Impact of Active Learning on Students' Adaptability Skills

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ABSTRACT

This study explored the impact of active learning on the students' adaptability skills. Using descriptive correlational design, the level of students active and students adaptability skills were identified and correlated. The factors of students' active learning obtained an overall mean score of 3.4. Both the indicators Technology and Provide Proper Setting reported the highest mean score of 3.6 and 3.5, while the Dialogue Environment the lowest mean score of 3.3 but both mean scores the description of agree. The adaptability skills obtained an overall mean of 3.46. The indicators Communication reported the highest mean score or 3.65 while the Time management and Communication are both lowest mean score of 3.53 and 3.27 but both mean scores have the description of agree. The Factors of Active Learning of Social Studies Students and their Adaptability Skills has a significant positive agree association, as seen by the Pearson's r of 0.22 p 0.05 and p-value of 0.000. This means that the higher the students "Factors of Active Skills" the greater the students "Adaptability Skills. Active learning essentially helps students become adaptive and engaged while learning. Students who have been exposed to various active learning activities were found to be good in managing emotions, controlling their own time and using effective communication strategies.

Keywords: impact, Active learning, adaptability skills

INTRODUCTION

In the resumption of face-to-face classes, one of the issues that the students are facing is how can they adjust to active learning. Active learning as claimed by various researchers make the students engaged in the process of learning concepts through diverse activities as opposed to passively listening to an expert. This strategy in teaching emphasizes the development of higher order thinking skills and often involves group work. Active learning essentially provides opportunities for authentic and meaningful academic activities (Aji and Khan, 2019). Researchers like Killian and Bastas (2015) explored the effect of active learning strategy and claimed that it has a positive impact on students' attitudes and performances in a class.

Instructional materials which are active learning based create consciousness among learners that concepts are constructed by them and that each student should be responsible in working and exploring new concepts (Fitzsimons, 2014). Moreover, Barr and Tagg (1991) as cited by Hui et.al (2021) claimed that the philosophy behind student-centred teaching is that it allows students to be autonomous by discovering concepts, constructing knowledge and using these acquired understanding through their own initiatives, giving students, rather than teacher, the control to engage in meaningful learning and monitor their own progress.

Many empirical studies suggests that active learning surpasses traditional teaching methods in establishing knowledge and skill development (Prince, 2004; Hui et.al 2021) and engaging students in active learning

pedagogy activities significantly improves their satisfaction with both their individual and group learning processes Hyun, J. (2016).

On the other hand, adaptability, otherwise known as learnability, is the skill that assists students to adapt and blend to new situations, environments and programs in order acquire the skill quickly (Extended Notes, 2019). Further, this expands the capability of learners to handle and control change that may affect their lives even far beyond the classroom situations. Students who have higher adaptability skills are more likely engage, participate and enjoy knowledge construction and acquire higher self-esteem(Athan and Thacha, 2022).

Martin, Nejad, Colmar, Liem, and Collie (2015) found out that when students were more adaptable, they also tended to perceive that they had greater control over their academic outcomes. In turn, greater perceived control was associated with reduced levels of the four detrimental outcomes. Adaptability, according to Darvell (2021), is the most important quality that a teacher should possess as it gives students the ability to handle unexpected situations without experiencing evident frustrations and that teachers, can reinforce and develop this skill among students by allowing students to make achievable goals, scaffolding and other classroom activities.

Martin, Collie, and Nagy (2021) advised that in order to enhance students' adaptability skills, teachers should adjust students' behavior, thinking, and feelings to help them navigate disruption. Teachers may need to seek out information and resources, or asking for help, and adjust attitude by thinking about the new task differently.

Mounting evidence suggests that active learning surpasses traditional teaching methods in establishing knowledge and skill development, engagement in class and academic performance (Killian and Bastas, 2015); however, limited studies explored how active learning affect students' adaptability skills. Thus, there is an urgent need to explore how active learning strategies impact student's adaptability skills, especially in the resumption of face-to-face classes in post-pandemic era.

LITERATURE REVIEW

Giving students a sense of progress and control over their own learning is essential for effective learning. To accomplish this, it is necessary to set up an environment in which students can put their theories to the test. In order to successfully complete this exam, it is preferable for students to relate their concepts to actual experiences; here is where the "active" portion of learning comes into play. Giving pupils the chance to actively talk and listen, write, study, and reflect on the concepts, arguments, problems, and considerations of an academic subject is referred to as active learning Zayapragassarazan, Z. (2012). Furthermore, the study's main objective was to look into the effects of adding a few items to an active learning scale that was created to measure some particularly captivating activities, mostly online. Concerns that distance learning students frequently report lower average scores on active learning scales than their on-campus peers led to the development of the items Carr, R., Palmer, S., & Hagel, P. (2015).

According Lumpkin, A. (2015) specifically, students were asked to engage in a variety of in-class and out-of-class exploratory writing assignments and pairs and other small group discussions interspersed among short lectures. One solution to this is active learning, where a model asks human to annotate data that it perceived as uncertain. A variety of recent methods have been proposed to apply active learning to deep networks but most of them are either designed specific for their target tasks or computationally inefficient for large networks Yoo, D. (2019).

The goal of active learning (AL) is to annotate the fewest number of samples while still maximizing a model's performance gain. If the model is to learn how to extract high-quality features, deep learning (DL)

needs a large amount of data supply to optimize a vast number of parameters Pengzhen, R., & Yun, X. (2021). The study's main objective was to look at the effects of adding a few items to an active learning scale that was created to measure some very captivating activities, largely online. Concerns that distance learning students frequently report lower average scores on active learning scales than their on-campus peers led to the development of the items. Largely online. Concerns that distance learning students frequently report lower average scores on active learning scales than their on-campus peers led to the development of the items

However, according to Khan, A. (2017) no matter the subject matter or format of the content distribution method, effective teaching and learning depend on student participation. However, in online learning contexts, it might be difficult to keep students' attention. A group of colleagues or students learn through the process of action learning. It is commonly utilized in a variety of educational settings, especially those that benefit from group learning. Both higher education and professional learning and training environments have adopted action learning Khan, A. (2017).

Active Learning (AL) is a widely used paradigm to deal with the lack of data. Pre-trained NLP models—and BERT in particular—have recently drawn a lot of attention thanks to their exceptional results on a variety of NLP tasks. However, there hasn't been much discussion of using AL with deep pre-trained models up until now. Here, we present a comprehensive empirical study that addresses a wide range of AL strategies and datasets and examines active learning methods for BERT-based classification Liat. E., Alon, H (2020).

According to Hyun, J. (2016) ALCs [Active Learning Classrooms] have been shown in studies to assist raise student engagement and boost academic performance. However, converting all conventional classrooms to ALCs will cost a lot of money. Therefore, whether active learning pedagogies may enhance learning outcomes when classroom resources are constrained is a crucial concern for institutions of higher education. The majority of nursing students are kinesthetic learners who choose an active, hands-on learning style. According to research, active learning techniques can improve student learning and satisfaction. This study examines how a Jeopardy-style game called "Nursopardy" might be used to reinforce the Fundamentals of Nursing course material and help students get ready for a required final exam Boctor, L. (2013).

Given the significance of career adaptability skills Ebenehi, A. S. (2016) to the seamless transfer of graduates from school to the job market, the study recommended that comparable studies be duplicated in other parts of the world. In order to improve students' career adaptation skills, the study recommended that stakeholders of higher education institutions in Nigeria create career exploration databases and support career intervention programs. The necessity of concentrating on theory and application of time-management in Russia considering quickly-changing processes in the globe and deficiency of time. The various time-management methodologies, including the tools, techniques, and methods, were examined (Kirillov, 2015).

THEORETICAL FRAMEWORK

The study was anchored on the Flipped Classroom: An Opportunity to Engage Millennial Students Through Active Learning Strategies that is proposed by Roehl, A., Reddy, S. H., & SHANNON, G. J. (2013). The Flipped Classroom: An Opportunity To Engage Millennial Students Through Active Learning Strategies intends to increase chances for teacher-to-student mentoring, peer-to-peer collaboration, and cross-disciplinary interaction by using class time for active learning rather than lectures. This study of the literature discusses how difficult it is to keep students' attention in lecture-based classes nowadays and makes a case for using the "flipped classroom" paradigm by teachers of family and consumer sciences.

This theory supported the study by the Active Learning in Schools addresses the highs and lows, the successes and failures, and their underlying causes. It also offers insights into theories of collaboration,

innovation, leadership, and community building to guide both small-scale projects and comprehensive school development programs. It will be of interest to policymakers, school administrators, in-service teachers, and teacher educators who are working to improve student learning outcomes and teacher professional development.

The independent variable is the variable that experimenter manipulates or change. Independent variables predict or forecast the values of the dependent variable in the model. Independent variable cause effect on the dependent variable. The dependent variable it is identified based on the outcome of what is being measured. The dependent variable responds to the independent variable so that is how they connect.

Statement of the Problem

This study sought to answer the following:

1. What is the level of student's factor of active learning of social studies students in terms of;
    o Provide Proper Setting
    o Technology
    o Dialogue Environment
2. What is the level of student's adaptability skills in terms of;
    o Time Management
    o Emotional Management
    o Communication
3. Is there a significant relationship between the factors of active learning of social studies students and their adaptability skills?

Hypothesis

This study tested the null hypothesis.

Ho: There is no significant relationship between the factors of active learning of social studies students and their adaptability skills**.**

METHODOLOGY

Discussed in this chapter is the methodology used in this quantitative study. This includes the research design, research locale, research respondents, research instruments, data collection procedure and statistical treatment.

Research Design

This design gives the essence of the topic that being investigated, this study employed the descriptive correlational design. According to Kerlinger (2014), research design is a plan, structure, and strategy for conducting research in order to answer research questions and control variance. The researchers discovered that there are certain factors in active learning of Social Studies Students in their adaptability skills.

The method used for frequencies, averages and other calculations. Often the best approach prior to writing descriptive correlational research, is conducted through a survey investigation. The characteristics for this method are used as a tool to give its descriptive correlation that determines the significant relationship between the factors in transferring and the adaptability skills of the students.

In this study, the researchers collected all the information received from the respondents as they completed a

survey related to this topic.

Research Instrument

The researcher-made survey questionnaire was validated by the expert's panel. Validity was checked using the appropriate statistical formulas. The analyzed results were revised and finalized by the researcher. The improved instrument was reproduced through face-to-face survey paper question for administration to respondents of predetermined study group during its prescribed schedules.

Range	Scale	Interpretation
4	Strongly Agree	This means that the condition embodied in the item is oftentimes observed.
3	Agree	This means that the condition embodied in the item is somewhat observed.
2	Disagree	This means that the condition embodied in the item is slightly observed.
1	Strongly Disagree	This means that the condition embodied in the item is not observed.

DATA ANALYSIS

The gathered data was obtained tallied and tabulated. The tools were used for the accuracy in the analyses and interpretations of the findings are the following:

Mean. This was used to determine the level of student's factors of active learning of social studies students in terms of Provide active learning, Technology, and Dialogue Environment, and the level of students' adaptability skill social studies students in terms of Time Management, Emotional Management, and Communication. The formula was,

$\bar{X} = \frac{\sum x}{n}$ where $\sum x$ = total scores and n = the number of students for each group.

Pearson-r. This was used to measure the degree of relationship and to test the significant effects of the factors of active learning of social studies students and their adaptability skills.

RESULTS AND DISCUSSION

This section presents the results obtained from the collected data and the subsequent analyses in a sequence corresponding to the problems presented. Data and preliminary information were also provided as basis of the computation and interpretations of the results.

Summary on the Factors of Active Learning in terms of Specified Indicators

Presented in Table 1 is the Factors in Active Learning of Social Studies Students based on the identified three indicators – Provide Proper Setting, Technology, Dialogue Environment.

Table 1

Summary on the Students' level of Factors in Active Learning Students in terms of Specified Indicators

Indicators	Mean	Description
Provide Proper Setting	3.5	Agree
Technology	3.6	Agree

Dialogue Environment	3.32	Agree
General Mean	3.47	Agree

Reflected in table 1 is the summary on the Factors in Active Learning of Social Studies Students which obtained an overall mean score of 3.4 This entails that the Factors in Active Learning of Social Studies Students are Agree. Both the indicators Technology and Provide Proper Setting reported the highest mean score of 3.6 and 3.5, while the Dialogue Environment the lowest mean score of 3.3 but both mean scores the description of agree.

Presented in Table 2 is the Adaptability Skills of Social Studies Students based on the identified three indicators – Time Management, Emotional Management, Communication.

Table 2

Summary on the Students' level of Adaptability Skills of Students in terms of Specified Indicators

Indicators	Mean	Description
Time Management	3.27	Agree
Emotional Management	3.53	Agree
Communication	3.65	Agree
General Mean	3.46	Agree

Reflected in table 2 is the summary on the adaptability skills of social studies students which obtained an overall mean of 3.46. This entails that the adaptability skills of social studies students are Agree. The indicators Communication reported the highest mean score or 3.65 while the Time management and Communication are both lowest mean score of 3.53 and 3.27 but both mean scores have the description of agree.

Significant Relationship between Factors in Active Learning and the Adaptability Skills of the Social Studies Students

Using the Pearson r in SPSS, Table 9 shows the result of the relationship between the level of Factors in Active Learning and the Adaptability Skills of the Social Studies Students.

Testing the Hypothesis

Table 3

Significant Relationship between Factors in Active Learning and the Adaptability Skills of Social Studies Students

Variables	N	Mean	Degree of Relationship	p-value @ significance level 0.01	Decision	Conclusion
Active Learning	20	3.25	0.35, Moderate Positive Correlation	0.00	Reject Ho	There is a significant relationship
Adaptability Skills	20	2.99				

The table reveals that the Factors of Active Learning of Social Studies Students and their Adaptability Skills has a significant positive agree association, as seen by the Pearson's r of 0.22 p 0.05 and p-value of 0.000. This means that the higher the students "Factors of Active Skills" the greater the students "Adaptability Skills" is shown. As a result, it suggests that the null hypothesis is false.

Discussions

Level of the social studies students Factors of Active Learning in terms of Provide Proper Setting

The level factors of Active Learning of Social Studies Students as indicated by Prove Active Learning were exhibited agree with an overall mean of 3.5.

In Provide Proper Setting, the emphasis on the factors of active learning of social studies students and their adaptability skills. That pupils can benefit from having a teacher who is in the right environment for them. Whether they are online or in-person classes. Students are also a little more enthusiastic about attending class because of the teachers' direction. According to Kim, M. (2017) regression analyses revealed that students' intrinsic motivation and expectancy-value were positively impacted by transformational leadership. In addition, multiple regression analysis revealed that intellectual stimulation was a typical element that favorably impacted students' intrinsic motivation and expectancy-value.

Level of the students Factors of Active Learning in terms of Technology

The level factors of Active Learning of Social Studies Students as indicated by Technology were exhibited agree with an overall mean of 3.6.

In Technology. This aids learners in meeting their basic necessities while attending school thanks to technology. such as completing all of their teacher's assigned homework and other schoolwork. Additionally, they can collaborate with a distant classmate thanks to technology. To converse, they can do a video chat. According to Wa ng (2015) theoretical perspectives on learning and teaching today's digital students with technology and proposes a realistic and sustainable framework for teachers' professional learning to incorporate digital technologies into their toolkit of instructional strategies in a systematic, comfortable, and coherent way so that technology integration becomes an almost effortless pedagogy in their day-to-day teaching.

Level of the social studies students Factors of Active Learning in terms of Dialogue Environment

The level factors of Active Learning of Social Studies Students as indicated by Dialogue Environment were exhibited agree with an overall mean of 3.32.

In Dialogue Environment. In classroom setting being to communicate with your classmate is important. It can help you to boost your self-esteem and self-awareness of each other. The research employed mixed-methods methodology with multiple research methods. The results Rahmawati, Y. (2016) show that the teachers and the students were engaged and enjoyed the activities. The fieldwork experiences stimulated student critical voice, group cohesiveness, and student involvement.

Level of the Social Studies Students Adaptability Skills in terms of Time management

Level of the students Adaptability Skills in terms of Time Management was exhibit agree with an overall mean of 3.5.

Time Management is important in our daily lives. It is the way on how we handle and do our schoolwork

and household chores. Having a good time management enables students to easily process the adjustments they have undergone, from their previous school being transferred to a new school they are looking for. This is to introduce that time management allows students to submit their tasks on time. It also motivates students to achieve a good performance in their school attendance.

As cited by many researchers, time management can be one of the adaptability skills of the senior high school students. Throughout history, there has been a strong emphasis on effective and efficient time management, which has also been regarded as the key to success Pugh et al (2015). Time management has also been defined as a form of self-management with a clear emphasis on time in understanding what activities to do; how to do them more efficiently; in what time it should be done and when is the correct time to the particular activity (Savino, 2016). Time attitude refers to one's positive or negative attitude toward the present, future, and past, and it has been directly linked to academic achievement, particularly in scientific subjects Nieuwoudt, & Brickhill (2017). According to Kirillov et al (2015), the findings of a study on the role of students in time management to increase the efficiency of the educational process were provided by the researchers.

Level of the Social Studies Students Adaptability Skills in terms of Emotional Management

Level of the students Adaptability Skills in terms of Emotional Management was exhibit agree with an overall mean of 3.65.

Students believe that having emotional support strengthen their will in attending school. This also articulates learners with higher emotional intelligence had higher grades and achievement test scores than students with lower emotional intelligence. Students having a proper emotional management can better equipped to cope with the unpleasant feelings like worry, boredom, and disappointment, which can have a negative impact on academic achievement. It is also presented in the results that students can achieve specific goals without a companion as long as they were able to settle their emotions individually.

As stated by Freudenthaler & Neubauer (2005), recently developed and validated performance measures of emotional management abilities (EMA), which require subjects to indicate their typical behavior in emotional situations (typical-performance instruction, TP) rather than evaluating the effectiveness of various behavioral alternatives or indicating the most appropriate response (maximum-performance instruction, MP). The nature of self-development is investigated using a diverse literature related with experiential learning, emotion research, and social cognitive theories of change Nesbit, P. L., (2012). According to Sunindijo, R. Y., Hadikusumo, B. H., & Ogunlana, S. (2007), stated the importance of human aspects in project success cannot be overstated. Although several studies have been conducted on human aspects in project management, there has been little research on emotional intelligence (EI). EI has been proved in studies to be advantageous to both individuals and organizations. In terms of leadership style, the benefits of EI to project management were explored.

Level of the Social Studies Students Adaptability Skills in terms of Communication

Level of the students Adaptability Skills in terms of Communication was exhibit agree with an overall mean of 3.55.

In Communication. A safe learning environment where students may flourish, prosper, and learn can be created and fostered with the aid of effective communication. Early growth and future learning of a student's depend on the development of effective communication skills. According to Berge, Z. L. (2013) Education can be viewed in large part as a process of communication between the participants. This article focuses on remote education, which combines communication mechanisms that are both generic to in-person learning environments and specialized to the technologies that mediate distance learning and

teaching. Effective communication is hampered by a number of factors, both positive and negative.

CONCLUSION

Active learning essentially helps students become adaptive and engaged while learning. This ensures students participation in meaning-making processes and equipped them to become independent in constructing their own knowledge. Students who have been exposed to various active learning activities were found to be good in managing emotions, controlling their own time and using effective communication strategies .

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