

The Effect of Learning Management on and Learning Activities through Moderation of Learning Readiness Variables

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This research analyzed the effect of learning management on learning activities both directly and through moderating learning readiness variables. This research was an ex-post facto type of quantitative research carried out at the Universitas Muhammadiyah Makassar. The research variables consist of exogenous variables, namely learning management, endogenous variables, namely learning activities, and learning readiness as an intervening variable. The samples were 532 participants obtained through random sampling technique. The data collection technique used a questionnaire which measured using a scale of 1-5. The collected data was then analyzed using Structural Equation Modeling (SEM) with the help of the Analysis of Moment Structure (AMOS) program. The research results show that: 1) Learning management had a significant and positive effect on learning readiness with an effect of 33.64%; 2) Learning management has a positive effect on learning activities, but the effect is still low, namely 2.25% or not significant; 3) Learning readiness has a significant and positive effect on learning activities with an effect of 73.70%; 4) Learning management has a significant and positive effect on learning activities through learning readiness with an effect of 24.8%. The findings of this research explain that learning readiness is the most important variable possessed by students, because learning readiness was found to have any effect on learning activities both directly and as a moderating variable. Therefore, it was recommended that for students to further increase their readiness in learning, lecturers should continue to motivate students to increase their readiness in participating in learning, and advanced researchers are advised to develop strategies that can increase students' learning readiness.

Keywords: learning management, learning activities, learning readiness, learning, readiness variables

INTRODUCTION

Learning activities are important factor in determining student success in learning. This is important for students and lecturers to make learning activities effective because they are found to contribute to student learning outcomes (Cachia et al., 2018). Active learning activities are believed to enable students to integrate new information with their previous knowledge. Learning activities are defined as interactive between two or more learning partners creating new learning concepts, gathering together, taking turns, dialogue working with each other in a learning (Wekerle et al., 2022). Active learning activities are more closely related to the acquisition of knowledge than passive learning activities.

Active learning is not a learning goal, but is one of the strategies used to optimize the learning process, in active learning there is interaction between students and students and students and

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teachers, students are not burdened individually in solving problems, but it is done collaboratively. Teachers also do not have dominant control over providing material, but teachers play more of a role as facilitators (Uno & Mohamad, 2022). With active learning, it is possible for students to carry out various activities in order to develop skills and knowledge, students learn while doing cards while the teacher acts as a facilitator by providing various resources and learning aids (Jais, 2019; Purnomo et al. 2021; Nguyen, C., Trinh, T., Le, D., & Nguyen, T. 2021), with students being active in learning then it can support improving the quality of learning processes and outcomes (Ikhlas, 2019).

Student activity in learning is very important, especially in higher education. As we all know, the learning process in college is much different than in secondary education, where lectures do not put too much emphasis on pedagogical learning but more on andragogic learning where students are given the freedom to organize themselves in the learning process. However, in its implementation, there were various problems with student inactivity in learning, students not focusing on learning and less involvement in discussion activities (Yuliana et al., 2020; Satriani, S. 2022), low student interest and activity in learning (Sutomo & Tiro, 2020; Torabi, S., & Maleki, R. 2022), in the lecture process it was found that not all students were active or there are still passive students (Lom, 2012).

One element that can affect learning activities is good learning management. Learning management is an effort made to achieve learning objectives through the stages of planning, implementation and evaluating learning (Gemnafle & Batlolona, 2021). Implementing good learning planning will have an impact on implementing maximum learning (Widiyanto & Wahyuni, 2020), learning planning is very important for teachers, because it can increase student creativity and improve the quality of teachers in delivering material (Putrianingsih et al., 2021). Implementing learning using various models and strategies that suit students' needs and differentiated learning can improve activities and learning outcomes (Kamal, 2021). Likewise, learning evaluation is also very important to determine the level of success of learning outcomes and as evaluation material for determining strategies for improving the quality of the learning outcomes process (Suardipa & Primayana, 2023).

Another factor that can affect learning activities is learning readiness. Learning readiness is a physical, motor, socio-emotional, behavioral and cognitive skill that shows readiness to accept learning. Learning readiness can contribute to increasing learning activity which has an impact on improving student learning outcomes (Kirmizi, 2015); (Zuschaiya et al., 2021); (Ningsih & Suniasih, 2020); (Santoso & Widayaka, 2022).

Various previous studies that discussed student activity, including in Indonesia, were conducted by (Susilawati, 2020) regarding how to increase student activity in learning through the use of video media, use of information technology and online learning (Bakhri et al., 2020); (Ariawan, 2022). In the United States it was carried out by (Hite et al., 2024) regarding how to increase student activity in learning through virtual learning while (Donohoe et al., 2024) research related to active learning in the laboratory, and (Clancy III et al., 2024) related to active learning through a case-based approach; In Australia, (Caliph & Lee, 2024) conducted research related to curriculum development to improve learning activities; (Yiin & Chern, 2023) in Taiwan researched the effects of active learning mechanisms on cognitive load and learning achievement; (Yesildag & Bostan, 2023) in Turkey discusses film analysis as an active learning method. However, of the many existing studies, there has been no research that links learning management and students' learning readiness in relation to students' activeness in learning.

This research therefore analyzes the effect of learning management and learning readiness on activities both directly and through moderating learning readiness variables. This research is important in order to provide teachers with a concept regarding the importance of learning management, apart from that, it also provides information to students regarding the importance of learning readiness and activeness in learning. The results of this research form the basis for developing research regarding strategies to

increase student readiness and activeness in learning. Apart from that, the findings of this research also add to the body of theory regarding student activity in learning.

METHOD

This research was the ex-post facto type of quantitative research carried out at the Universitas Muhammadiyah Makassar. The research variables consist of exogenous variables, namely learning management, endogenous variables, namely learning activities, and learning readiness as an intervening variable. The population of this study were students at Universitas Muhammadiyah Makassar with a sample of 532 participants obtained through random sampling techniques. The data collection technique used was a questionnaire. The learning management questionnaire consisted of 15 question items developed from three indicators, namely planning, implemaetation and evaluation of learning, the learning readiness questionnaire consists of 8 question items developed from four indicators, namely physical, maletal, motivation and knowledge conditions, the learning activities questionnaire consists of the 10 question items developed from five indicators, namely paying attention, asking and answering, expressing ideas, listening, and solving problems. The questionnaire was measured using a scale of 1-5. The collected data was then analyzed using Structural Equation Modeling (SEM) with the assistance of the Analysis of Momalet Structure (AMOS) program

FINDINGS

This research involved 532 respondents consisting of 189 (35.53%) male and 343 (64.47%) female with an age range of 18-22 years. Data from the results of filling out the questionnaire were then tabulated in an Excel program and checked by the author before being carried out. data analysis. The collected data was then analyzed using descriptive analysis to determine the category of each variable. The results of the descriptive analysis of each variable are described in table 1.

Table 1
Descriptive analysis results

Variable	Average value	Category
Learning Management	4.28	Very High/Excellent
Learning Readiness	3.95	High/Good
Learning activity	3.67	High/Good

Based on the results of the descriptive analysis, it was found that the learning management carried out by the lecturers was very good, the students' learning readiness and learning activities were in the good or high category. Next, Structural Equation Modeling (SEM) analysis was carried out with the final model obtained as shown in Figure 1.

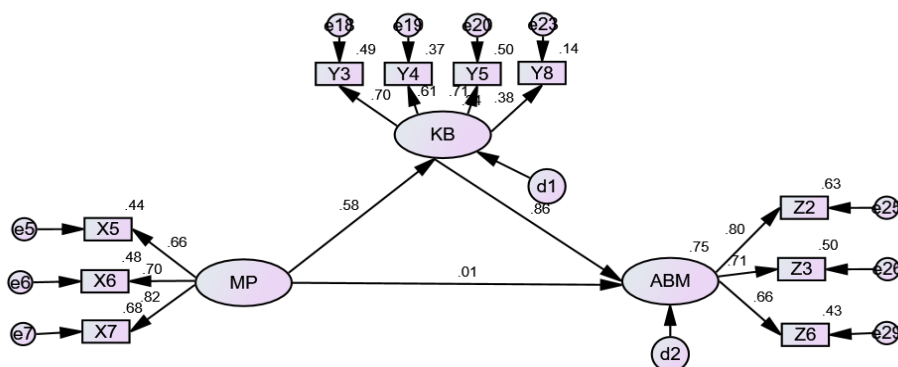


Figure 1
Final fit SEM model

The evaluation criteria for goodness of fit indices are as shown in Table 2.

Table 2
Results of evaluation of goodness of fit indices criteria

Goodness of fit index	Cut-off Value	Model Results*	Information
χ^2 - Chi-square	Expected to be small	1.83	Good
Sign. Probability	≥ 0.05	0.03	Good
CMIN/DF	≤ 2.00	1.83	Good
RMSEA	≤ 0.80	0.40	Good
GFI	≥ 0.90	0.98	Good
AGFI	≥ 0.90	0.96	Good
TLI	≥ 0.95	0.97	Good
CFI	≥ 0.95	0.984	Good

Because the evaluation results found that the goodness of fit index criteria had been met, analysis was then carried out to test the hypothesis to see the effect of each exogenous variable on the endogenous variables based on the results of the regression weights. The results of the estimated structural equation regression coefficients for the final stage model are described in Table 3.

Table 3
Results of evaluation of goodness of fit indices criteria

Relationship Between Variables	Standard Regression Weight	Estimate	S.E	CR	P	Estimate Standardized
(Y) <--- (X)	0.580	0.493	0.056	8,805	***	0.580
(Z) <--- (X)	0.015	0.014	0.060	0.233	,815	0.150
(Z) <--- (Y)	0.859	0.948	0.090	10,534	***	0.859

Description: Learning Management (X), Learning Readiness (Y), Learning Activities (Z)
Structural Equation Z: $3.986 + 0.015 X + 0.859 Y$; $R^2_z = 75.2\%$; $Y = 0.580$

The results of research hypothesis testing related to direct predictions are described as follows:

Direct effect of Learning Management (X) on Learning Readiness (Y).

The first statistical hypothesis to be tested is: $H_0: \gamma = 0$ vs $H_1: \gamma > 0$ where H_1 states that there is a positive and significant direct effect of learning management (X) on learning readiness (Y) at a significance level of 0.05. As shown in Table 3, positive estimation results were obtained with a p value = 0.000 $< \gamma_{11} = 0,580$ $\alpha = 0.05$ which is significant. This means that H_0 is rejected at the 0.05 significance level. So there is a positive and significant effect of learning management (X) on learning readiness (Y) at a significance level of 0.05. The magnitude of the effect of learning management (X) on learning readiness (Y) is 33.64% obtained from the Standardized Estimate (0.580×100)

Direct effect of Learning Management (X) on Learning Activities (Z).

The statistical hypothesis to be tested is: $H_0: z = 0$ vs $H_1: z > 0$ where H_1 states that there is a positive and significant direct effect of learning management (X) on learning activities (Y) at a significance level of 0.05. As shown in Table 3, positive estimation results were obtained with a p value = 0.815 $> \gamma_{11} = 0,015$ $\alpha = 0.05$ which is not significant. This means that H_0 is accepted. So

there is an insignificant positive effect of learning management (X) on learning activities (Z) at a significance level of 0.05. The magnitude of the effect of learning management (X) on learning activities (Z) is 2.25% obtained from the Standardized Estimate (0.152*100).

Direct effect of Learning Readiness (Y) on Learning Activities (Z).

The statistical hypothesis to be tested is: $H0: z = 0$ vs $H1: z > 0$ where H1 states that there is a positive and significant direct effect of learning readiness (Y) on learning activities (Z) at a significance level of 0.05. As shown in Table 3, positive estimation results were obtained with a p value = 0.000 < $\gamma_{11} = 0,948$ $\alpha = 0.05$ which is significant. This means that H1 is accepted. So there is a significant positive effect of learning readiness (Y) on learning activities (Z) at a significance level of 0.05. The magnitude of the effect of learning management (Y) on learning activities (Z) is 73.7% obtained from the Standardized Estimate (0.8592*100).

Next, the research hypothesis regarding indirect predictions (mediator) is explained based on Table 4.

Table 4

Indirect effect between variables

Learning Management	
	Standardized Indirect Effect-Estimates
Learning Readiness(Y)	0
Learning Activities (Z)	0.498
Indirect Effect-Significance (p-value)	
Learning Readiness(Y)	0
Learning Activities (Z)	0.012

Indirect effect of Learning Management (X) through Learning Readiness (Y) on Activities (Z)

The third statistical hypothesis to be tested is where H1 states that there is a positive and significant indirect effect of learning management (X) through learning readiness (Y) on learning activities (Z) at a significance level of 0.05. As shown in Table 4.13, the estimation results are

obtained $H0: \beta \gamma = 0$ against $H1: \beta \gamma > 0$ $\beta \gamma = 0.498$ y as positive with a value of $p = 0.012 < \alpha = 0.05$ which is significant. This means that H0 is rejected at the 0.05 significance level. So there is a positive and significant effect from learning management (X) through learning readiness (Y) on learning activities (Z) at a significance level of 0.05. The effect size of 24.8% was obtained from the standardized estimate (0.4982*100).

DISCUSSION

The Effect of Learning Management on Learning Readiness

Based on the results of research and hypothesis testing, it was found that there is a positive and significant direct effect of learning management on learning readiness with an estimated effect of 33.64%. This shows that with good learning management carried out by lecturers, students' learning readiness can improve, for the better. If learning management is implemented by lecturers, students' learning readiness will also be better.

This happens because learning management starts from the learning planning stage or dimension where at the planning stage, the lecturer has a learning plan that has been prepared in the form of a semester learning plan which contains the learning plan for each meeting, where the learning plan has been submitted to students at the beginning meeting in the form of a lecture contract. So that by having a clear and mutually agreed upon lecture contract, students will also prepare themselves to take part in learning and prepare for their needs in the learning process in accordance with the lecture

contract that has been agreed upon with the lecturer and students. The results of this research are in line with the research results of Wahyudi, R., Santosa, S., & Sumaryati, S. (2013) who found that there is an effect of teacher readiness on learning effectiveness; and giving apperception by the teacher will be followed by increasing students' learning readiness (Al-Muwattho et al., 2018).

The second dimension in learning management is the implementation of effective learning. With effective learning implemented by lecturers through various methods such as the application of learning models and strategies that are varied and in accordance with student characteristics, differentiated learning according to student needs, as well as student-centered learning resulting in students being better prepared in the learning process, students no longer only play a role as a good listener, but in the learning process the student is the main actor, so that interaction is formed between student and student and student and lecturer, the lecturer only acts as a facilitator. These findings strengthen the results of previous research which found that differentiated learning has a positive impact on learning motivation (Khasanah & Alfiandra, 2023); Differentiated learning has a positive impact on learning readiness (Fitriani et al., 2023).

The third indicator in learning management is learning evaluation. With the principle that learning evaluation is an inseparable part of the learning process, assessment which is part of learning evaluation is used as a tool to determine student learning needs, to determine the development and achievement of student learning outcomes. This assessment is carried out through three types, the first is a diagnostic assessment to determine the characteristics, learning styles and needs of students, the second is a formative assessment to determine the development of student competencies in the learning process, and the third is a summative assessment to determine student learning achievements, where the assessment is carried out continuously and is inseparable from learning activities. So, with evaluations and assessments that are carried out well, it will motivate students to be better prepared for the learning process.

The Effect of Learning Management on Learning Activities

Based on the results of research and hypothesis testing, it was found that there was an insignificant positive direct effect from learning management on learning activities. This shows that learning management is able to have a positive effect on learning activities, but the effect is still small or not significant. The research results are different from research findings which found that students' learning activities can be improved through the application of learning management because the results have a positive effect (Saprin, 2017), and learning management can increase the effectiveness of learning (CICI, 2022).

The Effect of Learning Readiness on Learning Activities

Based on the results of research and hypothesis testing, it was found that there is a positive and significant direct effect of learning readiness on learning activities. This shows that with good learning readiness possessed by students, learning activities will be even better. Readiness to learn in this study was measured by five indicators, namely physical and mental condition. Students' learning readiness will be formed if students have good physical and mental conditions, students who have good physical health and mental health will have good learning readiness.

The second indicator that forms learning readiness is motive and need. Students who have high motivation and learning needs will prepare themselves more thoroughly to prepare themselves for learning. Apart from that, the third indicator is students' initial knowledge, students who already have initial knowledge and basic knowledge related to learning material are more enthusiastic and have good learning readiness. The results of this research are in line with the results of research which found that there is a positive effect between learning readiness on learning activities (Yunita, 2020), and learning readiness can increase learning motivation and learning outcomes (Volvi Silva, 2017);

(Nurrahmawati & Kurniawan, 2021); (Fathoni & Sobandi, 2020); (Yulikasari & Pramusinto, 2016); (Nihaya & Yuniarsih, 2020).

The Effect of Learning Management on Learning Activities through Learning Readiness

Based on the research results, it was found that learning management has a significant and positive effect on learning activities, if mediated by students' learning readiness. These results explain that to make a higher contribution from learning management to learning activities, it needs to be supported by good learning readiness by students.

The findings of this research explain that learning readiness is the most important variable possessed by students, because learning readiness was found to have a direct effect on learning activities and learning readiness was found to be a moderating variable for learning management in increasing student learning activities. The implications of this research show the importance of learning readiness for students, so that this information can be used as a reference, consideration and recommendation for educators that to further improve the quality of the learning process and outcomes, the first thing that must be prepared is to improve students' learning readiness.

This should describe the design of the experiment and the obtained results. All tables, figures, graphs, statistical analyses and sample calculations should be presented in this section.

Tables

In tables font size 9 must be used and should be formed according to APA 6th edition (Publication Manual of the American Psychological Association). Number of the table and the title must be written above the table.

Table 5
Proportion of errors in younger and older groups

Level of difficulty	Younger			Older		
	n	M (SD)	%95 CI	n	M (SD)	%95 CI
Low	12	.05 (.08)	[.02, .11]	18	.14 (.15)	[.08, .22]
Moderate	15	.05 (.07)	[.02, .10]	12	.17 (.15)	[.08, .28]
High	16	.11 (.10)	[.07, .17]	14	.26 (.21)	[.15, .39]

Note. CI = confidence interval.

CONCLUSION, DISCUSSION AND SUGGESTIONS

This research analyzed the effect of learning management and learning readiness on learning activities and analyzed the effect of learning management on learning activities through moderating the learning readiness variable. The research results show that: 1) Learning management has a significant and positive effect on learning readiness with an effect of 33.64%; 2) Learning management has a positive effect on learning activities, but the effect is still low, namely 2.25% or not significant; 3) Learning readiness has a significant and positive effect on learning activities with an effect of 73.70%; 4) Learning management has a significant and positive effect on learning activities through learning readiness with an effect of 24.8%. The findings of this research explain that learning readiness is the most important variable possessed by students, because learning readiness was found to have an effect on learning activities both directly and as a moderating variable. Therefore, it was recommended for students to further increase their readiness in learning, lecturers to continue to motivate students to increase their readiness in participating in learning, and advanced researchers are advised to develop strategies that can increase students' learning readiness.

REFERENCES

- Al-Muwattho, F. P., Aminuyati, A., & Okianna, O. (2018). Pengaruh pemberian apersepsi terhadap kesiapan belajar siswa pada pelajaran akuntansi kelas xi sma islamiyah pontianak. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, 7(2). <https://jurnal.untan.ac.id/index.php/jpdpb/article/view/24076>
- Ariawan, S. (2022). Antara Ada dan Tiada: Studi Terhadap Tingkat Kehadiran dan Keaktifan Mahasiswa dalam Pembelajaran Online di Era Covid-19. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 12(1), 62–68.
- Bakhri, S., Dyatmika, T., & Kamal, M. R. (2020). Pengaruh Kemampuan Menggunakan Teknologi Komunikasi, Sosialisasi Media Pembelajaran Online, Dukungan Keluarga dan Pengajar Terhadap Keaktifan Mahasiswa di Masa Pandemi Covid-19. *Mediakita*, 4(1), 19–36.
- Cachia, M., Lynam, S., & Stock, R. (2018). Academic success: Is it just about the grades? *Higher Education Pedagogies*, 3(1), 434–439. <https://doi.org/10.1080/23752696.2018.1462096>
- Caliph, S. M., & Lee, C. Y. (2024). Online teaching and learning of a pharmacy curriculum designed for active learning and professional skills development—A report of students' perceptions and learning experience in two international campuses. *Currents in Pharmacy Teaching and Learning*, 16(2), 119–123.
- Cici, P. S. (2022). *Manajemen Pembelajaran Dalam Meningkatkan Efektivitas Belajar Siswa di MTS Muhammadiyah Sukarame, Bandar Lampung* [PhD Thesis, UIN Raden Intan Lampung]. <http://repository.radenintan.ac.id/id/eprint/20950>
- Clancy III, P. W., Tulenko, K., & Rizvi, T. (2024). An Innovative Medical Student Neuroradiology Elective Course: Active Learning Through a Case-Based Approach. *Academic Radiology*, 31(1), 322–328.
- Donohoe, K. L., Van Tassell, B., Gregory, A., Burns, D., Mader, K., Lee, S., Bitor, R., & Peron, E. P. (2024). An interprofessional active-learning laboratory on urinary incontinence for pharmacy, nursing, and occupational therapy students. *Journal of Interprofessional Education & Practice*, 35, 100697.
- Fathoni, M. R. N., & Sobandi, A. (2020). Dampak fasilitas belajar dan kesiapan belajar dalam upaya meningkatkan hasil belajar siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 5(2), 129–139.
- Fitriani, D., Rahman, F. R., Fauzi, A. D., Salamah, A. U., & Saefullah, A. (2023). Implementasi Pembelajaran Diferensiasi Berdasarkan Aspek Kesiapan Belajar Murid di Sekolah Menengah Atas. *Jurnal Genta Mulia*, 14(2). <https://ejournal.stkipbbm.ac.id/index.php/gm/article/download/358/282>
- Gemnafle, M., & Batlolona, J. R. (2021). Manajemen pembelajaran. *Jurnal Pendidikan Profesi Guru Indonesia*, 1(1), 28–42.
- Hite, R. L., Jones, M. G., & Childers, G. M. (2024). Classifying and modeling secondary students' active learning in a virtual learning environment through generated questions. *Computers & Education*, 208, 104940.
- Ikhlas, A. (2019). Penerapan pembelajaran aktif inovatif kreatif efektif dan menyenangkan (paikem) melalui pendekatan saintifik untuk meningkatkan aktivitas dan hasil belajar matematika siswa kelas VIII SMP N 7 kerinci. *Ensiklopedia of Journal*, 1(3). <https://jurnal.ensiklopediaku.org/ojs-2.4.8-3/index.php/ensiklopedia/article/view/122>
- Jais, A. (2019). Penerapan Strategi Pembelajaran Aktif, Inovatif, Kreatif, Efektif dan Menyenangkan (PAIKEM). *Journal of Dharmawangsa University*, IV (01), 113–123.

- Kamal, S. (2021). Implementasi pembelajaran berdiferensiasi dalam upaya meningkatkan aktivitas dan hasil belajar matematika siswa kelas xi mipa sma negeri 8 barabai. *Jurnal Pembelajaran Dan Pendidik*, 1(1), 409651.
- Khasanah, I., & Alfiandra, A. (2023). Implementasi Pembelajaran Berdiferensiasi Dalam Upaya Meningkatkan Motivasi Belajar Kelas IX di SMPN 33 Palembang. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(1), 5324–5327.
- Kirmizi, Ö. (2015). The influence of learner readiness on student satisfaction and academic achievement in an online program at higher education. *Turkish Online Journal of Educational Technology-TOJET*, 14(1), 133–142.
- Lom, B. (2012). Classroom activities: Simple strategies to incorporate student-centered activities within undergraduate science lectures. *Journal of Undergraduate Neuroscience Education*, 11(1), A64.
- Nguyen, C., Trinh, T., Le, D., & Nguyen, T. (2021). Cooperative Learning in English Language Classrooms: Teachers' Perceptions and Actions. *Anatolian Journal of Education*, 6(2), 89-108.
- Nihaya, S. S., & Yuniarsih, T. (2020). Pengaruh kesiapan dan gaya belajar terhadap prestasi belajar siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 5(2), 267–280.
- Ningsih, N. L. P. Y. W., & Suniasih, N. W. (2020). Kesiapan Belajar dan Aktualisasi Diri Meningkatkan Hasil Belajar IPA. *Mimbar Ilmu*, 25(3), 367–379.
- Nurrahmawati, S., & Kurniawan, R. Y. (2021). Pengaruh Kesiapan Pembelajaran Jarak Jauh Terhadap Hasil Belajar Peserta Didik Selama Pandemi Covid-19 Pada Mata Pelajaran Ekonomi Di SMA. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1559–1567.
- Purnomo, D., Bekti, S., Sulistyorini, Y., & Napfiah, S. (2021). The Analysis of Students' Ability in Thinking Based on Cognitive Learning Style. *Anatolian Journal of Education*, 6(2), 13-26.
- Putrianingsih, S., Muchasan, A., & Syarif, M. (2021). Peran perencanaan pembelajaran terhadap kualitas pengajaran. *INOVATIF: Jurnal Penelitian Pendidikan, Agama, Dan Kebudayaan*, 7(1), 138–163.
- Santoso, A. B., & Widayaka, P. D. (2022). The Effect of Learning Readiness and Prerequisite Courses on Project-Based Learning on Student Competencies in Working on Electrical Machine Repair Projects in The Post Covid-19 Transition Period. *2022 Fifth International Conference on Vocational Education and Electrical Engineering (ICVEE)*, 211–215. <https://ieeexplore.ieee.org/abstract/document/9930406/>
- Saprin, S. (2017). Pengaruh Penerapan Manajemen Kelas Terhadap Peningkatan Aktivitas Belajar Peserta Didik Di Mts. Negeri Gowa. *Al-Kalam*, 9(2). <https://journal3.uin-alauddin.ac.id/index.php/klm/article/view/4483>
- Satriani, S. (2022). The Application of Collaborative Learning Model to Improve Student's 4Cs Skills. *Anatolian Journal of Education*, 7(1), 93-102.
- Suardipa, I. P., & Primayana, K. H. (2023). Peran desain evaluasi pembelajaran untuk meningkatkan kualitas pembelajaran. *Widyacarya: Jurnal Pendidikan, Agama Dan Budaya*, 4(2), 88–100.
- Susilawati, E. (2020). Upaya meningkatkan keaktifan mahasiswa dalam menganalisis video pembelajaran melalui strategi pembelajaran webinar. *Jurnal Teknologi Pendidikan*, 13(2), 146–154.

- Sutomo, E., & Tiro, A. R. (2020). Pengaruh Model Pembelajaran Project Based-Learning Terhadap Minat, Keaktifan, Dan Hasil Belajar Ipa Pada Mahasiswa Pgsd Unimuda Sorong. *BASA (Barometer Sains) Jurnal Inovasi Pembelajaran IPA*, 1(1). <https://unimuda.e-journal.id/basa/article/view/455>
- Torabi, S., & Maleki, R. (2022). An Investigation into Iranian EFL Learners' Reading Comprehension Problems and the Tentative Solutions: Learners' Perceptions in Focus. *Anatolian Journal of Education*, 7(1), 123-138.
- Uno, H. B., & Mohamad, N. (2022). *Belajar dengan pendekatan PAILKEM: Pembelajaran aktif, inovatif, lingkungan, kreatif, efektif, menarik*. Bumi Aksara. [https://books.google.com/books?hl=id&lr=&id=wqtsEAAAQBAJ&oi=fnd&pg=PP1&dq=Uno,+H.+B.,+%26+Mohamad,+N.+\(2022\).+Belajar+dengan+pendekatan+PAILKEM:+pembelajaran+aktif,+inovatif,+lingkungan,+kreatif,+efektif,+menarik.+Bumi+Aksara.+&ots=MPekOP6TEe&sig=EB65pTL87R7nRnGE3oaOFwqNzyo](https://books.google.com/books?hl=id&lr=&id=wqtsEAAAQBAJ&oi=fnd&pg=PP1&dq=Uno,+H.+B.,+%26+Mohamad,+N.+(2022).+Belajar+dengan+pendekatan+PAILKEM:+pembelajaran+aktif,+inovatif,+lingkungan,+kreatif,+efektif,+menarik.+Bumi+Aksara.+&ots=MPekOP6TEe&sig=EB65pTL87R7nRnGE3oaOFwqNzyo)
- Volvi Silva, B. (2017). Pengaruh kesiapan belajar Terhadap Hasil Belajar Mata Pelajaran Ekonomikelas X di SMA Bina Jaya Palembang. *Jurnal Ilmiah Pendidikan Dan Ekonomi*, 1. <https://garuda.kemdikbud.go.id/documents/detail/1905628>
- Wekerle, C., Daumiller, M., & Kollar, I. (2022). Using digital technology to promote higher education learning: The importance of different learning activities and their relations to learning outcomes. *Journal of Research on Technology in Education*, 54(1), 1–17. <https://doi.org/10.1080/15391523.2020.1799455>
- Widiyanto, I. P., & Wahyuni, E. T. (2020). Implementasi Perencanaan Pembelajaran. *Satya Sastraharing: Jurnal Manajemen*, 4(2), 16–35.
- Yesildag, A. Y., & Bostan, S. (2023). Movie analysis as an active learning method: A study with health management student. *The International Journal of Management Education*, 21(1), 100759.
- Yiin, S.-J., & Chern, C.-L. (2023). The effects of an active learning mechanism on cognitive load and learning achievement: A new approach for pharmacology teaching to Taiwanese nursing students. *Nurse Education Today*, 124, 105756.
- Yuliana, D., Seituni, S., & Heny, U. (2020). Implementasi Collaborative Learning Dalam Meningkatkan Pemahaman Mahasiswa Pada Mata Kuliah Riset Operasi Informatika Program Studi Pendidikan Teknologi Informasi Stkip Pgrl Situbondo. *Jurnal IKA PGSD (Ikatan Alumni PGSD) UNARS*, 8(2), 281–292.
- Yulikasari, R., & Pramusinto, H. (2016). Pengaruh Kesiapan Belajar, Kompetensi Profesional Guru Dan Lingkungan Belajar Terhadap Motivasi Belajar Mata Pelajaran Kearsipan. *Economic Education Analysis Journal*, 5(3), 825–825.
- Yunita, E. (2020). *Pengaruh Kesiapan Belajar Terhadap Aktivitas Belajar Siswa Kelas VA di Madrasah Ibtidaiyah Sabilal Muhtadin Kecamatan Tembilahan Hulu* [PhD Thesis, STAI Auliaurasyididn Tembilahan]. <https://repository.stai-tbh.ac.id/handle/123456789/37>
- Zuschaiya, D., Wari, E., Agustina, Y., & Lailiyah, S. (2021). Pengaruh kesiapan belajar dan kemampuan berhitung terhadap hasil belajar matematika. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, 4(3), 517–528.