JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi)
Vol. 4 No. 1 /April 2020
ISSN 2550-0732 print / ISSN 2655-8319 online

EFFECTIVENESS OF LEARNING METHODS IN ACCOUNTING STUDY PROGRAMS: COMPARISON IN LEARNING RESULTS THROUGH ADVANCED METHODS, CASE STUDY, AND SIMULATION

Indra Komara[1]*, Prima Yusi Sari[2]
Universitas Padjadjaran, Indonesia*[12]
ikomara27@gmail.com

Abstract: This study aims to examine which learning method is the most effective among the face-to-face learning methods, case studies, and simulations of learning outcomes (learning outcomes) in the form of learning outcomes of problem solving abilities, interpersonal skills, and self-awareness. The independent variable in this research is face to face learning method, case study learning method, and simulation learning method. The dependent variable in this study is the ability to solve problems, interpersonal skills and selfawareness. The respondents in this study were students of the Accounting study program at the Faculty of Economics and Business, Padjadjaran University. The number of samples in this study were 135 students, 65 people consisted of 2015 and 70 people of 2016. The sampling technique used was simple random sampling using the Slovin formula. This study uses multiple linear regression statistical analysis to determine the effect of independent variables on the dependent variable. The level of significance used in this study was 5%. The results showed that partially face-to-face learning methods had a significant positive effect on problem solving skills, interpersonal skills, and self-awareness of students. Partially the case study learning method has a significant positive effect on problem solving abilities and interpersonal skills, while self-awareness has no significant effect. Partially the simulation learning method has a significant positive effect on problem solving skills, interpersonal skills, and self-awareness of students. Simultaneously face to face learning methods, case study learning methods, and simulation learning methods have a significant positive effect on problem solving skills, interpersonal skills, and self-awareness of students.

Keywords: learning methods, face to face, case studies, simulations, learning outcomes, problem solving abilities, interpersonal skills, selfawareness.

INTRODUCTION

The rapid development of technology, causing increasing "knowledge content" in almost all activities and sectors including the economy, if the response to it is lacking, the lag will cause a gap called the "Knowledge gap" that widens in the future (Jakti , 2014). Then, outside critics have identified a large gap or "gap" between the knowledge and skills needed in the business world with the knowledge and skills gained through lectures in business education (Baldwin, Pierce, Joines, & Farouk, 2011; Bennis & O 'Toole, 2005; Pfeffer & Fong, 2004; Mintzberg, 2004) in (Farashahi & Tajeddin, 2018).

This is of particular concern to researchers as to how to overcome this gap. Later, we identified the most effective learning methods in reducing this gap and developing the professional skills needed in the real business world.

To reduce this gap, it can be done by streamlining learning to be able to improve students' abilities, by seeing how learning outcomes (learning outcomes). Therefore, to reduce the gap between the world of education and the real business world, research is conducted on the comparison of face-to-face learning methods, case studies,

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

and simulations of learning outcomes in the form of problem solving abilities, interpersonal skills, and self-awareness.

The three learning methods were chosen because the face-to-face method is the most commonly used learning method, and for the case study learning method

and simulations are the most widely used learning methods in the world of business education (Farashahi & Tajeddin, 2018).

The three learning outcomes chosen in this study are problem solving skills, interpersonal skills, and self-awareness. The three cognitive learning outcomes (cognitive), ability (skill-based), and affective (affective) were chosen based on previous research suggested by (Rubin & Martell, 2009).

Theoretical Basis

Bloom's taxonomic theory has three sets or three aspects in achieving a learning outcome. The three aspects are cognitive (regarding knowledge), affective (regarding attitudes and feelings), and psychomotor (regarding physical abilities) Bloom (1956) in (Darmawan & Sujoko, 2016). Cognitive aspects pertain to mental activities (parts of the brain), usually everything related to the brain is a part or cognitive domain. Then the affective aspects related to something related to emotional, such as feelings, values, appreciation, enthusiasm, motivation, and attitudes of individuals. Then for the psychomotor aspect is an aspect for one's physical abilities that can be sharpened by practice.

Cognitive aspects

In this cognitive aspect there is a hierarchy of six levels related to knowledge, comprehension, application, analysis, synthesis, and evaluation which is commonly known as Bloom's taxonomy. The hierarchy is ordered from the simplest to the most complex, or can be said also as the level of difficulty.

Psychomotor aspects

As explained earlier, that this psychomotor aspect is an aspect related to behaviors that emphasize aspects of motor skills or physical. As well as in the ability to handwrite, type, swim, and operate something.

In the psychomotor aspect there are five main categories. The five categories in psychomotor aspects are imitation, manipulation, precision, articulation, and naturalization Dave (1975) in (Widyartono, Dawud, Ghazah, & Harsati, 2017).

Affective Aspects

As explained earlier that the affective aspects are aspects related to emotional, such as feelings, values, appreciation, enthusiasm, motivation, and attitudes of individuals (Krathwohl, Bloom, Masia, 1973). There are five main categories in this affective aspect, from the simplest to the most complex categories. The five categories are acceptance of phenomena, responding to phenomena, valuing, organization, and internalizing values or characterization in (Bloom's Taxonomy of Learning Domains.

Effectiveness of Learning Methods

The use of appropriate learning methods is intended so that there is alignment between the material or courses to be delivered with the learning method. Basically the learning method used serves as a guide so students learn (Hamdani, 2011).

Face to Face Learning Method

The face-to-face learning method is the most common and most widely used learning method in the education system. This learning method is a formal and systematic methodology, where educators play a major role in the educational process and students (students) will have knowledge of the external world (Ardalan, 2006).

Case Study Learning Method

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

The case study learning method is one approach to learning to represent the real world of work compared to the lecture learning method. Usually this case study learning method will ask students to solve cases or problems given by teachers, usually these cases use cases that usually appear in the real world of work.

Simulation Learning Method

Simulation learning method is a learning method that requires students to be active in the learning process. Besides this simulation learning method that plays an active role in the classroom are students, not teachers or educators as learning centers as in the face-to-face method. Through this simulation method, students get the opportunity to integrate what they have learned, overcome complex problems, and be actively involved in the decision making process and experience the consequences of their decisions (Coffey & Anderson, 2006) in (Farashahi & Tajeddin, 2018).

Problem solving skill

The ability to solve problems is one of the abilities that is needed in the workforce. Almost all jobs require problem solving skills in their work. Including accounting in his profession as an auditor. According to (Knight & Yorke, 2004) problem-solving ability is often regarded as one of the abilities or skills most desired by employers, in (He, 2015).

Interpersonal Ability

Interpersonal Skills (Interpersonal Skills) are also defined as the term "umbrella" which refers to directed behavior, including communication and relationship building competencies, this ability is used when interacting which is shown by complex perceptual and cognitive processes, dynamic exchange of verbal and nonverbal interactions , diverse roles, motivations and expectations (Klein et al, 2006) in (Bedwell, Fiore, & Salas, 2014). So, simply interpersonal ability is an ability or skill possessed by a person to make an introduction, face to face, and interact with each other.

Self-awareness

As stated by (Zimmerman, 2010) self-awareness is something that students need to know about themselves so that they are able to manage all the limitations they have as long as they have an effort to continue learning. This awareness will greatly help a person to better know who he really is, the extent of his abilities, and how much limitations he can overcome and fatherly to know how far he is learning.

Framework

Differences in the effect of face-to-face learning methods, case studies, and simulations on learning outcomes in developing problem solving skills in students

Problem solving skills are cognitive learning outcomes that provide opportunities for students to choose and apply the knowledge that is most appropriate for each particular case and situation (Rubin & Martell, 2009). In the process of learning through face-to-face methods, usually educators or teachers already know the answers to each problem they describe. In this learning method, students will tend to be passive because the one who plays the main role is the educator. This passive process provides limitations or there is no opportunity to develop problem solving skills to students (Farashahi & Tajeddin, 2018).

In the case study learning method, students are required to be more active in finding solutions to problems that are being faced or are being identified. Students are involved in analyzing, synthesizing, and evaluating, as a goal of Bloom's higher learning, to solve problems in the real world (Farashahi & Tajeddin, 2018). This is why using case studies in both qualitative and quantitative programs

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

can provide great opportunities for students to develop their problem solving skills (He, 2015).

In the simulation learning method, students will experience the results of the decisions they take in solving problems and get feedback (feedback) and be able to assess whether the decision is correct or not, and improve the decisions that have been taken previously. This involves students actively in the decision making process.

Differences in the effect of face-to-face learning methods, case studies, and simulations on learning outcomes in developing student interpersonal skills

The purpose of the second learning outcome is interpersonal skills. Interpersonal skills are actions that are oriented by nature and as an important domain of skill-based learning outcomes for business education (Rubin & Martell, 2009). Interpersonal skills as behaviors that are driven by goals that enable people to carry out effective and efficient communication (Klein et al, 2006) in (Farashahi & Tajeddin, 2018).

The first step in developing interpersonal skills is to build relationships or relationships with other parties to gain basic knowledge about how to communicate well (Bedwell, Fiore, & Salas, 2014). This can be obtained by face to face learning method. One fairly good way to develop student soft skills is through face-to-face with all activities in it (Herawati, 2012). The method indirectly teaches students how to communicate well by seeing how lecturers communicate or deliver material to their students. However, according to Salas and Cannon-Bowers (2001) in research (Farashahi & Tajeddin, 2018) said that interpersonal skills will be more effective if done through "demonstration, practice, and input", then teaching that gives more impact on experience is a case study learning method. and simulation.

According to (Mesny, 2013), case studies are claimed to be able to go beyond cognitive learning goals by achieving cognitive learning goals by achieving skills based learning goals through the development of personal and interpersonal skills of students. However, the efficiency of case methods in developing human behavior and interpersonal skills in technical business will be difficult (Cuplin & Scott, 2011), because the case study will be conducted in a closed room or classroom that limits interaction between people. So most likely with the limitations in the room, case studies are not effective enough to describe the actual business conditions. This interpersonal ability requires students to be actively involved in various aspects of interpersonal skills (communication and building relationships) in an environment that is closer to the real business world (Farashahi & Tajeddin, 2018). The most effective way for this interpersonal ability is with students having to experience directly and get actual feedback.

According to (Salas, Wildman, & Picolo, 2009) SBT (Simulation-Based Training) is considered as a synthetic practical environment created for the acquisition and development of attitudes, concepts, knowledge, rules, and skills as competencies needed to improve performance trainees. In the study of Li and Greenberg (2009) in their research (Farashahi & Tajeddin, 2018) they found that simulations were significantly more effective than lectures to improve student competencies in all managerial skills except for learning principles and concepts, as well as written communication.

Differences in the effect of face-to-face learning methods, case studies, and simulations on learning outcomes in developing student self-awareness

The purpose of the third learning outcome is self-awareness. According to (Zimmerman, 2010) self-awareness is something that students need to know

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

about themselves so that they are able to manage all the limitations they have as long as they have an effort to continue learning. Besides self-awareness is also known as one of the intrapersonal dimensions of emotional intelligence competence through which a person observes and monitors himself both in terms of feelings, behavior, and actions (Myers & Tucker, 2005).

This self-awareness is needed not only for the students themselves. But students must also be aware of the feelings and behavior of friends or colleagues who work with them, so that motivation will emerge into students, which in turn will increase their level of confidence. With self-awareness, students will know the extent of his abilities and how far he has learned. With the three learning methods used in this study, I want to see the extent to which the learning methods are able to influence students' self-awareness.

In this case, face-to-face learning methods provide great opportunities for students to improve their technical and cognitive knowledge, but this method has a weakness in increasing tacit knowledge in students as a metacognitive basis or awareness of students (Farashahi & Tajeddin, 2018). As is known, tacit knowledge is knowledge that is difficult to identify, map, and share where the knowledge comes from experience or habits of the learning process that is formed in a person's person. Students can improve their tacit knowledge through practice according to Raelin (2007) in (Farashahi & Tajeddin, 2018) and experience.

By using simulation learning methods and case studies students are expected to get better tacit knowledge. Because in this learning method students will get experience and get feedback on their decisions directly. This will be more effective in increasing students' tacit knowledge. Simulation learning methods are significantly more effective than case studies in developing students' self-efficacy in formulating and implementing strategies and actions needed (Tompson & Dass, 2000).

Hypothesis

H1: Based on students 'perceptions, simulation is the most effective learning method followed by case study and face-to-face learning methods sequentially in developing students' problem solving skills

H2: Based on students' perceptions, simulation is the most effective learning method followed by a case study and face-to-face learning method in sequence in developing interpersonal skills in students.

H3: Based on students' perceptions, simulation is the most effective learning method followed by case study and face-to-face learning methods sequentially in increasing student self-awareness.

METHODS

The population in this study were S1 students in the Accounting and Study Program class of 2015 and Padjadjaran University totaling 190 people. With the calculation of simple random sampling with the Slovin formula, a minimum total sample of 129 is obtained. In this study there were 135 samples with 65 respondents in 2015 and 70 respondents in 2016.

Data collection technique

The type of data used in this research is primary data with data acquisition carried out by distributing questionnaires online. Hypothesis testing uses multiple linear regression analysis method with SPSS version 22.0 application.

RESULT AND DISCUSSTION

Discussion of Research Results

Differences in Influence between Face-to-Face Learning Methods, Case Studies, and Simulation Against Students' Problem Solving Abilities

From the data testing in the previous sub-chapter, the results are obtained that each learning method has a significant effect on problem solving

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

skills. Then seen from the value β obtained in the regression equation for problem solving ability shows the results that the simulation learning method has the highest effect compared to case studies and face to face. This can be seen from the equation Y1 = 9,405 + 0,441 X1 + 0,533 X2 + 0,535 X3. And these results are in line with simultaneous hypothesis testing.

For the values obtained between the simulation learning method and case studies, the difference is not far adrift. This is in accordance with previous research which has such results, where the simulation learning method has a greater effect but is thinly adrift with the case study method which is then followed by the face-to-face method (Farashahi & Tajeddin, 2018). And this problem-solving ability, is an ability that can represent the cognitive realm of bloom's taxonomy (Rubin & Martell, 2009). And for the cognitive domain in Unpad accounting, it has only reached C4 from C1-C6, this was revealed by Mrs. Prima as a lecturer in S1 Accounting Unpad.

Then to see the results of the direct effect of the independent variable on the dependent variable, it can be seen with the coefficient of determination obtained from β standardized coefficients. From these data shows the problem-solving ability of students is influenced by 12.9% by face-to-face methods, 20.8% by case studies, and 19.1% by simulations. So that the total contribution of influence is 52.9%.

Differences in Influence between Face to Face Learning Methods, Case Studies, and Simulations on Interpersonal Ability in Students

Tests that have been done in the previous sub-chapter produce β values on the unstandardized coefficient which is not too far between independent variables. In these values show the results that the simulation learning method, is the learning method that has the greatest effect on interpersonal skills in students followed by the case study and face-to-face methods. This can be seen with the following regression equation Y2 = 6.755 + 0.573 X1 + 0.600 X2 + 0.609 X3. It also shows the same thing in simultaneous hypothesis research.

In simultaneous hypothesis testing the results show that, based on student perceptions, the simulation method is the most effective method followed by the case study and face-to-face method in order to improve the problem-solving ability of students, which means that Ho is rejected and accepts Ha. The research is in line with previous research which has the results between simulation learning methods and case studies is the most effective learning method to improve interpersonal skills followed by face-to-face (Farashahi & Tajeddin, 2018). Because it is indeed good research done before, with research conducted now has quite the same results.

Then this interpersonal ability is also one aspect that needs to be considered, and is in line with Bloom's theory with research conducted by Kraiger (1993) that learning outcomes are skill-based, or commonly referred to as behavior, or in Bloom's Taxonomy it is said to be psychomotor, results This learning involves demonstration of technical or motor skills that have not been held or demonstrated by students before as well as the ability to perform these skills with fluidity in real conditions (Kraiger, 2002) (Rubin & Martell, 2009).

Then to see the results of the direct effect of the independent variable on the dependent variable, it can be seen with the coefficient of determination obtained from β standardized coefficients. From these data shows that the influence given to the interpersonal ability of face-to-face learning methods is 18.4%, then the stido case is 24.4%, and simulation is 22.6%. So that the total contribution of influence given is equal to 65.4%.

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

Differences in Influence between Face-to-Face Learning Methods, Case Studies, and Simulations on Student Self-Awareness

For the results of tests conducted in the previous sub-chapter that there are two learning methods that have a significant positive effect on student self-awareness, namely the simulation and face-to-face methods, and there are methods that have a positive but not significant effect, namely the case study method. This is considered reasonable, because the cause of this insignificant effect is because previous studies were carried out in different places, namely Canada, then the number of different research samples and different populations. Then, previous research chose undergraduate students from various majors at business schools and MBA students in Canada. And in hypothesis testing simultaneously, it can be accepted that the simulation method is the most effective method compared to case studies and face-to-face in increasing self-awareness in students. For the effect of each variable can also be seen by looking at the regression equation Y3 = 10,016 + 0,642 X1 + 0,264 X2 + 1,120 X3.

The value obtained from each learning method on self-awareness, has a value that is quite far between learning methods. However, there is a slight difference with previous research, namely that which has a greater effect after the simulation method is a face-to-face method, not a case study. But still, the simulation method has the most influence on self-awareness of students. In addition, self-awareness is something that must be fulfilled by a student to fulfill the affective aspects of learning theory, according to Bloom's taxonomic theory, this includes understanding the direction or strength of certain attitudes such as student beliefs and also including student confidence (Rubin & Martel, 2009).

Then to see the results of the direct effect of the independent variable on the dependent variable, it can be seen that the coefficient of determination obtained from the data shows that self-awareness of students is influenced by 15.1% by face-to-face learning methods, 7.6% by case studies, and by 34.9% by the simulation method, and the contribution of influence exerted a total of 57.7%.

CONCLUSION

Simultaneously, based on student perceptions, simulation is the most effective learning method followed by case studies and face-to-face on problem solving skills, interpersonal skills, and self-awareness of students. Partially the face-to-face learning method has a significant influence on problem solving abilities, interpersonal skills and self-awareness of students. Partially the case study learning method has a significant effect on problem solving abilities and interpersonal skills, while self-awareness does not have a significant effect. Partially the simulation learning method has a significant effect on problem solving skills, interpersonal skills and self awareness in students.

REFERENCES

Ardalan, K. (2006). The philosophical foundation of the lecture-versus-case controversy: Its implications for faculty teaching, research, and service. *International Journal of Social Economics,*.

Bedwell, W. L., Fiore, S. M., & Salas, E. (2014). Developing The Future Workforce; An Approach for Integrating Interpersonal Skills Into the MBA Classroom. *Academy of Management Learning & Education*.

Cuplin, V., & Scott, H. (2011). The effectiveness of a live case study approach: Increasing knowledge and understanding of ‘hard’ versus ‘soft’ skills in executive education. *Management Learning*.

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020

Darmawan, I. P., & Sujoko, E. (2016). Revisi Taksonomi Pembelajaran Benyamin S. Bloom.

Farashahi, M., & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The International Journal of Management Education*.

Hamdani. (2011). *Strategi Belajar Mengajar.* Bandung: Pustaka Setia.

He, W. (2015). Developing Problem-Solving Skills With Case Study in A Conceptual Management Course. *Journal of Business Case Studies*.

Herawati, S. D. (2012). Review of the Learning Method in the Accountancy Profession Education (APE) Programs and Connection to the Students Soft Skills Development. *Social and Behavioral Sciences*.

Jakti, D. K. (2014). *Menerawang Indonesia Pada Dasawarsa Ketiga Abad Ke-21.* Pustaka Alvabet.

Mesny, A. (2013). Taking Stock of the Century-long Utilization of the Case Method in Management Education. *Canadian Journal of Administrative Sciences*.

Myers, L. L., & Tucker, M. L. (2005). Increasing Awareness of Emotional Intelligence in A Business Curriculum. *Business Communication Quarterly*.

Rubin, R. S., & Martell, K. (2009). Assesment and Accreditation in Business Schools. In S. J. Armstrong, & C. V. Fukami, *The SAGE Handbook of Management Learning, Education and Development.* London: SAGE.

Salas, E., Wildman, J. L., & Picolo, R. F. (2009). Using Simulation-Based Training to Enhance Management Education. *Academy of Management Learning & Education*.

Tompson, G. H., & Dass, P. (2000). Improving Students' Self-Efficacy in Strategic Management: The Relative Impact of Cases and Simulations. *Simulation & Gaming*.

Widyartono, D., Dawud, Ghazah, A. S., & Harsati, T. (2017). Cognitive, Psychomotor, and Affective Domain in Instruction on Writing Papers at University. *The International Journal of Social Sciences and Humanities Invention*.

Zimmerman, B. J. (2010). Becoming a Self-Regulated Learner: An Overview. *Theory Into Practice*.

Submitted: December 03, 2019; Revised: March 02, 2020; Accepted: March 27, 2020 Published: April 17, 2020