

## **Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies**

**Stella Noviani**

stellanoviani88@gmail.com

Sanata Dharma University, Yogyakarta, Indonesia

Studies on teachers' self-regulation are abundant and still posit strategic relevance for teacher professional development. Nevertheless, such studies focusing on online learning are yet underrepresented within informal education contexts. Hence, this study aimed to investigate the teachers' self-regulation in implementing the instructional strategies in real-time online teaching. This study was undertaken in an English course in an informal institution during the COVID-19 pandemic. Using the explanatory sequential method, the data were collected from sixteen teachers with different levels of classes in teaching, nine of whom are full-timers and seven part-timers. A set of questionnaires was adapted from TSRS (Teacher Self-Regulation Scale) by a five-point Likert scale to accommodate two variables, namely: (1) the strategies as self-regulated teachers, (2) the relation between the teacher's self-regulation and instructional strategies in real-time online teaching. The other two open-ended questions were addressed to support the quantitative data. The findings demonstrate that the role of teacher's self-regulation in teaching and implementing instructional strategies is essential in real-time online teaching. This concludes that the higher the self-regulation, the better it is for the mastery of instructional strategies and the positive output of real-time online teaching.

**Keywords:**

*COVID-19, real-time online teaching, teachers' self-regulation, self-regulatory instructional strategies*

**How to cite:**

Noviani, S. (2021). Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies. *Journal of English teaching*, 7(3), 273-285. DOI: <https://doi.org/10.33541/jet.v7i3.2921>

## INTRODUCTION

As COVID-19 affected some areas, the Minister of Education and Culture of the Republic of Indonesia announced to the public on 24 March 2020, that all education system must run online to slow down the spread of COVID-19 and to maintain the health and wellbeing of the teachers, students, and educational staffs (Pusdiklat, 2020). In the urgent situation where the learning system has rapidly changed, the teachers and students are forced to teach and learn at a distance. Before the pandemic, the teaching process in an informal English institution is conducted face to face. Yet with this current situation, the teaching method has fully proceeded in an online process. This type of learning undoubtedly requires the teacher to creatively adapt some aspects in teaching, including the instructional strategies that could direct students during the learning process.

It is common now to see through this new pandemic that the increasing proficiency in using technology and the need for good access to the internet has supported the explosion of online educational programs that are capable to serve discussion, sharing sessions, and real-time online teaching, such as via Zoom. It has also been demonstrated that the pandemic has transformed the conventional lecture into e-learning that can bring a great impact on education. Besides advancing humans in terms of technology, this distance online learning implemented lately has brought about problems for some teachers and students (Wijaya, Ying, & Suan, 2020). When students study at home, many factors may disrupt students' learning, one of which is the unsupported environmental learning at home. They may quickly become unmotivated and lack energy in following the class and doing the assignments. This uncondusive condition causes a potential problem that will affect students' academic performance (Pajarianto, Kadir, Galugu, Sari, & Februanti, 2020).

To troubleshoot this issue, teachers should be more innovative in online learning. According to McNair (2015), "technology does not teach students; effective teachers do". Technology should maximize the quality of teaching. Yet, too often teachers only take advantage of the technology itself without giving clearer images of the meaningfulness of their lessons to students' lives. This affects the quality of instruction that teachers have dedicated. To activate effective learning, teachers should form the learning with thorough preparation in teaching materials that meet students' needs, and students' learning targets (Omoregie, 1998). This capability is related to human's self-regulatory ability in terms of fulfilling students' needs and generating goals-oriented actions.

The ability to have self-regulation implies self-generated thoughts, feelings, and actions that are all intended to reach the specific personal goals (Zimmerman, Bonner, & Kovach, 2004). In the field of education, self-regulation will help someone to set goals, make plans, decide strategies, and self-evaluate their performance that will lead them to achieve the goals and help them to direct their future performance. As self-regulation will direct students to independent learning, teachers need to give them supportive learning assistance. Therefore, the self-regulation here will be closely related to teachers' self-regulated strategies in constructing the teaching atmosphere. Self-regulation can also be viewed as an active process to control their metacognition, motivation, and strategies to create effective instruction (Capa-Aydin, Sungur, & Uzuntiryaki, 2009).

It is shown that to maximize the quality of online learning, teachers should provide adequate instruction to make their teaching more effective and help the students to achieve better performance in the class. Whether the learning is in the context of traditional or in more modern ways that include technology, teachers must understand the

impact of the shift in face-to-face instruction to the online learning environment (Manion, 2020). To fill the research gap, this study has attempted to broaden the view on online real-time teaching that is previously done in the context of TOEIC class at the level of the university students. In drawing the connection of the ministry's policy and COVID-19 as an unprecedented phenomenon, the researchers intended to investigate the teacher's self-regulation and the instructional strategies used in carrying the class for real-time online teaching in the context of an informal English institution. The researchers took the position that the teacher's self-regulation is the main support in assisting teacher's performance in real-time online teaching, which also helps them to apply self-regulation in instructional strategies. Thus, the relation of teachers' self-regulation and teachers' self-regulatory instructional strategies are inseparable (de la Fuente et al., 2012) By examining the teacher's self-regulation, the researchers believe that the teachers' experience with self-regulation and providing self-regulatory instructional strategies may activate their plan on learning activities, monitor the learning activities, and evaluate themselves after finishing the class. The focus problems of the study are as follows: Is there any relationship between the self-regulation and instructional strategies undertaken by the teachers in an informal English institution? What are the positive outputs in real-time online teaching presented by the English teachers in an informal English institution?

## LITERATURE REVIEW

### Teachers' Self-regulation

The term self-regulation can be defined as "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals" (Zimmerman, 2000). This self-regulation is rooted in Bandura's social cognitive theory (Bandura, 1986) which describes the people's process that can perform their motivation, cognition, and action. People can construct their actions to react to certain conditions, while self-regulation is a process that determines human action. On the other hand, this self-regulation is expected to equip the teachers in performing their knowledge on planning, self-monitoring, and self-evaluating (Uzuntiryaki-Kondakci, Demirdögen, Akın, Tarkin, & Aydın-Günbatar, 2017).

To enrich the view on teachers' self-regulation, in displaying the teacher's self-regulation, teachers should be able to take a position as a learner first before they practice self-regulation towards the class. According to the study of (Randi, 2004), teachers need to be able to learn first from practices since they work in an environment that requires them to continuously update their knowledge on teaching (Peeters et al., 2014; Randi, Corno, & Johnson, 2011). Both teachers and students have a comparable demand where they have to blend with the social environment, face the distractions, get involved in cognitive tasks, search for support and feedback, and keep updated on their (instructional) knowledge. Self-regulation will support teachers to fulfil the demands, increase their motivation as well as their self-knowledge. In short, to engage as a self-regulated teacher, a teacher should experience as an effective learner first (Peeters et al., 2014).

Towards that literature review, the main difference between "self-regulation of teaching" and "self-regulation of learning from teaching" is on the work-oriented where teachers should be more adaptive and learning-oriented where teachers should control their motivation along with the pressure of demands (Peeters et al., 2014 as cited in Butler, 2003; Kramarski & Michalsky, 2009; Delfino, Dettori, & Persico, 2010). Hence, the teacher with self-regulation will provide a role as a person who presents progress in

Noviani: Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies DOI: <https://doi.org/10.33541/jet.v7i3.2921>

directing and preserving metacognition, motivation, and strategies in controlling the teaching environment through effective instruction (Capa-Aydin et al., 2009). Teachers need to work on self-regulation in the class by including metacognitive processes that follow goal setting in teaching, planning strategic actions, directing with instructional strategies, monitoring and evaluating the results, also helping them to re-arrange their approach in learning (Peeters et al., 2014 as cited in Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004). Although applying self-regulation denotes activating students to learn independently, teachers may also suggest that the students seek some supports in specific skills, broaden their knowledge by looking for other references and search for other feedbacks (Peeters et al., 2014).

### **Teacher Self-Regulatory Instructional Strategies**

From Zimmerman's perspective, self-regulation falls into three-cycle phases, namely *forethought*, *performance* or volitional control, and *self-reflection*. *Forethought* stands for *task-analysis* and *motivational beliefs* that include the process of forming strategic planning and goal setting. *Performance* stands for *self-control* and *self-observation* that enable students to control the distractions during the learning process and record their performance to keep them on track. *Self-reflection* stands for *self-judgment* and *self-reaction* that includes the recent progress and the learners' reaction in responding to that experience (Zimmerman, 2000). Following that cycle, teachers should be able to prepare their teaching, as they set the teaching goals, plan their actions, and formulate their teaching materials and instruction. Then, not only that the teachers should be able to track the students' comprehension and clear up their misconception, but the teachers should also maintain clear instruction during the learning process. Finally, teachers should be able to form self-reflection in terms of evaluating their instruction and teaching strategies whether they are effective or not as they evaluate the students' progress and understanding (Chatzistamatiou, Dermizaki, & Bagiatis, 2014).

Teachers who teach with self-regulation applying self-regulation to their instruction before, during, and after they direct the classroom's lesson to make the teaching is meaningful and effective. It is shown that in accelerating the effectiveness of their teaching, they have to have an excellent plan on their lesson, a well-monitored instruction, a thorough reflection on themselves, and an improvement of their method in teaching (Chatzistamatiou et al., 2014 as cited in; Kramarski & Michalsky, 2009; Porter & Brophy, 1988). Indeed, in teaching self-regulation, the teacher should give students tools that help them to activate their learning activities such as instruction that leads them to be more effective on planning their learning, monitoring their process, and evaluating their performance over a task.

In performing self-regulatory strategies in instruction, teachers also need to analyze some of the components, namely the learners, the goals in learning, the context of the learning, and the teachers' skills in providing the learning method that helps to achieve the goals in learning (Seechaliao, 2017). In the end, self-regulation in teaching is important to build a better instructional strategy and interactive communication inside the classroom (Chatzistamatiou et al., 2014) and the strategies suitable to teachers teaching skills and students' learning style.

### **Real-time Online Teaching**

With online teaching, teachers have to open an opportunity to extend the possible environment of learning of varied student populations. Teachers should be armed with a  
Noviani: Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies DOI: <https://doi.org/10.33541/jet.v7i3.2921>

set of skills that can be beneficial in building an effective learning environment that includes four aspects, namely: “community-centeredness, knowledge-centeredness, learner-centeredness, and assessment-centeredness” (Bransford, Brown, & Cocking, 2000). In online teaching, teachers have to share similar content through the learning process and set the learning application such as Zoom to get the courses right from the start. Teachers are also required to encourage students to participate during the class, working cooperatively, elevating active learning, giving valuable feedback, motivating the students, and stimulating their self-reflection (Adebo, 2018). In other words, the teacher knows “how to map the students, how to manage the connection during the class, how to create an engaging class, and how to construct the lesson plan that suitable with real-time online teaching” (Tibi & Tibi, 2009).

Related to the statement above, teachers may choose two possible methods in teaching, which help them to decide the content of the online classroom, the valuable tools in teaching, and the interaction on synchronous and asynchronous learning (Shahabadi & Uplane, 2015). In synchronous or real-time learning, human interaction is supported by the camera of the gadgets. Therefore, the people interaction that happened in a real-time classroom setting is called synchronous learning. By utilizing the synchronous method, teachers and students can have intense communication during the class. Nevertheless, the implementation of e-learning in Indonesia is still dominated by blended learning and LMS as the most applicable method in learning. The emergence of synchronous learning has enlightened human interaction toward the application of e-learning (Rahayu, 2020b).

As Rahayu (2020) stated the widespread of e-learning is hoped to facilitate the students’ activity within it. The benefit that students may earn from the learning process also gives impactful progress to the continuity of e-learning in Indonesia. Besides, the synchronous method in the learning and teaching process is another opportunity to strengthen the relationship between the teacher and the students as well as the utilization of technology as the main media in learning. Thus, technology can be a valuable resource if the teacher can adapt to the synchronous method in teaching.

## METHOD

### Research Design

This research adopted an explanatory sequential design aiming at investigating teacher’s self-regulation and the relation between the teacher’s self-regulation and the instructional strategies. Explanatory sequential design is one of mixed research designs (Creswell’s, 2009). An explanatory sequential design is carried out in two phases (Pardede, 2019). It starts with quantitative data collection and analysis. Next, qualitative data was collected and analysed to help elucidate or elaborate the previously acquired quantitative results (Figure 1).

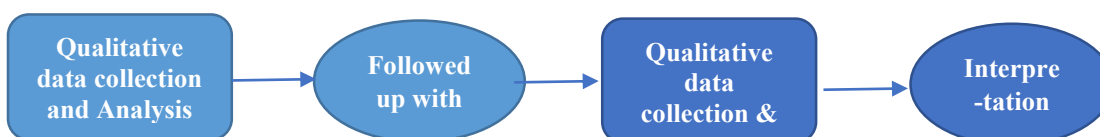


Figure 1: *Explanatory Sequential Mixed Method (Creswell, 2014)*

In implementing the explanatory sequential design, the researchers intended to provide the straightforwardness and the exploration toward the quantitative results in more detail and to prevent the unpredictable result from the quantitative result (Morse, 1991). Related to some (principles/methods) in the first phase, the researchers focused on observing the strategies that the teachers present as self-regulated teachers by utilizing the questionnaire about teacher's self-regulation and teacher's self-regulatory instructional strategies. In the second phase, the researchers focused on the questions concerning the relationship between the teacher's self-regulation and the teacher's self-regulatory instructional strategies in real-time online teaching.

### **Setting and Participant**

The participants of this research were 15 full-time and part-time teachers with different gender, age, and previous background of the study. The teachers teach English course subjects with three different levels from kids (age 6-12), teenagers (age 13-17), and adult levels in an informal English institution. The kids' level is distributed into two, namely English for Elementary Students (for 1<sup>st</sup> - 3<sup>rd</sup> grade) and English for Kids (for 4<sup>th</sup> - 6<sup>th</sup> grade). The teenager level is allocated into two, namely English for SLTP (for SLTP/SMP) and General English for Senior High Schools (for SMA/SLTA). Meanwhile, the adult level is organized into two, namely English for Active Communication and English for Specific Purposes (ESP). They have a different number of classes that they teach every day with Zoom meetings. The duration of teaching is about 1-1.5 hours consisting of 20 meetings and lasting for 2.5 months. During the course period, the teachers have to assist the students in the midterm, revision, and final tests. The questionnaire was distributed to the teacher during the teacher hour in an informal English institution.

### **Data Collection Method and Analysis**

Firstly, the researchers observed the teacher's self-regulation and the self-regulatory instructional strategies in online teaching at ELTI. To acquire the data, the survey was conducted one time by utilizing google form which was set right after the class within the teaching hour from Saturday until Monday. The close-ended questionnaire was adapted from Ghanizadeh & Ghonsooly (2014) and Toering, Elferink-Gemser, Jonker (2012) with some modifications and utilized a five-point Likert scale, namely Strongly disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; Strongly agree = 5. To support both the reliability and the validity of the instrument, prior research has provided adequate evidence for both (KAVANOZ, 2017). For example, we changed the original item from "I prepare classes to align with curriculum" to "To prepare the online classes, I follow the unit lessons and the teacher's manual in the book." The other two open-ended questions that related to the real-time (synchronous) teaching were adapted from (Ghazal, Samsudin, & Al-Dowah, 2015) which includes the positive and negative aspects in real-time online teaching.

The researchers included two phases, namely the quantitative phase and the qualitative phase in analyzing the data. In quantitative research design, comparing two or three groups of dependent variables and measuring the relation between those variables is important to examine the correlational between both (Creswell & Plano Clark, 2009). There are two kinds of variables in this research: teacher's self-regulation (TSR) as the independent variable and instructional strategy (IS) as the dependent variable. To obtain reliability, formulate the descriptive statistic, and test the hypothesis, the researchers used SPSS 22 as a tool to analyze the data. In addition to the qualitative phase, the researchers

Noviani: Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies DOI: <https://doi.org/10.33541/jet.v7i3.2921>

purposefully added some comments of the positive output in real-time teaching. The data was acquired through the open-ended survey to accommodate the thoughts on real-time online teaching.

## FINDINGS AND DISCUSSION

### Quantitative Findings

The questionnaire can be considered reliable if the answer to the questionnaire is consistent. In measuring the consistency of the instruments, the reliability test is used to assure to which extent the result can be trusted (Ghozali, 2016). The reliability testing in this research stated that if the value of Cronbach Alpha > 0.6, the instrument of the research is considered reliable (Ghozali, 2018). Table 1 shows that variable SR has a Cronbach alpha reliability coefficient of 0,668. Therefore, it can be concluded that the SR variable here is reliable.

Table 1. *Reliability of SR*

Cronbach's Alpha	N of Items
,668	5

Table 2 shows that the IS variable has Cronbach alpha reliability coefficient 0, 658. Therefore, it can be concluded that the IS variable is reliable.

Table 2. *Reliability of IS*

Cronbach's Alpha	N of Items
,658	7

The descriptive statistics (Table 3) represents the minimum and the maximum score of 'x' that stands for self-regulation calculated from the survey. The maximum score of self-regulation is 25, and from the descriptive data, the maximum score is 24, which means that the score almost reaches the maximum standard. Meanwhile, the minimum score for self-regulation is 17, which means that it is far from the lowest standard score of 1. The 'y' that stands for the instructional strategy reached the maximum score of 35, while the minimum score is 25, which is quite high compared to the lowest score of the IS. From these results, the researchers can conclude that the rate of self-regulation that the teachers have is high enough.

Table 3. *Descriptive statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
x_total	16	17	24	20,75	1,915
y_total	16	25	35	29,19	2,738
Valid N (list wise)	16				

## Hypothesis Testing

Table 3. *Correlations*

		x total	y total
x_tot al	Pearson Correlation	1	,448*
	Sig. (1-tailed)		,041
	N	16	16
y_tot al	Pearson Correlation	,448*	1
	Sig. (1-tailed)	,041	
	N	16	16

\*. Correlation is significant at the 0.05 level (1 tailed).

To examine the correlation between two variables and to ascertain whether they are positively or negatively related or not related, the Pearson Product Moment Correlation coefficient was applied. Table 3 indicates that Pearson's correlation coefficient is 0,448 and the statistical significance of the results is 0,041. Therefore, the correlations of the sub-scales were significantly matched between SR and IS. In other words, the hypothesis of this research is acceptable.

## Qualitative Findings

As aforementioned, this research is aimed to explore the strategies that the teachers present as self-regulated teachers and the relation between the teacher's self-regulation and instructional strategies in real-time online teaching. The quantitative findings made it obvious that the teachers' self-regulation is presented clearly in the teaching process and the relation between teacher's self-regulation and instructional strategy is relatively positive. These findings required further exploration of this topic; therefore, a sequential qualitative procedure is applied to the research design. The researchers used a qualitative method to explore the positive and negative potential of real-time online teaching that becomes one aspect of teacher's self-regulation and the implementation of instructional strategies.

From this open-ended question, the researchers anticipated the valuable information that was presented more naturally and helped to reveal the major aspects that influence the positive output in real-time online teaching. The informants were asked to elaborate on the potential factors that influence their personal output toward the implementation of real-time online teaching. The questions are as follows: "To what extent do you agree that real-time online teaching is beneficial to the dynamics of the class?" "What are the potential weaknesses of this real-time online teaching for teachers?"

After exploring the responses from the open-ended questions, the researchers found four potential aspects in real-time online teaching that makes learning and teaching more effective. These four aspects strengthen the hypothesis in which teachers with self-regulation and capability in managing instructional strategy can value real-time online (synchronous) teaching is considered effective to build an environment for teaching and learning. The four potential aspects in real-time online teaching are as follows:

### *Unlimited materials*

Recent technology allows teachers in exploring media that can accommodate the teaching and learning experience. It allows us to provide materials from electronic sources or textbooks to help students get a better understanding of certain topics (Tibi & Tibi, 2009).

Noviani: Instructional Strategies Toward Real-Time Online Teaching at an Informal English Institution: An Explanatory Study on Instructional Strategies DOI: <https://doi.org/10.33541/jet.v7i3.2921>



*“The possibility to provide unlimited materials related to the topic being taught which can be easily adjusted to the class needs. (T.4, O-EQ)”* Teachers agree that in applying real-time online teaching, they can provide unlimited materials that help the students to acquire powerful knowledge from the learning.

### ***Interactive activity***

Contrary to popular opinion, real-time online learning can often increase the interaction between the teacher and the students as remarked by one of the participants in the open-ended questionnaire (O-EQ):

*[I do agree that a real-time online teaching is beneficial to the dynamics of the class because students can interact with each other directly and if they have difficulties understanding the lesson, they can ask the teacher and have a direct answer from the teacher] (T.2, O-EQ)*

The teachers agree that in real-time online learning, students can have direct access to the teacher and their friends when they face difficulty. By creating a community in learning, a teacher also can build discussions with certain topics that can elevate the learning opportunities and collaborative works among the students (Tibi & Tibi, 2009).

### ***Flexibility***

Flexibility is the most popular aspect that attaches to real-time online teaching (Tibi & Tibi, 2009) as argued by one participant below:

*[The students with all the comforts at home (sometimes with the parents' assistance) are braver to speak”, “...potentially accommodate huge class crosses the world] (T.11, O-EQ).*

The teachers agree that real-time online teaching allows the students to have control over the learning. The flexibility in real-time online teaching makes the teachers adapt to students' learning styles and the resources that meet their needs. This makes the learning have greater flexibility and convenience for both teacher and students. With flexibility, teachers can take a role as a facilitator and direct them to be an independent lifelong learner (Cornelius & Gordon, 2008).

### ***Creative assessment***

By utilizing the real-time online learning method, teachers become more innovative in creating assessments for students' learning as clarified by one participant: *“...we can use online games/apps which support teaching-learning activity” (T.1, O-EQ).* Teachers agree that using a variety of assessment activities can stimulate the students' interest and improve their learning to be more effective. Students can have fun without realizing that they are being assessed by the teacher.

## **CONCLUSION**

From the findings, the researchers found that the range scores of self-regulation (SR) demonstrated by English teachers are quite high. The lowest score of SR is 17 while the highest score is 24, which means that it is close to the highest standard score of this variable. The range score of SR here also correlates with IS (instructional strategy) as a part of the teacher's self-regulatory instructional strategies. The positive output toward

real-time online teaching entails when the teachers can demonstrate self-regulation and self-regulatory instructional strategies.

Likewise, for the continuation of real-time online teaching, constant development is needed to maximize the use of technology and, accordingly, minimize the potential problems of real-time online teaching. It can generally be assumed that in real-time online learning, teachers need to produce more strategies in teaching and beneficial tools in instructional strategies for the improvement of the learning process. This study was limited in the source of data since the researchers only gathered the data from 16 teachers of an informal English institution. Further researchers can provide more data from larger participants and contexts, including formal and non-formal education, and add more variables related to self-regulation in real-time online teaching. The topic area, such as creative assessment and interactive activities as indicated in the findings are still open for further investigation, particularly if they are connected to other external variables, such as motivational beliefs and self-regulation strategy from teachers.

## REFERENCES

- Adebo, P. (2018). Online Teaching And Learning. *International Journal of Advanced Research in Computer Science and Software Engineering*, 8(2). Retrieved from <https://doi.org/10.23956/ijarcsse.v8i2.549>
- Bandura, A. (1986). Social foundations of thought and action : a social cognitive theory / Albert Bandura. *New Jersey: Prentice-Hall, 1986*, 16(1).
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How People Learn: Brain, Mind, Experience, and School. Committee on learning research and educational practice* (Vol. Expanded E). Retrieved from [https://doi.org/10.1016/0885-2014\(91\)90049-J](https://doi.org/10.1016/0885-2014(91)90049-J)
- Butler, D. L. (2003). Self-Regulation and Collaborative Learning in Teachers' Professional Development. *European Association for Research in Learning and Instruction (EARLI)*, (604), 30.
- Butler, D. L., Lauscher, H. N., Jarvis-Selinger, S., & Beckingham, B. (2004). Collaboration and self-regulation in teachers' professional development. *Teaching and Teacher Education*, 20(5). Retrieved from <https://doi.org/10.1016/j.tate.2004.04.003>
- Capa-Aydin, Y., Sungur, S., & Uzuntiryaki, E. (2009). Teacher self-regulation: Examining a multidimensional construct. *Educational Psychology*, 29(3). Retrieved from <https://doi.org/10.1080/01443410902927825>
- Chatzistamatiou, M., Dermitzaki, I., & Bagiatis, V. (2014). Self-regulatory teaching in mathematics: Relations to teachers' motivation, affect and professional commitment. *European Journal of Psychology of Education*, 29(2). Retrieved from <https://doi.org/10.1007/s10212-013-0199-9>
- Cornelius, S., & Gordon, C. (2008). Providing a flexible, learner-centred programme: Challenges for educators. *Internet and Higher Education*, 11(1). Retrieved from <https://doi.org/10.1016/j.iheduc.2007.11.003>
- Cresswell, J, W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.*

- Creswell, J., & Plano Clark, V. (2009). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage. *Organizational Research Methods* (Vol. 12).
- de la Fuente, J., Zapata, L., Martínez-Vicente, J. M., Cardelle-Elawar, M., Sander, P., Justicia, F., ... García-Belén, A. B. (2012). Regulatory teaching and self-regulated learning in college students: Confirmatory validation study of the IATLP Scales. *Electronic Journal of Research in Educational Psychology*, 10(2). Retrieved from <https://doi.org/10.25115/ejrep.v10i27.1511>
- Delfino, M., Dettori, G., & Persico, D. (2010). An online course fostering self-regulation of trainee teachers. *Psicothema*, 22(2), 299–305. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20423636>
- Ghanizadeh, A., & Ghonsooly, B. (2014). A tripartite model of EFL teacher attributions, burnout, and self-regulation: Toward the prospects of effective teaching. *Educational Research for Policy and Practice*, 13(2). Retrieved from <https://doi.org/10.1007/s10671-013-9155-3>
- Ghazal, S., Samsudin, Z., & Al-Dowah, H. (2015). Students' perception of Synchronous courses using Skype-based video conferencing. *Indian Journal of Science and Technology*, 8(30). Retrieved from <https://doi.org/10.17485/ijst/2015/v8i1/84021>
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Edisi 8. Cetakan ke-8. Semarang : Badan Penerbit Universitas Diponegoro. 2011, 8.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 Edisi 9*. In *Universitas Diponegoro*.
- Kavanoz, S. (2017). An Explanatory Mixed Method Study on Pre-Service Language Teachers' Communication Apprehension towards Their Instructors. *International Journal of Languages' Education*, 1(Volume 5 Issue 1). DOI: <https://doi.org/10.18298/ijlet.1721>
- Kramarski, B., & Michalsky, T. (2009). Investigating Preservice Teachers' Professional Growth in Self-Regulated Learning Environments. *Journal of Educational Psychology*, 101(1), 161–175. Retrieved from <https://doi.org/10.1037/a0013101>
- Manion, J. L. (2020). A mixed methods investigation of student achievement and satisfaction in traditional versus online learning environments. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 81(7-A).
- McNair, D. E. (2015). Palloff, R. M., & Pratt, K. Lessons From the Virtual Classroom: The Realities of Online Teaching. *Journal of College Student Retention: Research, Theory & Practice*, 17(2). Retrieved from <https://doi.org/10.1177/1521025115578237>
- Morse J. M. (1991). Approaches to Qualitative-Quantitative Methodological Triangulation. *Nursing Research*, 40.
- Omoregie, M. (1998). Distance Learning: An Effective Educational Delivery System. In *Society for Information Technology & Teacher Education International Conference* (Vol. 1998).
- Pajarianto, H., Kadir, A., Galugu, N., Sari, P., & Februanti, S. (2020). Study From Home In The Middle Of The COVID-19 Pandemic: Analysis Of Religiosity, Teacher, and Parents Support Against Academic Stress. *Journal of Talent Development and*

- Excellence*, (June). Retrieved from <http://iratde.com/index.php/jtde>
- Pardede, P. (2019). Mixed Methods Research Designs in EFL. In Pardede, P. (Ed.), *Proceeding. EFL Theory & Practice: Voice of EED UKI*. Jakarta: UKI Press, pp. 230-243. In Pardede, P. (Ed.), *Proceeding of EED Collegiate Forum 2015-2018* (pp. 230–243). UKI Press.
- Peeters, J., De Backer, F., Reina, V. R., Kindekens, A., Buffel, T., & Lombaerts, K. (2014). The Role of Teachers' Self-regulatory Capacities in the Implementation of Self-regulated Learning Practices. *Procedia - Social and Behavioral Sciences*, 116. Retrieved from <https://doi.org/10.1016/j.sbspro.2014.01.504>
- Porter, A. C., & Brophy, J. (1988). Synthesis of Research on Good Teaching: Insights from the Work of the Institute for Research on Teaching. *Educational Leadership*, 45(8), 74–85.
- Pusdiklat. (2020). Surat Edaran Mendikbud No 4 Tahun 2020 tentang Pelaksanaan Kebijakan Pendidikan dalam Masa Darurat Penyebaran Corona Virus Disease (Covid-19). *Pusdiklat Pegawai Kementerian Pendidikan dan Kebudayaan*.
- Rahayu, D. (2020a). Students' E-Learning Experience through a Synchronous Zoom Web Conference System. *Journal of ELT Research: The Academic Journal of Studies in English Language Teaching and Learning*.
- Rahayu, D. (2020b). Synchronous Zoom Web Conference System: An Exploratory Study on Students' E-Learning Experience. *Journal of ELT Research*, 5(1).
- Randi, J. (2004). Teachers as self-regulated learners. *Teachers College Record*. Retrieved from <https://doi.org/10.1111/j.1467-9620.2004.00407.x>
- Randi, J., Corno, L., & Johnson, E. (2011). Transitioning from college classroom to teaching career: Self-regulation in prospective teachers. *New Directions for Teaching and Learning*, (126). Retrieved from <https://doi.org/10.1002/tl.447>
- Seechaliao, T. (2017). Instructional Strategies to Support Creativity and Innovation in Education. *Journal of Education and Learning*, 6(4). Retrieved from <https://doi.org/10.5539/jel.v6n4p201>
- Shahabadi, M. M., & Uplane, M. (2015). Synchronous and Asynchronous e-learning Styles and Academic Performance of e-learners. *Procedia - Social and Behavioral Sciences*, 176. Retrieved from <https://doi.org/10.1016/j.sbspro.2015.01.453>
- Tibi, M., & Tibi, L. (2009). Distance Learning: What are its Strengths and Pitfalls? *Journal in Educational and Social Sciences*, 13(2003), 71–98.
- Toering, T., Elferink-Gemser, M. T., Jonker, L., van Heuvelen, M. J. G., & Visscher, C. (2012). Measuring self-regulation in a learning context: Reliability and validity of the Self-Regulation of Learning Self-Report Scale (SRL-SRS). *International Journal of Sport and Exercise Psychology*, 10(1). Retrieved from <https://doi.org/10.1080/1612197X.2012.645132>
- Uzuntiryaki-Kondakci, E., Demirdöğen, B., Akın, F. N., Tarkin, A., & Aydın-Günbatır, S. (2017). Exploring the complexity of teaching: the interaction between teacher self-regulation and pedagogical content knowledge. *Chemistry Education Research and Practice*, 18(1). Retrieved from <https://doi.org/10.1039/c6rp00223d>
- Wijaya, T. T., Ying, Z., & Suan, L. (2020). Gender and Self Regulated Learning During

- COVID-19 Pandemic in Indonesia. *Jurnal Basicedu*, 4(3), 725–732. Retrieved from <https://doi.org/10.31004/basicedu.v4i3.422>
- Yulianto, D. (n.d.). Online Assessment during Covid-19 Pandemic : EFL Teachers ' Perspectives and Their Practices, 7(2021), 229–242. Retrieved from <https://doi.org/10.33541/jet.v7i2.2770>
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In *Handbook of Self-Regulation*.
- Zimmerman, B. J., Bonner, S., & Kovach, R. (2004). *Developing self-regulated learners: Beyond achievement to self-efficacy*. Retrieved from <https://doi.org/10.1037/10213-000>