea in a paragraph themselves. This process of trying to find out for yourself is part of the stage of proposing a hypothesis in the inquiry method. The students became competitive in trying and competing to find each other's main ideas correctly. In learning activities, students appear to be very active and happy. Many students showed their fingers, a sign of enthusiasm and enthusiasm at every stage of learning. At the end of the lesson, the lecturer also invited students to reflect together and conclude the learning results. This causes students to feel involved, so that students gain meaningful learning and a good learning experience.

5) Cycle I Reflection

After the actions in cycle, I were completed, researchers and collaborators reflected on what had been done in cycle I. Several advantages and disadvantages in the process of learning to read to find the main idea are found in the first cycle of action. Some of these advantages are: (1) students are more interested and enthusiastic about learning to read, (2) students' activities in learning increase which include responding to questions, doing assignments, asking questions, participating in discussions, and taking notes, (3) test results on the ability to find the main idea students' paragraphs also increased. Apart from these advantages, several problems were also found that arose during the implementation of actions in cycle I, namely: (1) in the actions in cycle I, the first meeting, when the initial introduction process to the inquiry method occurred, many students felt surprised and confused, because they have long been accustomed to learning using the lecture method, (2) in the first cycle of action, the first meeting, the focus of the learning material was that finding the main idea in the deductive paragraph was easy for the students, this was proven by the finding that the majority of students found the idea very easily main deductive paragraph, (3) in applying the inquiry method, even though they have been guided by the sequence of learning scenarios in the RPP, teachers sometimes still lack the sequence in implementing the learning stages using the inquiry method.

In the first cycle of action, it was discovered that student activity and students' ability to find the main idea of the paragraph had increased. However, there were still several findings that were problems and shortcomings in cycle I. Therefore, the PTK team decided to continue the research to cycle II. This was done to revise cycle I and also to ensure and prove that the application of the inquiry method can increase student activity and students' ability to find the main idea of the paragraph.

Judging from the results of the assessment data or student responses to action learning cycle II, it can be concluded that students have been actively involved in learning. A study conducted by Azizah and Ruksandi (2018) revealed that the implementation of Inquiry Learning in the Medical Surgical Nursing Care course can improve nursing students' ability to apply the nursing process. Through a series of inquiry stages, students are trained to identify problems, collect data, and create a comprehensive nursing plan. This causes the classroom atmosphere to become lively, students are enthusiastic about participating in learning, students are given direct experience to develop their thinking abilities, students are more active in expressing opinions and asking questions, students are even invited to formulate, conclude and reflect on what they have learned.

b. Cycle II

The cycle is carried out in one action only in one meeting with a time slot of two hours for reading comprehension to find the main idea of the paragraph. This is done based on the considerations: (1) the learning material regarding finding the main idea of a paragraph is small so that it does not need to be given in a large amount of time, (2) in the first cycle of action, students have been accustomed to learning using the inquiry method so that in the second cycle of action, students has become more active and his thinking abilities are developing well.

1) Implementation of Cycle II Actions

Orientation activities carried out by lecturers condition students to learn actively in reading lessons at this meeting. The lecturer carries out the core learning activities of cycle II by applying the inquiry method which consists of: (i) formulating the problem in a sequence of steps: (a) The lecturer proposes a main problem, namely the main idea of a mixed, argumentative and expository paragraph, (b) the lecturer directs students to read intensively and pay close attention to the reading entitled "Mental Health", (c) the lecturer assigns students in groups to think in order to record or find the main idea of the paragraphs contained in the reading based on the students' previous experience and knowledge. So, in this case the lecturer did not explain in advance the meaning of the main idea. Students are given the opportunity to think critically and innovatively, (ii) propose hypotheses, by: (a) the lecturer asks students to report the results of temporary answers regarding the main idea of mixed paragraphs, argumentative and expository paragraph, (b) the lecturer encourages students to express their opinions or asking various questions regarding the main idea of mixed, argumentative and expository paragraphs, (iii) collecting data by the lecturer asking questions related to the main idea of mixed, argumentative and expository paragraphs. In this case, students think about looking for information related to the three types of paragraphs, (iv) testing the hypothesis by means of the lecturer and students determining the answer regarding the main idea of the paragraph which is considered the most appropriate and accepted according to the data or information obtained based on data collection regarding the main idea. mixed paragraphs, argumentative and expository, closing activities, at the closing stage of learning, the lecturer and students conclude and reflect on the learning that has been carried out.

2) Observation Results regarding Student Activities in Cycle II Actions

The classroom atmosphere that can be observed in the second cycle of action is not much different from the classroom atmosphere during the first cycle of action. In this second cycle of action, students already seem accustomed to learning that applies the inquiry method. Students appear to actively participate in learning. At the beginning of the lesson, the lecturer informed him that the material to be studied was the main idea in a mixture of argumentative, argumentative and expository paragraphs. This is intended so that students do not get bored with the main idea material, so after students can understand the main idea material in deductive and inductive paragraphs, the lecturer provides other material, namely the main idea in mixed, argumentative and expository paragraphs. The students seemed happy because they would gain experience in finding the main idea of mixed paragraphs, argumentative, and expository paragraphs.

Lecturers in the second cycle of action seemed to be more motivating and guiding students to participate in learning well, enthusiastically, and think critically. Lecturers also often say words of praise when students participate in learning well. The students' learning outcomes in cycle II can be seen in table 3 below.

Table 3. Students' learning outcome after cycle II

No	Score interval	Category	Total
1	90 – 100	Very good	14
2	80 – 89	Good	19
3	70 – 79	Enough	6
4	60 – 69	Not enough	2
5	≤ 59	Very less	-
Total			41
Class avarage			93.7
Category			Good
Individual completeness students			39
Classical completeness			95.12%
Category			Complete

3) Results of the Ability Test to Find the Main Idea of Cycle II

After the actions in cycle II end, the next stage is to carry out a reading competency test to find the main idea of the paragraph. Based on data from the results of students' competency tests in finding the main idea of a paragraph at the end of cycle II, it is known that the students' ability to find the main idea of a paragraph is better than the students' ability to find the main idea of a paragraph in the cycle I test. Based on the table above, it can be explained that students who 14 students obtained scores in the interval 90-100. The 80-89 score interval was 19 students. The score interval was 70-79 for 6 students. The score interval is 60-69 for 2 people. In Cycle II the class average obtained was 93.7 in the very good category. Individual completion was 39 students out of 41 students. Classical completion is 95.12% in the complete category. It is said to be complete because >75% of students have reached the Minimum Score Enhancement.

4) Observation Results Regarding the Application of Inquiry Methods by Collaborating Lecturers in the Cycle II Learning Process

The cycle is carried out in one action only in one meeting with a time slot of two hours for reading comprehension to find the main idea of the paragraph. This is done based on the considerations: (1) the learning material regarding finding the main idea of a paragraph is small so that it does not need to be given in a large amount of time, (2) in the first cycle of action, students have been accustomed to learning using the inquiry method so that in the second cycle of action, students has become more active and his thinking abilities are developing well.

5) Observation Results regarding Student Activities in Cycle II Actions

The classroom atmosphere that can be observed in the second cycle of action is not much different from the classroom atmosphere during the first cycle of action. In this second cycle of action, students already seem accustomed to learning that applies the

inquiry method. Students appear to actively participate in learning. At the beginning of the lesson, the lecturer informed him that the material to be studied was the main idea in mixed paragraphs, argumentative paragraphs and exposition. This is intended so that students do not get bored with the main idea material, so after students can understand the main idea material in deductive and inductive paragraphs, the lecturer provides other material, namely the main idea in mixed, argumentative and expository paragraphs. The students seemed happy because they would gain experience in finding the main idea of mixed paragraphs, argumentative, and expository paragraphs. Lecturers in the second cycle of action seemed to be more motivating and guiding students to participate in learning well, enthusiastically, and think critically. Lecturers also often say words of praise when students participate in learning well.

6) Reflection on Cycle II

After all series of actions and competency tests for cycle II were completed, researchers and collaborators held a reflection on the implementation of cycle II. Based on the results of the reflection, it was stated that cycle II, which was a continuation of cycle I, had been implemented well. All stages in the learning process that characterize the inquiry method have been implemented. The learning process includes: (1) the orientation stage which is carried out by conditioning students to learn actively and develop all their potential. At this stage, the lecturer motivates and invites students to study the main ideas in mixed paragraphs, argumentative paragraphs and expository paragraphs, (2) the problem formulation stage is carried out by the lecturer by asking students to try or experiment to find the main idea of the paragraph based on the students' experience and knowledge. previously. So, in this case the lecturer does not explain the main idea first. Students are given the opportunity to actively think critically and innovatively, (3) the stage of proposing a hypothesis, which is done by the lecturer asking students to report the results of experiments or their answers regarding the main idea of the paragraph which is still a temporary answer, (4) the stage of collecting data, at this stage students collect complete data or information regarding the main idea of mixed paragraphs, descriptive paragraphs and narrative paragraphs. The lecturer gives students the freedom to look for sources of information, it can be from books in the library, it can also be from internet sources, (5) stage of testing the hypothesis.

After obtaining accurate data containing theories regarding the main ideas in mixed, argumentative and expository paragraphs, the lecturer and students formulate the most appropriate answer from several student answers. The accuracy of the answer is obtained if the answer is in accordance with the supporting theories. In this case, the student's reasoning process occurs by formulating an explanation. This process is very important and is different from the lecture method. In this case the lecturer involves the students, the lecturer together with the students formulates the correct answer based on existing theory. So, the most appropriate answer regarding the main idea is formulated jointly between the lecturer and students after the students try to find the main idea in each paragraph, (6) stage of formulating conclusions, in this stage, the lecturer and students conclude the learning results of this meeting. Because conclusions about learning outcomes must be supported by relevant and precise data, lecturers must be able to show relevant and precise data.

There was an increase in the average student learning outcomes from before Classroom action research to after Classroom action research. Before Classroom action research the average class obtained was 58.7 in the poor category. Individual completion was 21 students out of 41 students. Classical completion was 51.21% in the incomplete category. In the first cycle, there was an increase which can be explained by the fact that 9 students got scores in the interval 90-100. The 80-89 score interval was 10 students. The 70-79 score interval was 12 students. The score interval was 60-69 as many as 8 people and 2 students got a score ≤ 59 . In Cycle I the class average obtained was 68.7 in the sufficient category. Individual completion was 31 students out of 41 students. Classical completion is 75.6% in the complete category. The improvement was increasingly visible after cycle II, it can be explained that there were 14 students who got scores in the interval 90-100. The 80-89 score interval was 19 students. The score interval was 70-79 for 6 students. The score interval is 60-69 for 2 people. In Cycle II the class average obtained was 93.7 in the very good category. Individual completion was 39 students out of 41 students. Classical completion is 95.12% in the complete category.

The application of the inquiry learning method can improve students' understanding of reading texts, be productive in creative thinking, and students become skilled in obtaining and analyzing information. The application of the inquiry learning method can not only develop intellectual abilities but all existing potential, including emotional development and skills development.

c. Cycle I and Cycle II Actions

Based on the results of observations during actions in reading learning to find the main ideas in class by applying the inquiry method, it is known that student activity is starting to show an increase in participating in reading learning. In the initial stage of action, namely in the first cycle of action, the first meeting, the lecturer conditions and familiarizes learning with inquiry methods which were previously rarely experienced by students. The process of trying by students to find the main idea independently accompanied by reinforcement of material by the lecturer makes students have a meaningful experience in learning. Research conducted by Nurfuadi and Fariyah (2020) shows that the application of Inquiry Learning can improve nursing students' understanding of concepts and communication skills. Through discussion, presentation and problem solving activities, students are trained to communicate findings and deepen their understanding. Students appear to be starting to be active in learning because they are directly involved and the lecturer does not seem patronizing and does not dominate learning.

From the results of the answers to written questions to students after the action process, it is known that learning to read using the inquiry method makes it easy for students to understand what is being learned. The lecturer didn't lecture much and didn't give much explanation. Apart from that, lecturers actively involve students in learning. So, in this case, the lecturer is no longer the person who knows everything about the main ideas but the students are very involved in learning. The learning stages that are characteristic of learning using the inquiry method as a whole have been carried out in the second cycle of action. Increasing student activity and improving reading competency test results to find the main idea of a paragraph can also be achieved.

d. Increased Student Activities

Based on data from observations regarding student activity when taking part in reading lessons which are assessed in the form of numerical scores, it can be seen that student activity has increased before the action compared to during the action. These improvements are summarized in Table 4.

Table 4 Average Value and Percentage of Increase in Student Activity

Activites	Mean	Enhancement
Before CAR	10,81	
Cycle I Meeting I	13,68	2,87
Cycle II Meeting II	14,86	1,18
Cycle II	14,95	0,09
Before CAR vs Cycle II		4,36

Student activity before the action had a mean of 10.81. Thus, it is known that student activities before the action are included in the poor category. Furthermore, from the results of observations and assessments regarding student activities in cycle I and cycle II, the mean was obtained which had increased compared to before the action. The results of increasing student activity in cycle I compared to before the action showed a fairly large increase in mean, namely 2.68. Furthermore, in the actions in cycle I of the second meeting, which was a continuation stage of the actions in cycle I of the first meeting, a fairly good increase in the mean of student activity was obtained, namely 1.18. In the actions in cycle II, the increase in student activity was 0.09 when compared with the mean action activity in cycle I of the second meeting. A fairly large increase in mean student activity was seen in the mean activity before the action compared to the mean activity in the second cycle of action, which was 4.36.

Judging from the increase in activity in percentage form, it can be seen that there was an increase in the percentage of students who had activities in the good category from before the action compared to during the action in both cycles I and II. On the other hand, students who had scores in the lower category experienced a drastic decline. Student activity increased after the action was taken. The success criterion which states that student activity has been achieved if all or at least 75% of students have been actively involved during learning has been achieved because in the second cycle of action, 91% of students had activities in the good category. This increase in activity occurs because lecturers have implemented actions in learning using the inquiry method, a learning method that has the characteristics of greatly activating students at every stage of learning. Lecturers are only motivators and facilitators, so lectures from lecturers are no longer dominant. This is in line with research conducted by Suastra and Kariasa (2019) showing that the application of the Inquiry Learning model can improve critical thinking skills and learning outcomes for nursing study program students. Through the Inquiry stages, students are actively involved in formulating problems, collecting data, analyzing information, and drawing conclusions. More clearly, the increase in the percentage of

student activity categorized both before action and during action in cycles I and II is depicted in Figure 3 as follows.

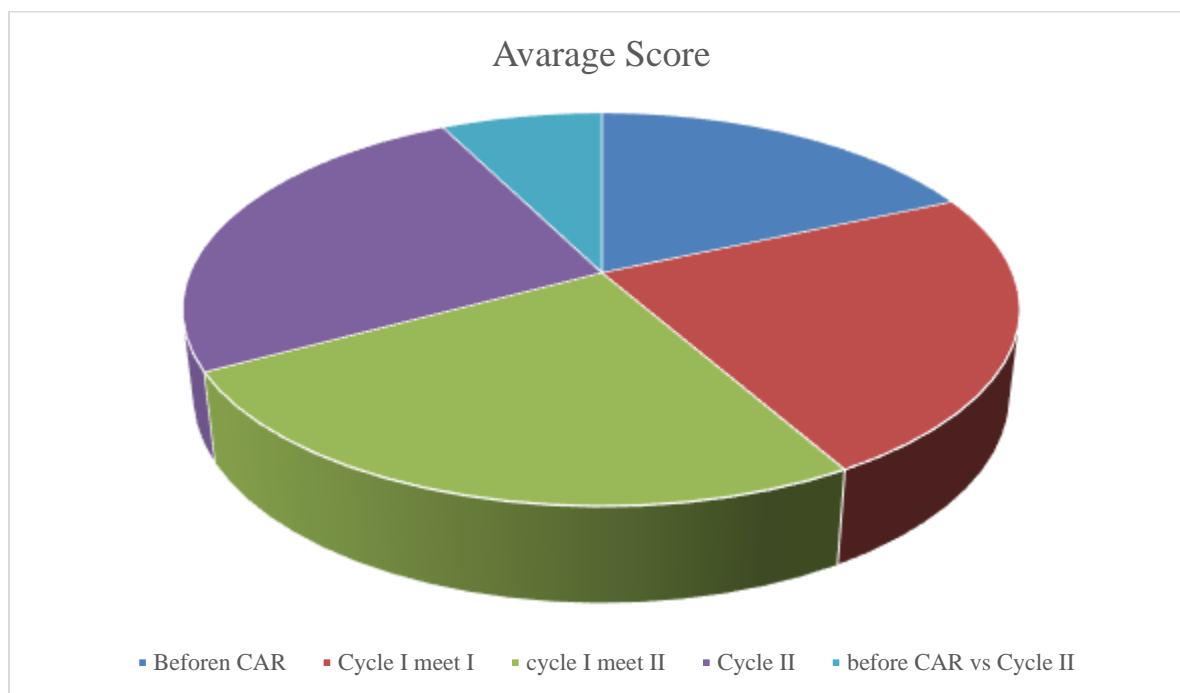


Figure 2 Improvement in Reading Competency Test Results

After taking action, the results of the reading competency test were obtained to find the main idea of the paragraph which always increased in both cycle I and cycle II. In the pre-action stage, students generally still have difficulty working on questions related to finding the main idea. In the first cycle competency test, students were able to answer the main idea, especially for deductive and inductive paragraphs. Furthermore, in the second cycle test, students' abilities increased further, namely being able to work on questions related to mixed paragraphs, argumentative paragraphs, and expository paragraphs. The increase in competency test results in finding the main idea of the paragraph can be seen from the increase in the mean competency test score. In the competency test before the action, the mean obtained was 6.04, increased to 7.86 in the first cycle test and increased again to 8.32 in the second cycle test. To make it clear, the increase in the mean competency test score for the ability to find the main idea of the paragraph is depicted in Figure 4.

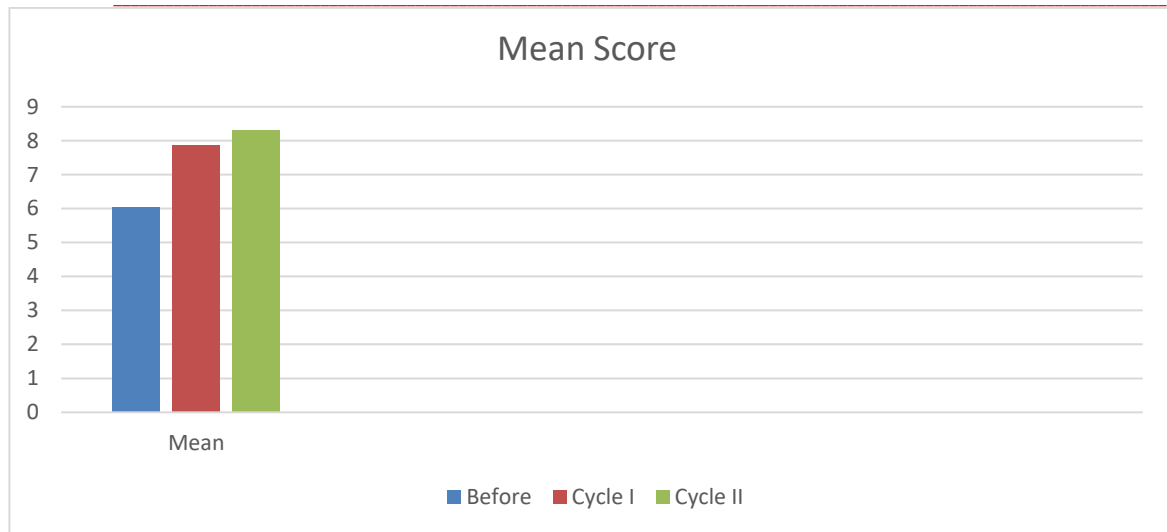


Figure 3 Mean Increase in Competency Tests.

Seen from Figure 4, the mean increase which was quite large in the mean of the second cycle competency test compared to the mean of the competency test before the action, which was 2.28. Complete data on the number of mean increases can be seen in Table 5 below.

Table 5 Mean Improvement**Student Competency Test Results Before and After Action**

No	Competence test	Mean	Enhancement
1	Before CAR	6,04	1,82
2	Cycle I Meeting I	7,86	
3	Cycle II Meeting II	9,32	2,46
4	Before CAR vs Cycle II		4,28

Judging from the criteria for individual learning completeness with a KKM of 75, the number of students who achieved a complete score, namely a score greater than or equal to 75, experienced an increase after the action was taken. In the competency test to find the main idea before action, only 13 (31.3%) students completed it. In the first cycle test, this increased to 29 (70.73%) students and in the second cycle test, all students or 39 (95.12%) students had achieved complete marks. This means that class learning completeness with the criteria of 85% of students achieving individual completeness has been achieved, and has even been exceeded because it has reached 100%.

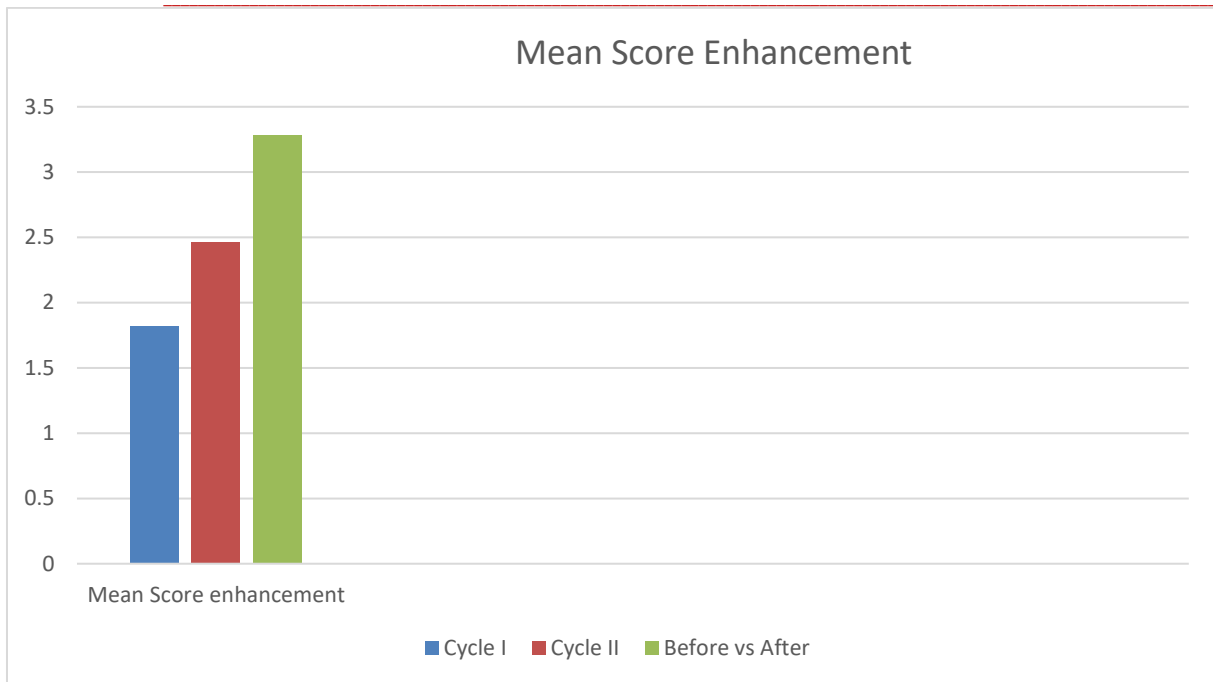


Figure 4 Mean score students' enhancement

More clearly regarding the increase in students who complete their learning outcomes, can be seen in Table 6 below.

Table 6 Number of Students Who Completed and Incomplete Before Action and After Action

No	Competence test	Number of students (%)	
		Complete	Incomplete
	Before CAR	13 (31.3%)	29 (70,73%)
	Cycle I	29 (70,73%)	12 (31,13%)
	Cycle II	39 (95.12%)	2 (4.88%)

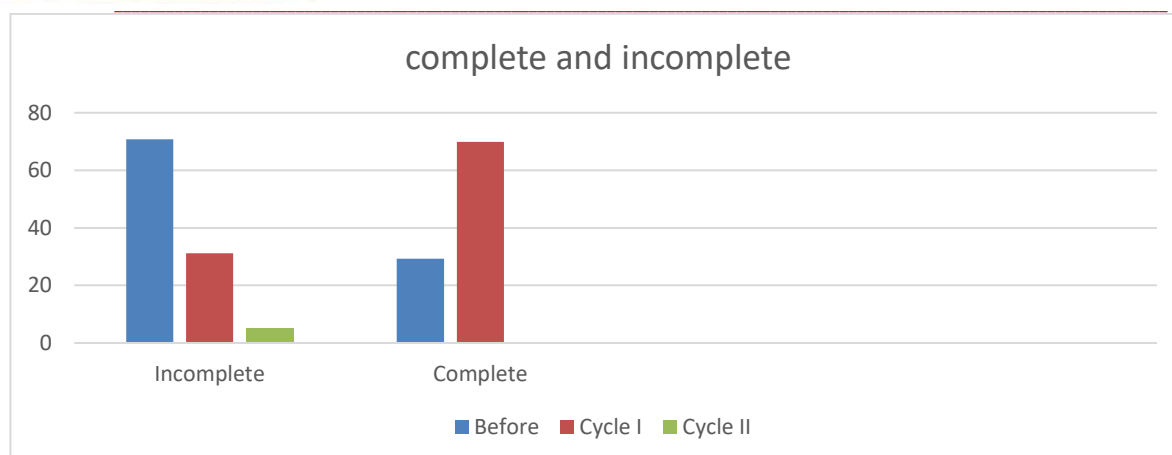


Figure 5 Number of complete and incomplete

4. CONCLUSION

The results of this study indicate that the Inquiry learning used by lecturers in the teaching and learning process makes students better understand a reading text in context nursing which must be comprehend by a candidate of nurse not only for the learning outcome but also for enriching their knowledge. With the Inquiry learning, it exposes students to practical problems through stimulus in learning. Therefore, the role of the lecturer is very important in providing these stimuli so that students can carry out learning independently, find their own understanding, and develop their creativity collaboratively. From the results of the answers to written questions to students after the action process, it is known that learning to read using the inquiry method makes it easy for students to understand what is being learned. The lecturer didn't lecture much and didn't give much explanation. Apart from that, lecturers actively involve students in learning. So that, in this case, the lecturer is no longer the person who knows everything about the main ideas but the students are very involved in learning. The learning stages that are characteristic of learning using the inquiry method as a whole have been carried out in the second cycle of action. Increasing student activity and improving reading competency test results to find the main idea of a paragraph can also be achieved.

There was an increase in the average student learning outcomes from before Classroom action research to after Classroom action research. Before Classroom action research the average class obtained was 58.7 in the poor category. Before the implementation of Inquiry learning, individual completion was 21 students out of 41 students. Classical completion was 51.21% in the incomplete category. In the first cycle, there was an increase which can be explained by the fact that 9 students got scores in the interval 90-100. The 80-89 score interval was 10 students. The 70-79 score interval was 12 students. The score interval was 60-69 as many as 8 people and 2 students got a score ≤ 59 . In Cycle I the class average obtained was 68.7 in the sufficient category. Individual completion was 31 students out of 41 students. Classical completion is 75.6% in the complete category. The improvement was increasingly visible after cycle II, it can be explained that there were 14 students who got scores in the interval 90-100. The 80-89 score interval was 19 students. The score interval was 70-79 for 6 students. The score

interval is 60-69 for 2 people. In Cycle II the class average obtained was 93.7 in the very good category. Individual completion was 39 students out of 41 students. Classical completion is 95.12% in the complete category.

In addition, students find it easy to carry out the task of understanding some reading texts to increase their learning outcomes of English for nursing subject using the Inquiry learning. The implementation of Inquiry learning makes the English for nursing course more interesting. The Inquiry learning makes the English for nursing course more useful according to the field. The experience of students in understanding some sources of nursing texts in English by using Inquiry learning has also become more varied. This research provides an implication that the Inquiry learning provides a detailed, challenging, and longer-term learning experience with the target of completing a project that produces a satisfactory product and student work.

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REFERENCES

- Aribawati, D., Kristin, F., Anugraheni, I. (2018). Penerapan Model Pembelajaran Inkuiri Terbimbing untuk Meningkatkan Kreativitas dan Hasil Belajar IPA Siswa Kelas 3 SD. *Jurnal Sains dan Teknologi*. 1(1) 70-75.
- Azizah, R., & Ruksandi, H. (2018). Improvement of Students' Nursing Process Ability through Inquiry-Based Learning. *Jurnal Keperawatan Padjadjaran*, 6(1), 57-65.
- Basturkmen, H., & Bocanegra-Valle, A. (2018). Materials design processes, beliefs, experiences and practices of experienced ESP teachers in university settings in Spain. In Kirkgöz, Y. & Dikilitaş, K. (Eds.), *Key issues in English for specific purposes in higher education* (pp. 13–27). Cham, Switzerland: Springer.10.1007/978-3-319-70214-8_2CrossRefGoogle Scholar
- Cheng, M. H. M., & Wan, Z. H. (2017). Exploring the effects of classroom learning environment on critical thinking skills and disposition: A study of Hong Kong 12th graders in Liberal Studies. *Thinking Skills and Creativity*, 24, 152-163. <https://doi.org/10.1016/j.tsc.2017.03.001>
- Hamalik, O. (2011). Proses belajar mengajar. Jakarta: Bumi Aksara.
- Guo, P., Saab, N., Wu, L., & Admiraal, W. (2021). The Community of Inquiry Perspective on Students' Social Presence, Cognitive Presence, and Academic Performance In

- Online Project-Based Learning. *Journal Of Computer Assisted Learning*, 37(5). <https://doi.org/10.1111/jcal.12586>
- Irham, I, & Jayanti, SD (2020). Inquiry-based learning for students'speaking skill improvement: voices and realities from the ground. *Journal of English for Academic and ...*, ejournal.uin-malang.ac.id,<http://ejournal.uinmalang.ac.id/index.php/jeasp/article/view/11120>
- Kemmis, S. & McTaggart, R. (1995). *The action research planner*. Victoria: Deakin University Production Unit.
- Nurfuadi, N., & Fariyah, U. (2020). Peningkatan Pemahaman Konsep dan Keterampilan Komunikasi Mahasiswa Keperawatan melalui Pembelajaran Inkuiri. *Jurnal Pendidikan Keperawatan Indonesia*, 6(1), 1-10.
- Mauranen, A. 2015. English as a global Lingua Franca: changing language in changing global academia. In Murata, K. (ed.) *Exploring ELF in Japanese Academic and Business Contexts*. Amsterdam: John Benjamins. 29-46.
- Sinulingga, A., Saputro, D. P., & Nova, A. (2021). The Differences Between Learning Model Of Inquiry And Direct Instruction Toward Learning Outcomes Of Discus Throw. *Journal Sport Area*, 6(1). [https://doi.org/10.25299/Sportarea.2021.Vol6\(1\).4856](https://doi.org/10.25299/Sportarea.2021.Vol6(1).4856)
- Suastra, I. W., & Kariasa, N. (2019). The Effect of Inquiry-Based Learning Model on Critical Thinking Ability and Learning Outcomes of Nursing Students. *International Journal of Nursing and Health Services (IJNHS)*, 2(1), 42-50.
- Wale, BD, & Bishaw, KS (2020). Effects of using inquiry-based learning on EFL students' critical thinking skills. *Asian-Pacific Journal of Second and Foreign ...*, Springer, <https://doi.org/10.1186/s40862-020-00090-2>.