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Active Learning Pedagogy for Enriching Economics Students' Higher Order Thinking Skills

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Abstract. This paper advances active learning as a pedagogic praxis in Economics education to enrich students' critical and higher order thinking skills (i.e., analysis, evaluation, and synthesis). The paper is grounded within Critical Theory (CT) as a theoretical lens, which gives this intellectual piece an impetus to propagate empowerment and transformation as guiding principles. The paper adopted Participatory Action Research (PAR) as a methodological approach to generating data. The two overarching research questions that developed the intellectual elements of this paper are: what are the challenges faced by Economics students in responding to higher order questions? How can active learning pedagogy be used to enrich Economics students' critical and higher order thinking skills? A thematic analysis technique was used to analyse the discourses generated. Research shows that students find it challenging to respond to higher order questions and that Economics teaching is predominantly skewed towards the conventional lecture approach or the teacher-centred method, which often does not create opportunities for students to be actively engaged in the teaching and learning process, thus leaving them as passive recipients of knowledge. Based on the findings, this paper argues for active learning as a more unconventional pedagogy in Economics teaching to empower students to respond to higher order questions.

Keywords: Active Learning; Economics Education; Higher Order Thinking Skills; Student Engagement

1. Introduction

This paper seeks to explore the use of active learning as a pedagogic method in teaching Economics to enrich students' higher order thinking skills through active engagement in the teaching and learning spaces. Calls to adopt an active learning approach stem from the observation that the teaching of Economics has been primarily dominated by conventional teacher-centred approaches, such as direct instruction or a lecture method. Ancho and Serbo (2019) found that the traditional lecture method, or chalk-and-talk approach, is the instructional strategy that

Economics teachers predominantly use. Unfortunately, it is an approach that relegates students to a passive role in a teaching and learning environment. Whiting (2006) asserts that the passive learning environment brought about by the lecture method does not arouse student interest or create enthusiasm for what the subject Economics has to offer, and hence the calls in the Economics education literature for Economics teaching to transcend the dominant, traditional chalk-and-talk method. Nepal and Rogerson (2020) explain that Economics is a highly analytical, technically demanding discipline, and one which students find difficult to understand; consequently, they are usually less engaged in class.

Salemi (2009) also observes the problem of lack of active student engagement in Economics classes and asserts that one of the challenges that Economics instructors face is using strategies that make students undertake activities through which they master course material at deep levels and in a lasting way. Broman et al. (2015) note that even though students might have factual knowledge in various subject areas, it may be difficult for them to transfer knowledge, combine facts and ultimately achieve a comprehensive understanding of the subject. To mitigate such difficulty, Zoller and Nahum (2012) assert that there is a need for a paradigm shift from teaching methods that mainly focus on lower order thinking skills to teaching methods that promote higher order thinking skills. This assertion is corroborated in an argument by the Department of Basic Education (2021) that classrooms dominated by teaching and learning methods based on regurgitation of factual content may not provide opportunities to develop students' critical thinking skills, but that such opportunities will be created in classrooms where active learning is an essential component.

Active learning is one pedagogic approach that seems to have the potential to transform Economics education into a participative teaching and learning environment that promotes student engagement, deeper learning of the subject, and the development of students' higher order thinking skills. Gogus (2012) describes active learning as a combination of instructional techniques that allow students to participate in learning and teaching activities, to take responsibility for their learning, and to establish connections between ideas by analysing, synthesising, and evaluating. Additionally, Martinez Casanovas et al. (2022) mention that students engage in meaningful activities and think about what they are doing in an active learning environment. Martinez Casanovas et al. (2022) further note that active learning strategies are introduced in the teaching and learning environment to enhance students' problem-solving and critical-thinking skills. Yen and Halili (2015) note that to develop students' higher order thinking skills, teachers need to promote student engagement using learning tasks that go beyond knowledge and comprehension to encourage the application, analysis, synthesis, and evaluation of information. In agreement, Malanog and Aliasas (2021) maintain that engaging students in the learning process through classroom activities or discussions is one initiative teachers can take to improve students' higher order thinking skills.

It is against this background that a problem statement was formulated which states that an over-reliance on teaching methods that do not actively engage

students in the learning process is a contributing factor to inadequate development of Economics students' higher order thinking skills, resulting in student under-achievement in the higher-order questions. The challenge that Economics students have in demonstrating higher-order thinking skills is highlighted in the study by Kurniawati (2021), which found that higher order thinking skills are still low among Economics students. The results of that study indicated that most of the students who took the test that consisted of lower and higher order questions did better in lower order questions; only a few performed well in higher order questions (Kurniawati, 2021).

This study aims to answer the primary question of how the use of active learning strategies in Economics helps to enrich students' higher order thinking skills. The study will argue that the active engagement of Economics students in the teaching and learning process using active learning methods has the potential to advance the higher order thinking skills required to answer higher order questions.

2. Literature review

The predominant use of a teacher-centered approach in Economics teaching is noted by Ismail et al. (2020), who state that Economics largely follows traditional methods such as lectures and is more teacher-centered. A similar observation is made by Asarta et al. (2021), who argue that Economics teaching is predominantly through lecturing and writing on the chalkboard. Ping (2003) notes that sole reliance on the traditional lecture method and the textbook often makes it difficult for Economics students to answer the 'What if?' questions. Such questions require students to use higher order thinking skills and hence call for Economics teachers to design learning strategies that can encourage such skills (Kurniawati, 2021). Romadhoni and Nurlaela (2018) state that higher order questions are the questions that require students to conclude, hypothesise, analyse, apply, synthesise, evaluate, and engage in comparing and contrasting the ideas they come across. These activities require a student to demonstrate high levels of logical reasoning. The same challenge is found in Engineering education. Asok et al. (2016) argue that an inclination toward the use of traditional teacher-centered methods could be a reason for the difficulty in attaining higher order thinking skills among Engineering students and therefore recommend the establishment of an active learning environment in Engineering education.

Students are likely to develop higher order thinking skills when they actively engage with the teacher, the subject content, and their peers to develop a deeper understanding of Economics and apply its concepts and theories in their daily lives. This contrasts sharply with the teaching and learning environment dominated by teacher-centered methods, where teachers transmit information to less-engaged students who passively listen to the lecture. Malanog and Aliasas (2021) note that higher order thinking skills are more than memorizing facts as they are presented. They require students to understand the facts, infer from them, connect them to other facts or concepts, categorise them, manipulate them, put them together in new ways, and apply them to find solutions.

Vasiliki et al. (2016) argue that teachers must discover and apply new teaching methods compatible with students' needs, interests, and abilities. This argument relates to the challenge that Economics teachers often encounter when trying to teach the subject such that students understand the fundamental economic phenomena, the relevant economic concepts, and their application in everyday life. The contention by Ismail et al. (2020) that learning not only requires a mere absorption of information into the students' minds but also needs the active involvement of their minds and actions provides further motivation for adopting alternative pedagogic methods in Economics teaching. Similarly, Ancho and Serbo (2019) argue that teaching Economics should not be viewed as a mere transmission or lecturing of knowledge about economic facts, concepts, and theories, but should be based on previous knowledge. Students will be able to understand what they are learning through brainstorming to synthesise the newly acquired information.

Joshi and Marri (2006) note that there is general agreement in social studies and Economics education for theorising and testing active learning pedagogies, which in Economics education include simulations, experiments, interactive computer exercises, and various kinds of games, among others. Furthermore, Ismail et al. (2020) note that using multiple active learning techniques, for example, games and role-play methods in Economics teaching, can develop the student's analytical skills which will further enable them to apply economic theory using information and data supplied by the teacher. This is the opposite of a learning environment in which students memorise and regurgitate economic concepts precisely from the teacher's explanation. The use of games technique in Economics teaching can improve students' understanding of economic concepts that are too abstract to comprehend by simply listening to a lecture. Similarly, role-playing enhances students' interest in the subject and prevents boredom and sleepiness in class (Ismail et al., 2020).

The case method is another active learning strategy suitable for enriching students' higher order thinking skills. It is defined by Conway et al. (2010:19) as a group of source materials on a single subject. A case may be a short, written summary, a collection of news articles, or any other presentation of events drawn from experience that places the participants in an analytical decision-making role. Carlson and Velenchik (2006) describe the case method as an active learning technique that uses classroom discussion of a written narrative or a case as a strategy to develop the student's analytical tools and skills. The potential the case method has to enrich students' higher order thinking skills is also noted by Chumak et al. (2022), who state that the case method is an appropriate and effective interactive teaching method because of its efficacy in promoting critical thinking, collaboration, and cooperation of students and teachers. According to Chumak et al. (2022), the case method involves students discussing a particular event or situation in the real world. It requires them to find the best possible solution to the problem highlighted. The case method thus allows the students, who are seen as future role players in the real economic world, not only to solve the problem but also to develop strategies to predict the further development of the situation and to develop the ability to express and defend their arguments.

Popescu (2014) mentions that one can acquire these cases from formal, purpose-written material available from different sources (mainly from business schools) or they can be constructed from sources such as newspaper articles, cartoons, or radio stories. The use of the case method as an active learning strategy is thus relevant for achieving the main objective of this research, that is, enriching the higher order thinking skills of Economics students by the decision-making role it places on students in the class. Popescu (2014:274) states that cases are narratives that contain information that invites analysis, and the cases involve situations that require decision-making, problem-solving, evaluation, or reconsideration of existing practices or policies.

The relevance and potential effectiveness of active learning pedagogy in enriching students' higher order thinking skills are made apparent by the description of active learning offered by Nguyen and Trimarchi (2010) who state that active learning is an approach that requires students to move past the phase of simply acquiring basic information through lectures and texts to engaging in higher order thinking tasks such as analysis, synthesis, and evaluation. The advantage that Economics education stands to gain from active learning pedagogy is noted by Joshi and Marri (2006), who maintain that using active methods in Economics instruction is beneficial because such methods emphasise active rather than passive learning. Furthermore, Joshi and Marri (2006) contend that active learning promotes more significant learning through personal experience. More significant learning develops when students bear the consequences of their actions in learning.

Hetler (2015) notes that active learning is characterised by teaching and learning spaces where students are involved in activities such as reading, discussing, and writing instead of merely passively listening. An active learning class is further characterised by less emphasis on transmitting information from the teacher to students as it focuses more on developing students' higher order skills such as analysis, synthesis, and evaluation. Al-Bahrani and Patel (2015) contend that students are likely to gain and retain a deeper understanding of economic concepts in classes where active learning is used as a pedagogic method, and they further argue that active learning effectively develops students' knowledge of complex economic concepts and improves their retention. According to Al-Bahrani and Patel (2015), the effectiveness of active learning in developing students' understanding of complex economic concepts and improving their retention ability can be ascribed to the fact that meaningful learning experiences are created when students are actively engaged in trying to acquire and understand information.

Malanog and Aliazaz (2021), too, maintain that rather than having students as passive listeners in class, teachers should involve them in constructive learning to improve their higher level thinking skills. The assertion that active learning requires more than mere absorption of information into students' minds is supported by Ismail et al. (2020), who state that active learning needs the active engagement of students' minds in the learning process. The characteristics of active learning, as mentioned in the preceding paragraphs, paint it as a suitable

pedagogic approach in Economics teaching to enrich students' higher order thinking skills. When their higher order thinking skills and critical thinking skills are enriched, students will be able to improve their performance in the higher order questions that require them to demonstrate the ability to analyse, synthesize and evaluate economic data. Students will also be able to apply economic concepts and theory appropriately when answering questions.

3. Theoretical Framework

The study is couched in a Critical Theory framework, the origins of which can be traced to a group of German social theorists known as the "Inner Circle" at the privately-financed Institute for Social Research in Frankfurt, Germany, in 1923 (Abrams, 2004). The members of this school included Max Horkheimer, Theodor Adorno, Herbert Marcuse, Leo Lowenthal, and Frederick Pollack. Some of the main principles of Critical Theory include transformation, emancipation, and empowerment. Ponteronto (2005) states that Critical Theory serves to disrupt and challenge the status quo, and Grant and Humphries (2006) assert that Critical Theory aims to produce the kind of knowledge that seeks to achieve an emancipatory interest through the critique of consciousness and ideology. The goal of Critical Theory is not merely to determine what is wrong with contemporary society but to identify progressive aspects and tendencies within the organisation that help to transform it for the better (Kemmis, 2008). The intention of Critical Theory is to challenge the status quo to achieve emancipatory interest; its quest for transformation resonates with the objective that this study, that is, transformation of the pedagogical practices in Economics education.

Critical Theory is therefore relevant to this study as it seeks to transform the teaching of Economics from teaching methods that develop mainly lower order thinking skills in students to methods that actively engage students in activities that enrich their higher order thinking skills. Active engagement of the students in the teaching and learning spaces also emancipates them from their accustomed role as passive recipients of information in class. The usual order of the classroom is also transformed into a learning space in which students take more responsibility for their learning, where their voices are heard in class, and they become co-constructors of knowledge. The teacher's role changes from a sage on the stage to a guide on the side. Empowering students with higher order thinking skills will assist in overcoming the study's identified problem of low performance in higher order questions.

4. Methodology

The study is sited in a transformative paradigm that dovetails with the theoretical framework's transformation principle. A qualitative design was adopted for this Participatory Action Research (PAR) as the principal researcher believed rich data could be generated by tapping into the lived experiences of research participants. Savin-Baden and Major (2010) argue that PAR methodology is an agreement in which different parties believe that a collaborative effort of the voices and actions of those directly affected by the research problem will produce the knowledge required to solve an identified problem. In this study, the principal researcher worked with a team of research participants comprised of three Economics

teachers and six Economics students. The teachers were purposively selected based on their experience in teaching the subject and their keen interest in finding a solution to the research problem. The teachers recommended the students from their schools based on the interest they showed in this subject and their wish to pursue courses in Economics at tertiary level. The primary purpose of purposive sampling is to focus on population characteristics that are of interest, which will best enable the researcher to answer research questions (Rai & Thapa, 2015). Permission to conduct the study in the selected schools was sought from the Department of Education; the identified research participants provided informed consent and approval. The principal researcher's university issued ethical clearance to conduct the study.

Data were generated through focus group meetings conducted over three months. The research participants' main questions during the focus group meeting were (i) What challenges do students experience when responding to higher order questions in Economics? (ii) How can active learning strategies be used in Economics to enrich the students' abilities to answer higher order questions?

De Vos, Strydom, Fouche, and Delport (2005) assert that a focus group creates a platform where members are encouraged to share their lived experiences, views, and perceptions on the issue under investigation, with no pressure being put on them to arrive at a consensus. The study went through three Participatory Action Research cycles, namely (i) planning, (ii) acting and observing, and (iii) reflecting. In the first planning cycle, the research participants came together to determine students' difficulties in answering higher order questions and identify strategies to engage students in higher order thinking. In the second cycle of acting and observing, teachers were requested to teach specific topics using the traditional lecture method and to administer a pre-test before presenting the same topic using active learning methods. After that, teachers were requested to present lessons adopting identified active learning strategies and observe how those strategies engaged students in higher order thinking. The teachers administered a post-treatment test, and students' responses to higher order questions were compared with their answers to the same questions in the pre-test. In the last reflection cycle, the research participants held another focus group meeting to reflect on their experience of using the active learning pedagogy in the Economics class. They assessed its effectiveness in strengthening students' higher order thinking skills and evaluated its impact on students' performance in higher order questions.

Data were analysed using thematic analysis. Braun and Clarke (2012) maintain that thematic analysis allows the researcher to see and make sense of collective or shared meanings and experiences. The principal researcher discussed the main themes that emerged during data generation with the research participants to ensure that they were an accurate record of the focus group meetings held by participants.

5. Findings and Discussions

Three significant themes emerged from the research participants' responses to the two main questions that guided the focus group discussions: What are the challenges students find in answering higher order questions? How can active

learning pedagogy be used in enriching students higher order thinking skills? The study found that the dominant lecture method in Economics leads to passive learning, as students rarely engage in activities that can hone their higher order thinking skills. Furthermore, the study found that students encounter challenges in answering higher order questions. Lastly, the study found active learning pedagogy through student engagement activities such as role-play and simulations, classroom experiments, and the use of case method effectively enriched students' higher order thinking skills.

5.1 Passive learning does not help students to develop higher order thinking skills

One of the major themes that emerged is that Economics classes are characterised by passive learning; students mainly listen to the teacher, write down notes and respond to the teacher's questions when prompted. This situation does not create opportunities for students to strengthen their higher order thinking skills. One reason cited for this is that the teaching of Economics seems to be dominated by the traditional lecture method, where the teacher plays the role of a transmitter of knowledge to students who become passive recipients of that information. This observation is supported by Asarta et al. (2021), who argue that Economics teaching is predominantly through lecturing and writing on the chalkboard. The following are extracts from transcripts of the focus meetings where participants tried to deduce the cause of students' challenges in strengthening their higher order thinking skills.

Bonolo (student):

"I think we, as students, spend most of the class time just listening to the teacher, and we hardly question some of the things the teacher tells us."

Cally (student):

"I agree with what Bonolo is saying; most of the time, the teacher does most talking in the class and reading from the textbook. We follow the lesson by listening and writing down the notes from the chalkboard as presented by the teacher."

Aljos (teacher):

"What the two previous students have mentioned is a true reflection of the Economics class, and one reason could be that students do not always come prepared for the class; hence they do not bring to class the questions that troubled them as they were preparing. I sometimes ask myself, or is it because I have become used to spoon-feeding them?"

The classroom order described above echoes the argument by Zain et al. (2009) that students often expect that their role in class is to sit passively and wait for information from their teachers. This is the attitude that, according to Zain et al. (2009), leads to students coming to class unprepared and unable to engage in discussions and activities that require them to demonstrate reasoning and provide two-way communication. In this type of classroom setup, students mainly develop lower order thinking skills as they merely learn the subject by rote and regurgitate the teacher's facts. In such a classroom setting, students rarely engage in activities that require them to think critically about what they are learning.

Chan (teacher):

"I also experience the same thing in my class, and I have to acknowledge that I seldom use methods that engage the students in discussions. I believe that when I use a direct method of instruction, I can cover enough content in the time allocated. I also try to ensure that students remember the presented content to prepare for the tests or exams."

The reason offered by the teacher for the use of the direct teaching method appears to be driven by the need for breadth of content coverage while ignoring the depth of coverage. In this vein, Salemi (2009) asserts that Economics instructors often face the challenge of using strategies that induce students to undertake activities through which they master course material at deep levels and in a lasting way. Furthermore, Malek et al. (2014) argue that even though the traditional lecture method may effectively transmit large volumes of information, it may not promote independent thought because students are not engaged.

5.2 Students' challenges in responding to higher order questions

The research indicated that responding to higher order questions by Economics students is a challenge, as is supported by scholar such as Kurniawati (2021). They maintain that Economics students perform better in lower order questions than higher order ones.

Romadhoni and Nurlaela (2018) state that higher order questions are the questions that, amongst others, require students to conclude, hypothesise, analyse, apply, synthesise, evaluate, and to engage in comparing and contrasting ideas they come across. These questions, therefore, need a student to demonstrate high levels of logical reasoning.

Below are extracts from the transcripts of the focus meetings in which research participants responded to the challenges students face in answering higher order questions.

Amantle (student):

"Sometimes, a question will say, "Evaluate the effectiveness of a fiscal policy in combating inflation." The problem is that you do not know precisely what you have to say in responding to such a question because you only know how to define fiscal policy and two of its main instruments."

In support of Amantle's statement, Bonolo (student) said

"It is accurate, and this happens most of the time when you are required to write an essay on a particular topic, and you are required to examine or discuss it in detail critically."

Adding to the challenges raised by Amantle and Bonolo, Cally (student) further mentioned that:

"Sometimes, the question paper has a cartoon you must interpret before answering its questions. Providing an answer becomes difficult because a cartoon can be something that comes from a newspaper and it is not in our textbooks."

The challenges raised here indicate the students have mainly gained the ability to respond to the questions only at a lower level, that is, to define, name, or list. Conway et al. (2010) argue that an inclination towards oversimplifying the course concepts in Economics teaching and a tendency to emphasise basic definitions result in students showing the ability to answer lower order questions while struggling with higher order questions. The preceding extracts of students' comments demonstrate a lack of higher order thinking skills, which require them to analyse information, evaluate economic policies, interpret data, and provide evidence-based arguments.

The lack of the necessary higher order thinking skills points to one of the principles of critical theory: empowerment. For this reason, Economics teachers are called upon to incorporate teaching and learning methods to equip students with the thinking skills needed to answer higher order questions. However, a study by Kurniawati (2021) demonstrates that students' thinking skills are generally still at the level of lower order thinking. Hence a need to improve the learning process to encourage students' higher order thinking skills by involving them in activities that develop their ability to analyse, evaluate and create.

5.3 Active learning pedagogy is effective in enhancing students' higher order thinking skills

The research further indicated that using active learning strategies in Economics teaching engages students in activities that strengthen their higher order thinking skills. This finding concurs with literature arguments such as the findings of Gogus (2012) who explains that active learning refers to instructional techniques that allow students to participate in learning and teaching activities and establish connections between ideas by analysing, synthesising, and evaluating. Yen and Halili (2015:41) note that to develop students' higher order thinking skills, teachers need to promote student engagement using learning tasks that go beyond knowledge and comprehension to encourage the application, analysis, synthesis, and evaluation of information. The value of actively engaging students in the learning process is highlighted by Ismail et al. (2020), who maintain that when students are actively engaged in the learning process, they are able to solve problems that need higher order skills. They develop and strengthen creative and critical thinking skills. Achieving these outcomes is made possible because when students are actively engaged in the learning process, they not only learn about doing things, but they think about the actions and decisions taken during their engagement in certain activities.

The following are extracts from transcripts of focus group meetings in which the research participants allude to the effectiveness of active learning strategies enriching students' higher order thinking skills.

5.3.1 Role-play and simulations

Aljos (teacher):

"Role-play strategy that I used in my class when I was treating the topic of market structure required the students first to research the roles they were allocated. The research they were doing contributed to strengthening

the students' analytic and evaluation skills as they were processing information related to their roles."

Bushy (student):

"My participation in the role-play, which the teacher mentions, helped me learn how to develop new strategies and creative solutions to deal with the problems associated with my role."

These statements by the research participants seem to be in line with the argument by Wentland (2004) that active learning strategies, such as role-play and simulations, challenge students to process information efficiently, apply economic analysis, sharpen their decision-making skills, and improve negotiation skills with the ultimate goal of developing and implementing plans that are effective in addressing economic problems. Furthermore, Ismail et al. (2020) observe that using a variety of active learning techniques, for example, games and role-play in the Economics class, has the potential to develop students' analytical skills and provide them with an opportunity to apply economic theory using information and data supplied by the teacher.

5.3.2 Classroom experiments

Chan (teacher):

"Classroom experiments on the concepts of the Law of Diminishing Marginal Utility and Economies of Scale positively affected students' critical thinking skills. The experiments assist them in having a feeling of the concepts being studied and require them to illustrate Economics concepts practically."

This finding is consistent with Hoyt and McGoldrick (2012) who contend that classroom experiments are one of the active learning techniques that promote higher order thinking as they allow students to make economic decisions in a controlled environment. The same finding can further be linked to Lin (2021) who notes that classroom experiments serve as a means for students to demonstrate abstract Economics concepts since the experiments allow students to act as real economic agents. Lin (2021) asserts that students are put in the shoes of real-world economic agents by participating in the classroom experiments, so allowing them to gain real world understanding of economic concepts, to make economic decisions, and to evaluate the consequences.

5.3.3 Case Method

Eno (student):

"The case study based on Inflation which the teacher gave us to complete in groups, was so helpful. It helped me get a deeper understanding of the concept of Inflation, and it became easier for me to relate that knowledge to the information provided by the textbook."

Amantle (student):

"After participating in the activity which Eno mentioned, I returned to that question I mentioned earlier. I managed to figure out what I was supposed to do. I think that digging deep into that case study and the discussions I had on this case study with my group members enabled us to share our understanding of the topic of Inflation. We were able to see

which strategies are working and why, and which ones do not work, and why they do not."

The positive effects of the case method mentioned in this research support Volpe's argument (2015) that this method not only helps the students master economic concepts, but also helps them apply them in real life and systematically analyse policy issues. Similarly, Martinez Casanovas et al. (2022) note that students in Economics and Management courses often use the case method, which involves using scenarios that allow students to apply subject concepts in real-life situations. Martinez Casanovas et al. (2022) further assert that cases elicit a group discussion and force students to analyse or critique a problem or a situation. Similarly, Hoyt and McGoldrick (2012) argue that the case method is effective when the teacher's goal is to promote higher order mastery since cases bring the real world into the classroom and put students in the role of economic decision-makers.

The participants' accounts of the impact of various active learning activities reverberate with the argument by Malanog and Aliazas (2021) that engaging students in the learning process through classroom activities or discussions is one initiative teachers can take to improve students' higher order thinking skills.

In response to the main research question of how teachers use active learning to enrich students' higher order thinking skills, the study found that various active learning strategies engage students in higher order thinking differently. The study found that classroom experiments positively nurture students' critical thinking skills as the experiments put them directly in the economic environments being studied and require students to illustrate Economics concepts practically. This finding is consistent with Hoyt and McGoldrick (2012) that classroom experiments are one of the active learning techniques that promote higher order thinking as they allow students to make economic decisions in a controlled environment. On the other hand, using the case method was also productive in developing students' analytical and problem-solving skills. Ray (2018) notes that the case method helps students to develop higher order thinking skills as it puts them in a position where they are required to do the work instead of just listening to the teacher explaining economic principles to solve problems. The research participants also found the role-play method enhanced students' higher order thinking skills. Its effectiveness stems from the fact that students first research the roles they will play, which helps them analyse the information on their roles and evaluate the actions they take in the role play.

6. Conclusions

This study concludes that there is a need for a shift in the teaching of Economics from pedagogic approaches that do not create opportunities for more student engagement in the learning process to approaches that use active learning. The study's finding strengthens the argument that when students are less engaged in the learning process, they are not afforded opportunities to practise higher order thinking skills and ultimately learn by memorisation instead of developing deep understanding. The study further concludes that using active learning strategies in Economics through classroom experiments, role-play, and case method enrich

students' higher order thinking skills as these activities put them in situations where they need to think critically and creatively. The transformation of an Economics class using active learning empowers students with the ability to answer higher order questions and emancipates them from just being passive absorbers of knowledge in class. The study also recommends that teachers regularly test students on higher order questions throughout the year so that students get used to such questions before encountering them in summative assessment. The limitation of this study is the small number of research participants involved in this investigation; the limited scope of the research could have impacted the richness of the data generated. Future research should investigate the effectiveness of other active learning methods in enriching Economics students' higher order thinking skills as this study focused only on the use of case method, role-play and simulations, and classroom experiments.

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