

The Effect of Community of Inquiry on the Collaborative Skills of English Education Students



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ABSTRACT: The purpose of this study was to determine the effect of the Community of Inquiry learning model on collaboration skills in English Education study program students. A quantitative approach was used in this research and this research was designed using a quasi-experimental design approach. The method used in this research is a quasi-experimental method by comparing two groups treated using the Community of Inquiry model and traditional learning that is usually done by lecturers. The analytical technique used is to compare the two groups with statistical tests. The results of the analysis test show that there is an effect of the Community of Inquiry learning model on collaboration skills in English Education students. Students who receive treatment with the Community of Inquiry learning model have better collaboration skills than the class control

KEYWORDS- Community of Inquiry, collaborative skill, metacognition skills, higher education

I. INTRODUCTION

Reports from around the world confirm that the 21st-century skills gap requires enormous costs to attract highly skilled employees and bring the skills of new workers to the required levels through expensive training programs. And when the economy crashes and budgets need to be tightened, companies look for skilled workers who are willing to work without expensive additional training (Thrilling and Fadel, 2009).

A fundamental question arises. The best way to prepare students for a world that is changing at a rate never seen before is knowing that education is one of the most powerful tools for change. First, the need to review the implementation of the curriculum in schools and universities that are tailored to the skills needs of the 21st century. Furthermore, students must be provided with appropriate tools to manage and analyze rapidly changing needs, and students need a conceptual framework for learning (Kennedy et al. 2016). There is a growing recognition that the individual's need for multiple skills matches the demands of the modern workplace. The advent of technology, especially computers, has changed the way teachers design learning and students learn content. Modern learning places are expected to be able to prepare students, especially in universities, for various knowledge and skills, which are often referred to as 21st-century skills, including; the ability to solve complex problems, think critically about their tasks, communicate effectively with people from different cultures and use a variety of different techniques, collaborate with others, adapt to rapidly changing environments and conditions to carry out tasks, perform tasks their tasks, manage their work effectively and constantly require new skills and information for self-realization (Koenig, 2011).

Indeed, the development of learning through communication technology began to be applied in 1982. At that time, communication technology influenced learning and teaching in universities and then made educational technology a theme. Central in the New Directorate of Teaching and Learning (Knapper, 1982). However, it is known that education has made extensive use of technological products and processes, from whiteboards to computers. And we continue to write a lot about educational technology (application of technology in the teaching and learning process). Indeed, some practitioners continue to seek "technological improvements" that can fundamentally change educational practice, making it more effective and efficient.

Industrial revolution 4.0 plays a permanent role. Increasingly, students see university as a place where they can develop skills for their future work, not just study and personal development. And ICT skills are elements that must be included in the process of teaching and learning activities. Therefore, the main challenge in the delivery of professional education must be the restructuring of the entire learning process, which includes pedagogical methods and techniques as well as information technology (Chu et al., 2010; Di Blas et al., 2014; Sampson et al. al., al., 2014).

Teaching at the Muhammadiyah University English Education Study Program uses an e-learning platform that allows for online teaching, but in general, the implementation of learning is still through uploading teaching materials, accompanied by questions as a guide for discussion of individual teaching materials. . Therefore, the frequency of student participation in class is still lacking. In

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addition, students cannot also increase understanding through learning strategies to increase their knowledge. In other words, students lack the collaborative skills, critical thinking, creativity, and metacognitive awareness needed in the 21st century.

Davies et al. (2011) found that one of the ten most important skills in the future is virtual collaboration. They allow you to work productively when virtual collaboration emerges. Meanwhile, students who are connected to technology make it very easy to share ideas and knowledge or learn together without having to face barriers of distance and time. It is very important to create an environment with new skills related to virtual technology.

By using the Community of Inquiry learning strategy, students are expected to have the same skills. Then, with computer-based collaborative learning, they can learn together in class or anywhere because they use web-based application tools.

One of the learning strategies that can be used in online learning is the Community of Inquiry (CoI). Inquiry-based learning can be applied by forming a learning community or group, which is then referred to as a research community. Voughan (2010) states that CoI is a combination of inquiry-based learning and blended learning, to make the learning process more interactive and innovative. One of the main characters of CoI is Garrison, who integrates online skills into inquiry-based learning processes and stages.

Schwan, et al. (2009: 43-57) states that the Community of Inquiry (CoI) framework is an online learning process that sees online educational experiences using the interaction of 3 things, namely: participation or social presence, cognitive presence (a certain level of knowledge) and class participation. Each of the three elements of the CoI strategy is interconnected. Long before the opinion of these experts, Dewey (1959) believed that the educational experience must unite the interests of individuals and society (learning groups), and that individual development depends on the learning group. He believes that the essence of a study group is an organic blend of community and individual. He also believed that the process of inquiry was central to the learning experience. The Community of Inquiry is a powerful pedagogical tool to encourage student participation, critical thinking, and the development of collaborative skills (Swan, et al.: 2009).

This study aims to determine and analyze the effect of the Community of Inquiry on Collaboration Skills in students of the English education study program. The purpose of this research is to provide guidelines and a basis for problem-based learning and critical thinking skills in research and can be used as a reference for conducting the learning process.

II. METHOD

The type of research that will be carried out is quasi-experimental with the Nonequivalent Control Group Design, which uses existing classes as a group, with the selection of classes that have been estimated to be of the same condition and condition (homogeneous). The subjects of this research were taken from 2 groups, namely the experimental group (70 students) and the control group (70 students) through the Cluster Random Sampling technique (Fraenkel, 2006). The consideration of the selection was because this research couldn't be carried out using random or random techniques, by taking classes that have homogeneous abilities in the implementation of learning (Cohen & Morrison, 2011).

This study uses two independent variables, namely the community of inquiry learning model, then the dependent variable in this study is the collaboration skills of scientific and critical reading subjects. Analysis of the data used in this study using the t-test by looking for differences between the two samples.

III. RESULT AND DISCUSSION

After giving treatment to the experimental group with the collaborative learning model and the control group with the conventional learning model, measurements were made. Data analysis was carried out in each class, namely the experimental class and the control class. The results of descriptive statistical data analysis are presented in table 1.

Table 1. Group Statistics

	Collaborative Skill	
	Group	
	Experiment	Control
N	70	70
Mean	71.66	54.79
Std. Deviation	14.332	13.921
Std. Error Mean	1.713	1.664

Based on the results of the data analysis of various Tests with descriptive statistics in Table 1 above, the results of the descriptive analysis of collaborative skills. When the mean collaborative skills were converted, the average collaborative skill score in the experimental class was 71.66, while the average collaborative skill score produced in the control class was 54.79. According to the average, the experimental class has a higher average of collaboration skills than the control class. To test the hypothesis with a parametric statistical t-test, and an independent sample t-test. The following are the results of the analysis.

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Table 2. Table of Independent Sample T-Test Collaborative Skills

		Collaborative Skill		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.064		
	Sig.	.801		
t-test for Equality of Means	t	7.065	7.065	
	df	138	137.883	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	16.871	16.871	
	Std. Error Difference	2.388	2.388	
	95% Confidence Interval of the Difference	Lower	12.149	12.149
		Upper	21.593	21.593

The results of the calculation by comparing the two groups showed that the experimental group obtained a higher average (71.66) than the control group (54.79) (table 1). Students who were taught using the Community of Inquiry model had better collaborative skills than the control group. Based on the statistical test (table 2), shows $p = 0.000 (<0.05)$ on the t-test for Equality of Means. The results of this study can be concluded that the Community of Inquiry learning model has a positive effect on the collaborative skills of English Education students.

Online collaborative learning is an active learning method in which students solve problems collaboratively in an online learning environment; students can determine and formulate problems independently and exchange ideas, negotiate, answer questions, explain and debate to build knowledge. Garrison and Vaughan (2008) emphasize the importance of a theoretical framework in adopting certain techniques, such as online collaborative learning, to prevent distortion due to the gap between theory and practice.

The Community of Inquiry is a coherent framework that provides the means to shape practice and reflect or evaluate results (Garrison, 2011; Garrison & Vaughan, 2008). Garrison and Arbaugh (2007) state that the Community of Inquiry framework has proven helpful in guiding research and practice in online higher education. Castellanos-Reyes (2020) highlights that the Community of Inquiry framework is one of the most widely used frameworks in online teaching and learning by researchers around the world. The ability to build a positive learning environment is reflected in the Social Presence (SP). Garrison et al. (1999) categorize Social Presence (SP) into three subcomponents: emotional (affective) expression, such as personal expression and values; open communication; and group cohesion. Teaching Presence (TP) also consists of three subcomponents: instructional design and organization, facilitating discourse, and direct instruction. The essence of discourse, Cognitive Presence (CP), is operational critical thinking consisting of triggering events (problem identification) for further investigation), exploration, integration (synthesizing and making meaning of ideas formed during exploration), and resolution (maintaining solutions or applying them) new skills and knowledge learned into different contexts) (Garrison et al., 1999).

Alavi and Taghizadeh (2013) detail five reasons why the Community of Inquiry framework was chosen in their technology-assisted collaborative learning research, namely the CoI framework that describes a collaborative learning process that is deep and meaningful in experience; it guides researchers to conceptualize complex interactions between online learning participants; it outlines the behaviors and processes required in knowledge construction in asynchronous learning environments; it's an online collaborative learning process model; it describes an online learning experience that is constantly being developed and learned. Fiock (2020) states that the Community of Inquiry framework is one of the most widely used frameworks for building online communities. Junus et al. (2019) implemented a cognitive internship to teach students the Community of Inquiry framework, integrated into the Linear Algebra course. The study revealed that students equipped with the Community of Inquiry framework experienced increased levels of communication skills, self-regulation, co-organization, and learning strategies. Research on how to teach the Community Of Inquiry framework as an area of learning in different subjects is currently limited. In response to this research gap, the current research examines the application of role-playing as a method for teaching the Community of Inquiry framework. The Community of Inquiry framework is one of the areas of the CAI course, which intends to equip students with the necessary skills to interact in online collaborative learning by applying the Community of Inquiry framework.

Research on the provision of a Community of Inquiry framework to improve learning readiness and critical thinking skills has been carried out previously, such as in Boris and Hall (2005) and Santoso (2014). The method used in this study is relatively the same, explaining to students the framework at the beginning of the course. Students are expected to apply their knowledge to solve problems in online collaborative learning settings. The results showed an increase in the participants' critical thinking (Boris & Hall, 2005). But on the other hand, research conducted by Santoso (2014) shows that the socialization of the Community of Inquiry framework is not proven to significantly improve students' critical thinking skills.

Collaborative learning has long been discussed among college/university educators who stick to traditional teaching methods despite changing student populations. The problem is that the 'traditional' structure and academic culture (Smith & MacGregor, 1992, p. 16)

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allow teacher-centered information delivery to continue through the classroom, where students interact, test ideas, and have multiple perspectives. This reinforces the concept that results are achieved by working alone and competing with peers. This concept can discourage students from asking for help because on the one hand, it can reveal personal vulnerabilities when support comes from faculty, and on the other hand, when information is discussed with colleagues they may be reluctant to share the information received individually.

Roselli (2016) states that collaborative learning is a construction that identifies a strong field today, both in face-to-face and virtual education. According to student responses to the application of the Community of Inquiry (CoI) model with outlines of the material examined, 4 have important aspects, namely: (1) most students are interested in the Community of Inquiry (CoI) model, (2) most students are interested in the material, (3) most of them gave a positive impression of the answers during the learning process, (4) most of the students found that students could more easily understand the material and complete tasks more easily (Warisman, 2021). However, this learning should not only be used online, so the CoI learning model should be combined with blended learning so that students' collaboration skills can not only be honed through social media but also perfected in the real world. In addition, when using face-to-face teaching, the material presented becomes more comprehensive and effective (Warisman, 2021). At the end of the study, a community of inquiry learning model should be given with the blended learning method, so that students' cooperative abilities can develop both in the virtual world (online) and in the real world (offline).

According to Prayogo (2017:13), the way to practice collaborative skills is to work together, listen and be open with others, and learn from other parties. According to Kurniawan (2013:6), the way to practice collaborative skills is to form study groups, all students must read, discuss and write, participate in groups, write the results of case discussions and present the results of discussions, and finally correct the group results and close. From these two views, it can be concluded that the way to practice collaborative skills is to work together, listen and be open with others and learn from others. Some of these possibilities can be summarized in the Community of Inquiry learning method.

The results of this study provide several practical implications for teachers of English as a foreign language (EFL). First, this research provides insight into how blended learning can complement classroom-level English as a foreign language (EFL) courses and increase student engagement and confidence in learning. When the benefits of blended learning are introduced into the regular college-level curriculum as a strategy to be taught sufficient study hours, this approach can lead to active student learning and ongoing language development. Second, as expected from didactic attendance and cognitive attendance. Lecturers must effectively make learning successful in their mixed learning context with a pedagogical approach to organizing student learning by encouraging active participation, responsibility, and social interaction. This can also be done in conjunction with Implementing a well-designed scaffolding strategy to promote the Community of Inquiry framework in mixed learning contexts. Finally, when the benefits of the exercises are implemented into the curriculum they have the potential to provide their self-sustaining learning models.

Students are active and responsible for their learning. In this course, the blended learning Experience successfully supports sustainable development for students to meet the needs of current and future challenges. Also, additional research that is more related to didactic planning or curriculum development in the development of the Community of Inquiry framework, and success in language learning is needed. This could be enhanced, for example, by establishing social interactions between group members and an authentic task-oriented language approach in the continuing trend of mixed learning areas

IV. CONCLUSION

This study concludes that community of inquiry affects collaboration skills in students in English education study programs. the use of the Community of Inquiry learning model becomes more active and fun for students of English education study program because students of English education study program better understand various things they often experience in everyday life, namely scientific activities of students of English education study program are in the process of learning to be influential on the growth of psychomotor aspects. The Community of Inquiry learning model encourages the development of collaboration skills through discussion, clarification, ideas, and evaluation of other people's ideas. however, both teaching methods were found to be equally effective in acquiring factual knowledge. Therefore, if the purpose of teaching is to improve collaboration skills, then the community of inquiry learning model is more useful. For the Community of Inquiry model to be effective, lecturers must see teaching as a process of developing and improving the collaboration skills of students in English education study programs to learn. This study is the first step in examining a deliberate Community of Inquiry exercise by focusing on a small sample of students with university-level courses. To increase the validity of the results, a more diverse sample of different schools and skill levels should be included in future studies. In the end, however, integrating Information and Communication Technology (ICT) into blended learning offers more options. There is still significant involvement and responsibility in learning to provide their education contributing in particular to the success of continuous learning, which is expressed in innovation, Pedagogy teachers, and organizations. This requires further empirical studies to find the best way to support the goals for sustainable development in the context of collaborative learning. Instructions for increasing the effectiveness of the learning process. Formulating more involved study habits can support and improve student efficiency and effectiveness of the learning process, especially in the context of blended learning. This is very much

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consistent with the potential to promote social sustainability through curriculum design to develop and maintain the availability of quality lifelong education.

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