



## **Active Learning Approach to Optimize Student Engagement and Promote Deep Learning of Economics Theories and Concepts**

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### **Abstract**

This paper advances Active Learning as a suitable pedagogy in Economics education to optimize students' engagement in the teaching and learning process, with the potential to achieve deep and meaningful learning of the subject's concepts and theories. The study is couched by a Constructivist theoretical framework and adopted the Participatory Action Research method to generate the data. This paper sought to answer the following research questions: What challenges hinder students from understanding economic theories and concepts? What is the best pedagogical approach for deep and meaningful learning of Economics concepts and theories? The study's findings demonstrate that the teaching of the subject relies more on the lecture method, which seems to limit opportunities for student engagement. Lack of student engagement in the learning process often contributes to passive learning in Economics. The study also found that students are challenged to gain a deeper understanding of the subject by the abstract nature of its concepts and theories that are not easily relatable. Furthermore, the study found that engaging students in the learning process using active learning strategies such as cooperative learning exercises, classroom experiments, and role-playing enhances students' understanding and retention of the subject theories and abstract concepts.

**Key words:** Active Learning, Economics, Passive learning, Student engagement, Deep learning

### **Introduction**

This paper aims to advance Active Learning as a suitable pedagogic approach to optimize students' engagement in the teaching and learning process to create learning experiences that promote deep learning and improved retention of the subject's theories and concepts. Gordan and Thomas (2018) note that deep learning goes beyond memorizing facts and subject content but requires students to reflect on the information, apply their understanding, make hypotheses, relate to principles and concepts, and construct arguments. The advancement of Active learning in Economics education stems from the observation that the teaching of Economics is dominated using traditional teacher-centered methods, e.g., the lecture or chalk-and-talk method, which have been made amongst others by Malek et al. (2014) who note that Economists prefer chalk and talk and that lecturing is the primary teaching method used by teachers at both secondary and tertiary level. A similar observation is made by Sheridan and Smith (2020), who state that despite literature attesting to the benefits of active learning strategies over passive learning, recent studies suggest that the teaching of economics is still dominated by the lecturing method.

In assessing the efficacy of the traditional lecture method in helping teachers and students achieve the subject's learning outcomes, literature has shown that a lecture method is often lauded for its effectiveness in the breadth of content coverage. In contrast, it may not be equally efficient regarding the depth of content coverage. Smith et al. (2022) argue that the traditional lecture-based teaching methods are ineffective in keeping students motivated enough to engage with the subject content at a deeper level. Additionally, Nepal and Rogerson (2020) note that concerns are raised about the quality of learning in economics since many students find this subject difficult, resulting in high failure rates in undergraduate economics courses. Serbo and Ancho (2019) state that the concepts and theories taught in Economics are very technical and seem unrelated to students' life experiences; this could be the one reason this subject is viewed as challenging to master. Arsaythamby and Juinamary (2015) further mention that because of this perceived difficulty in understanding abstract economic theories and concepts, teachers must apply various teaching methods and strategies to advance students' understanding of this subject.

An alternative approach that has the potential to assist teachers and students in achieving the learning outcomes of Economics is the Active learning pedagogy. Smith et al. (2022) assert that active learning methodologies promote student engagement with the subject content at a deeper level than traditional lecture-based methods. Against this background, this paper developed the following problem statement: A heavy reliance on the traditional lecture method and theoretical teaching of Economics limits students' engagement in the learning process and often breeds surface learning and lower retention levels instead of deeper and meaningful learning of the subject's theories and concepts. Romadhoni and Nurlaela (2018) point out that students who are passive in teaching and learning tend to forget the material they learned easily. Patir (2020) identified some limitations of student passivity in the learning process, such as learning for memorization instead of developing understanding and emphasizing theory more than practical and real-life situations. Because of this problem, this paper intends to answer the two research questions: What challenges hinder students from understanding economic theories and concepts? What pedagogical approach can teachers adopt to promote deep and meaningful learning of economics concepts and theories? Therefore, the paper aims to investigate how a more actively engaging teaching and learning environment can be created in economics education for students to achieve deep learning and retention of the subject concepts and theories.

### Literature Review

Economics is described by Ismail et al. (2020) as a discipline that seeks to help students be more critical and creative in their decision-making and make rational economic decisions in their daily lives. Arsaythamby and Julinamary (2015) state that Economics is a subject that integrates theoretical skills, graphical illustrations, tables, and equations. Malek (2014) notes that to learn economics successfully, students must demonstrate ability in both abstract thinking and application. However, Demircioglu et al. (2013) note that students are often exposed to abstract subject concepts at a very young age and find such concepts challenging to learn and visualize. Arsaythamby and Julinamary (2015) note that many students regard Economics as a difficult subject since it requires them, amongst others, to define complex ideas logically and fluently, use their understanding of the subject, and to use abstract thinking and apply economics theories in the real world. Hasyim et al. (2019) note that Economics teachers are often faced with the problem of how to implement learning that can enhance student understanding of economics concepts and their applications in real-world situations. Hussein (2017) holds a similar view and mentions that Economics is generally seen as a complex and rigid subject to understand.

Advances have been made in Economics education to adopt interactive and participatory methods to reduce over-reliance on the traditional lecture methods. The observation made by Ray (2018) is that in the conventional teaching methods, the teacher controls the teaching and learning process by delivering knowledge through using a lecture method while students simply listen to the lecture, jot down the notes, and remain passive recipients of the information. Ray (2018) asserts that in a traditional teaching and learning environment, students' attention tends to fade after some time because of their passive role. Ancho and Serbo (2019) maintain that the predominant use of traditional teaching methods ignores students' views,

thus making them passive recipients of the information. In such a teaching and learning environment, students tend to achieve only surface learning of the subject.

The limitations of the traditional teaching methods noted in the preceding paragraph are one reason that calls have been made for introducing alternative methods in teaching and learning economics. Al-Bahrani and Patel (2015) assert that students will likely gain and retain a deeper understanding of Economics concepts in classes where Active learning is used as a pedagogic method. Active learning is described by Morita and Yamamoto (2017) as a process in which students engage in activities that promote analysis, synthesis, and evaluation. Stevens (2015) contends that Active learning is an effective strategy to enhance student engagement and that its key objective is to ensure direct involvement of students in the teaching and learning process.

The importance of student engagement in the learning process is highlighted by Vale and Barbosa (2023) in their argument that students' cognitive engagement with the subject content develops conceptual understanding and critical thinking skills, allowing them to go beyond rote memorization and limited comprehension. Hussein (2017) asserts that active engagement of students in the learning process can result in in-depth understanding, knowledge retention, and increased processing and critical thinking skills. Furthermore, Vale and Barbosa (2023) contend that when students are engaged with the subject content using a variety of active learning tasks, they can establish connections with what they are learning and will be able to reach a deeper understanding. Altinyelken and Hoeksma (2021) mention that active learning is often promoted because it leads to deep and meaningful learning by engaging students in the learning process.

The benefit of Active learning in Economics education is noted by Al-Bahrani et al. (2016), who assert that Active Learning allows Economics teachers to vary their teaching methods, increase their students' learning depth, and assess a higher level of understanding of Economics concepts. Al-Bahrani and Patel (2015) maintain that Active Learning effectively develops students' knowledge of complex economic concepts and improves retention of those concepts because meaningful learning experiences are created when students are actively engaged in trying to acquire and understand information. Given the analytic nature of the subject Economics, Bavishi et al. (2022) argue that the active learning approach provides a practical context that allows for the creation of meaningful learning experiences, resulting in improved knowledge retention and a deeper understanding of the subject content.

The argument for active engagement of students in the teaching of Economics is further strengthened by Popescu (2014) in stating that advantages realized from Active Learning include, amongst others, deeper learning of the material by students as they work with it at a higher level; students become co-constructors of knowledge in class, and improved retention of the course material since they work with it rather than just reading or hearing about it. Popescu's argument seems to be in line with Altinyelken and Hoeksma (2021), who assert that Active learning is assumed to lead to deep and meaningful learning through the engagement of students in learning and is likely to improve learning outcomes, students' performance in the subject and retention of the subject content. In the same vein, Munna and Abul-Kalam (2021) maintain that Active learning is regarded as a deep learning approach since it aims to enhance students' understanding of the material and not just memorize it.

Several strategies to actively engage students have been identified e.g., Stevens (2015) notes that Active learning involves various teaching methods, including small group work, role-play, debates, and simulations. Van Wyk (2015) note that teaching strategies that actively engage students include collaborative problem-solving and classroom experiments, also referred to in the context of teaching as dramatization or demonstrations. Furthermore, Maros et al. (2021) mention brainstorming, educational games, project-based learning, and case methods as some methods that Economics teachers may incorporate into their teaching.

One of the Active learning strategies used in this study is Cooperative learning. It is described by Morita and Yamamoto (2017) as a kind of collaborative learning structured as group work in which students seek to achieve common goals. Additionally, Malek et al. (2014) note that Cooperative learning includes classroom techniques in which students work in small groups to solve a problem, complete a task, or pursue

a common goal and receive a reward based on their group performance. One benefit of Cooperative learning noted by Morita and Yamamoto (2017) is that it allows students to discuss and explore problems with each other. This collaboration can help them learn how to connect the concepts being studied and understand the material more deeply. Morita and Yamamoto (2017) note that students who work in Cooperative learning groups performed significantly better in their ability to analyze and apply economic theory to case studies, which required deeper learning levels.

Role-playing and classroom experiments are two other strategies that have the potential to engage students in the Economics class actively and were adopted in this study. Stevens (2015) maintains that role-play is an effective active learning strategy to encourage passive learners' participation and promote the retention of the subject content. On the other hand, Gordan and Thomas (2018) note that role-playing emphasizes students experiencing the learning situation more than just being lectured and aims to promote classroom interaction and peer learning. They further note that role plays are useful for making theoretical issues more practical and can impart deep and lasting learning.

The relevance of classroom experiments in Economics teaching can be attributed to the contention that Eisenkopf and Sulser (2016) noted that abstract economics theory can be best understood through actual application. Špačková (2015) asserts that the involvement of students in an experiment scenario may assist them in understanding the subject concepts and mechanisms, and this will make the theory less abstract. Eisenkopf and Sulser (2016) believe that the participatory experience from the classroom experiments enhances students' interest in economics and stimulates learning more effectively than conventional instruction. In addition, Li and Wong (2018) believe that classroom experiments provide opportunities for students to discover economic concepts, think deeply about the subject matter, and enhance their application of theoretical knowledge.

### **Theoretical Framework**

This paper adopted a Constructivist theory as a lens through which the study is viewed. Suryani (2020) state that constructivism believes that learning is an active and constructive process in a social context where a student is seen as a knowledge constructor and not a passive knowledge recipient. This theory is relevant for this study since it seeks to advance the viewpoint that knowledge should not be seen as a packet that the teacher can just deliver to students waiting in class to receive it. Instead, students should be actively engaged in different learning activities to become co-constructors of knowledge, and the teacher becomes a guide and facilitator, not a knowledge transmitter.

Ancho and Serbo (2019) maintain that constructivism in economics teaching means that instruction and construction are combined and should be appropriately connected. Dalton (2010) mentions that Constructivist alternatives to a traditional lecture format include a variety of active learning approaches that allow students to discuss classroom-related concepts or work together on a project with a high degree of independence from the teacher. Adopting the Constructivist theory helps this study advance a shift from passive learning to active learning in teaching Economics to achieve a deeper understanding of the subject content and its relevance in the real world.

### **Methodology**

The paper is in a transformative paradigm, which is in line with the argument advocated in this study that a change in the teaching of Economics from the traditional lecture method to the use of Active Learning Pedagogy will optimize student engagement in the learning process and promote the deeper learning of the subject's theories and abstract concepts. The study was conducted using Participatory Action Research (PAR) methodology, which was carried out in three cycles. Wimpenny (2013) notes that Participatory Action Research is based on two major elements, i.e., participation and action. Therefore, in a PAR process, the common concern(s) experienced by a group of people, an organization or a community become the central issue for investigation, and those affected collaborate to find the best solution.

In this study, the primary researcher collaborated with the Economics teachers and students, who also showed concern that deep learning and retention of the subject content is challenging. The teachers and

students who participated in this study were purposively selected for their similar concerns and willingness to find a solution. Campbell et al. (2020) maintain that the reasons for using a purposive sampling strategy are found in the assumption that, as informed by the aims and objectives of the research, particular individuals may hold differing and valuable views about the ideas and issues under investigation and as such need to be included in the sample.

The participants formed a research team that met on selected days to address the research problem. In the first cycle, i.e., planning, research participants met to find a common understanding of the research problem, identify challenging topics, and suggest strategies which could be used to address the problem. The research participants developed a role play to illustrate the concepts of money creation and cost-push inflation. An experiment to demonstrate the concepts of diminishing marginal utility and diminishing returns was created, and they further planned a small group activity. In the second cycle, i.e., acting and observing, students were taught the topics that were identified as challenging to master. Only the lecture method was used and a pre-treatment test was administered. Teachers then used the Active learning methods suggested in the planning cycle to teach those topics, and the post-treatment was administered to compare students' responses and performance from the pre-treatment test. Another post-treatment test was administered towards the end of the research process to assess students' retention of the material. In the third cycle, i.e., the reflection cycle, the research team met to reflect on the impact of Active Learning strategies in addressing the research problem.

Data were generated from the research team's focus group meetings, which were recorded to capture the meeting discussions accurately. The core research team mandated the primary researcher to have one-on-one interviews with other individuals identified as having the potential to share valuable views on the research problem who could not be part of the core team. Data were analyzed using a Thematic analysis method described by Nowell et al. (2017) as a method used in qualitative research to identify, organize, analyze, describe, and report themes within the data set. Peel (2020) argues that qualitative researchers use Thematic Analysis to create detailed descriptions that emerge from the data extracts using the research participants' words to support their interpretations.

### **Findings and Discussions**

The study's findings can be summarized by the following three major themes, which emerged from the research participants' focus group discussions and interviews conducted by the principal researcher. The first theme is that the abstract nature of economic concepts and theories poses a challenge to deep understanding and mastery. The second theme is that minimal student engagement in the teaching and learning process due to a theoretical teaching approach and a heavy reliance on the lecture method leads to rote and surface learning of Economics abstract concepts and theories. The third theme that emerged from this study is that the active learning approach is suitable for optimizing students' engagement and promoting deeper learning and retention of economics theories and abstract concepts.

#### **The Abstract Nature of Economics Concepts and Theories Poses a Challenge to Deep Understanding and Mastery**

To discover the nature of the subject of Economics and why students seem to find it challenging to gain a deep understanding, both the literature study and empirical study revealed that the subject comprises many abstract concepts and theories. For example, Demircioglu et al. (2013) note that students are introduced to abstract subject concepts that they find challenging to learn and visualize. In addition, Ancho and Serbo (2019) state that the concepts and theories taught in Economics are very technical and seem unrelated to students' life experiences.

The observation that Economics is comprised of abstract concepts which students often find challenging to comprehend fully is made by the research participants, as noted in the following statements:

*“The problem that we have in Economics is actually the concepts; most of them are not easily understood in plain English, they seem to be at a high level, or they are more*

*abstract, and Economics requires you thoroughly understand them” (Lesego – student).*

*“I am the kind of person who always tries to first study something on my own, and I always find that economics has difficult concepts, and even if I go to the dictionary, I don’t often understand the meanings. It is hard to understand some of the concepts” (Reneilwe – student).*

Arsaythamby and Julinamary (2015) note that students find Economics a challenging subject since it requires them, amongst others, to define complex ideas logically and fluently, use their understanding of the subject, and to use abstract thinking. The argument by Arsaythamby and Julinamary (2015) seems to resonate with the statement below made by one research participant:

*“I think the problem with economics is that you need to understand it deeply and know its jargon, and that is always difficult for us because when we study, we don’t do it with understanding but just resort to memorizing, something that is not good for us” (Bushy – student).*

The arguments from the literature and research participants that Economics is an abstract subject point to one reason why students struggle to understand this subject deeply. It is for this reason that calls have been made to teachers to find ways of teaching the subject which can assist students in understanding it e.g., Hasyim et al. (2019) note that Economics teachers are often faced with a problem of how to create a learning environment that can enhance student understanding of economics concepts while Arsaythamby and Julinamary (2015) mention that a variety of teaching methods and strategies need to be used to advance students understanding of this subject as a result of an apparent challenge in understanding its abstract theories and concepts.

### **Minimal Student Engagement in the Teaching and Learning Process Leads to Rote and Surface Learning of Economics Abstract Concepts and Theories**

The finding that students have difficulty achieving a deep understanding of the subject may be caused by its many abstract concepts and theories, which led to the need to determine teachers’ teaching methods. The study found that Economics is taught more theoretically using mainly the lecture method with minimal opportunities for student engagement in the teaching and learning process. For example, Ancho and Serbo (2019) point out that the traditional approach, also known as chalk and talk, dominates the teaching of Economics, where teachers mainly transmit the subject content to students who are passive recipients of information and are hardly meaningfully engaged in the teaching and learning process.

In the extracts below, the research participants responded to the following question: who does most of the talking during the Economics class? and to the follow-up question, what roles do students play during the lesson?

*“It is the teacher, ... and .... We are just listening” (Hlonolofatso – student).*

*“We see our role in the class comprising only of listening, writing notes, and submitting assignments. We have become used to just coming to class and passively listening to the teacher as if we are in church listening to the sermon by the priest...” (Reneilwe – student).*

*“Traditionally in our country, for many years, teachers have become used to being the chalk and talk masters”* (Aldam – teacher).

*“With curricula reforms we have seen in our country and elsewhere, emphasis was to move away from the teacher-centered and textbook driven approach to learner-centered, active learning approach... we fail to adopt this approach because we are still comfortable with the traditional way of teaching”* (Sebola – teacher).

The statements made by the research participants seem to be echoed in the observation by Ray (2018), who states that in the traditional teaching methods, the teaching and learning process is dictated by the teacher who delivers knowledge mainly through a lecture method to students who remain passive recipients of the information through listening and jotting down notes.

The creation of few opportunities for student engagement, which leads to their passivity in class and which is often cited as a reason for rote and surface learning, can be seen in the following extracts:

*“I think the problem with economics is that you need to understand it deeply ... when we study, we don't do it with understanding, but we just memorize what we are taught just hoping to pass ... ’. which is not good for us as we soon forget that information”* (Marematlou – student).

*“Another thing is that we focus more on results rather than on deeper understanding of subject matter. Students would just memorize information from the teacher just to get a pass mark”* (Tshabi – teacher).

Literature seems to corroborate statements made by the research participants that the dominant lecture methods appear to focus more on the breadth of content coverage while ignoring the depth of coverage. The apparent focus on covering as much content as possible seems to contribute to students learning through memorization just to pass tests and examinations.

Ismail et al. (2020) assert that teaching methods that seem to encourage memorization of information in preparation for examinations characterize the learning of economics. A similar assertion is made by Altinyelken and Hoeksma (2021), who state that the traditional teaching model commonly known for its expository and narrative form is often criticized for its inclination towards memorization and rote learning, thus limiting creativity and critical thinking by students. Adding to these limitations, Romadhoni and Nurlaela (2018) maintain that when students are passive in the teaching and learning environment, they quickly forget what they have learned.

### **Active Learning Approach is Suitable to Optimize student engagement and promote deeper learning and retention of Economics Theories and Abstract Concepts**

The study found that adopting an active learning approach is suitable in Economics education to optimize student engagement and assist students in achieving deep learning and retention of the subject content. Stevens (2015) and Van Wyk (2015) note that the active learning approach is comprised of different strategies, including small group work, role-play, debates, simulations, collaborative problem-solving, and classroom experiments, which in this context is also referred to as dramatization or demonstrations.

### **Impact of Cooperative Learning in Optimizing Student Engagement, Deep Learning, and Retention of Subject Content**

Morita and Yamamoto (2017) argue that Cooperative learning allows students to discuss and explore problems with each other inside and outside the class and that this collaboration has the potential to help them learn how to connect the concepts and understand the material at a deeper level.

The participatory nature and benefits of Cooperative learning can also be noted from the following statements by the research participants.

*“Group work also works because it allows everybody to get involved by making inputs to the topic”* (Reabetswe – student).

*“When they work in small groups, I see good results because even those who in a normal class situation do not participate, they push themselves to be active members in a group, and it becomes easier for them to get assistance from their fellow group members”* (Tshabi – teacher).

In demonstrating that students need to conduct research and find more information on the concept to be discussed in their groups, two research participants were quoted as follows.

*“One other thing is that the mere fact of going out to do research will go a long way, remember we are different as students in class, so if one comes with information on the topic and the others do the same, we can be able to use that information to understand a topic from various points of view which also improves our understanding”* (Reneilwe – student).

*“As one student presents findings on the topic to group members, it assists the student to gain more understanding and retain that information”* (Bushy – student).

*“As other students are posing questions to the one who is presenting, it helps the presenter to deepen understanding of the topic by responding to the questions”* (Motedi – student).

*“That information will be helpful to those who might not have understood the lesson as it was presented by the teacher; they can therefore use that information to have clarity on the concept under discussion”* (Mosa – student).

### **Impact of Role Play Method in Optimizing Student Engagement, Deep Learning, and Retention of Subject Content**

The role-playing method’s potential to achieve this study’s goals is linked to the statement by Stevens (2015) that role-play is an effective strategy to actively prompt the participation of passive learners and improve knowledge retention. The research participants also highlighted the benefits of role-playing as seen from the following extracts:



*“With the use of a role-play, for example, we can ensure that learners participate in class by giving them roles to play in the exercise ... that will encourage our participation and improve understanding of the lesson. Even by the time you write a test or exam, you would still remember what was happening in that exercise ...”* (Moletlo – student).

*“Yes, I also think role-play is an effective method, especially in a difficult subject like economics which does not only require you to just read but you also need to do things practically and be actively engaged in class so that you can start to understand it better ... by reflecting on the roles that were played by different students, you can easily remember the topic on which the role play was based”* (Reabetswe – student).

### **Impact of Classroom Experiments in Optimizing Student Engagement, Deep Learning, and Retention of Subject Content**

Van Wyk (2015) note that teaching strategies that actively engage students include classroom experiments/dramatization/demonstrations. The effectiveness of this strategy in actively engaging students in the learning process to encourage deep learning can be inferred from the statement by Špačková (2015), who asserts that the involvement of students in an experimental scenario enhances students' understanding of the subject concepts and mechanisms and make the theory less abstract.

The research participants were also of the view that by participating in activities that dramatize or experiment with a particular topic, they will gain a deeper understanding, e.g.

*“I think we should also practically illustrate those concepts in class, also doing it in the form of drama by assigning roles to students to illustrate a particular concept”* (Reneilwe – student).

*“It is going to help us understand; I mean, Sir, let's say we dramatize a particular concept, we can add jokes during the dramatization, and that will help us to remember the concept even in the exam you will remember that we once made a joke based on such a concept and will remember its meaning”* (Moduedi – student).

*“In my experience the students respond to the demonstrations and classroom experiments, unlike when I am in front of them trying to explain a difficult concept”* (Sebola – teacher).

*“Personally, I think I have benefited a lot from those practical activities. I could understand the law of diminishing marginal returns... I think that demonstration was effective in helping me to understand*

*that concept of diminishing marginal returns” (Mosa – student).*

*“With the experiment we did to illustrate the law of diminishing marginal utility, I think the experiment managed to bring the theory into the classroom; it helped us to see what we read about in the textbook... In that experiment, we saw students recording decreasing satisfaction levels when more units of the sweets are consumed one after the other” (Reabetswe – student).*

*“This strategy has an impact because it engages the students with what they are doing, ...and the student gets a better understanding of economics concepts ... and how the economy works” (Tshabi – teacher).*

The effectiveness of the Active Learning approach in enhancing deep learning and retention of the content material can be found in an argument by Bavasi et al. (2022) that an active learning pedagogy creates a practical context that can bring about meaningful learning experiences, improved knowledge retention and deeper understanding. Additionally, Kilgour et al. (2015) argue that Active learning enhances deep learning and content material retention by creating learning experiences that allow students to remember facts, concepts, and feelings. The literature claims on the value of actively engaging students in the teaching and learning process are also found in the following statements made by the research participants. The research participants reflected on their experiences using active learning strategies in class.

*“I would say the difference is that when we do practical illustration, we can see the meaning of the concepts in action, and you get a better understanding, unlike when you are just reading from the textbook or listening to the explanation” (Moletlo – student).*

*“From the role play, I think we learnt a lot when those students we are illustrating the process of money creation; it was fun; I can still remember the character Sophy. The atmosphere was more relaxed than in a normal class situation. You know students’ concentration span is very short, so by adding humor to a role play, focus and concentration can be sustained, and students will be having fun while learning at the same time” (Nkamogeleng – student).*

The above findings of the study thus position the active learning approach as a suitable approach to address the study’s research problem. The literature and empirical research done in this study demonstrate that incorporating strategies such as cooperative learning, role-playing, and classroom experiments optimizes student engagement in the learning process and assists them in gaining deep and meaningful learning of the subject. The results of the post-treatment tests showed a remarkable improvement from the pre-treatment test in student understanding and retention of the topics that were treated during this study. Students’ responses to questions requiring them to analyze, apply, and evaluate information demonstrated an improved understanding of the topics taught using the different active learning strategies.

### Conclusions

The study concludes that the abstract nature of economics may not be suited for a more lecture-based and theoretical approach that lacks practical student activities. The study further concludes that the optimum engagement of students in the teaching and learning process promotes deep and meaningful learning of abstract economics concepts and theories and improves the student's retention of the subject material. Student engagement is optimized when teachers incorporate strategies that allow students to grapple actively with the economics theories and concepts taught. The study found that strategies such as cooperative learning, role-playing, and classroom experiments create an active learning environment that shifts the learning mode from mere memorization to pass tests and examinations to a deep learning mode where students can make meaning of what they have learnt and are able to retain and apply knowledge. Therefore, this study concludes that teachers can develop student interest in the subject and help them improve their performance by adopting an active learning approach. A notable limitation of this study is the relatively smaller scale on which it was conducted. Another limitation of the study was the number of active learning strategies with which the study experimented due to time constraints.

### Research implications and future research directions

This research has the potential to positively impact the classroom practice of Economics teachers and create learning experiences that will assist the students in improving their understanding of the subject's abstract theories and concepts. The research can help teachers overcome the problem of learner passivity in the class, often cited as one of the reasons for rote learning of the subject where students only achieve surface learning. The adoption of an Active Learning Approach advocated in this research can potentially turn the teaching of the subject from being too heavily theoretical and abstract to more practical. The strategies that this research experimented with are learner-engaging and may thus help students to achieve deep learning. Deep learning may be possible because when the subject is taught more practically and learner-engagingly, students can see the relevance of the content they learn, its relation and meaningfulness to their daily lives, and how they can apply it to solve real-world problems.

Furthermore, students' retention of the subject will likely improve, which will help them pass the subject and enhance the quality of their results. Despite the limitations in conducting this study, the research contributes to theory and Economics teaching practice as it proposes viable and sustainable measures to enrich student learning. The study recommends that further research be carried out using a different research method, with a bigger sample and with more time allocated to experiment with other Active learning strategies that can optimize student engagement in the learning process.

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