"SELF-REGULATED LEARNING ANALYSIS IN THE COVID-19 PANDEMIC ERA" : META SYNTHESIS OF SELF REGULATED LEARNING ABILITIES

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Abstract

This research was conducted to synthesize the ability of students to learn independently in the Covid-19 era which is based on four themes, namely: goal assistance (planning), self-improvement (monitoring), measuring themselves (controlling), and strengthening themselves (reflection). The research was conducted using the meta-synthesis method in four journals with various cases of students' independent learning abilities in the Covid-19 pandemic era. The results of the synthesis show that the self-regulated learning ability consists of: (1) assistance with goals (planning), namely the ability to make plans to sort priorities related to objectives, (2) increased self-interest (monitoring), namely the ability to check the extent of the project walking and progress in achieving goals, namely the ability to exercise self-control by giving attention to the process being undertaken, (4) self-improvement (reflection), namely the ability to look back at their performance and determine the similarity they feel, and the influence they feel. gained from their performance. The implications of these findings can be used as a reference for other researchers who want to change their self-regulated learning abilities.

Keywords: self-regulated learning, meta synthesis, self-monitoring

Abstrak

Penelitian ini dilakukan untuk mensintesis kemampuan self-regulated learning peserta didik di era pandemi Covid-19 yang dibatasi pada empat tema yaitu : mengatur tujuan (planning), pemantauan diri (monitoring), instruksi diri (controlling), dan penguatan diri (reflection). Penelitian dilakukan dengan metode meta sintesis pada empat jurnal dengan berbagai kasus kemampuan self-regulated learning peserta didik di era pandemi Covid-19. Hasil sintesis bahwa kemampuan Self-regulated learning yang terdiri dari : (1) mengatur tujuan (plannning) yaitu kemampuan membuat rencana untuk mengurutkan prioritas yang terkait dengan tujuan , (2) pemantauan diri (monitoring) yaitu kemampuan dalam melakukan pengecekan sampai sejauh mana proyek berjalan dan melacak kemajuan dalam mencapai tujuan, (3) instruksi diri (controlling) yaitu kemampuan dalam melakukan pengontrolan terhadap diri dengan memberi instruksi agar memfokuskan perhatian pada proses yang tengah dijalani, (4) penguatan diri (reflection) yaitu kemampuan melihat kembali kinerja mereka dan menentukan persaaan yang mereka rasakan, serta pengaruh yang didapat atas kinerja mereka. Implikasi temuan ini bisa dijadikan referensi bagi peneliti lainnya yang ingin mengadopsi kemampuan self-regulated learning.

Kata kunci: pembelajaran mandiri, sintesis meta, pemantauan diri

INTRODUCTION

Self-regulated learning is an important factor in the learning process. SRL is determined by three important factors, namely aspects of the self, behavior and environment. The interaction

of these three factors will form individuals who are able to bring out certain self-behaviors that lead to good performance (Zimmerman & Schunk, 2011). Students who can manage themselves in learning well will be responsible for their learning activities. They define goals and issues to bear, develop standards of perfection in achieving goals, and evaluate how best to achieve them. They not only apply this behavior in classroom learning, but they can also apply it to online learning (Dunn & Rakes, 2015). Self-regulation in online learning is the ability to express and monitor a person's thoughts, feelings, and behavior to achieve learning goals using online applications and available features (Sulisworo, Fatimah, Sunaryati, & Sanidi, 2020). Simply put, the process of self-regulation is defined as individual activity in planning, monitoring plans, making changes to stay on track, and reflecting on what works and what can be done in the future (Jaleel & P., 2016; Ellis, Denton, & Bond, 2014; (Rahimi & Katal, 2012).

A more successful transition to online learning is influenced by user intentions and the usefulness of technology (Yakubu, M & Dasuki, S, 2019; (Kemp, Palmer, & Strelan, 2019). Currently digital technology has become an inseparable part of the world of education (Benson & Kolsaker, 2015). This is supported by the results of a survey conducted by the Indonesian Internet Service Entrepreneurs Association (APJII) with PUSKAKOM UI in 2014 (APJII, 2016) showing that 88.1 million Indonesians actively use internet services. The interesting thing about this survey release is that most users aged 18-25 use internet services. Seeing the learning process through online technology, this is in accordance with the learning principles set out in Permendikbud Number 22 of 2016 concerning Process Standards, including learning that takes place at home, at school, and in the community; learning that applies the principle that anyone is a teacher, anyone is a student, and anywhere is the class; and the use of information and communication technology to increase the efficiency and effectiveness of learning. In online learning, where learning control is higher for students, self-regulated learning becomes an important problem to learn.

The problem that is happening right now is the learning process that has been forced to be carried out at home, since the pandemic that occurred in the world. The world is currently in shock with the presence of a type of virus, the way it works to attack the immune system and can cause death. The virus is called Coronavirus Disease 2019 or covid-19. The spread of the COVID-19 corona virus occurs in all countries. This pandemic has been taken seriously by various sectors including in the world of education where students must carry out their learning activities at home (Sulisworo, Fitrianawati, et al., 2020). The COVID-19 pandemic has presented new challenges in the teaching and learning process for teachers, students and families (Carter & Rice, 2020). The ability to manage yourself is an important factor in achieving learning goals, including COVID-19 mitigation (Sintema, 2020). One of the concepts regarding self-management ability is the concept of self-regulated learning. This can be used to measure how a person plans goals, manages activities and behavior, controls himself to stay in line with goals and also reflects on making improvements to achieve goals (Mooij, 2009). Developing students' self-regulated learning skills will ensure the effectiveness of online learning which ultimately can be focused on by the field of education in the future (Carter & Rice, 2020).

Self-regulated learning, both in online learning and offline classroom-based learning refers to the ability to understand and control the learning environment (Sulisworo, Fatimah, et al., 2020). The ability of self-regulated learning includes efforts to set goals (planning), self-monitoring (monitoring), self-instruction (controlling), and self-strengthening (reflection) (Zimmerman & Schunk, 2011). Self-regulated learning can be developed through a

development process that arises from guided practice and feedback so that this behavior will change mental abilities with new skills and habits (Sulisworo, Fatimah, et al., 2020). In online (virtual) learning, students who have excellent self-regulated learning will be better able to face the development of a learning environment that is different from their real world (Sulisworo, Fatimah, et al., 2020). With good self-regulated learning, students can find, choose, use information from the internet to solve problems or achieve learning goals (Sulisworo, Fatimah, et al., 2020).

Four essential components of self-organization: planning and articulating what students want to achieve; immediately monitor progress and distractions related to student goals; controlling change by implementing specific strategies when things don't go according to plan; and reflect on what works and what students can do better in the future (Persico & Steffens, 2017). In this paper, the author wants to provide an overview of the ability of self-regulated learning which includes efforts to set goals (planning), self-monitoring (monitoring), self-instruction (controlling), and self-strengthening (reflection). The author will conduct a meta-synthesis in four journals related to the SRL skills of students in the Covid-19 pandemic era. The results of the synthesis are compared or compared, so that there are various abilities possessed by individuals related to SRL.

The author formulates the problem in this article, namely making comparisons of various SRL cases of students in the era of the Covid-19 pandemic. Then, the research questions in this article are: a) what is the ability of individual SRL in setting goals (planning) ?, b) what is the ability of individual SRL in self-monitoring ?, c) What is the ability of individual SRL in carrying out self-instruction (controlling)?) ?, d) how is the ability of individual SRL in doing self-strengthening (reflection) ?.

Based on the background description, this article was prepared to synthesize the ability of students to learn self-regulated learning in the Covid-19 pandemic era which is limited to four themes, namely: setting goals (planning), self-monitoring (monitoring), self-instruction (controlling), and strengthening. self (reflection). Meta-synthesis was carried out in four journals with various cases related to the ability of students to self-regulated learning in online learning carried out during the Covid-19 emergency.

METHOD

Meta-synthesis carried out in this manuscript is included in the meta-aggregation category which aims to answer research questions by summarizing various research results. Meta synthesis is a part of systematic review. There are several steps that the author takes in compiling a systematic review.

First, based on the background description, the author will synthesize four journal manuscripts, namely: a) individual SRL ability in setting goals (planning), b) individual SRL ability in self-monitoring, c) individual SRL ability in carrying out instructions self (controlling), d) individual SRL ability in doing self-reinforcement (reflection).

Second, the object of meta-aggregation is four manuscripts of research results from various cases related to students' SRL skills in online learning carried out in a COVID-19 emergency. Third, although there are many points of view offered by experts in conveying the terminology of students' SRL abilities in online learning, in this article the author limits the search area to research results from four research results manuscripts on SRL capability which includes efforts to set goals (planning), self-monitoring (monitoring), self-instruction

(controlling), and self-strengthening (reflection). Fourth, the authors collect research results that are relevant to the research question. The first manuscript was entitled "Students' self-regulated learning (SRL) profile dataset measured during Covid-19 mitigation in Yogyakarta, Indonesia". The second manuscript with the title "Self-regulated learning in online learning environments: strategies for remote learning". The third manuscript entitled "A quick study on SRL profiles of online learning participants during the anticipation of the spread of COVID-19". The fourth manuscript is entitled "The role of self-regulated learning in the Covid-19 pandemic era".

Fifth, after collecting relevant research results, the authors excluded and included studies that were selected based on quality. Sixth, the authors extracted data from individual studies to obtain important findings. Seventh, the authors synthesize the research results using metasynthetic techniques and the results of the synthesis will be described into three discussion themes. Eighth, the authors write the results of the research in the document report on the systematic review.

RESULTS AND DISCUSSION

Results

A. Yogyakarta, Indonesia (Sulisworo, Fitrianawati, et al., 2020)

The COVID-19 pandemic has brought changes in various sectors of life in Indonesia, including in the field of education. The Ministry of Education and Culture of the Republic of Indonesia issued a policy for the implementation of online learning. One of the factors that determine the success of online learning is the level of student learning independence. So, self-study is essential to achieve a successful education during this pandemic. This article presents data that explores the profile of self-learning in grade 1 to grade 12 students. Four aspects of self-learning include planning, monitoring, controlling, and reflection. Retrieval of data related to predicting the success of online learning during COVID-19 mitigation. The sample consisted of 6571 students. The questionnaire was distributed to 61 schools (37 elementary schools, 12 junior high schools, and 12 high schools) with an online survey in Yogyakarta, Indonesia. The questionnaire was prepared in an online format using Google Form

The first is set goals (planning). The results of research from (Sulisworo, Fitrianawati, et al., 2020) in Yogyakarta show that the planning aspect of self-regulated learning is planning a project to be completed by making a study plan. Before doing anything it is necessary to consider all the things that need to be done. Then, it can estimate how much time it will take to complete the job. Thus, students need to prepare or plan all the things needed to carry out independent learning (self-regulated learning).

Second is monitoring. Research results from (Sulisworo, Fitrianawati, et al., 2020) in Yogyakarta that check to what extent the project is running and track progress in achieving goals. Then, identify the things that need to be completed at a certain time and check what has been done.

The third aspect is controlling. The results of research from (Sulisworo, Fitrianawati, et al., 2020) in Yogyakarta show that controlling the work that is being carried out is by doing something different to succeed. Then, maintain focus on jobs that are taking a long time to complete.

The fourth aspect is reflection. The results of the research (Sulisworo, Fitrianawati, et al., 2020) show that realizing the extent to which a task has been completed and feels good achievement when completing the task on time. Then, evaluate yourself by thinking about what you have obtained and serve as a guide for the future to be even better.

B. Albuquerque, New Mexico, USA (Carter & Rice, 2020)

The COVID-19 pandemic has presented new challenges in the teaching and learning process for teachers, students and families. These challenges present themselves in lingering tension and mean supporting learners from an affective point of view through choice and control and providing adequate structure in a course. Instructional design during the outbreak and afterwards might consider how to support K-12 learners regarding goal orientation and the need for structure. Important decisions that are outside the learner's hands include whether online learning that takes place in virtual schools and in public schools is facilitated for distance learning, whether learning is carried out on the traditional school calendar and whether online learning will alternate with traditional learning. Finds that much of what has been done to support self-regulated learning online involves recruiting parents or other adults to co-organize learners. The four aspects of self-learning include planning, monitoring, controlling, and reflecting.

The first aspect is planning. Research results from (Carter & Rice, 2020) that in the aspect of planning for doing independent learning online, it requires students to think about how they learn. Online teachers must help students understand what online learning means and is different from studying in a traditional setting. In this case, students need some guidance in setting appropriate goals for online learning. It must be emphasized to students that, "online learning will be easier than traditional learning because I can do it at home." In addition to providing information about online learning, teachers must decide what online sources to use or what search terms will help students in learning online.

The second aspect is monitoring. Research results from (Carter & Rice, 2020) that One of the important strategies of research in online teaching and learning is to monitor student participation in and engagement with teaching materials. This strategy utilizes technology for the use of teaching materials for students. This monitoring has been accomplished in a number of ways. Some teachers have used the dashboard through a learning management system. In some cases, parents may also have access to the dashboard. This dashboard provides information about when students enter and complete assignments. Online teachers can check when students collect the assignments given. In this case the teacher uses technology, especially the learning management system to monitor the tasks performed by students during online learning

The third aspect is controlling. Research results from (Carter & Rice, 2020) show that an important factor in online learning is not only delivering subject matter or problem solving but also teaching students how to learn. Teachers provide "fun online learning" to students. The teacher's role in online learning is to provide a learning environment that allows students to be better able to manage themselves by using the various facilities available on the online learning platform. The teacher provides triggers so that students can support each other both with motivational words (i.e. words that are not belittling), positive emoticons, supporting their feedback.

The fourth aspect is reflection. Students need to understand that they have support for independent learning in online learning. Prior to the COVID-19 pandemic, teachers relied on parents or other mentors to help with independent or self-regulated learning, including monitoring student progress, providing encouragement, communicating information about assignments and achievements, and even providing instructional support. Considering the different situation that is online learning, establishing a consistent pattern of communication on how to provide support for self-regulated learning appears to be important for successfully transitioning to online work.

C. Surakarta, Indonesia (Sulisworo, Fatimah, et al., 2020)

This study describes the profiles of Indonesian students' Self-Regulated Learning (SRL) on online learning carried out in a COVID-19 emergency. The research began three days after the WHO COVID-19 pandemic order. Respondents were taken by accident in several school places that implemented online learning. The school consists of public high schools and vocational schools. Data were collected through Google Forms filled in by grade 10 to 12 students. The instrument used was a questionnaire with a scale of 1 to 5 (from strongly disagree to strongly agree) consisting of planning, monitoring, controlling, and reflecting on aspects

The first aspect is planning. Research results from (Sulisworo, Fatimah, et al., 2020) show that setting goals and planning (goal setting and planning), namely statements that indicate student plans to achieve educational goals or sub-goals and plans to sort priorities, determine time, and complete plans for all activities related to these goals. At this stage, students set goals to be achieved during a certain period of time. That means during a period determined by the government, while looking at which materials are difficult. Students then prepare strategies according to the needs of the material, and at the same time cultivate self-efficacy.

The second aspect is monitoring. Research results from (Sulisworo, Fatimah, et al., 2020) show that progress and distraction related to student goals. Students in Indonesia still need assistance from teachers to improve self regulated learning. Several mentoring strategies can be applied to children who are actively doing self regulated learning. In the learning design, the teacher must include the mentoring process in student independent learning.

The third aspect is controlling. Research results from (Sulisworo, Fatimah, et al., 2020) that combine student control and structure in full K-12 online learning in traditional school settings, the scaffold for self-regulated learning may come in the form of: teacher assistance in creating an effective learning environment; availability of tools for organizing content and activities; self-evaluation through student reflection; and development of self-monitoring skills from instructional feedback and encouragement.

The fourth aspect is reflection. Research results from (Sulisworo, Fatimah, et al., 2020) that as feedback, students can assess for themselves what they have learned and achieved. This illustrates that students have felt, informed about what challenges or even difficulties they had during the learning session. At the same time, the teacher can also get feedback to evaluate the program and to measure whether or not the facilitation of students is successful in achieving goals. The way teachers organize online learning can have a profound effect on students' ability to become independent learners.

D. Krangkeng, Indonesia (Fida, 2020)

Early in 2020 the world was concerned because of the Covid-19 pandemic, as a result, to stay at home students were forced to learn from home. . Students should be able to take advantage of the existing situation with conducive home learning activities, for this purpose students must have their own strategies that supports learners. This study aims to analyze the role of self-regulated learning in the Covid-19 pandemic era and describe self-regulated learning strategies in the Covid-19 pandemic era. Self-regulated learning strategies during the Covid-19 pandemic, namely the preparation stage, implementation stage, and reflection stage.

The first stage is planning. The results of the research from (Fida, 2020) show that explicitly setting and informing learning objectives helps students realize what will be achieved at the end of the learning process.

The second aspect is monitoring. The results of research from (Fida, 2020) show that the ability to monitor self (monitoring) is done by looking for information related to tasks with other sources while doing assignments.

The third aspect is controlling. The results of research from (Fida, 2020) show that at this stage students control themselves by giving instructions to focus attention on the process that is being carried out. In addition, students can make personal experiments through existing assignments and materials.

The fourth aspect is reflection. The results of research from (Fida, 2020) indicate that a statement indicates an assessment of the quality of tasks that have been completed, an understanding of the scope of work, or effort in relation to task demands. This stage is the final stage where students look back on their performance and determine the kindness they feel, and the influence it has on their performance. There will be defensive reactions, namely behaviors that tend to avoid learning again and adaptive reactions, namely behaviors that encourage individuals to increase the effectiveness of the learning process. It is the adaptive reaction that is expected to emerge in students so as to encourage them to maintain existing methods.

The following is the meta-synthesis of students' self-regulated learning abilities in the Covid-19 pandemic era which is limited to four themes, namely: setting goals (planning), self-monitoring (monitoring), self-instruction (controlling), and self-strengthening (reflection) (Table 1). Meta-synthesis was carried out in four journals with various cases related to the ability of students to self-regulated learning in online learning carried out during the Covid-19 emergency.

Table 1. Results of Meta-synthesis of Students' Self-Regulated Learning
Abilities in the Covid-19 Pandemic Era

Author	Planning	Monitoring	Controlling	Reflection
(Sulisworo, Fitrianawati, et al., 2020)	Plan and consider all the things needed to carry out independent learning (SRL).	Checking the extent to which the project is progressing and tracking progress towards achieving goals, and identify	controlling the work that is being carried out is by doing something different to succeed. Then,	Thinking about the work that has been completed later, evaluating yourself with an assessment of what you have

Author	Planning	Monitoring	Controlling	Reflection
		things that need to be completed.	maintain focus on jobs that are taking a long time to complete.	obtained and making it new for the better in the future.
(Carter & Rice, 2020)	In this case, students need some guidance from the teacher in setting appropriate goals for online learning.	The monitoring strategy utilizes technology such as dashboards to monitor student participation and engagement with teaching materials	Students manage themselves by using the various facilities available on the online learning platform.	Due to the Covid-19 pandemic, teachers need to establish consistent communication patterns on how to provide support for SRL.
(Sulisworo, Fatimah, et al., 2020)	Make a plan to sort priorities, determine time, and complete the plan all activities related to the goal.	Students in Indonesia still need assistance from teachers to improve independent learning.	Tools for reading content and activities	feedback, students can self-assess what they have created and accomplished. This illustrates that students have felt, saw about what challenges or even difficulties they faced during the learning session.
(Fida, 2020)	At this stage, students set goals to be achieved during a certain period of time. That means that during the period determined by the government, while looking at which materials are difficult.	Looking for task-related information with other sources while working on assignments.	Students control themselves by giving instructions to focus attention on the process being undertaken.	Students look back at their performance and determine how much they feel like, and how much influence it has had on their performance.

Discussions

Several findings in online learning during COVID-19 mitigation indicate that teachers tend to give higher academic assignments (attendance of academics) for each subject matter or lesson. This discovery will have an impact on the number of tasks that must be completed. With inadequate SRL skills, students can fail in this online learning. In online (virtual) learning, students who have excellent self-regulated learning will be better able to cope with the development of a learning environment that is different from their real world. With good self-regulated learning, students can find, select, use information from the internet to solve problems or achieve learning goals.

Some of the new challenges in online learning make them give up faster and not try to achieve their learning goals. In certain cases when students need to search for information via the internet, they are less likely to do so to strengthen learning performance. Such students depend on the content provided by the teacher. In addition, the lack of self-regulated learning also discourages students from learning. This can be seen from their intensity in interacting online on the learning platform used.

The ability of self-regulated learning includes efforts to set goals (planning), self-monitoring (monitoring), self-instruction (controlling), and self-strengthening (reflection) (Zimmerman & Schunk, 2011).

A. Set Goals (Planning)

The results showed that even though a student has high abilities, his academic achievement will not be optimal if he is not able to manage himself in learning (Sulisworo, Fitrianawati, et al., 2020). In many recommendations it has been suggested that SRL be used to improve academic achievement (Ellis et al., 2014 ; Tsai, 2011). Thus, teachers who firmly emphasize increasing SRL when managing learning will be able to help students improve learning achievement. Planning (planning), in which individuals plan their actions and various motivational beliefs, values, and goals are activated (Zimmerman & Schunk, 2011).

B. Self-monitoring (Monitoring)

Next is performance monitoring in learning situations (monitoring); this phase also involves monitoring performance and motivation, and trying to control these things. Self-monitoring (monitoring) is the ability to check the extent to which a project is progressing and track progress towards a goal.For example, by monitoring their performance, students can decide when they may need to change the strategies they are using (Zimmerman & Schunk, 2011).

C. Self-instruction (Controlling)

Self-instruction (controlling), namely the ability to exercise self-control by giving instructions to focus attention on the process that is being carried out (Zimmerman & Schunk, 2011).

D. Self-strengthening (Reflection)

The third stage is a reflection of the performance that occurs after the learning activity is completed (reflection). During reflection, students try to understand why different results occur, manage their emotions with respect to achievement outcomes, and otherwise engage in self-evaluation and reflection on learning situations that have just been experienced (Zimmerman & Schunk, 2011). Self-reinforcement (reflection) is the ability to look back at

their performance and determine the feelings they feel, and the influence it has on their performance (Zimmerman & Schunk, 2011).

CONCLUSION

Based on the narrative description of the results of meta-synthesis in four journals with various cases of students' self-regulated learning ability in the Covid-19 pandemic era. The results of the synthesis show that the ability of self-regulated learning which consists of: (1) setting goals (planning), namely the ability to make plans to sort priorities related to objectives, (2) self-monitoring, namely the ability to check to what extent the project is running and tracking progress in achieving goals, (3) self-instruction (controlling), namely the ability to exercise self-control by giving instructions to focus attention on the process being undertaken, (4) self-reinforcement (reflection), namely the ability to review their performance and determine the brotherhood they feel, as well as the influence it has on their performance.

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