

Self Regulated Learning: Its Role and Influence in Increasing Student Achievement and Interest in Learning

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ABSTRACT

Background. Nowadays, many students carry out learning activities without any planning and evaluation of their learning itself. So many students do assignments haphazardly, submit assignments not on time and are late in learning. This is because students are not yet able to regulate themselves in learning which can influence students' low academic achievement.

Purpose. The aim of this research isto improve student achievement and interest in learning through self-regulated learning.

Method. Method used The researcher used a quantitative method in conducting this research by distributing research questionnaires via Google Form. Results of this research There have been many important findings that self-regulated learning can help students improve their ability to learn and understand material.

Results. Limitations of this researchis that researchers only conduct surveys on certain students so it will be difficult to obtain appropriate data in choosing ideal student learning methods. Researchers hopefor future researchers to be able to conduct surveys on all students and not just certain students.

Conclusion. Conclusions from this researchexplained that self-regulated learning plays an important role in increasing student achievement and interest in learning. Because it can make it easier for students to understand the lessons explained by the teacher.

KEYWORDS

Learning Interest, Learning Achievement, Regulated Learning

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INTRODUCTION

Learning is a form in which students can develop themselves and increase their potential to achieve changes in behavior, better knowledge and skills (Barr & Askill-Williams, 2020; C.-M. Chen et al., 2019). When studying, students gain experience so they can develop according to what the teacher teaches, so the role of educators is very important in learning so that students can develop (Lung-Guang, 2019; Saint et al., 2020). Learning should also be at the level of formal educational institutions, ie. Elementary school and middle school. In addition, students start their studies from children, teenagers to adults. The learning process is not only influenced by internal factors such as intelligence and motivation to learn, but also external factors that influence the learning process. Namely, the learning environment, learning methods and educator.



Many students realize that education is important for them. because they believe education is the key to success(Limone et al., 2020; Tsang, 2020). However, most students are less interested in participating in learning because students do not understand the learning process explained by the teacher. That is where teachers must be able to increase students' interest in learning.(Holzer et al., 2021; Wong et al., 2019). So that students can be enthusiastic about participating in learning, one way to increase students' interest in learning is by self-regulated learning. This method is made for students who do not understand the learning process so they can understand what Huguru explains and increase students' learning motivation and academic abilities.(Hertel & Karlen, 2021; Lim et al., 2021). Self-regulated learning can also make students more skilled at working on questions from the teacher and able to work independently without depending on the teacher or their parents.

In the learning process, students' learning achievements are often paid attention to(K. Li, 2019; Viberg, Wasson, et al., 2020). why is that because students are assessed whether they are capable or not in solving a problem which is seen first, namely their achievement, although learning achievement is not the main factor for students to solve a problem(Hooshyar et al., 2020; Jones, 2019). Student achievement is important as a benchmark for success or failure, even though there are other important factors. Learning achievement for students can increase self-confidence and can be a great opportunity to be successful(Bai et al., 2021; Yan, 2020). For teachers, student learning achievement is important to assess which students are trying to learn and which students are not willing to try to learn(Y.-L. Chen & Hsu, 2020; Viberg, Khalil, et al., 2020). Learning achievement is also called the result of a student's ability to put effort into his learning and also carry out a series of tests to determine whether the student is an achiever or not.

Self-regulated learning is a method of learning independently so that students can understand the material taught by teachers in an autodidactic manner with the aim of increasing students' learning potential so that they are not dependent on teachers or parents.(Lee et al., 2019; Moreno-Marcos et al., 2020). Self-regulated learning can increase students' learning motivation so that students can set their own learning goals and can also improve their own abilities(Atlas et al., 2004; Moreno-Marcos et al., 2020). Students can develop skills that are useful in learning in order to improve student learning achievement(Gabriel et al., 2020; Hooshyar et al., 2019). Self-regulated learning can reduce stress in learning. Students can avoid unnecessary situations and take control of their learning which can reduce stress and anxiety while studying. Self-regulated learning can help students become more involved in learning and organize the most effective learning strategies for themselves

Self-regulated learning is a concept that emphasizes an individual's ability to regulate and direct their learning independently. Self-regulated learning has become a popular research topic in the fields of educational psychology and cognitive science(Montgomery et al., 2019; Saint et al., 2021). So self-regulated learning in an educational context can be defined as a person's ability to regulate and control their behavior in studying a topic(Khiat, 2022; Palalas & Wark, 2020). From previous research, self-regulated learning has a positive impact on academic presentation and career success(Aguilar et al., 2021; S. Li, Du, et al., 2020). Even though there has been a lot of research on self-regulated learning, there is still a lot that is not known about self-regulated learning, namely the factors that influence it and how to improve this self-regulated learning. Therefore, there must be further research so that self-regulated learning can be fully understood.

Self-regulation allows people to manage their learning using efficient and effective strategies. In an age of ever-evolving information, self-directed learning is becoming increasingly important to ensure that people adapt and thrive in a rapidly changing environment(S. Li, Chen, et al., 2020). Independent learning is not only about mastering a subject but also about developing important

skills such as problem solving, critical thinking and effective communication. Implementing independent learning requires strong motivation and the ability to set clear goals and a willingness to take the necessary actions to achieve those goals. Learning to organize Self-confidence can help people develop self-confidence and the capacity for lifelong learning.

The purpose of this research is to understand how self-regulated learning can help students improve their learning skills in the classroom and outside the classroom. This research is important to conduct because self-regulated learning has been proven effective in improving student learning outcomes in various learning contexts. By exploring how self-regulated learning can be applied in different learning contexts, this research can help teachers and educational practitioners develop more effective learning strategies. This research can also help increase our understanding of how students can develop their self-regulation skills, which are critical skills for success in the academic and professional worlds. Through this research, we can learn the factors that influence self-regulated learning and how we can facilitate the development of these skills in students. Overall, this research will make an important contribution to our understanding of self-regulated learning and how we can maximize students' learning potential.

Self-regulated learning is a relevant and important topic in the current educational context. Self-regulated learning can help individuals to become more effective and independent learners. In today's fast-paced digital era, self-regulated learning can help individuals continue to develop and improve their learning skills. Many studies show that self-regulated learning can positively influence individual learning outcomes. By knowing and understanding the concept of self-regulated learning, we can help students to develop their learning abilities better.

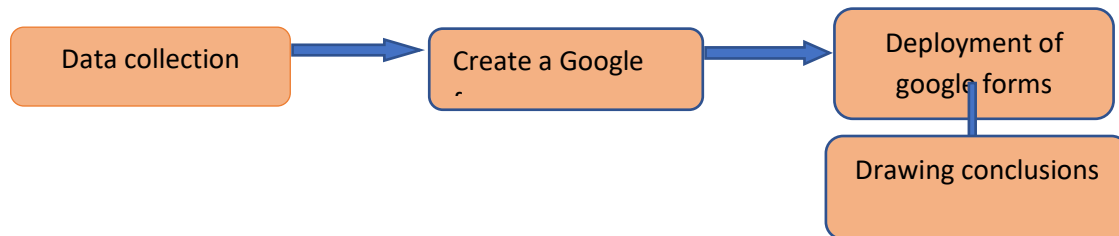
RESEARCH METHODS

The method used by researchers in this research is a quantitative method. This quantitative method is a process for finding data which in research uses numerical data (Crowther et al., 2019; Lin et al., 2020). This method has advantages such as the accuracy of the facts obtained and the ability to generate data easily. In the context of Self Regulated Learning, the use of quantitative methods can measure the extent to which this learning model can increase student learning effectiveness (Crowther et al., 2019). Researchers carry out research through several stages until they reach the final part of the research. The stages carried out by the researcher were starting from collecting data, creating a questionnaire using Google form, where the questionnaire contained questions related to the research carried out by the researcher to obtain accurate and specific information, where the research was aimed at teachers and students.

Researchers conducted this research at a nearby school institution. Data collection was carried out by researchers through questionnaires. This research was carried out by distributing questionnaires to subjects who were undertaking education at the school institution (Dolez et al., 2019). The object of this research is a self-regulated learning model to increase student learning effectiveness. The aim is to find out what percentage is related to the importance of self-regulated learning in education to help increase student learning effectiveness. The population in this study were teachers and students at school. The samples taken were 50 people, the samples were obtained from several teachers and students at the educational institution. This sample is useful to make it easier for researchers to obtain information, where later the data will be obtained using quantitative analysis by researchers for this research.

This research method includes analytical methods, one of which is statistical techniques or data collection methods via mail. Data analysis techniques are a data management process that involves studying, processing and modeling data which will later be useful for drawing conclusions.

This method was chosen because by mastering this technique, data can become meaningful information using numbers that are easy for people to understand to find solutions to the problems being investigated. Respondents' arguments about the technology under study were obtained based on survey results obtained via Google, which had several questions related to the problem under investigation. The survey results can be seen from the background of several respondents who accepted the self-regulated learning model.



RESULTS AND DISCUSSION

Teachers play a very important role in creating students' interest in learning. In the classroom, teachers are not only responsible for providing lessons to students, but also encouraging them to study hard and foster curiosity. A good teacher creates a fun and challenging learning environment for students. He chooses appropriate teaching methods that facilitate understanding and increase students' interest in learning. In addition, teachers know students' individual interests and abilities and help them develop. Teachers can also play an important role in motivating students who lack enthusiasm or lack self-confidence. With the right support and encouragement, a teacher can help students who feel confused or stuck on a topic.

For this reason, effective methods are needed for students to understand learning. With the self-regulated learning method, students become more independent and responsible for their own learning. They also learn to overcome obstacles and difficulties that may arise in their learning process. This helps them achieve better learning outcomes and improves their metacognitive skills to learn effectively in the future. For example, a student who uses a self-regulated learning method will probably create a clearly structured study plan, set specific and realistic goals, and monitor their progress regularly. In addition, they will also use effective study strategies and adapt their study techniques according to their needs.

NO	Question		S	SS	T.S	STS
1	The self-regulated learning model helps provide learning patterns according to student needs		68	28	0	0
2	Self-regulated learning can help teachers provide feedback quickly and efficiently by creating models that can evaluate student work		71	22	0	0
3	Self-regulated learning can help improve the quality of learning and provide a more personal and effective learning experience for		65	26	0	0

	students.					
4	Self regulated learning is a learning model solution for teachers so that it is not boring.		64	23	9	0
5	The self-regulated learning model can be applied at all levels of education		68	17	14	0
6	With self-regulated learning, it can help teachers solve problems in the learning process.		45	17	36	0
7	Self-regulated learning can be used to evaluate the extent to which students have mastered the material being taught		69	18	12	0
8	Self-regulated learning is the most appropriate solution in the current era of technological development		51	21	28	0
9	Self-regulated learning is the most appropriate solution in the current era of technological development		65	14	21	0
10	Self-regulated learning is the most appropriate solution in the current era of technological development.		75	14	10	0
11	With self-regulated learning, students can increase their creativity in learning		66	14	19	0
12	With self-regulated learning, students can increase their creativity in learning		68	10	21	0
13	The self-regulated learning model can help teachers explain learning.		56	7	36	0
14	The self-regulated learning model can regulate students in learning		75	8	15	0
15	Self-regulated learning can increase student learning effectiveness		73	12	14	0
16	Self-regulated learning will make students more independent		73	17	8	0
17	Self-regulated learning will help students focus more on learning		68	21	10	0

18	Self Regulated Learning's Role and Influence in Increasing Student Achievement and Interest in Learning		58	15	26	0
19	Self Regulated Learning makes students learn slowly		66	23	10	0
20	Self Regulated Learning makes the learning process easier		47	51	0	0

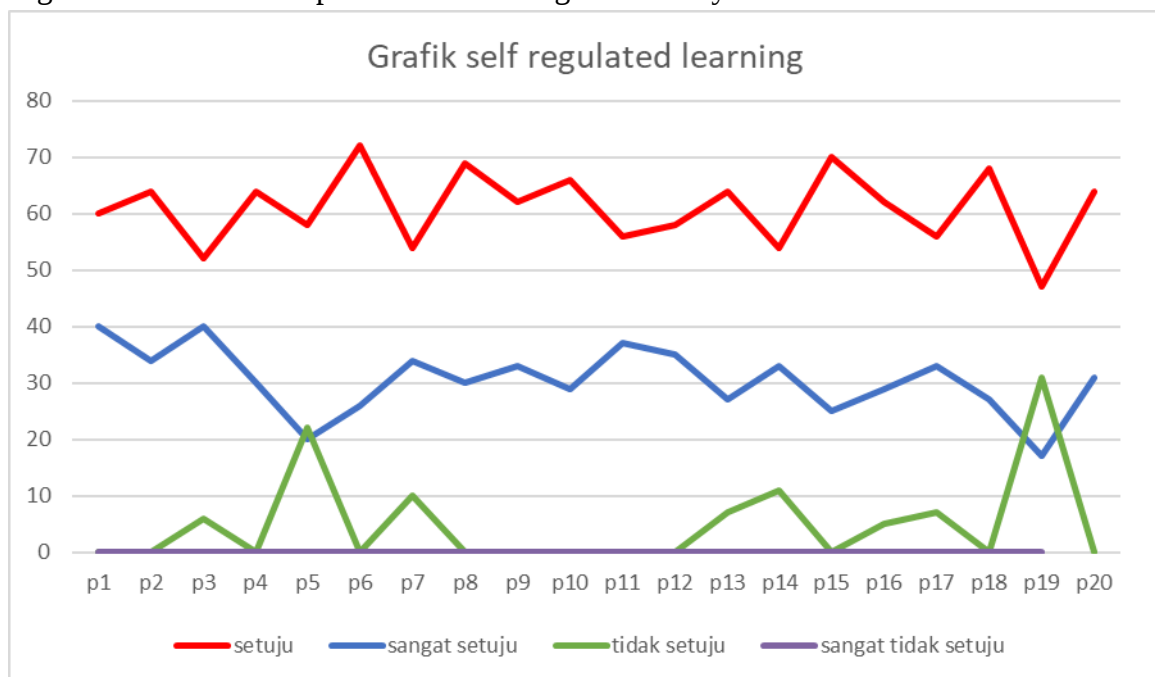
The table above contains several explanations regarding self-regulated learning methods in the world of education. The table above contains several questions which make it easier for researchers to research this study. There are 20 questions listed regarding how important self-regulated learning is in the world of education for teachers and students to improve student learning. Questions containing self-regulated learning models help provide learning patterns according to students' needs with a gain of 68% by selecting agree and some selecting strongly agree with a percentage level of 28%. The table above shows that Self-regulated learning can help teachers in providing feedback effectively, quickly and efficiently by creating a model that can evaluate student assignments with a rate of 71% with answers agreeing and 22% for strongly agreeing. Furthermore, researchers also surveyed that Self-regulated learning can help improve the quality of learning and provide a more personal and effective learning experience for students. With a percentage of 65% agreeing and other supporting answers, namely strongly agree with a score of 26%

Self-regulated learning is a learning model solution for teachers so that it is not boring. With a percentage of 64% with answers agreeing and strongly agreeing 23%, but there is also a disagreeing response of 9%. Apart from that, researchers also researched that the self-regulated learning model can be applied at all levels of education with the percentage of answers that agreed was 68% and those who answered strongly agreed, namely 17%. explainWith self-regulated learning, it can help teachers solve problems in the learning process. The survey results show that the percentage of respondents who agreed was 45% and 17% of respondents who answered strongly agreed, there were also respondents who answered disagreed with a percentage of 36%. Self-regulated learning can be used to evaluate the extent to which students have mastered the material being taught with 69% of respondents agreeing and 18% answering strongly agreeing and 12% responding disagreeing, then the table above is alsodiscussing Self-regulated learning, the most appropriate solution in the current era of technological development, the percentage of people who agree is 51% and the answer is strongly agree, 21%, there are also 28% of people who disagree with this statement.

Self-regulated learning is the most appropriate solution in the current era of technological development. The answers related to this statement were 65% agreeing and 14% strongly agreeing and 21% disagreeing. The next question: Self regulated learning is the most appropriate solution in the current era of technological development with a percentage result of 75% of answers agreeing and 14% strongly agreeing and 10% of answers disagreeing. Researchers are also researching. With self regulated learning students can increase their creativity in learning, which results The survey explains that respondents agreed with a percentage of 66% and 14% strongly agreed and 19% disagreed with this. The next question is that with self-regulated learning, students can increase their creativity in learning with a percentage result of 68% agreeing, other respondents 10% strongly agree and 21% for a disagree answer. Questions containing self-regulated learning models

can help teachers explain learning with a percentage of 56% for agreeing answers and there are also agreeing answers, around 7% of which are 36% disagreeing. Another question asked is that self-regulated learning models can regulate learning. students in learning. The percentage of respondents who agreed was 75% and who strongly agreed was 8%, then the percentage who disagreed was 15%.

From the table above, the next question is that Self-regulated learning can increase the effectiveness of student learning. Many respondents chose to agree, 73% and those who chose to strongly agree, 12%, not a few also chose to disagree with this statement, around 14%. The next answer was with learning. Self-regulation will make students more independent Respondents who answered agreed were 73% and respondents who strongly agreed with this statement were 17%. There were also respondents who disagreed with this statement as much as 8%. The following question was the next question, namely Self-regulated learning will help students focus more on learning. The answer of the majority of respondents was agreeing with the percentage was 68% and respondents who strongly agreed were 21% and the lowest number was 10% who disagreed. Furthermore, the research also examined Self Regulated Learning's Role and Influence in Increasing Student Achievement and Interest in Learning with a percentage of 58% of respondents who answered agree and 15 % who answered strongly agreed and 26% who answered disagreed Self Regulated Learning makes students learn slowly. Of the many respondents who answered agree with a percentage of 66% and respondents who strongly agreed with the statement were 23% there were also respondents who did not agree with the statement by 10% based on the next question Self Regulated Learning makes the learning process easier for respondents who answered agreeing around 47% and respondents who disagreed namely 51%



The graph above illustrates the self-regulated learning model in the world of education. This research examines the use of 20 self-regulated learning questions to improve student learning achievement. In this graph, there is the highest data acquisition, namely the respondents' answers agree with a percentage of 75% on the question of Self-regulated learning, the most appropriate solution in the current era of technological development. The next highest question is that the self-regulated learning model can regulate students in learning with a percentage of 75% in the agree category. The question with the next highest percentage is Self regulated learning can increase

student learning effectiveness with a percentage of 73% in the agree category as well as the question Self regulated learning will make students more independent with a percentage of 73% in the agree category.

Furthermore, the highest percentage based on answers from respondents is found in Self-regulated learning. It can help teachers provide feedback quickly and efficiently by creating a model that can evaluate student work with a score of 71% with the highest percentage agree category. Next, Self-regulated learning can be used to evaluate the extent to which students mastered the material taught with a percentage of 69% for agree answers. In this research, some got a figure of 68%. The agree category lies in the question. The self-regulated learning model helps provide learning patterns according to student needs. Next question. With the same percentage, the self-regulated learning model can be applied at all levels of education. Furthermore, with self-regulated learning questions, students can increase their creativity in learning. Finally, with the question, self-regulated learning will help students focus more on learning.

The next highest question: With self-regulated learning, students can increase their creativity in learning with a percentage of 66% in the agree category, the next highest percentage is Self-Regulated Learning, making students learn slowly with the same percentage, namely 66%, the next highest percentage. Self-regulated learning can help improve the quality of learning and provide a more personalized and effective learning experience for students. With a percentage of 65% in the agree category, other respondents with the same number on the question Self-regulated learning, the most appropriate solution in the current era of technological development, with the agree category, the next question is Self-regulated learning, a learning model solution for teachers so that it is not boring. With a percentage figure of 64% in the agree category, the next highest question is Self Regulated Learning. The Role and Influence in Improving Student Achievement and Interest in Learning with a percentage of 58% in the agree category and also another question with an affirmative answer is Self regulated learning, the most appropriate solution in the current era of technological development with a percentage of respondents' answers of 51% and a question with an answer value of 47% by respondents, namely Self Regulated Learning makes the learning process easier with the agree category

in the strongly agree section, the highest in this category is in the question. The next percentage is in the strongly agree section, the highest in this category is in the question. Self Regulated Learning makes the learning process easier with a percentage of 51%, then the highest percentage is in question number 1, namely the self regulated learning model learning helps provide learning patterns according to student needs with a percentage of 28% with the strongly agree category, the next highest percentage of strongly agree with the highest strongly agree category is number 3 with the statement Self regulated learning can help improve the quality of learning and provide a more personal and effective learning experience for student. With a percentage of 26%, the next question is question number 4, namely Self-regulated learning, a learning model solution for teachers so that it is not boring. With a percentage value of 23% in the strongly agree category, the next percentage is the same as the previous statement with number 19, namely Self Regulated Learning makes students learn slowly.

The question with the highest percentage in the strongly agree category is question 2. Self regulated learning can help teachers provide feedback quickly and efficiently by creating a model that can evaluate student work with a percentage of 22%. The next highest question is number 8, namely Self regulated learning solution the most appropriate in the current era of technological development with a percentage of 21%, the next question with the same percentage of strongly agree is question 17. Self-regulated learning will help students focus more on learning. Continuing

to the question with the next percentage is 7 Self regulated learning can be used to evaluate the extent to which students have mastered the material being taught with a strongly agree percentage of 18%

From the graph above, another question that is very agreeable is question 5. The self-regulated learning model can be applied at all levels of education with a percentage value of 17%. Next with a different question but with the same percentage is question 6. Self-regulated learning can help teachers. in solving problems that exist in the learning process. Next, question 9 Self regulated learning is the most appropriate solution in the current era of technological development with a strongly agree percentage of 14% and the next question with the same percentage is number 10 Self regulated learning is the most appropriate solution in the current era of technological development. and question number 11 With self-regulated learning, students can increase their creativity in learning

Not only that, then in the disagree section, the highest of the categories in the question with 2 answers is the same with a percentage of 36%. With self-regulated learning it can help teachers in solving problems that exist in the learning process. With question 13, the self-regulated learning model can help teachers explain learning. Furthermore, with the answer not agreeing with question 18, namely Self Regulated Learning's Role and Influence in Improving Student Achievement and Interest in Learning with a percentage value of 26%, then the question with the highest disagreeing answer with the same 2 answers with a percentage of 21% is 9 Self regulated learning solution. most appropriate in the current era of technological development and number 12. With self-regulated learning, students can increase their creativity in learning. The next question concerns 11. With self-regulated learning, students can increase their creativity in learning with a percentage of disagreeing 19%. The question with the other highest percentage is 14. Learning model self regulated learning can regulate students in learning with a percentage of 15% with the answer category not agreeing to the next question with the same answer with a percentage result of 14% 5. The self regulated learning learning model can be applied at all levels of education with answer number 15 namely Self regulated learning can increase the effectiveness of student learning

The image above explains information about the use of self-regulated learning to increase student learning effectiveness. Finally, researchers found that self-regulation is very beneficial because it can facilitate the teaching and learning process of teachers and students in the classroom. This research focuses on students who use self-regulated learning in their learning. This research explains self-regulation of learning to improve learning. Self-regulated learning research often examines adaptive learning methods that are taught according to student ability data. The self-regulated learning learning model considers learning assessment to be very necessary for students to improve student learning achievement. The use of self-regulation is necessary to motivate students and self-regulate learning. Sri Rahayu Utami et al. The results of the Enhancing Student Self-Regulated Learning Through Intensive, Solution-Focused Consultation show that an intensive, solution-focused consultation technique approach emphasizes that everyone has a solution to the problem. Problems, but sometimes individuals focus too much on the problem and forget the benefits. In this research, researchers refer to counseling courses where self-regulated learning is better than other guided learning methods in increasing the effectiveness of student learning with self-regulated learning. However, the article provides a comparison between self-regulated learning and others. Because if you use self-regulated learning, students' educational learning outcomes become easier to understand.

CONCLUSION

Based on the description above, the researcher concludes that many students do not understand the understanding given by the teacher. Due to ignorance of the importance of education, educational goals have not been achieved. One way to overcome this problem is the need for independent learning, where this method helps teachers and students in the teaching and learning process. Student learning thus increases student potential and improves student achievement. Through self-regulation it can encourage students to become independent learners. This is no exception for students who are lazy about studying. Researchers also stated that this method would help students better understand the lessons explained by the teacher because they studied independently before starting to study. One of the teacher's efforts to improve student learning outcomes is to use self-regulated learning to obtain knowledge from students so that the method given is correct and successful without errors.

BIBLIOGRAPHY

- Aguilar, S.J., Karabenick, S.A., Teasley, S.D., & Baek, C. (2021). Associations between learning analytics dashboard exposure and motivation and self-regulated learning. *Computers & Education*, 162, 104085. <https://doi.org/10.1016/j.compedu.2020.104085>
- Atlas, G.D., Taggart, T., & Goodell, D.J. (2004). The effects of sensitivity to criticism on motivation and performance in music students. *British Journal of Music Education*, 21(1), 81–87. <https://doi.org/10.1017/S0265051703005540>
- Bai, B., Wang, J., & Nie, Y. (2021). Self-efficacy, task values and growth mindset: What has the most predictive power for primary school students' self-regulated learning in English writing and writing competence in an Asian Confucian cultural context? *Cambridge Journal of Education*, 51(1), 65–84. <https://doi.org/10.1080/0305764X.2020.1778639>
- Barr, S., & Askill-Williams, H. (2020). Changes in teachers' epistemic cognition about self-regulated learning as they engage in a researcher-facilitated professional learning community. *Asia-Pacific Journal of Teacher Education*, 48(2), 187–212. <https://doi.org/10.1080/1359866X.2019.1599098>
- Chen, C.-M., Chen, L.-C., & Yang, S.-M. (2019). An English vocabulary learning app with self-regulated learning mechanism to improve learning performance and motivation. *Computer Assisted Language Learning*, 32(3), 237–260. <https://doi.org/10.1080/09588221.2018.1485708>
- Chen, Y.-L., & Hsu, C.-C. (2020). Self-regulated mobile game-based English learning in a virtual reality environment. *Computers & Education*, 154, 103910. <https://doi.org/10.1016/j.compedu.2020.103910>
- Crowther, L.J., Brunner, P., Kapeller, C., Guger, C., Kamada, K., Bunch, M.E., Frawley, B.K., Lynch, T.M., Ritaccio, A.L., & Schalk, G. (2019). A quantitative method for evaluating cortical responses to electrical stimulation. *Journal of Neuroscience Methods*, 311, 67–75. <https://doi.org/10.1016/j.jneumeth.2018.09.034>
- Dolez, P.I., Tomer, N.S., & Malajati, Y. (2019). A quantitative method to compare the effect of thermal aging on the mechanical performance of fire protective fabrics. *Journal of Applied Polymer Science*, 136(6), 47045. <https://doi.org/10.1002/app.47045>
- Gabriel, F., Buckley, S., & Barthakur, A. (2020). The impact of mathematics anxiety on self-regulated learning and mathematical literacy. *Australian Journal of Education*, 64(3), 227–242. <https://doi.org/10.1177/0004944120947881>
- Hertel, S., & Karlen, Y. (2021). Implicit theories of self-regulated learning: Interplay with students' achievement goals, learning strategies, and metacognition. *British Journal of Educational Psychology*, 91(3), 972–996. <https://doi.org/10.1111/bjep.12402>
- Holzer, J., Lüftenegger, M., Korlat, S., Pelikan, E., Salmela-Aro, K., Spiel, C., & Schober, B. (2021). Higher Education in Times of COVID-19: University Students' Basic Need for

- Satisfaction, Self-Regulated Learning, and Well-Being. *AERA Open*, 7, 233285842110031. <https://doi.org/10.1177/23328584211003164>
- Hooshyar, D., Kori, K., Pedaste, M., & Bardone, E. (2019). The potential of open learner models to promote active thinking by enhancing self-regulated learning in online higher education learning environments. *British Journal of Educational Technology*, 50(5), 2365–2386. <https://doi.org/10.1111/bjet.12826>
- Hooshyar, D., Pedaste, M., Saks, K., Leijen, Ä., Bardone, E., & Wang, M. (2020). Open learner models in supporting self-regulated learning in higher education: A systematic literature review. *Computers & Education*, 154, 103878. <https://doi.org/10.1016/j.compedu.2020.103878>
- Jones, J. A. (2019). Scaffolding self-regulated learning through student-generated quizzes. *Active Learning in Higher Education*, 20(2), 115–126. <https://doi.org/10.1177/1469787417735610>
- Khiat, H. (2022). Using automated time management enablers to improve self-regulated learning. *Active Learning in Higher Education*, 23(1), 3–15. <https://doi.org/10.1177/1469787419866304>
- Lee, D., Watson, S.L., & Watson, W.R. (2019). Systematic literature review on self-regulated learning in massive open online courses. *Australasian Journal of Educational Technology*, 35(1). <https://doi.org/10.14742/ajet.3749>
- Li, K. (2019). MOOC learners' demographics, self-regulated learning strategies, perceived learning and satisfaction: A structural equation modeling approach. *Computers & Education*, 132, 16–30. <https://doi.org/10.1016/j.compedu.2019.01.003>
- Li, S., Chen, G., Xing, W., Zheng, J., & Xie, C. (2020). Longitudinal clustering of students' self-regulated learning behaviors in engineering design. *Computers & Education*, 153, 103899. <https://doi.org/10.1016/j.compedu.2020.103899>
- Li, S., Du, H., Xing, W., Zheng, J., Chen, G., & Xie, C. (2020). Examining temporal dynamics of self-regulated learning behaviors in STEM learning: A network approach. *Computers & Education*, 158, 103987. <https://doi.org/10.1016/j.compedu.2020.103987>
- Lim, L.-A., Gasevic, D., Matcha, W., Ahmad Uzir, N., & Dawson, S. (2021). Impact of learning analytics feedback on self-regulated learning: Triangulating behavioral logs with students' recall. *LAK21: 11th International Learning Analytics and Knowledge Conference*, 364–374. <https://doi.org/10.1145/3448139.3448174>
- Limone, P., Sinatra, M., Ceglie, F., & Monacis, L. (2020). Examining Procrastination among University Students through the Lens of the Self-Regulated Learning Model. *Behavioral Sciences*, 10(12), 184. <https://doi.org/10.3390/bs10120184>
- Lin, C., Zhang, M., Zhou, Z., Li, L., Shi, S., Chen, Y., & Dai, W. (2020). A new quantitative method for risk assessment of water inrush in karst tunnels based on variable weight function and improved cloud model. *Tunneling and Underground Space Technology*, 95, 103136. <https://doi.org/10.1016/j.tust.2019.103136>
- Lung-Guang, N. (2019). Decision-making determinants of students participating in MOOCs: Merging the theory of planned behavior and self-regulated learning model. *Computers & Education*, 134, 50–62. <https://doi.org/10.1016/j.compedu.2019.02.004>
- Montgomery, A.P., Mousavi, A., Carbonaro, M., Hayward, D.V., & Dunn, W. (2019). Using learning analytics to explore self-regulated learning in flipped blended learning music teacher education: Learning analytics and teacher education. *British Journal of Educational Technology*, 50(1), 114–127. <https://doi.org/10.1111/bjet.12590>
- Moreno-Marcos, P.M., Muñoz-Merino, P.J., Maldonado-Mahauad, J., Pérez-Sanagustín, M., Alario-Hoyos, C., & Delgado Kloos, C. (2020). Temporal analysis for dropout prediction using self-regulated learning strategies in self-paced MOOCs. *Computers & Education*, 145, 103728. <https://doi.org/10.1016/j.compedu.2019.103728>
- Palalas, A., & Wark, N. (2020). The relationship between mobile learning and self-regulated learning: A systematic review. *Australasian Journal of Educational Technology*, 36(4), 151–172. <https://doi.org/10.14742/ajet.5650>

- Saint, J., Fan, Y., Singh, S., Gasevic, D., & Pardo, A. (2021). Using process mining to analyze self-regulated learning: A systematic analysis of four algorithms. LAK21: 11th International Learning Analytics and Knowledge Conference, 333–343. <https://doi.org/10.1145/3448139.3448171>
- Saint, J., Gašević, D., Matcha, W., Uzir, N.A., & Pardo, A. (2020). Combining analytic methods to unlock sequential and temporal patterns of self-regulated learning. Proceedings of the Tenth International Conference on Learning Analytics & Knowledge, 402–411. <https://doi.org/10.1145/3375462.3375487>
- Tsang, A. (2020). Enhancing learners' awareness of oral presentation (delivery) skills in the context of self-regulated learning. Active Learning in Higher Education, 21(1), 39–50. <https://doi.org/10.1177/1469787417731214>
- van der Graaf, J., Lim, L., Fan, Y., Kilgour, J., Moore, J., Bannert, M., Gasevic, D., & Molenaar, I. (2021). Do Instrumentation Tools Capture Self-Regulated Learning? LAK21: 11th International Learning Analytics and Knowledge Conference, 438–448. <https://doi.org/10.1145/3448139.3448181>
- Viberg, O., Khalil, M., & Baars, M. (2020). Self-regulated learning and learning analytics in online learning environments: A review of empirical research. Proceedings of the Tenth International Conference on Learning Analytics & Knowledge, 524–533. <https://doi.org/10.1145/3375462.3375483>
- Viberg, O., Wasson, B., & Kukulska-Hulme, A. (2020). Mobile-assisted language learning through learning analytics for self-regulated learning (MALLAS): A conceptual framework. Australasian Journal of Educational Technology, 36(6), 34–52. <https://doi.org/10.14742/ajet.6494>
- Wong, J., Khalil, M., Baars, M., de Koning, B.B., & Paas, F. (2019). Exploring sequences of learner activities in relation to self-regulated learning in a massive open online course. Computers & Education, 140, 103595. <https://doi.org/10.1016/j.compedu.2019.103595>
- Yan, Z. (2020). Self-assessment in the process of self-regulated learning and its relationship with academic achievement. Assessment & Evaluation in Higher Education, 45(2), 224–238. <https://doi.org/10.1080/02602938.2019.1629390>

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