Al-Ishlah: Jurnal Pendidikan
Vol. 15, 3 (September, 2023), pp. 3017-3027
ISSN: 2087-9490 EISSN: 2597-940X, DOI: 10.35445/alishlah.v15i3.3742

Exploring the Impact of Post-Pandemic Learning Strategies on University Students' Engagement and Academic Achievement

Jihan[1], Samuel Mamonto[2], Endang Fatmawati[3], Ika Suhartanti Darmo[4], Muas Muchtar[5]

[1] Universitas Islam Negeri Datokarama Palu, Indonesia; jihan.abdullah08@gmail.com
[2] Universitas YAPIS Papua, Jayapura, Indonesia; s.mamonto@gmail.com
[3] Universitas Diponegoro, Semarang, Indonesia; efatmawati@gmail.com
[4] Universitas Bina Nusantara, Jakarta, Indonesia; ikasd@gmail.com
[5] Politeknik Negeri Ujung Pandang, Indonesia; muasm@gmail.com

ARTICLE INFO

Keywords:

Academic Achievement;
Campus-Based Education;
Learning Strategy;
Student Involvement

Article history:

Received 2023-03-21
Revised 2023-05-11
Accepted 2023-09-28

ABSTRACT

In the context of campus-based education, this study aims to investigate how post-pandemic learning strategies affect students' levels of engagement with their coursework as well as their overall academic performance. In this study, a quantitative approach is taken, and the participants are students in an English language education study program in the city of Palu who take a campus-based learning approach to their education. The type of research is correlational and non-experimental. Google Forms and other similar online survey distribution and gathering platforms facilitate this process. The results showed that the adoption of post-pandemic learning strategies that were inclusive and adaptive had a positive impact on student engagement, and post-pandemic learning strategies that were inclusive and adaptive had a positive impact on their academic achievement. In addition, post-pandemic learning strategies also indirectly affect student academic achievement through student involvement. This research provides recommendations for the development of post-pandemic learning strategies that are more inclusive and adaptive in campus-based education to increase student engagement and academic achievement.

Corresponding Author:
Jihan
Universitas Islam Negeri Datokarama Palu, Indonesia; jihan.abdullah08@gmail.com

1. INTRODUCTION

Education is one of the sectors that has been significantly affected by the Covid-19 pandemic. Social restrictions and lockdowns imposed by governments around the world are forcing schools and tertiary institutions to switch to distance learning. According to a report by UNESCO (2020) cited in Ghazali (2020), the global student population has seen significant disruptions due to the closure of schools, affecting around 91% of students globally. Consequently, over 1.5 billion students have been unable to physically attend their classes. In response to the COVID-19 pandemic, the Indonesian government has implemented policies pertaining to social distancing and remote learning. According

to Martoredjo (2020), these modifications have an impact on the methods of instruction and learning, as well as the level of student involvement and academic performance.

For this reason, a post-pandemic learning strategy that is both effective and inclusive needs to be developed in order to guarantee the unbroken flow of educational opportunities (Suhendro, 2020). In accordance with the findings of Freiberg and Driscoll (2000), the utilisation of strategies for learning can serve several purposes, such as delivering subject content across various levels, catering to diverse pupils, and adapting to varied contextual settings. According to Dick (1996), it is argued that learning strategies encompass more than only activity routines, but also encompass learning materials and packages. Dick (1996) proposes that learning strategies consist of five key components. The first component involves pre-instructional activities, which encompass aspects such as motivation, goal-setting, and behavioural considerations. The second component involves the presentation of information, which includes providing descriptions of the learning material, conveying relevant information, and offering illustrative examples. The third component is participation learning, which involves engaging in practice.

The degree to which students participate in their education is one of the most important factors determining how well they do academically. A greater level of student engagement in the learning process is associated with an increased likelihood of the student achieving better academic results. Student engagement can be understood as a manifestation of student accountability, as demonstrated through adherence to school regulations, active involvement in the educational journey, and effective communication with pertinent stakeholders who facilitate the learning experience (Trowler, 2010). In addition, learning support technologies such as online platforms and learning applications play an important role in increasing student engagement as well as the academic achievement of those students (Klem & Connell, 2004).

In the context of education that takes place on campus, it is necessary to develop post-pandemic learning strategies that are both effective and inclusive in order to raise the level of student engagement and academic achievement. The degree of student engagement is a crucial factor in determining academic success. The level of student engagement has been identified as a significant determinant of academic success. However, it is worth noting that there is a subset of students that exhibit limited participation within the educational framework of their respective institutions (Lei, Cui, & Zhou, 2018). Behaviours that may serve as indicators of diminished student involvement encompass a decline in motivation to acquire knowledge, heightened student discontentment, a sense of ennui towards the educational endeavours pursued, and subpar academic performance.

High levels of student engagement are widely regarded by universities as a reliable measure of academic achievement. Attaining this form of involvement may provide challenges within the existing classroom framework. Assessing student participation poses challenges due to the availability of diverse measurement instruments and the absence of a universally accepted definition of the construct of engagement (Delfino, 2019). The correlation between academic achievement and the quality of instruction is significantly influenced by the degree of student engagement during classroom activities. The facilitation of student learning and the cultivation of self-reflection can be enhanced when the course is engaging, enjoyable, practical, meaningful, and significant to the students. In order to attain elevated levels of student engagement within contemporary educational settings, it is important to possess a comprehensive understanding of the effective amalgamation of engaging pedagogical tactics and activities. The influence of lecturers' skills on students' attentiveness and emotional engagement in learning is a significant component that can considerably impact the outcomes achieved and the perceived value of the course (Song, Lee, Liew, Ho, & Lin, 2022). When students demonstrate both attentiveness and active participation in their own education, this can be seen as a satisfactory degree of involvement. Indicators of students' investment in their learning encompass attendance, active participation in course activities, emotional engagement, motivation, and a sense of community. The rates of participation may be influenced by various factors, including the extent to which students feel connected to the group and their level of enthusiasm to fulfil the course requirements.

Academic performance changes behaviour through learning, not development (Eryanto & Swaramarinda, 2013). Standardised examinations can assess skills and direct problem-solving, and process results can be spoken or written. Academic performance also indicates success in connection to a goal due to optimal learning effort (Manurung, 2017). Thaib (2013) explains that academic accomplishment is the result students achieve in a given time period on specific subjects, which is presented numerically on report cards. According to Saleh (2014), academic achievement is success towards a goal through optimal learning. Student successes are both cognitive-intellectual and non-cognitive, manifesting in personality traits, among other aspects. Due to the nature of learning activities, academic performance is the product of the learning process. Understanding learning achievement starts with learning. Nasution (1996) defines academic success as flawless thinking, emotion, and acting. Academic accomplishment is excellent if it meets cognitive, emotional, and psychomotor standards; unsatisfactory if it does not. Academic achievement is when a child does as well as feasible given their ability at a given moment.

Previous research has demonstrated that participation in extracurricular activities outside of the classroom, such as student organizations, clubs, and social events, can help students become more engaged in their studies and improve their academic performance. Additionally, the support that students receive from campus lecturers and staff members plays an important role in increasing student engagement as well as the academic achievement of those students (Umamah, Anggraini, Edyta, & Faradiba, 2018). Participation in extracurricular activities has positively impacted student engagement and academic performance. In the context of learning in the aftermath of the pandemic, it is imperative to modify extracurricular activities in order to facilitate their virtual or remote execution (Sagoro, 2013). Furthermore, the assistance provided by lecturers and personnel on campus is a significant factor in enhancing student engagement and academic performance, particularly in the context of remote education (Irawan et al., 2020).

Within the realm of remote education, the incorporation and application of educational technologies designed to provide learning assistance possess the capacity to enhance student involvement and academic performance (Darmayanti, 2008). However, it should be noted that there exists a disparity among students in terms of their access to and proficiency in utilising different types of educational technology. Hence, it is imperative to incorporate considerations of inclusion and fairness into the design and implementation of learning support technologies in the post-pandemic age (Putri, Mahriani, & Fatricia, 2022). However, there are several challenges in developing effective and inclusive post-pandemic learning strategies. These challenges include a lack of infrastructure and resources for distance learning, a lack of technological skills from students and lecturers, as well as differences in access to technology and conditions of the learning environment between students who come from different backgrounds (Makur et al., 2021).

In the context of campus-based education, conducting this research to investigate the effect of post-pandemic learning strategies on student engagement and academic achievement. Understanding this impact is anticipated to aid in developing post-pandemic campus-based learning strategies that are more inclusive and adaptable to increase student engagement and academic achievement. In addition, the findings of this study can help policymakers and educators develop more effective policies and practices for addressing post-pandemic learning difficulties.

2. METHODS

This study employs a quantitative methodology. Quantitative research aims to evaluate established ideas, determining their validity or invalidity empirically, and is employed to investigate overt issues (Darmawan, 2013). The research methodology employed in this study is characterised as correlational and non-experimental in nature. Correlational research refers to a type of investigation that aims to identify and examine the associations or connections between different variables. This type of research is sometimes referred to as associational research, which involves examining the interrelationships between variables. Meanwhile, non-experimental research is research where

observations are made on a number of characteristics (variables) of research subjects according to their circumstances, without any manipulation (intervention) of the researcher. This study's variables included independent variables, such as Learning Strategies (X), and dependent variables, such as Student Involvement (Y1) and Academic Achievement (Y2). The research population consisted of 662 students from the English Language Education Program who attended lectures during the even semester of the 2022/2023 academic year in Palu City. A simple random sample technique was used to select the research sample. A total of 132 students were sampled.

In this study, data was collected using a questionnaire, which is a form of data collection that includes a series of questions or statements. Questionnaires will be distributed via online platforms such as Google Forms or similar applications. Each instrument used must have a scale in order to produce accurate quantitative data. A Likert scale is used in this study. This research technique is intended to answer the formulation or test the hypothesis. As a result, the data analysis technique employed is the use of available statistical methods, specifically the processing of quantitative data or the use of numbers and computers in the statistical package for the Social Sciences (SPSS) version 25.

The linkages between variables will then be formulated in the form of a paradigm. So, the framework of thought is a synthesis of the relationship between variables compiled from various theories that have been described. The framework of thinking in this study is:

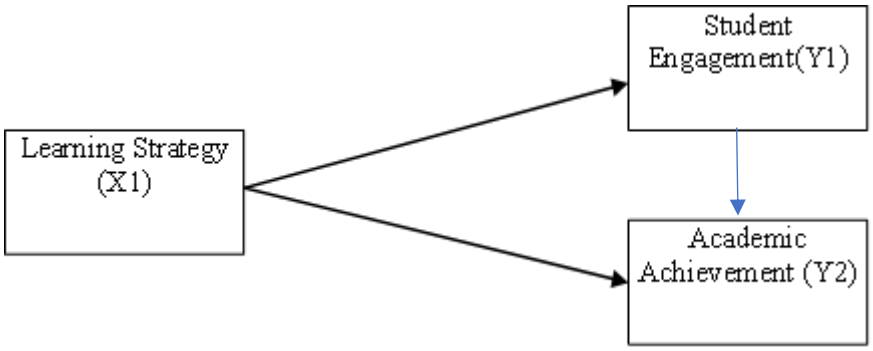

Figure 1. Research Framework

3. FINDINGS AND DISCUSSION

3.1. Validity test

In this study, to find out whether the instruments used were valid or not, testing was carried out on the instrument so that it could find that it had a suitable validity among the items, meaning that it could be said that the data was valid data. A questionnaire item is said to be valid if the r count is greater than the r table for a significance level of a = 0.05 and vice versa. Based on the measurement results with the SPSS 25.0 tool, it was found that the indicators for all variables were valid as measured by the r-count > r-table value (0.3440), and the significance value was < 0.005.

3.2. Reliability Test

Data collected with or obtained using a reliable instrument can be relied on to be accurate and trustworthy. Data at a certain level of reliability can be relied upon and trusted. Arikunto (2010) explained that the research instrument was declared reliable if the Cronbach alpha index or value was > 0.6.

Table 1. Reliability Test Results

Variable	Cronbach Alpha	Results Test
Learning Strategy (X)	0.737	Reliable
Student Engagement (Y1)	0.755	Reliable
Academic Achievement (Y2)	0.751	Reliable

In Table 1, it can be concluded that the results of the reliability test indicate that all data is reliable, with results above 0.60 with a significance level of 5%. The results of testing *the* Learning Strategy variable was 0.737, the results of the Student Involvement test were 0.75 3, and the results of the academic achievement test were 0.751, with these results fulfilling the requirements, the data was declared reliable.

3.2.1 Classic assumption test

1. Normality test

The goal of the normality test is to ascertain if the distributions of the independent and dependent variables are, in fact, normal. The One Sample Kolmogorov Smirnov test for normality yielded the following results:

a. For the results of the Normality Test Value X against Y1, it is obtained that the value of Monte Carlo Sig. (0.092) is greater > α (0.05) so it can be concluded that the data used is normally distributed.
b. For the results of the Normality Test Value X against Y2, it is found that the value of Monte Carlo Sig. (0.275) is greater > α (0.05) so it can be concluded that the data used is normally distributed.

2. Multicollinearity Test

Whether or not one or more of a model's independent variables are highly correlated with one or more other independent variables can be ascertained with the multicollinearity test. The following are the outcomes of the multicollinearity test performed in this research:

Table 2. Multicollinearity Test Results

No	Information	Tolerance	VIF
1	X against Y1	1.000	1.000
2	X Against Y2	1.000	1.000

According to the table above, the regression model does not exhibit multicollinearity problems. This is evidenced by the tolerance value of each variable exceeding 10 percent (0.1). The results of the VIF calculation indicate that the VIF value of each variable is less than 10. Therefore, there is no correlation between the independent variables in the regression model.

3. Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is heteroscedasticity or not. To determine heteroscedasticity, you can use the Glejser test. Heteroscedasticity test results as follows:

Table 3 Heteroscedasticity Test X against Y1

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.618	5.131		3.041	.002
	X	-.101	.069	-.121	-1.417	.156

Source: data processed researcher (2022)

Table 4. Heteroscedasticity Test X against Y1

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.228	3.835		1.621	.105
	X	-.002	.051	-.001	-.022	.979

Source: data processed researcher (2022)

Based on the Glejser test table, it is known that the significance value is greater than 0.05, so it can be concluded that the regression model does not exhibit heteroscedasticity.

4. Hypothesis Testing

1. t-test (Partial Test)

Table 5. Variable X's t test against Y1

Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	63.375	8.931		7.092	.001
	X	.301	.121	.208	2.450	.014

Source: data processed researcher (2022)

According to the table given, the Constant value is 63,375, indicating that the baseline value for the Student Engagement variable is 63,377. The regression coefficient, X, of 0.301 suggests that for each 1% increase in the value of the Learning Strategy variable, there is a corresponding increase of 0.302 in the value of the Student Engagement variable. Since the regression coefficient is positive, it can be inferred that there is a positive relationship between variable X and variable Y1. Table 5 indicates that the Learning Strategy variable has a 95% significance level ($\alpha = 0.05$). The P-value significance level for this comparison is 0.014, which is less than 0.05. Therefore, the null hypothesis (H0) is rejected, indicating that the Post-Pandemic Learning Strategy variable has a significant impact on the Student Engagement variable.

Table 6. The t test between X and Y2

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	64.862	6.574	.368	9.862	.000
	X	.410	.089		4.540	.001

Source: data processed researcher (2022)

According to Table 6, the Constant value is 64.86 2, which indicates that the constant value of the Academic Achievement variable is 64.86 2. The regression coefficient X is 0.41 0 which indicates that the academic achievement score increases by 0.41 0 for every 1% increase in the post-pandemic learning strategy score. The positive regression coefficient indicates that the influence of variable X on Y is in a positive direction. The variable Post-pandemic Learning Strategy has a 95% significance level ($\alpha = 0.05$) as shown in the table above. The significance level of the P-Value is $0.000 < 0.05$. This comparison rejects the null hypothesis, indicating that the learning strategy variable significantly affects academic achievement.

2. Determination Coefficient Test

If the coefficient of determination (R2) value is zero, then it can be concluded that no part of the variation in Y can be accounted for by changes in the independent variable (X). In contrast, if R2 is 1, then all of the variation in Y can be explained by changes in X.

Table 7 The coefficient of determination (R2) of X against Y1

Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimates
1	.208 [a]	.043	.036	10.347

Based on the table above it can be seen that the correlation value is 0.208. The R Square value is 0.043. This can be interpreted that the learning strategy variable can explain the student involvement variable of 4.3% while the remaining 95.7% is explained by other factors not examined.

Table 6 The coefficient of determination (R2) of X against Y2

Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of theEstimates
1	.368 [a]	.135	.128	7.616

According to Table 6, the correlation value is 0.368. The value of R Square is 0.135. This means that the learning strategy variable can explain 13.5% of the academic achievement variable, while the remaining 86.5% is explained by other factors that were not investigated.

3. Path Analysis Test

The following is a Regression analysis for Pathway 2 (Learning Strategy on Academic Achievement Through Student Engagement)

Table 7 Equation II

Summary models

Model	R	R Square	Adjusted R Square	Std. Error of the Estimates
1	.542 [a]	.294	.283	6.906

Coefficient[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	44.823	7.019		6.382	.000
X	.315	.082	.282	3.761	.000
Y1	.314	.057	.406	5.400	.000

a. Dependent Variable: Y2

As for this simple regression analysis, it can be seen that the direct effect of learning strategies on academic achievement (line c) is 0.128 in Table 6, and the indirect effect on academic achievement (line axb) is 0.084. The total effect is the sum of the direct effect plus the indirect effect (c'= c+ ab) of 0.212. Because c' > c (0.212 > 0.128), it means that after analysis using the mediator variable the coefficient of 0.212 is greater than the analysis before using the mediator with a coefficient of 0.128. So, it can be concluded that student involvement acts as a mediating variable that influences post-pandemic learning strategies on student academic achievement.

3.3. Impact of post-pandemic learning strategies on student engagement

Students' engagement in class activities has a large impact on their learning outcomes and teachers' efficacy as educators (Saleh, 2014). When a course is interesting, fun, useful, important, and significant to the students, it can help facilitate learning and cultivate self-reflection. With a regression coefficient of 0.301 and a p-value of 0.014, data analysis reveals the relationship between learning strategies and student involvement. These findings suggest that the variable learning strategy has a significant positive effect on student engagement. Thus, it can be concluded that there is a positive and significant influence between learning strategy variables and student engagement, i.e., if the learning strategy is good, so is student engagement. The value of R Square is 0.043. This can be interpreted to mean that the learning strategy variable can explain 4.3% of the variance in student involvement, while the remaining 95.7% is explained by other factors that were not examined. Despite the fact that students frequently complain during the learning strategy due to obstacles such as not understanding the material due to online learning, they do receive support from their surroundings, have good skills, and can use the latest technology to increase student engagement.

According to the findings of the research that was carried out, post-pandemic learning strategies benefit the level of student engagement. According to the findings of this investigation,

students who took part in post-pandemic learning were more likely to actively engage in academic pursuits such as attending lectures and taking part in other academic activities. This demonstrates that increasing student involvement in the learning process can be accomplished through the implementation of appropriate learning strategies and technological tools.

In post-pandemic learning, the use of online media and e-learning is becoming more frequently used as an alternative to face-to-face learning. Students who study online have flexibility in arranging their study schedule so that they can arrange their study time according to their needs. In addition, the use of interactive and user-friendly online platforms can make students more interested and comfortable in participating in learning. With higher involvement in learning, students also tend to achieve better academic results. This can happen because students who are more active in participating in learning can more easily understand the material and increase their understanding. In addition, students who are more involved in academic activities also have the opportunity to interact with lecturers and other students, so that they can obtain additional information and broaden their horizons. Therefore, the use of post-pandemic learning strategies can be used as an effective learning alternative and increase student involvement. After the pandemic has passed, it is critical for educational institutions to continue to develop and improve their teaching methods in order to encourage greater student engagement and improved academic outcomes.

This research is in line with research that was carried out by (Rochana, Darajatun, & Ramdhany, 2021), which employs learning strategies that prioritize the interests of students in an effort to increase student involvement, particularly in the implementation of independent campus policy. According to the findings of the study, the Level of Academic Challenge is the most important factor in determining student involvement, while the Supportive Campus Environment was found to be the least important factor. According to the findings of (Yu, Yu, Xu, Xu, & Wu, 2022), the utilization of learning strategies that make use of mobile learning technology and social media tools has a significant impact on the level of student engagement as well as the learning outcomes. Students now have more opportunities than ever to study on their own and effectively investigate a wide variety of interesting English topics thanks to mobile learning technologies and tools for social media. Students are able to connect with one another and with their teachers through the use of mobile learning technologies and social media tools, which results in an increase in the amount of interaction and collaboration that takes place during the learning process.

3.4. The Impact of Learning Strategies on Student Academic Achievement

According to Manurung (2017), academic achievement is a reliable indicator of success in relation to a specific objective, as it reflects the level of effort put into learning. The influence of learning strategies on learning outcomes is demonstrated by a regression coefficient of 0.410 and a significance level of 0.001. These results indicate that the variable learning strategy has a significant positive effect on academic achievement among students. Therefore, if the learning strategy is effective, academic achievement is also effective. The value of R Square is 0.135%. This can be interpreted to mean that the learning strategy variable can account for 13.5% of the variance in academic achievement, while the remaining 86.5% is explained by factors that were not examined.

Academic achievement is the main goal of higher education, so the role of learning strategies in improving student academic achievement is very important. In the context of lectures, learning strategies can include teaching methods, resources, technology, interactions between teachers and students, as well as academic and administrative policies. Therefore, to achieve optimal academic goals, educational institutions need to pay attention to these factors and evaluate the learning strategies they apply.

One of the effective learning strategies is a participatory teaching method, in which students are actively involved in the teaching and learning process. Students can participate in class discussions, group assignments, presentations, or research projects, which can help them understand the material better and improve their communication skills. On the other hand, learning strategies that are less

effective, such as passive teaching methods, such as lectures that only rely on lectures and reading of teaching materials, can make students lose interest and motivation to learn.

Resources and technology also play an important role in an effective learning strategy. Educational institutions need to provide adequate resources, such as libraries and laboratories, and adopt educational technology that suits the curriculum and learning styles of students. Learning technologies that can be accessed online or via mobile devices can also increase learning flexibility and facilitate interaction between teachers and students. The interaction between lecturers and students is also an important factor in a successful learning strategy. Lecturers need to pay attention to the needs and learning styles of students and facilitate interaction and discussion in class. In addition, educational institutions need to promote policies that support interactions between teachers and students outside the classroom, such as consultation hours and online discussion forums.

Academic and administrative policies also play an important role in an effective learning strategy. Clear and regular policies, such as structured class schedules and fair grading systems, can help students manage their time and achieve optimal study results. Educational institutions also need to consider other factors that can influence learning strategies, such as educational continuity and flexibility, as well as campus policies that support equality and inclusiveness.

This is in line with research conducted by Zagoto (2022) where the application of learning strategies using the Word Square cooperative model has a positive effect on learning outcomes, namely increasing student learning outcomes in Basic Mathematics courses at Nias Raya University. This is also in accordance with Sadikin's (2017) research, which states that the use of the Rotating Trio Exchange (RTE) learning strategy has an effect on student learning outcomes in the Basics and Learning Processes of Biology course.

3.5. Effect of learning strategies on academic achievement through student engagement

The study's findings indicate that student involvement is a factor that acts as a mediator for academic achievement. According to the findings of the study, the effect of learning strategies on student academic achievement is 0.212. The results of the influence of learning strategies on academic achievement through student involvement are obtained by multiplying the X variable by the M variable, where the value of the X variable on the M variable is 0.208 multiplied by the M variable on the Y variable, which is 0.406, yielding an indirect result of 0.084. While the total effect given is 0.212, it is the sum of the direct and indirect effects of learning strategies on academic achievement. Furthermore, the significance value of both direct and indirect influence must be less than 0.05.

Learning strategies can influence student academic achievement by involving students in the learning process. The level of interaction and participation in learning activities demonstrated by students can be defined as their level of involvement in learning. Students who are more involved in the learning process are more focused and enthusiastic about participating in learning, which can lead to higher academic achievement. The use of appropriate learning strategies can also increase student engagement and their academic achievement. Learning strategies can include various methods and techniques such as the use of technology, problem-based teaching, collaborative learning, and so on. When appropriate learning strategies are used, students can feel more involved in learning and more easily understand the material being taught, thereby increasing their academic achievement. However, the influence of learning strategies on student engagement and academic achievement cannot be seen as the sole determining factor. There are other factors that can affect engagement and academic achievement, such as students' talents and interests, family social and economic conditions, learning environment, and so on. Therefore, in optimizing the influence of learning strategies on student engagement and academic achievement, it is also necessary to consider these factors. Teachers and lecturers need to understand and pay attention to the conditions and individual needs of students, as well as create a conducive learning environment so that students feel comfortable and involved in the learning process.

Overall, learning strategies can influence student engagement and academic achievement. However, this influence cannot be seen as the only determining factor, so it is necessary to consider other factors such as talents, interests, and the socio-economic conditions of the student's family.

4. CONCLUSION

Post-pandemic learning strategies have positively impacted student engagement and academic achievement. Implementing online-based learning, blended learning, and using learning techniques such as e-learning and social media tools can increase student involvement in the learning process. The involvement of these students then has a positive impact on their academic achievement. Students who are more active in the learning process tend to get better grades and meet their academic goals. This research shows that changes in learning strategies post-pandemic are becoming a must for higher education institutions. In the face of rapidly changing situations, institutions must update their learning approaches to remain relevant and practical. In addition, the use of technology and online platforms is emerging as an effective way to increase student engagement and academic achievement. This research also shows that effective post-pandemic learning strategies must be adapted to each educational institution's specific needs and characteristics. Therefore, institutions must conduct further research to find a learning approach that best suits the characteristics and needs of their students.

REFERENCES

Arikunto, S. (2010). Metode peneltian. *Jakarta: Rineka Cipta*, *173*.

Darmawan, D. (2013). Quantitative Research Techniques. *Bandung: PT Remaja Rosdakarya Offset*.

Darmayanti, T. (2008). Efektivitas intervensi keterampilan self-regulated learning dan keteladanan dalam meningkatkan kemampuan belajar mandiri dan prestasi belajar mahasiswa pendidikan jarak jauh. *Jurnal Pendidikan Terbuka Dan Jarak Jauh*, *9*(2), 68–82.

Delfino, A. P. (2019). Student engagement and academic performance of students of Partido State University. *Asian Journal of University Education*, *15*(1), n1.

Dick, W. (1996). The Dick and Carey model: Will it survive the decade? *Educational Technology Research and Development*, 55–63.

Elihami, E., & Syahid, A. (2018). Penerapan pembelajaran pendidikan agama islam dalam membentuk karakter pribadi yang islami. *Edumaspul: Jurnal Pendidikan*, *2*(1), 79–96.

Eryanto, H., & Swaramarinda, D. R. (2013). Pengaruh modal budaya, tingkat pendidikan orang tua dan tingkat pendapatan orang tua terhadap prestasi akademik pada mahasiswa Fakultas Ekonomi Universitas Negeri Jakarta. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, *1*(1), 39–61.

Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to student engagement. *The Journal of Negro Education*, *62*(3), 249–268.

Firman, F. (2020). Dampak covid-19 terhadap pembelajaran di perguruan tinggi. *BIOMA: Jurnal Biologi Dan Pembelajarannya*, *2*(1), 14–20.

Freiberg, H. J., & Driscoll, A. (2000). *Universal teaching strategies*. Allyn & Bacon.

Gerlach, V. S., Ely, D. P., & Melnick, R. (1980). *Teaching and media*. Prentice-Hall.

Ghazali, F. Al. (2020). Challenges and Opportunities of Fostering Learner Autonomy and Self-Access Learning During the COVID-19 Pandemic. *Studies in Self-Access Learning Journal*, *11*(3).

Irawan, E., Arif, S., Hakim, A. R., Fatmahanik, U., Fadly, W., Hadi, S., … Pahlevi, F. S. (2020). *Pendidikan Tinggi Di Masa Pandemi: Transformasi, Adaptasi, dan Metamorfosis Menyongsong New Normal*. Zahir Publishing.

Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, *74*, 262–273.

Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic

achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, *46*(3), 517–528.

Majid, A. (2013). *Strategi pembelajaran*. Bandung: PT Remaja Rosdakarya.

Makur, A. P., Jehadus, E., Fedi, S., Jelatu, S., Murni, V., & Raga, P. (2021). Kemandirian belajar mahasiswa dalam pembelajaran jarak jauh selama masa pandemi. *Mosharafa: Jurnal Pendidikan Matematika*, *10*(1), 1–12.

Manurung, T. M. S. (2017). Pengaruh motivasi dan perilaku belajar terhadap prestasi akademik mahasiswa. *JAS-PT (Jurnal Analisis Sistem Pendidikan Tinggi Indonesia)*, *1*(1), 17–26.

Martoredjo, N. T. (2020). Pandemi covid-19: Ancaman atau tantangan bagi sektor pendidikan. *Jurnal Binus*, *7*(1), 1–15.

Nasution, S. (1996). Prestasi Belajar. *Jakarta. Penerbit: Rineka Cipta*.

Putri, A. U., Mahriani, R., & Fatricia, S. (2022). *Strategi Implementasi Kebijakan Kuliah Daring Masa Pandemi Covid-19 dengan Menerapkan Teknologi Digital Dalam Proses Pembelajaran PKN di Universitas Sriwijaya.* Bening Media Publishing.

Rochana, R., Darajatun, R. M., & Ramdhany, M. A. (2021). Pengaruh implementasi kebijakan kampus merdeka terhadap minat dan keterlibatan mahasiswa. *Journal of Business Management Education (JBME)*, *6*(3), 11–21.

Sadikin, A. (2017). Pengaruh penerapan strategi pembelajaran Rotating Trio Exchange terhadap hasil belajar mata kuliah Dasar-Dasar dan Proses Pembelajaran Biologi. *Biodik*, *3*(2), 73–80.

Sagoro, E. M. (2013). Pensinergian mahasiswa, dosen, dan lembaga dalam pencegahan kecurangan akademik mahasiswa akuntansi. *Jurnal Pendidikan Akuntansi Indonesia*, *11*(2).

Saleh, M. (2014). The Influence of Motivation, Family Factors, Campus Environment And Active Organization On Academic Achievement. *Phenomenon Journal*, *4*(2).

Simatupang, H. (2019). *Strategi Belajar Mengajar Abad Ke-21*. Pustaka Media Guru.

Song, B. L., Lee, K. L., Liew, C. Y., Ho, R. C., & Lin, W. L. (2022). Business students' perspectives on case method coaching for problem-based learning: impacts on student engagement and learning performance in higher education. *Education+ Training*.

Suhendro, E. (2020). Strategi pembelajaran pendidikan anak usia dini di masa pandemi covid-19. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, *5*(3), 133–140.

Thaib, E. N. (2013). Hubungan Antara prestasi belajar dengan kecerdasan emosional. *JURNAL ILMIAH DIDAKTIKA: Media Ilmiah Pendidikan Dan Pengajaran*, *13*(2).

Trowler, V. (2010). Student engagement literature review. *The Higher Education Academy*, *11*(1), 1–15.

Umamah, K. N., Anggraini, M. P., Edyta, N., & Faradiba, A. T. (2018). Prestasi Akademik Ditinjau Dari Keterlibatan Remaja Dalam Kegiatan Ekstrakurikuler. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni*, *2*(1), 108–114.

Yu, Z., Yu, L., Xu, Q., Xu, W., & Wu, P. (2022). Effects of mobile learning technologies and social media tools on student engagement and learning outcomes of English learning. *Technology, Pedagogy and Education*, *31*(3), 381–398.

Zagoto, M. M. (2022). Peningkatan Hasil Belajar Mahasiswa Melalui Implementasi Model Pembelajaran Kooperatif Word Square. *Educativo: Jurnal Pendidikan*, *1*(1), 1–7.