# PHENOMENOLOGY STUDIES: ACCOUNTING GAMES AS METHOD SIMULATION ACTIVE LEARNING FOR UNDERSTANDING ACCOUNTING IN I-GENERATION

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#### **Abstract**

The rapid development and growth of technology have implications for innovation in the field of education. Accounting learning in a monotonous class with learning that is embedded in the teacher is an old way that gives the impression that learning is only centered on the teaching staff. Accounting learning education is not limited to understanding but there are other components in terms of intellectual intelligence, emotional intelligence, and social intelligence. Generation-I is the youngest generation in the order of human evolutionary life, where they were born in a world of sophisticated technology so the methods in the process of growth and development while learning and education must be adapted to the times. A new way of learning as in the concept of independent learning is one way to follow the implementation of learning for Batch I students. This research was conducted with the aim of observing and studying students in independent research to solve accounting learning problems using learning simulations designed with the learning accounting game method project based. Phenomenology is used as a tool to analyze students' understanding of accounting with the project-based learning accounting game method because it can observe directly and exploratively existing situations. This research is qualitative descriptive research with the type of phenomenological research with observation techniques, interviews, and documentation. This research was conducted on class XII high school (SMA) students at SMAN 4 Tangerang Selatan and SMA Dharma Karya. The results of this study illustrate that students in the igeneration category prefer active learning with the project-based accounting game method because not only intellectual learning but other components such as emotional and social in groups are also needed in solving problems and determining policies. Understanding of learning accounting is increasing and students are happier and understand that learning accounting is fun.

Keywords: Phenomenology, Active Learning, Accounting Games, Project Based Learning.

### 1 INTRODUCTION

Technology has become an integral part of human life. The rapid growth of technology currently is very helpful and facilitates all areas of life, especially in the field of learning. Learning technology is often associated with learning theory and education. Education is a process of interaction between students and educators as well as learning resources within the area (Sulistiani et al., 2020). The educational process needs to be planned, implemented, assessed, and supervised so that it is carried out efficiently and effectively. The growth of

technology and data in the world of learning should be able to facilitate the educational process. The educational process is intertwined with the data delivery process, which can use tools as data transmitters or modules. These data delivery tools are referred to as educational media. Educational media using technology provides new reflections for researchers to be able to develop more interesting educational methods (Kurniawan & Rakhmawati, 2018).

Learning that can create quality human resources requires an educational process. The educational process is intertwined because there is interaction between a person and his environment. The achievement of an educational process is indicated by the presence of better changes in behavior which involve changes in knowledge (cognitive), skills (psychomotor), or those involving values and behavior (affective). The achievement of these changes is influenced by several aspects, including educators, students, areas, educational procedures, and educational media. Educational media is a tool to help teachers in the process of educational activities. Thus, the goal is to make it easier for teachers to deliver modules to students. In addition, educational media helps students to prepare and receive modules because students can use them independently at home. Educational media must be packaged properly and create attractiveness so that students feel at home while studying. The lack of variety of media is not just a teacher's fault, but because of the little time to understand accounting lessons, school conditions, student personalities, and not optimizing technological growth and development (Putra & Nugroho, 2016).

According to the opinion expressed by Familius (2016), The most important aspects of educational theory can basically be divided into two, namely associative theory and field theory. Associative theory, which is inductively oriented, namely the building of knowledge in the development of education based on knowledge, attitudes, and skills acquired by students after receiving the teaching they receive then if it is explained that the flow in this theory is behavioristic. This theory holds that education is directed at creating new student behaviors through the stimulus and response provided during the learning process. In contrast, field theory assumes that it is more deductive, meaning that knowledge is obtained from something general and holistic. Field theory has two streams, namely cognitivism and humanism so that students do not only interact individually but are in groups and cooperate with one another and work for the common interest in accordance with the goals of the study group.

Playing games is a fun activity and a form of entertainment for most people. Especially for young people who are known as digital natives who were born in the development of a sophisticated technological world, they are very familiar with these activities. By definition,

games are interactive game activities that have targets for achievement and interaction between players (both between pairs and between opponents) to carry out these activities. (Krath, et.al., 2021). Game-based learning is a learning method that is starting to develop combining learning methods and industrial areas. The use of games as a learning tool is based on the current fact that the latest learners are the digital generation with a new profile that is different from previous students (Joella, et.al., 2020). Due to this fact, interesting learning tools are needed to keep them motivated and actively involved in the learning process (Rahayu, 2022). Learning by using games provides a very different learning experience compared to the conventional learning process in monotonous and traditional classes, this proves their literacy increases (Ellahi, et.al., 2016). In game-based learning, participants interact with each other in a team or interact with other teams, thus building several competencies, both hard skills and soft skills. In connection with business training in tertiary institutions, through games students have learning experiences by running a business virtually (Rahayu, 2022). In this case, they design strategies, execute strategies, analyze data, make decisions, and also evaluate the strategies implemented (Burhanudin, et.al., 2021)

The participation of accounting educators is linked to preparing students for their professional careers and facilitating the development of knowledge, skills, and self-confidence (Schoenfeld, J., G. Segal, 2017). Student scores usually reflect the level of technical expertise and knowledge they have acquired. However, confidence and self-assurance are needed to put those skills and knowledge into practice in a real-world setting (Siegel, 2000). Although several studies have explored accounting education and learning, only a few have focused on pedagogical approaches that develop students' confidence in their ability to apply this knowledge (Ugrin et al., 2021). In other professions where self-confidence is essential for successful job performance, such as nursing, research has revealed that complex practice through simulation can facilitate the development of confidence in abilities not covered by monotonous and conventional lectures (Palmer, B. J., 2017).

Accounting learning can be defined as a series of learning procedures that aim to enable students to apply accounting methods based on their scientific principles. Students are expected to be able to understand the importance of accounting as a business language in making decisions for the sustainability of an entity and making financial reports according to predetermined competency standards. Accounting learning is done by implementing supporting learning strategies so that learning activities can take place effectively and efficiently (Dwiharja, 2015).

Accounting is a subject that is generally considered quite difficult by students. In studying procedural accounting, of course, requires attention from the teacher so that students are interested and able to achieve predetermined targets. In general, from a student's perspective, accounting is a science that only deals with numbers, lacks fun, and is rigid. But that does not mean there is no opportunity to provide "color" in accounting learning because, with creativity and using available applications, educators are able to increase students' interest in learning to account (Dwiharja, 2015). One of the media that can be utilized is to use collaborative active learning simulations with the accounting game method which are packaged in the project and case-based learning methods which are completed in groups with different roles because in this way it provides other aspects not only intellectual intelligence, but emotional and social intelligence to increase success to be more increased. Utilizing this learning method as a means of supporting accounting learning by implementing several interesting learning strategies, is expected to minimize obstacles in the form of limited knowledge and learning that is still traditional and boring and this can increase students' interest in accounting.

Based on this description, the researcher is interested in conducting research using phenomenological studies regarding the role of active learning with accounting games that can increase interest and knowledge in Generation Z so that this research can aim to see the development of existing technology and media to be implemented in deep learning. accounting so that the interests and skills of students can be increased and become provisions for preparation in entering the world of work.

#### 2 METHODOLOGY

In this study, the approach used was descriptive qualitative, a type of qualitative research. According to (Sugiyono, 2019) argues that qualitative methodology is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior. So, it can be concluded that qualitative research is a research procedure that produces descriptive data in the form of written or spoken words whose implementation occurs naturally. The purpose of this type of research is to reveal facts, circumstances, and phenomena that occur.

While the type of research used in this study is a type of phenomenological research. Research with a phenomenological approach is a research strategy in which researchers identify the nature of human experience about a particular phenomenon (Creswell & Poth, 2018). The researcher chose this type of phenomenological research because the researcher wanted to

understand and reveal phenomena in Phenomenology. Understanding students learning accounting by using active learning with project- and case-based accounting games carried out in groups with certain roles. This phenomenological study is based on situations that occur in the field in a natural, intact and accurate manner so that this research can only be carried out using qualitative research with a phenomenological approach.

This phenomenological study was carried out in two locations, namely Senior High School (SMA) 4 South Tangerang and Dharma Karya High School (SMA) with 12th grade students with vocational sciences in social sciences. Then the data collection technique by observing participants was taken randomly by selecting students from Senior High School (SMA) 4 South Tangerang and Dharma Karya High School (SMA), then they were given the opportunity to answer questions that were given in a semi-structured manner and provide related comments. impressions and messages based on experience and their participation in class when learning accounting with the accounting game method then each representative of each school was selected as much as 1 person to conduct in-depth interviews on the responses and meanings obtained after carrying out accounting learning using active learning with game-based accounting projects and cases carried out in groups with certain roles besides this data collection technique also uses documentation, namely archives from the results of accounting learning simulation work using the accounting game method.

## 3 FINDINGS AND DISCUSSION

## 3.1 Observation Result

In this part of the test, it was carried out by observing in the field the process of implementing learning in the classroom, then direct observation was carried out by taking a random sample of participants to carry out a survey with semi-structured questions and listening to their impressions and messages in carrying out accounting learning activities using the game-based accounting method. project.

Based on the results of the observations we made, we got 5 students as participants, consisting of 3 from SMA Dharma Karya and 2 from SMAN 4 Tangsel. The five students responded with the same pattern of learning behavior and the same adaptation process. The five students experienced changes in learning styles, ways of socializing or interacting in conveying message impressions and answering existing questions for the better and increasing an understanding in learning accounting, so this is associated with theories in psychology, namely behavioristic theory. This theory explains the observation of changes in behavior that are influenced by

events around it (this is the learning experience of students when participating in accounting lessons with project-based games). This theory argues that learning occurs because of Operant Conditioning, that is, if a person studies well and gets something fun and easy, then he will get an imbalance and this will improve the quality of his understanding of the learning material he is doing. (Puspitasari, 2023). Based on the questions asked to the student participants in the average class of the five students, they gave positive responses and agreed on these accounting games to provide a more simple understanding in capturing accounting learning, then they gave answers that accounting games provide their knowledge in financial transactions can be captured simply so that they can implement it into making financial reports easier and faster in identifying accounts used in financial statements, balance sheets and profit and loss. So overall, from the average of their answers to the questions asked that students understand accounting learning easily by using accounting games.

#### 3.2 Interview Results

In this part of the test, 1 student representative from each school was taken, then they were given questions by conducting in-depth interviews with. These participants consisted of 1 male and 1 female student where the male students came from SMA Dharma Karya and the female students came from SMAN 4 South Tangerang. This in-depth interview was conducted a few days after they carried out a simulation of learning to account for project-based games. This was done to dig deeper into whether their understanding of learning to account still crossed their minds or even did not remember how learning accounting was game based.

The first participant was an 18-year-old male student as a final year class with a social sciences major from Dharma Karya High School. We gave the initials AA for our name to maintain the confidentiality of the participant's identity. This student said in an interview that in the process of learning accounting with the project-based game method it provides interesting experience and knowledge for me, as far as I know accounting learning is very stiff and boring sometimes it gives the impression of being bored and lazy to follow it, especially in the learning process when we find the problem is that the balance sheet that is made is not balanced, and the complexity of the figures that I myself do not understand with the existing explanations. However, when the lecturers from the Open University came to our school, especially into my class to replace the supporting teacher at that hour, at first I was lazy and quite bored because the learning must have been monotonous as usual, but it turned out I was wrong and then quite surprised because they provides a new method of learning accounting using games, I also feel

curious so I pay attention to the explanation and steps in carrying out this accounting learning using the game method, after I follow it turns out this is very cool and gives a new impression to me, which was originally learning accounting what is boring at this time becomes very fun learning and triggers me to become more curious that accounting is not as complicated as what I have been following and studying. With this game method, it has increased to me that financial transactions are not as complicated as one might imagine identifying them. Learning accounting with this new method gives me the impression that accounting is not as difficult as imagined and can even trigger and improve our ability to identify financial transactions, understanding accounting literally gets better. Therefore, I really agree with this game method in learning accounting implemented into learning in schools, but of course it can be developed even simpler and more practical to be able to attract more attention.

The second participant is a 17-year-old female student as a final year social sciences major from SMAN 4 Tangerang Selatan. In the in-depth interview conducted, this student said that after participating in the activities of the open university accounting lecturers who filled out our classes, I was very, very lucky. First, I really like accounting because the subject is quite challenging for me. Second, accounting for most people is quite boring learning but not for me, although sometimes I also have a bored and bored side, maybe because learning is done at critical hours, or the teacher is very monotonous when delivering. However, when the ladies and gentlemen of an open university accounting lecturer came to my class, to be honest I was surprised that this was the first time a lecturer had taught a class, for me it was an experience to get used to later after graduating from high school and entering the world of lectures. I totally agree with the method used by the lecturers for us by learning accounting by using games, this has provided an extraordinary experience for me and can improve my ability to understand accounting learning, especially in identifying financial transactions and posting them in financial reports. I agree with this game method, I believe friends and especially for me to get rid of our stigma that learning accounting is boring, and accounting is a difficult subject. After participating in learning accounting with this game, my understanding skills in accounting lessons, especially in identifying financial transactions, have become easier because it is packed with learning that is very fun and not boring.

# 3.3 Study Documentation Results

The results of these tests and observations were made to see their results in implementing accounting learning simulations with project-based games. In this simulation, one class will be divided into several groups, namely there are 7 groups, and each group consists of 5 people, each of whom has different responsibilities and functions. Then they will carry out an accounting game simulation by being given an attribute and supporting tools for implementing the project-based learning simulation and they are given approximately 45 minutes to work on the simulation, before the simulation is carried out the instructors from the open university provide explanations and playing procedures, after being given an explanation they carried out a simulation of learning accounting with the game method. In the results they got from the 7 groups who succeeded in completing their work there were 6 groups and one group had not finished because the time allotted had finished, then from the 6 groups who succeeded the answers were in accordance with the existing key there were 4 groups so in this case it was more half of the group has been successful in completing accounting learning with this gamebased case and project method, judging from the existing documentation, the average suitability of each step and part in the process is appropriate and consistent with existing rules and regulations, each group has quite good at completing and identifying existing case studies, so that in this case learning accounting with the game method on a project and case basis they are happier and can give a good impression of appreciation, besides that their abilities are also more explored with each other, not only from academic side that can be improved but from the side of their soft skills in communicating between groups, teamwork, habits of nature in terms of helping each other are also intertwined in this learning method.

# 3.4 Discussion

In terms of behaviorist theory, it is a learning theory that emphasizes changes in behavior produced and applied by students or learning actors from the interaction of stimuli and responses obtained in the learning process in their environment, both individually and in groups (Abidin, 2022). If seen from Watson's behavioral learning theory it differs from the Pavlovian notion that humans are born with many reflexes and emotional responses, love and hate, all behavior is developed through stimulus-response associations (Puspitasari, 2023). In self-directed learning, behaviorist theory is a learning theory that emphasizes changes in behavior with stimulus-response elements. Teaching and learning can be applied through behavioral theory, which is a theory based on observed change that focuses on the learner in a new pattern

of behavior that is repeated until the behavior becomes habitual in an environment or a new way of learning (Mudlofir, A., & Rusydiyah, 2017). Then in terms of field theory which emphasizes cognitivism and humanism for students to study in groups for goals that have been set based on the potential and abilities of everyone to be integrated.

Based on the existing theory, learning accounting with game-based accounting games and projects gives a good and new impression in the learning process of transferring knowledge to students. By learning with this game behavioristic theory and fields in education science can be implemented, students can not only improve their cognitive ability in learning, but they can also change their behavior in learning so that they are accustomed to the environment and develop new methods of learning so they don't only individual traits but a sense of humanism from everyone will be trained into a positive habit. Academically, game-based accounting learning gives a positive impression of increasing hard skills and soft skills for students, with learning using this method it gives a good impression that learning does not have to be done in a monotonous manner as has been the case and has been carried out by many educational institutions. , but with the development of the times and sophisticated technology providing a new atmosphere for learning which will give a good impression in the world of education both in formal and non-formal institutions.

#### 4 CONCLUSION

Technological developments and the times that continue to skyrocket in the industrial world 4.0 provide an innovation, especially in the field of education, which must be carried out continuously. Accounting learning using the accounting game method on the basis of case studies or projects is one of the developments of a good innovation in the process of increasing accounting learning. With this method it gives a good and positive impression to students not only in improving their academic abilities in understanding accounting but also improving in terms of personality and socialization skills as qualified HR individuals. Increasing hard skills and soft skills also provides good provision for these students in preparing themselves to enter the next level of education or enter the world of work. With this learning innovation, it is hoped that it will continue to be the basis for improving skills and new breakthroughs in the world of education, so that students understand the importance of learning to become a fundamental thing to prepare themselves to become superior and quality human resources. The implications of this phenomenological study research can give a good impression to the world of education

to continue to innovate in updating the implementation of learning techniques that are adapted to the times and technology.

This research still needs a lot of improvement, it is necessary to increase more literacy in this phenomenological study, then the observations made can be carried out more broadly with existing methods or techniques so that an understanding of the situation can be more specific and more clearly visible to be drawn in a conclusion. For subsequent research, it is also necessary to expand the sample such as the number of participants or participants interviewed is increased and documentation studies can be carried out pretest and posttest so that it can be seen more specifically how the results of measurements are appropriate in research with similar or the same theme.

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## REFERENCES

- Abidin, A. M. (2022). Penerapan Teori Belajar Behaviorisme dalam Pembelajaran (Studi Pada Anak). An Nisa', 15(1), 1–8.
- Burhanudin, Y. S., Shah Kassim, M., Khair, Z., & Abdullah, M. (2021). Keberkesanan permainan simulasi perniagaan dalam kalangan pelajar UTM. Innovative Teaching and Learning Journal, 5(1), 54–64.
- Creswell, J. W., & Poth, C. N. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. In Sage Publishing.
- Dwiharja, L. M. (2015). Prosiding Seminar Nasional 9 Mei 2015 MEMANFAATKAN EDMODO SEBAGAI MEDIA PEMBELAJARAN AKUNTANSI. Prosiding Seminar Nasional 9 Mei 2015, 332–344.
- Ellahi, A., Sultan, F., & Zaka, B. (2016). Digital game based learning in business management education: a step from entertainment to digital literacy. European Journal of Business and Management, 8(22), 64–74.

- Familius, F. (2016). Teori Belajar Aliran Behavioristik Serta Implikasinya Dalam Pembelajaran. Pelita Bangsa Pelestari Pancasila, 11(2), 98–115. https://pbpp.ejournal.unri.ac.id/index.php/JPB/article/view/5161
- Joella, J., Yulia, Y., & Handojo, A. (2020). Business process simulation game as a business process learning tool for retail companies. International Journal of Industrial Research and Applied Engineering, 5(2). https://doi.org/https://doi.org/10.9744/jirae.5.2.33-40
- Krath, J., Schürmann, L., & von Korflesch, H. F. O. (2021). Revealing the theoretical basis of gamification: A systematic review and analysis of theory in research on gamification, serious games and game-based learning. Computers in Human Behavior, 125, 1–33. https://doi.org/https://doi.org/10.1016/j.chb.2021.106963
- Kurniawan, R., & Rakhmawati, R. (2018). Game Edukasi Pembelajaran Interaksi Mata bagi Anak Autis. Seminar Nasional Aplikasi Teknologi Informasi (SNATi) 2018, 68–76.
- Mudlofir, A., & Rusydiyah, E. F. (2017). Desain Pembelajaran Inovatif Dari Teori ke Praktik. Rajawali Pers.
- Palmer, B. J., and K. H. (2017). Collaborative simulation: Enhancing the transition to clinical practice. Nursing Education Perspectives, 38(5), 281–282. https://doi.org/https://doi.org/10.1097/01.NEP.000000000000166
- Puspitasari, A. (2023). Studi Fenomenologi Tentang Behavior Pattern Mahasiswa Akuntansi: Serupa atau Tak Samakah? 15, 113–127.
- Putra, D. R., & Nugroho, M. A. (2016). Pengembangan Game Edukatif Berbasis Android Sebagai Media Pembelajaran Akuntansi Pada Materi Jurnal Penyesuaian Perusahan Jasa. Jurnal Pendidikan Akuntansi Indonesia, 14(1). https://doi.org/10.21831/jpai.v14i1.11364
- Rahayu, I. (2022). The influence of game-based learning on business literacy business literacy. 4(3), 159–168. https://doi.org/10.20885/jca.vol4.iss3art3
- Schoenfeld, J., G. Segal, and M. B. (2017). Social cognitive career theory and the goal of becoming a certified public accountant. Accounting Education, 26(2), 109–126. https://doi.org/https://doi.org/10.1080/09639284.2016.1274909

- Siegel, G. (2000). Skills needed for entry-level management accounting positions. Strategic Finance, 81(10), 79–80.
- Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alphabet.
- Sulistiani, H., Darwis, D., Silaen, D. S. M., & Marlyna, D. (2020). Pengembangan media pembelajaran akuntansi berbasis multimedia (studi kasus : sma bina mulya gading rejo, Pringsewu). Jurnal Komputer Dan Informatika, 15(1), 127–136. https://journal.untar.ac.id/index.php/JKI/article/view/7195
- Ugrin, J. C., Odom, M. D., Honn, D. D., & Rose, A. M. (2021). The Effects of Collaborative Simulation on the Development of Students' Confidence in Managerial Accounting Skills. Issues in Accounting Education, 36(2), 43–63. https://doi.org/10.2308/issues-19-112