

## **Problem-Posing Learning Method for Enhancing the Competence of Digital Marketing Students**

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**Abstract:** Adopting a new lecture style will enable students to have meaningful learning and actively interact and solve problems. This study attempts to discover the online marketing professional ethics learning process through the problem-posing method. In doing so, this research involved classroom action research, which is provided through four stages: planning, implementation, observation, and reflection. Through the problem-posing method, lecturers can find solutions to problem-solving for the low scores of these students. Based on the implementation of classroom action research in the first and second cycles, it can be seen that the students' scores are satisfying, which is indicated by the increase in student scores from pre-test to post-test. This implies that the problem-posing method has successfully enhanced students' competence in the marketing professional ethics course. Meanwhile, based on the non-test observation sheet, it shows that the students' response to the implementation of the marketing professional ethics course using the problem-posing method in the first and second cycles is good, but there need to be improvements to obtain a better assessment in the future.

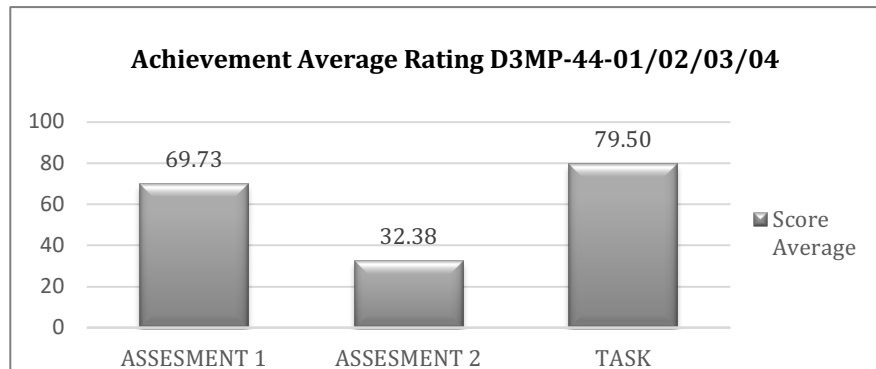
**Keywords:** Problem posing method, learning methods, classroom action research.

### **INTRODUCTION**

Enhancing the quality of education has been a concern among scholars and policymakers. Higher education problems include inadequate educational outcomes, inappropriate curriculum arrangements and learning methods, and the quality of university graduates (Gamage et al., 2020; Rodríguez-Abitia et al., 2020). These problems often cause mistakes in the learning process (Medeiros et al., 2018). Efforts to improve the quality of graduates should lead to fundamental changes in students' intellectual abilities and attitudes (Lotulung et al., 2018). In the Indonesian context, a vocational school where most instruction is practical. Diploma (D3) marketing management builds a competency-based curriculum based on the Indonesian National Qualifications Framework and the Indonesian National Work Competency Standards for its students (Bradberry & De-Maio, 2019). All parts of learning must assist each other to create a favorable learning environment (Aliyyah et al., 2020).

Learning activities must encourage active student learning since the goal of education is the learning process, not just assessing learning results (Lassoued et al., 2020). However, there are still difficulties in learning activities in the learning process. For example, the marketing professional ethics course has been offered to students with two credits from the first semester of the Marketing Management D3 Study Program. This course examines a marketer's professional ethics regarding marketing operations and laws. A marketer's social duty involves creating

marketing campaigns and promoting social concepts and behaviors (Zhang et al., 2019). Only one-way lectures were employed in last year's online marketing professional ethics course. With the lecture technique, the lecturer is the topic of information, the focus of attention, and the lecturer speaks more while the students listen or take notes (Churiyah et al., 2020).



**Figure 1.** Comparison of Student Assessment in the Previous Semester

Figure 1 illustrates that the average student grade in the previous semester (2020/2021) was 32.38 in the second assessment, which inversely affects the first assessment score. The value of the second assessment dropped during online lectures because more students were bored with the method. Students are more interested in studying directly in class and listening to lectures (Delcker & Ifenthaler, 2021) because they can express and discuss their opinions openly (Asih & Ellianawati, 2019). The marketing management lecture system comprises theoretical and practical sessions, thus these students require hands-on experience that is tough to do online since assignments that provide theoretical answers tend to be less tightly supervised (Asih & Ellianawati, 2019).

In a vocational education program, students perform more actual work than theoretical sessions, and lecturing is regarded as tedious and uninteresting. First, lectures are theoretical and rote (such as articles, rules, codes of ethics, and definitions). Second, students are inactive because of repetitive course content. Third, cannot apply material (there is a decrease in student scores from first to second assessment). Fourth, one-way learning cannot channel student creativity. Active learning approaches are key to teaching online courses successfully (Buil-Fabrega et al., 2019). The lecture technique has been provided by giving homework, and debates have not effectively engaged students in online courses (Simamora et al., 2020). Finally, problem-based learning is anticipated to engage students and deliver the desired objectives (Svensson et al., 2021). Student activity indicators must fulfill these standards (1) students can detect phenomena or general difficulties of a marketer, particularly those linked to marketing ethics; (2) able to engage by discussing and attempting to solve problems actively; and (3) able to identify and provide answers to the problems mentioned.

During online lectures, many students have experienced a downgrade in scores due to boredom (Yazdanmehr et al., 2021). In addition, theoretical assignments do not lead to suitable practical activities (Visser et al., 2018). This study is essential since it starts with less active online lecture participation. One-way presentations where students listen. When lecturers let students ask/comment,

they do not discuss the delivered topic or marketer-related phenomena. Students believe they lack broad understanding, which in turn impacts communication ideas less creatively. Despite encouraging students to exhibit their talents, lecturers have given no input (Joshi et al., 2020). It is odd that D3 Marketing students, who will become marketers, are exposed to marketing challenges. This led to problem-based learning in online lectures (problem-posing).

Flipped learning focuses on student-centered learning by transferring lectures to pre-learning exercises using videos or other resources and utilizing class time for active learning to improve high-level thinking skills, including problem-solving, critical thinking, and cooperation (Birgili et al., 2021). Problem-posing may assist learners in building critical thinking abilities and inspire them to study compared to other learning methods (Sung et al., 2019). Cai & Hwang (2021) suggest that it is critical in the problem-posing mechanism to create problem-based on posing activities in groups and to give step-by-step indications throughout the learning process. Furthermore, lecturers' supervision during problem-solving exercises might improve students' learning accomplishments (Chen & Cai, 2020). However, when it comes to problem-solving exercises, most students find them tough. Scholars have said that most students have trouble putting together new and old information (Schindler & Bakker, 2020). Also, if students do not have enough knowledge, experience, or skills to understand the learning goals, or cannot connect the new ideas to what they already know, they may have trouble coming up with a problem-posing process (Voica et al., 2020).

Through this lecture approach, instructors will encourage students to continue studying properly and actively participate, solve difficulties, and debate the evolution of marketer professional ethics issued (Al-Samarraie et al., 2020). In this scenario, the lecturer directs students to examine real-world occurrences using a case study. They are then requested to evaluate case studies connected to marketing ethics literature. Based on observations, these problems will be discussed to develop answers, and students will be asked to present group results and case study discussions (Cai et al., 2020; Hwang et al., 2021). Through this problem-posing strategy, instructors attempt to solve students' poor scores (Sulman, 2019). However, research on the problem-posing model is exclusively for online lecture systems. Therefore, it may not work in onsite lecture systems. Further study and observation are needed to adapt the problem-posing lecture style to onsite lectures. By considering the problems that have been described previously, there is a need to improve the quality of learning and efforts to create an ethical marketing profession.

## **METHODS**

This research is intended to find out things related to the online marketing professional ethics learning process through the problem-posing method. The type of method used in this research is classroom action research. The model that will be used in this action research adopts the model of Kemmis et al. (2013), which is carried out through four stages, namely: planning, implementation, observation, and reflection. The flow of the cycle is mutually sustainable and continuous. The first cycle is carried out based on the observed problems. If the results are still lacking,

then proceed to the next cycle, which is an improvement from the second cycle. The cycle is stopped if the research results have met the expected goals (Kemmis et al., 2015).

In each cycle, this action research will be carried out with the following steps. First, planning and preparing lecture materials as well as discussion and presentation materials in the form of case study articles and submitting them through LMS (learning management system). Implementation: briefly providing material and opportunities for each group that has been formed to carry out discussions and then presents the results of their group work online and documented. The recording results will be uploaded by each team to their Youtube account so that the discussion will be monitored. Third, observation, recording students' questions and answers during the discussion and assessing student activities during the discussion and presentation using an evaluation sheet. Lastly is reflection—evaluating the implementation of the problem-posing learning method by measuring student perceptions of this method using a questionnaire.

This research was conducted from 20 September 2021 to February 2022. This classroom action research was carried out in parallel classes consisting of four classes in the D3 Marketing Management study program, Faculty of Applied Sciences, Telkom University. This research was conducted on first-year students, taking into account the cumulative achievements of all students. This research was conducted on the subject of professional marketing ethics with the consideration that the pass rate for that course in the previous semester was quite low, and the course is very suitable to be associated with practice and case studies. The subjects or participants involved in this study are researchers as planners and implementers of class action research to be carried out, and students as research subjects who will be a benchmark for the success of implementing the problem-posing method in the marketing professional ethics course.

**Table 2.** Rubric for Assessment of the Implementation of the Problem-Posing Method

No	Assessment Indicators	Score
1	<b>Group Assessment (60%)</b>	
	Presentation of the results of group discussions in Power-point	20
	The results of the analysis of situations, problems, decisions, and continuous solutions to each other	20
	Creativity and novelty of found solutions	20
2	<b>Individual Assessment (40%)</b>	
	Individual contributions within the group (such as mastery of the material)	20
	Ability to present discussion results (communicate)	20
<b>Total Score</b>		<b>100</b>

Note(s): Score Range: A= 81-100, AB= 71-80, B= 66-70, BC= 61-65, C= 51-60, D= 41-50, E= 0-40

The instruments used in this research are assessment tests and questionnaires developed with critical thinking criteria consisting of multiple choices in the high-level question category and several essay questions that adopt critical thinking criteria from the case study in the assessment test. Questionnaires using a five-point scale: Strongly Disagree (1 point) to Strongly Agree (5 points): this is believed to

provide more accurate answers than the previous scales, which had just three points. The range of scores on the questionnaire responses can be categorized as follows. A score > 80 is categorized as high, whereas if the score is 50 to 80, it is categorized as moderate, and the score is in a low category if < 50 (see Table 2). In classroom action research in the online marketing professional ethics course, the method that will be used is the problem-posing method. The problem-posing method is a learning concept that helps lecturers relate the material being taught to students' real-world situations and encourages students to actively participate in building relationships between their knowledge and its application in the field (Fahyuni et al., 2019).

## **RESULTS & DISCUSSION**

### **Planning**

At the beginning of the lecture, the lecturer begins by delivering the semester learning plan to the students so that they know an overview of the learning materials, reference books that need to be read, the purpose of studying ethical issues of the marketing profession as well as agreements in determining the value and evaluation. With this explanation, it is hoped that students will find it easier to complete assignments, case studies, or make presentations in front of other students, actively discuss during the learning process with course lecturers and fully understand their obligations to become marketers as the profession that will be owned in the future. In addition, it is hoped that they will animate the profession as marketers and the orientation that will be achieved after following the course. With these activities, it is hoped that students will feel happy and there will be no coercion when they pursue what they do in the process of attending college, and there will be an earnest effort to obtain better final results. At this stage, the things that the researcher did are provided as follows.

First, forming discussion and observation groups with members of each class divided into seven groups of 4 to 5 students. Second, develop a learning plan following the problem-posing learning method strategy with activities including the following steps: (1) Prepare a lesson plan for each meeting which includes learning scenarios according to the chosen strategy, namely problem-posing learning with group concept maps in the assignment/case study. (2) Prepare teaching materials under learning activities at each meeting in the LMS (learning management system). Third, develop data collection instruments in the form of tests and non-tests. Before compiling the questions, the researcher first compiled a grid of questions and assessment guidelines. The pretest is carried out before the implementation of the first action cycle (in the form of a quiz), and the posttest is carried out after the implementation of the first action cycle (in the form of an assessment). (3) Prepare a feedback questionnaire for students. In the form of observation sheets, it is accompanied by observation guidelines and then an evaluation of the results of observations.

### Implementation

The steps for implementing the actions that have been applied by the researcher are in line with the semester learning plan. The steps for implementing the actions are provided in Table 3.

**Table 3.** The Implementation of Learning Actions

Type/Stage Action	Meeting	Lecturer and Student Activities	Achievement Indicators
Introduction	1	Lecturers motivate students by conveying the basic competencies to be achieved through the problem-posing learning model.	Student participation and performance
	2-8 & 10-15	Giving assignments to students to make observations in the field about things that happen in the phenomenon of a marketing profession.	Performance appraisal in discussion
Core	2-8 & 10-15	Students make observations in the field to complete assignments, case studies, or other problems as desired. Then students explore marketing issues and professional ethics of marketers on the internet and can also access references through online library ( <a href="http://openlibrary.telkomuniversity.ac.id">openlibrary.telkomuniversity.ac.id</a> ).	Assessment of student performance in project observation and assessment
	2-8 & 10-15	Students make online presentations in front of other students to report their observations in the field, each group will be appointed randomly every week. Then at the end of the meeting, the lecturer will clarify based on reports presented by students.	Performance appraisal in presentation
Closing	9 & 16	A pre-test (quiz) was held at the 8th and 15th meetings before the post-test (assessment) at the 9th and 16th meetings, where all students had to take an assessment through LMS-CELOE (e-learning management system) as an evaluation material for lecture activities.	Assessment of the results of observations and post-test

The introduction phase in the first cycle begins with providing material on general knowledge in the ethics and marketing profession courses with a two-way presentation method (there is a combination of lectures, discussions, and question and answer sessions) to students. After giving the material, students will be asked to access the LMS-CELOE (e-learning management system) to download lecture materials (Powerpoint slides) and complete the discussion forum. Through this discussion forum, students can provide their opinions regarding their understanding of the material presented by the lecturer. In addition, these students can also discuss directly, such as asking, responding, and doing various other activities. In the core activity, before carrying out practical activities, students first study the material that has been previously prepared through the LMS. Based on the presentation of the lecture material by the lecturer and the case study questions (assignments) that have been determined, the students make observations and present the results of their observations.

The case study assignment will be discussed with the group members, and then the observations from the case study will be documented through the class Youtube channel. Furthermore, in the following week, a random presentation will be made by one of the groups to find out the extent of mastery of the material and knowledge in the discussion of marketing professional ethics material, either from the supporting lecturer or from the discussion of case study completion. In closing, after all, lecture materials at CLO 01-07 have been delivered by the lecturers, and students have also observed by solving problems in each case study assigned each week according to the criteria directed. Then the lecturer will evaluate the results of these observations by testing all lecture materials that have been delivered through pre-test (quiz) and post-test (assessment). The aim is to measure the ability of students to understand and accept lecture material given by the supporting lecturer.

### Observation

Observations were carried out by the lecturer in conjunction with implementing the first cycle of actions starting from the first meeting to the ninth. This observation records all student activities on the lecturer's performance during the problem-posing learning action. After the lesson ended at each meeting, the researcher discussed with the observers to find the findings during the learning activities as reflection material. The observations' results were then analyzed for improvement at the next meeting. In carrying out this observation, the lecturer uses an instrument and an observation format (see Table 4).

**Table 4.** Observation Results of Problem-Posing Learning Method Development

No	Rating Indicator	First Cycle		Second Cycle		Change
		%	Category	%	Category	
1	Understanding of the reality of phenomena increases	80.76	High	85.73	High	Increase 4.97%
2	Better understand the concept of professional marketer ethics	83.95	High	86.37	High	Increase 2.42%
3	Adding insight into the reality of lecturers	82.42	High	86.24	High	Increase 3.82%
4	Improved understanding in learning	83.31	High	83.95	High	Increase 0.64%
5	Thinking is more developed/creative	84.08	High	87.77	High	Increase 3.69%
6	More active participation in class	79.24	Medium	80.13	High	Increase 0.89%
7	Thinking becomes more critical	81.91	High	83.06	High	Increase 1.15%
8	Adding inspiration when completing case studies	81.53	High	86.11	High	Increase 4.58%
9	More comprehensive understanding	79.62	Medium	80.25	High	Increase 0.63%
10	Increase the experience of thinking from various aspects and points of view	85.35	High	89.55	High	Increase 4.2%

No	Rating Indicator	First Cycle		Second Cycle		Change
		%	Category	%	Category	
11	Able to solve higher quality problems	81.91	High	84.46	High	Increase 2.55%
12	Increase life skills	83.95	High	89.94	High	Increase 5.99%
13	Provide a more meaningful life experience	84.84	High	86.62	High	Increase 1.78%
	Average	82.53	High	85.40	High	Increase 2.87%

Note(s): Score Category Description: High (Score > 80); Moderate (50 < Score < 80); Low (Score < 50).

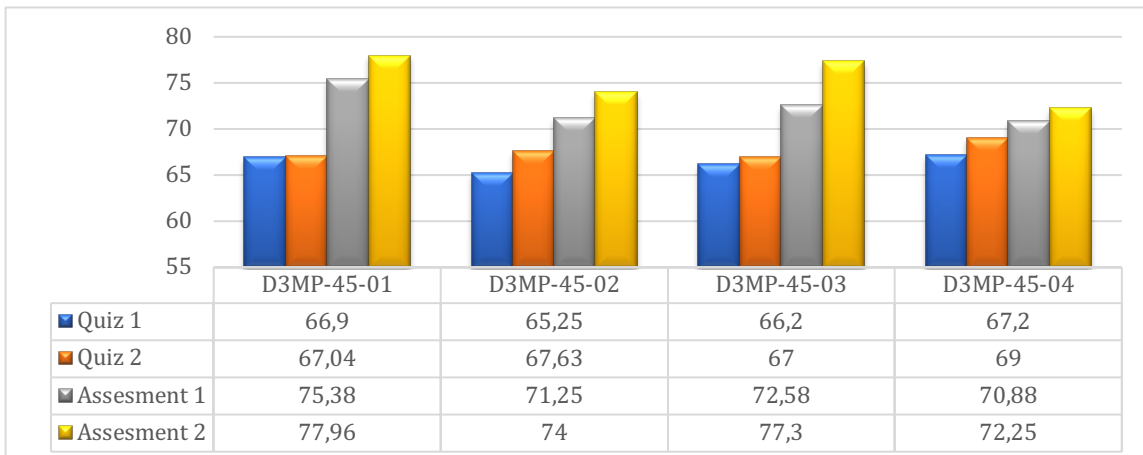
The data in Table 4 is an assessment of the students on the development of the implementation of the first and second cycle problem-posing method in the D3MP-45-01/02/03/04 class. Where observations were made by giving questionnaires related to 4 main aspects, namely the level of student attention, creativity, level of understanding, and activeness in group discussions. From the results of the questionnaire, it can be seen that there was an increase from the first and second cycle in all assessment indicators according to the students. However, in the first cycle, there were still two aspects in the moderate category: more active participation in class (79.24%) and more comprehensive understanding (79.62%). These two aspects have become the focus of attention for lecturers before implementing the problem-posing learning method in the second cycle. In the second cycle, all aspects of the assessment indicators were in the high range. It is hoped that in the future, all aspects of the assessment indicators will remain in the high range, and then it is also hoped that the learning in the next semester will increase the percentage value of the score.

In addition to conducting non-test activities (surveys as previously presented), the classroom action research in the first and second cycles was also observed through the test method (via quizzes and assessments). This is performed by measuring students' understanding of the marketing professional ethics lecture material at CLO 01-07, which has been submitted, discussed, and completed in each case study at the meeting. The assessment measuring instrument used in the observation is an evaluation sheet (assessment result sheet). Based on the evaluation sheet on the student assessment sheet, it can be seen that the comparison of the scores between the D3MP-45-01/02/03/04 class in two stages of assessment, namely, pre-test through quiz questions and post-test through assessment questions with the details of the values are provided in Figure 2.

Based on the data in Figure 2, it can be seen that the assessment of student learning outcomes through the evaluation sheet gets an average value of the second assessment, which is higher than the average value of the first assessment for the D3MP-45-01/02 class /03/04, it shows an increase in the assessment value in the first cycle to the second cycle. As for the increase in the average value of the assessment of the four classes from 72.52 to 75.38 (AB category) or 3.94%. Then the average value of the second quiz was also obtained, which was higher than the average value of the first quiz for the D3MP-45-01/02/03/04 class. This indicates an increase in quiz scores in the first cycle towards the second cycle. The average



quiz scores for the four classes rose from 66.39 to 67.67 (B grade category) or 1.93%.



**Figure 2.** Comparison of Pretest and Posttest Average Scores in the 1<sup>st</sup> and 2<sup>nd</sup> Cycle  
 Note(s): A= 81-100, AB= 71-80, B= 66-70, BC= 61-65, C= 51-60, D= 41-50, E= 0-40

This student achievement is in line with one of the indicators of the guidelines in improving study achievement in the marketing professional ethics course based on the expected action intervention results from each trial method or learning cycle, namely, learning outcomes enlarges if the post-test and pre-test scores - the second cycle test (assessment-2 and quiz-2) increased or at least comparable to the results of the post-test and pre-test in the first cycle (assessment-1 and quiz-1), with an individual learning completeness standard of 85% who got a score A, AB, B, BC, and C (values above 50.01 to 100). The data above shows that there is an increase in student learning outcomes in the second cycle. The problem posing-learning method in the second cycle was proven to improve students' competence in observing material and case studies related to the implementation of professional marketing ethics.

### Reflection and Analysis

Learning scenarios are considered good if the material is given interactively (two-way), learning steps are given systematically, and evaluation instruments are complete, such as the availability of test and non-test observations. The students' responses to the implementation of learning scenarios using the problem-posing method for the marketing professional ethics course for class D3MP-45-01/02/03/04 obtained a score of 82.53% in the first cycle and 85.40% in the second cycle. This shows that students' perceptions of learning scenarios are good because they are in the high score category and increase in each cycle. In addition to conducting non-test activities (surveys as previously presented), the classroom action research in the first and second cycles was also observed through the test method (via quizzes and assessments).

Based on the assessment of student learning outcomes, an increase in the assessed value was found in the first to the second cycle. As for the increase in the average assessed value in the four classes from 72.52 to 75.38 (AB category) or 3.94%. Then there was also an increase in quiz scores from the first cycle to the

second cycle. The incline in the average quiz scores for the four classes was from 66.39 to 67.67 (B grade category) or 1.93%. In addition, this shows that the students' assessment of the learning material is good. The reason is that the material presented by the supporting lecturer is considered interesting, following the competencies to be achieved, under the semester learning plan, relating to the concept of science, and inviting students to think critically, creatively, and innovatively (not limiting when looking for sources of information only through scientific media such as journals) (Akben, 2020). It also gives freedom to these students to access material via Youtube, social media, and other informal sources of information. Thus, it is easy to understand and clear delivery, the depth of the material is to the student's abilities, and the information provided follows the times or current marketing trends (Cai & Hwang, 2020).

The process of learning based on the problem-posing method is very suitable for the type of Professional Marketing Ethics course because the nature of the course is flexible in the sense that its development will depend on students exploring problems in existing phenomena, as well as values that apply in society. The problem-posing approach is through a process or active learning method (Suwandi et al., 2021). This method gives students the flexibility to think creatively, find ideas, and ask questions to understand social reality (Goldenberg, 2019). It is hoped that later, students will be able to see problems with the ethics of the marketing profession. Thus, these problems can be solved, and found the right solution for further development. Implementing the problem-posing method is important to be applied as an alternative learning approach (Ye et al., 2019).

This means that when students experience boredom with concepts/theories taught by teachers/lecturers, an educator must find solutions and find new approaches that would give students more pleasure and activity to learn (Winarso & Haqq, 2020). In addition, educators must also provide learning whose results are more meaningful for the benefit of the lives of their students. Mardapi and Herawan (2019) provides enlightenment to educators with the concept of community-based education. This concept makes education must have a relationship with social reality. The absence of relationships only provides meaningless education (Andrews-Todd & Forsyth, 2020). The idea of the problem-posing approach begins with implementing the concept of reality-based social education (Suryanto et al., 2021). The following describes the effectiveness percentage of the learning methods implementation that have been applied.

**Table 4.** Effectiveness Percentage of Problem-Posing Learning Method Application

No	Rating Indicator	1 <sup>st</sup> Cycle	2 <sup>nd</sup> Cycle	Decision
1	Observation Results of Problem-Posing Learning Method (Non-Test)	82.53%	85.40%	Increase 2.87%
2	Obtaining Average Post-Test (Assessment)	72.52	75.38	Increase 3.94%
3	Obtaining the Average Pre-Test (Quiz)	66.39	67.67	Increase 1.93%

The criteria or requirements for this method to be applied to other courses are as follows. There is no specific rule regarding the number of students per class. However, the research team only needs to ensure that the number of participants in the class can be divided into several groups/teams. Meanwhile, based on the

characteristics of the course material, this learning method should be applied to courses relevant to the discussion or completion of the case study. Thus, there is a topic of discussion that must be resolved by each group and also found a solution to the problem. If it is implemented in parallel classes, the coordinating lecturer should first coordinate with the teaching team. Therefore, the learning method in each parallel class is conveyed properly and properly.

The involvement of each teaching team is required to collaborate with the coordinating lecturer in implementing this learning method. Various methods are very necessary for the learning process for students. It is important to conduct research with various other methods to vary the results. Through the problem-posing method, it can encourage students to learn actively, increase understanding holistically, improve life skills, increase insight into thinking, and be inspired. Observations made by students on the phenomenon of teacher problems in general and the ethics of the marketing profession, in particular, can inspire making assignments and improve problem-solving skills. As a result, learning is more vibrant and meaningful, and students can produce quality solutions to the problems discussed.

## CONCLUSIONS

Information that supports the positive value of learning the marketing profession ethics is when question and answer session is held after each group presents the results of their analysis. They mostly give logical answers to the questions given. Thus, through the non-test learning observation process in the first cycle, which was not fully in the high category. Finally, in the second cycle, it seemed that it had met the high criteria for what was the purpose of implementing the problem-posing method. To give a more accurate picture of success, this report also evaluates the scope of problems that students must solve and find solutions for each case study. Giving the task of making an analysis to be presented is intended to find out how deep the students are in understanding the ethical problems of the marketing profession that should have been attached to their profession. This assignment also aims for students are expected to be more sensitive to problems and cases that occur in the world of marketing and marketing ethics. Furthermore, the results of the collected analysis will be presented by students every week. From this percentage, it can be seen that students' abilities are relatively increased in conveying ideas verbally and their ability to respond to or answer questions from seminar members. Based on the description of the success of the results of observations that are both test and non-test, there has been an increase from the first to the second cycle.

From the practical aspect (daily or changes in student behavior patterns and habits), the researchers assess that the success rate of implementing this grant is more than 80%. Based on the implementation of classroom action research in the first and second cycles, it can be seen that the students' scores have been good. This is indicated by the increase in student scores from pre-test to post-test. It shows that the problem posing-method can enhance students' competence in the marketing profession ethics course. Meanwhile, the non-test observation sheet shows that the student's response to implementing the marketing professional ethics course using

the problem-posing method in the first and second cycles is good. However, there need to be improvements to acquire a better assessment in the future. The next steps to correct deficiencies in implementing this classroom action research include: preparing learning scenarios that are more mature, interesting, and interactive so that students' understanding is more comprehensive. Also, it is suggested to provide case studies that are trending or updated in the marketing industry; and encourage students to participate more actively, creatively, and innovatively in implementing the problem-posing method.

## REFERENCES

- Akben, N. (2020). Effects of the problem-posing approach on students' problem solving skills and metacognitive awareness in science education. *Research in Science Education, 50*(3), 1143-1165.
- Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Journal of Ethnic and Cultural Studies, 7*(2), 90-109.
- Al-Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: a review of the evidence across disciplines. *Educational Technology Research and Development, 68*(3), 1017-1051.
- Asih, N. F., & Ellianawati, E. (2019). The enhancement of verbal communication skills for vocational students through project-based learning Physics. *Jurnal Penelitian & Pengembangan Pendidikan Fisika, 5*(1), 21-28.
- Birgili, B., Seggie, F. N., & Oğuz, E. (2021). The trends and outcomes of flipped learning research between 2012 and 2018: A descriptive content analysis. *Journal of Computers in Education, 8*(3), 365-394.
- Bradberry, L. A., & De-Maio, J. (2019). Learning by doing: The long-term impact of experiential learning programs on student success. *Journal of Political Science Education, 15*(1), 94-111.
- Buil-Fabrega, M., Martínez Casanovas, M., Ruiz-Munzón, N., & Filho, W. L. (2019). Flipped classroom as an active learning methodology in sustainable development curricula. *Sustainability, 11*(17), 4577.
- Cai, J., & Hwang, S. (2020). Learning to teach through mathematical problem posing: Theoretical considerations, methodology, and directions for future research. *International Journal of Educational Research, 102*, 101391.
- Cai, J., & Hwang, S. (2021). Teachers as redesigners of curriculum to teach mathematics through problem posing: conceptualization and initial findings of a problem-posing project. *ZDM—Mathematics Education, 53*(6), 1403-1416.
- Cai, J., Chen, T., Li, X., Xu, R., Zhang, S., Hu, Y., ... & Song, N. (2020). Exploring the impact of a problem-posing workshop on elementary school mathematics teachers' conceptions on problem posing and lesson design. *International Journal of Educational Research, 102*, 101404.

- Chen, T., & Cai, J. (2020). An elementary mathematics teacher learning to teach using problem posing: A case of the distributive property of multiplication over addition. *International Journal of Educational Research*, *102*, 101420.
- Churiyah, M., Sholikhah, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. *International Journal of Multicultural and Multireligious Understanding*, *7*(6), 491-507.
- Delcker, J., & Ifenthaler, D. (2021). Teachers' perspective on school development at German vocational schools during the Covid-19 pandemic. *Technology, Pedagogy and Education*, *30*(1), 125-139.
- Fahyuni, E. F., Arifin, M. B. U. B., & Nastiti, D. (2019). Development textbook with problem posing method to improve self regulated learning and understanding concept. *Jurnal Pendidikan Sains (JPS)*, *7*(1), 88-92.
- Gamage, K. A., Silva, E. K. D., & Gunawardhana, N. (2020). Online delivery and assessment during COVID-19: Safeguarding academic integrity. *Education Sciences*, *10*(11), 301.
- Goh, E., & Sigala, M. (2020). Integrating information & communication technologies (ICT) into classroom instruction: Teaching tips for hospitality educators from a diffusion of innovation approach. *Journal of Teaching in Travel & Tourism*, *20*(2), 156-165.
- Goldenberg, E. P. (2019). Problem posing and creativity in elementary-school mathematics. *Constructivist Foundations*, *14*(3), 319-331.
- Hwang, G. J., Chang, S. C., Song, Y., & Hsieh, M. C. (2021). Powering up flipped learning: An online learning environment with a concept map-guided problem-posing strategy. *Journal of Computer Assisted Learning*, *37*(2), 429-445.
- Joshi, A., Vinay, M., & Bhaskar, P. (2021). Impact of Coronavirus pandemic on the indian education sector: Perspectives of teachers on online teaching and assessments. *Interactive Technology and Smart Education*, *18*(2), 205-226.
- Kemmis, S., McTaggart, R., & Nixon, R. (2013). *The action research planner: Doing critical participatory action research*. Springer Science & Business Media.
- Kemmis, S., McTaggart, R., & Nixon, R. (2015). Critical theory and critical participatory action research. *The SAGE Handbook of action research*, 453-464.
- Lassoued, Z., Alhendawi, M., & Bashitialshaaer, R. (2020). An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic. *Education Sciences*, *10*(9), 232.
- Lotulung, C. F., Ibrahim, N., & Tumurang, H. (2018). Effectiveness of learning method contextual teaching learning (CTL) for increasing learning outcomes of entrepreneurship education. *Turkish Online Journal of Educational Technology-TOJET*, *17*(3), 37-46.
- Mardapi, D., & Herawan, T. (2019). Community-based teacher training: Transformation of sustainable teacher empowerment strategy in Indonesia. *Journal of Teacher Education for Sustainability*, *21*(1), 48-66.
- Medeiros, R. P., Ramalho, G. L., & Falcão, T. P. (2018). A systematic literature review on teaching and learning introductory programming in higher education. *IEEE Transactions on Education*, *62*(2), 77-90.

- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
- Rodríguez-Abitia, G., Martínez-Pérez, S., Ramirez-Montoya, M. S., & Lopez-Caudana, E. (2020). Digital gap in universities and challenges for quality education: A diagnostic study in Mexico and Spain. *Sustainability*, 12(21), 9069.
- Sahronih, S., Purwanto, A., & Sumantri, M. S. (2019, March). The effect of interactive learning media on students' science learning outcomes. In *Proceedings of the 2019 7th International Conference on Information and Education Technology* (pp. 20-24).
- Schindler, M., & Bakker, A. (2020). Affective field during collaborative problem posing and problem solving: A case study. *Educational Studies in Mathematics*, 105(3), 303-324.
- Simamora, R. M. (2020). The Challenges of online learning during the COVID-19 pandemic: An essay analysis of performing arts education students. *Studies in Learning and Teaching*, 1(2), 86-103.
- Simamora, R. M., de Fretes, D., Purba, E. D., & Pasaribu, D. (2020). Practices, challenges, and prospects of online learning during Covid-19 pandemic in higher education: Lecturer perspectives. *Studies in Learning and Teaching*, 1(3), 185-208.
- Sulman, F. (2019). Application of cooperative problem posing and prior motivation towards students learning outcomes. *IJER (Indonesian Journal of Educational Research)*, 4(2), 94-97.
- Sung, H. Y., Hwang, G. J., & Chen, S. F. (2019). Effects of embedding a problem-posing-based learning guiding strategy into interactive e-books on students' learning performance and higher order thinking tendency. *Interactive Learning Environments*, 27(3), 389-401.
- Suryanto, H., Degeng, I. N. S., Djatmika, E. T., & Kuswandi, D. (2021). The effect of creative problem solving with the intervention social skills on the performance of creative tasks. *Creativity Studies*, 14(2), 323-335.
- Suwandi, A. F., Sahidu, H., & Gunada, I. W. (2021). Effectiveness of problem-based learning model devices with multiple intelligences approach to improve learners' physics problem-solving skills. *Jurnal Penelitian Pendidikan IPA*, 7(SpecialIssue), 238-243.
- Svensson, J., Axén, A., Andersson, E. K., & Hjelm, M. (2021). Nursing students' experiences of what influences achievement of learning outcomes in a problem-based learning context: A qualitative descriptive study. *Nursing Open*, 8(4), 1863-1869.
- Visser, L., Korthagen, F. A., & Schoonenboom, J. (2018). Differences in learning characteristics between students with high, average, and low levels of academic procrastination: students' views on factors influencing their learning. *Frontiers in psychology*, 9, 808.
- Voica, C., Singer, F. M., & Stan, E. (2020). How are motivation and self-efficacy interacting in problem-solving and problem-posing?. *Educational Studies in Mathematics*, 105(3), 487-517.

- Winarso, W., & Haqq, A. A. (2020). Where Exactly for Enhance Critical and Creative Thinking: The Use of Problem Posing or Contextual Learning. *European Journal of Educational Research*, 9(2), 877-887.
- Yazdanmehr, E., Elahi Shirvan, M., & Saghafi, K. (2021). A process tracing study of the dynamic patterns of boredom in an online L3 course of German during COVID-19 pandemic. *Foreign Language Annals*, 54(3), 714-739.
- Ye, X. D., Chang, Y. H., & Lai, C. L. (2019). An interactive problem-posing guiding approach to bridging and facilitating pre-and in-class learning for flipped classrooms. *Interactive Learning Environments*, 27(8), 1075-1092.
- Zhang, Q., Oo, B. L., & Lim, B. T. H. (2019). Drivers, motivations, and barriers to the implementation of corporate social responsibility practices by construction enterprises: A review. *Journal of cleaner production*, 210, 563-584.