

# **Empowering Learners: Challenges in Promoting Self-Regulated Learning in Indonesian Senior High School EFL Classroom**

**Indah Swandewi Dhiasa,**

<sup>1</sup>Faculty of Language and Arts,  
Universitas Negeri Surabaya  
Indonesia

([indah22018@mhs.unesa.ac.id](mailto:indah22018@mhs.unesa.ac.id))

**Him'mawan Adi Nugroho,**

<sup>1</sup>Faculty of Language and Arts,  
Universitas Negeri Surabaya  
Indonesia

([himmawannugroho@unesa.ac.id](mailto:himmawannugroho@unesa.ac.id))

**Widyastuti**

<sup>1</sup>Faculty of Language and Arts,  
Universitas Negeri Surabaya  
Indonesia

([widyas@unesa.ac.id](mailto:widyas@unesa.ac.id))

Received:

Accepted:

Published:

## **Abstract**

The Minister of Education of the Republic of Indonesia introduced the Merdeka Curriculum in 2022, which emphasizes fostering self-regulated learners by adopting a student-centered approach tailored to their interests and needs. Self-regulated learning (SRL) is established as a core competency standard across educational levels, from primary to high school. Despite its significance, EFL teachers face challenges in promoting SRL in the classroom. This study aimed to identify these challenges using a multiple-case study method, which is well-suited for examining complex issues in real-world contexts. The findings revealed notable differences in students' self-regulation capabilities within the same classroom, making it difficult for teachers to manage groups with varying levels of SRL. Additionally, the lack of continuous training and professional development further hinders teachers' ability to support SRL effectively. Another challenge identified was the prioritization of subject matter instruction over SRL due to the curriculum's rigid content and pedagogical framework. These findings highlight the need for more flexible curriculum designs and enhanced teacher training programs to address the challenges of implementing SRL in EFL classrooms.

**Keywords:** *Self-Regulated Learning; English as a Foreign Language; Teacher; Challenges.*

## **1. Introduction**

Learning English as a foreign language (EFL) poses significant challenges, particularly in contexts where English is not the primary language. A primary issue in such environments is the limited exposure to English outside the classroom, restricting opportunities for students to practice and immerse themselves in the language (Khan, T. J., & Khan, N., 2016). Given these constraints, students need to take responsibility for their learning. In this regard, Self-regulated learning is especially important when students are required to work independently, as it enables them to manage their learning effectively without constant guidance from a teacher (Xu et al., 2023). In 2022, the Minister of Education of the Republic of Indonesia introduced the latest Independent Curriculum, which incorporates self-regulated learning into the graduate competency standards for primary to high school education. This curriculum adopts a student-centered approach,



emphasizing the concept of self-regulated learners and tailoring learning to students' interests and needs. The curriculum marks a significant shift in Indonesia's education system, particularly in EFL teaching, by encouraging students to select topics, methods, and resources that align with their preferences, while teachers play a supporting role in the learning process (Anggrella, 2023). Consequently, the advantages of self-regulatory strategies are highly appealing to teachers who aim to help students not only master subject material but also develop lifelong learning skills.

Self-regulated learning (SRL) is an active, constructive process where learners set goals, monitor their progress, and adjust their behaviors to achieve academic success (Zimmerman, 2011). These behaviors may include effective time management (Lourenço & Paiva, 2024), seeking help when needed, maintaining motivation, and using strategies such as note-taking, self-testing, or setting specific study routines (Hartwig & Dunlosky, 2012). By actively engaging in these practices, learners can take greater control of their learning process, overcome challenges, and improve their academic performance. Such actions help learners take ownership of their learning and persist through challenges, which directly contributes to improved academic performance. SRL involves not only behavioral aspects but also metacognitive and motivational components. Metacognitively, self-regulated learners are able to plan their learning tasks, monitor their progress, and evaluate outcomes. Motivationally, they demonstrate a strong sense of self-efficacy and a sustained willingness to engage in learning.

To effectively practice SRL, learners often use a variety of strategies, such as goal-setting, self-monitoring through checklists or journals, using self-questioning to check understanding, and employing feedback to refine their approach. These strategies support students in becoming more reflective and independent, which is essential for both academic success and long-term personal development. Recent studies have emphasized the importance of SRL in fostering lifelong learning skills (Woogul, Myung-Jin, & Bong, 2014), a study highlighted that SRL encompasses students' thoughts, feelings, and actions, all oriented toward achieving personal learning goals. Another research emphasized that SRL is significantly influenced by motivational and attitudinal components, suggesting that students' beliefs about their capabilities play a crucial role in their ability to self-regulate (Teng, 2021). These insights underscore the multifaceted nature of SRL and its critical role in academic achievement. However, putting self-regulated learning (SRL) into practice in classroom settings comes with its own set of challenges. Not all students are naturally equipped with the skills or mindset needed to regulate their learning. Some may struggle with setting realistic goals, staying motivated, or managing their time effectively. Others might find it difficult to reflect on their learning progress or to choose appropriate strategies without guidance. Teachers, on the other hand, may find it challenging to provide personalized support for SRL within the constraints of a traditional classroom, especially when managing large groups of learners with diverse needs and abilities, varying levels of student readiness, limited professional development opportunities, and students' reliance on teacher-defined objectives (Hadwin et al., 2019).

Additionally, limited professional development opportunities pose a significant challenge. Many teachers receive minimal training on how to foster SRL in their classrooms, leaving them without the necessary pedagogical tools and strategies to support students in developing self-regulated learning skills. Without adequate guidance, teachers may rely on traditional instructional methods that emphasize teacher-centered learning rather than encouraging student autonomy. Another major obstacle is students' dependence on teacher-defined objectives and structured learning environments. Many learners are accustomed to receiving explicit instructions and may struggle with taking ownership of their learning process. This dependency can make it difficult for students to set their own learning goals, monitor their progress, and reflect on their learning experiences—key components of SRL. Moreover, the classroom environment itself may not always support SRL. Large class sizes, rigid curricula, and standardized assessments can limit teachers' flexibility in incorporating SRL strategies. Teachers may feel pressured to cover extensive content within a short time frame, making it challenging to dedicate time to explicitly teaching self-regulation skills. Addressing these challenges requires a combination of teacher training, curriculum adjustments, and a shift in classroom culture to promote student autonomy and responsibility for learning. By understanding and overcoming these barriers, educators can create a more conducive environment for fostering SRL and equipping students with lifelong learning skills.

Understanding these challenges is crucial, as teachers play a pivotal role in fostering SRL. Research indicates that while the concept of learner autonomy is implied in the 2013 high school curriculum in Indonesia, efforts to promote it in the classroom have been limited (Daflizar & Petraki, 2022). EFL teachers often struggle to foster learner autonomy, as traditional teacher-centered learning still dominates the classroom. (Salsya & Amalia, 2022). This study examines the

obstacles EFL teachers encounter when encouraging students' SRL in the classroom. It seeks to identify the factors that hinder the effective implementation of SRL strategies and how teachers navigate these challenges. By shedding light on these issues, the research aims to provide valuable insights that can support the development of pedagogical approaches, instructional techniques, and professional development programs tailored to enhance SRL in EFL contexts. Additionally, the study aspires to contribute to broader discussions on fostering learner autonomy, motivation, and metacognitive skills in language education.

## 2. Method

This research employs a multiple case study approach as its main methodology, as it is well-suited for investigating intricate issues in real-life contexts (Cohen et al., 2017). The study aims to explore the beliefs of senior high school teachers. By choosing a case that is both pertinent and representative of the intended population, this research offers an in-depth analysis of the subject. To enhance the depth of the findings interview methods were utilized to gather the data. The combination of these methods establishes a comprehensive research design that thoroughly explores teachers' beliefs regarding the promotion of SRL in English instruction at senior high schools. Incorporating multiple data sources allows for a richer and more detailed understanding of the topic (Cohen et al., 2017).

The structured interviews serve as a primary tool for examining participant opinions about the challenges teachers face in promoting SRL. The interview guide was carefully designed based on the research objectives, incorporating the SRL prompts to encourage detailed and reflective responses. These interviews provide valuable insights into participants' perspectives and experiences. All interviews were audio-recorded and later transcribed for further analysis (Ary, Donald et al., 2010). To answer the research question about what challenges EFL teachers face when promoting students' SRL behaviors? The researcher used the data as an interview checklist and notes. The researcher interviewed teachers to explore their challenges in integrating self-regulated learning into their instructional practices in ELT classrooms. The interview involved open-ended questions. The data source for this research question is the teachers who participated in this study.

The participant in this study is a certified English teacher who has completed the Teacher Professional Education (Pendidikan Profesi Guru/PPG) program and is currently teaching at the senior high school level in East Java, Indonesia. She has more than ten years of experience in teaching English as a foreign language, which qualifies her as an experienced practitioner in the field. Before selecting her as a participant, the researcher conducted an initial interview to ensure her suitability for the study, particularly about her familiarity with and application of self-regulated learning (SRL) strategies in the classroom. The decision to involve a teacher as the participant is based on the recognition that teachers are central to the classroom experience and play a vital role in shaping students' learning behaviors. Her insights into instructional practices, beliefs, and experiences provide valuable information for understanding how SRL is implemented in real teaching contexts. Moreover, her involvement enables the study to explore the challenges faced by teachers in fostering students' independence and capacity for self-regulation.

The teacher was specifically chosen for her expertise in language teaching, as her professional background equips her with a deep understanding of pedagogical techniques and language acquisition. Their experience allows them to provide informed perspectives on the practical application of SRL within the context of language learning, which often involves specific skills such as vocabulary acquisition, grammar, reading comprehension, and speaking fluency. Teachers with this expertise are more likely to be familiar with various instructional approaches that encourage student autonomy, motivation, and engagement—all of which are essential for SRL.

Additionally, the selection of teacher who has experience in providing SRL-based instructional practices is important because their first-hand knowledge of how SRL is integrated into language lessons offers insights into its challenges and successes. These teachers are likely to have experimented with different strategies to promote self-regulation in their students, such as goal setting, self-monitoring, and reflection. Their experience allows for a deeper exploration of the practical realities of implementing SRL in diverse classroom settings and with students of varying skill levels.

Once the researcher has gathered the data, a descriptive analysis is conducted. The interview data is transcribed through careful note-taking, and the key information is identified, labelled, and categorized into codes that represent teachers' perspectives on the challenges they face in promoting self-regulated learning strategies. These codes are then refined and grouped into broader themes to emphasize the central findings of the research. Throughout the analysis, these themes are continuously reviewed and adjusted to ensure they accurately reflect the data and provide a comprehensive understanding of the teachers' experiences.

### 3. Findings and Discussion

#### *Student Motivation and Engagement*

Students often rely on their teachers to provide instructions and explanations rather than take initiative in their learning. Even when specific strategies are introduced, many students struggle to implement them consistently. For instance, one teacher shared an experience of encouraging students to set a daily goal of learning 10 new vocabulary words at home. However, many students failed to follow through with this practice regularly. This highlights the difficulty of fostering independent learning among students. Even tasks as simple as selecting a topic for speaking practice can take considerable time and pose a challenge for them.

Teacher: *"Most of the Students always wait for the teacher to teach and explain what they need to do. Sometimes, even though I've already explained and taught them certain strategies, they still don't follow through. For example, I once taught my students to set a daily goal of learning 10 new vocabulary words at home, but many of them didn't do it consistently. So, I think expecting all students to learn independently is still quite difficult. Even something as simple as choosing a topic to talk about during speaking practice can take them a long time and be a challenge."*

In the excerpt, Teacher A's statement, *"Most of the students always wait for the teacher to teach and explain what they need to do,"* sheds light on the strong reliance that students have on their teachers for direction. This dependency indicates that many students are not yet equipped with the confidence or skills required to independently manage their learning process. Instead of actively engaging with the material or taking ownership of their educational journey, they tend to wait for clear instructions and step-by-step guidance from the teacher.

This dependence on external guidance can be a significant obstacle to the development of self-regulated learning (SRL). SRL demands that students take a proactive role in their learning, which includes setting personal learning goals, tracking their progress, and evaluating the effectiveness of their strategies. The teacher stated that if students are used to relying on the teacher for constant direction, they may struggle to initiate these processes themselves. Without the confidence to make decisions about their learning and the ability to self-monitor their progress, students may miss out on the opportunity to develop essential skills like goal-setting, time management, and self-reflection, all of which are critical components of SRL.

Moreover, when students depend too much on teacher-driven guidance, it can create a cycle of passive learning, where they may only engage with the content when directed by the teacher, rather than taking the initiative to explore and learn on their own. This can hinder their ability to adapt to more independent and self-directed learning environments, both in and outside of the classroom.

To shift this pattern, teachers would need to gradually introduce strategies that encourage more student autonomy, such as guiding students in setting their learning objectives, offering opportunities for self-assessment, and creating a classroom culture where students feel comfortable taking risks and making decisions about their learning. By fostering a more self-directed approach, students would be better equipped to become lifelong learners who can manage their learning without relying heavily on external direction.

One of the challenges was the pupils' expectations. Teachers indicated that students want their teachers to give clearly defined materials that facilitate the achievement of course objectives established exclusively by the teacher. These findings align with Hadwin et al. (2019), who propose that students' expectations may act as possible barriers to their self-regulation. Furthermore, teachers expressed differences in students' self-regulation capabilities within a single classroom, however, they find it somewhat tough to instruct a group with varying levels of self-regulation. Teachers' responses and usage of SRL promotion tactics may also be influenced by individual student traits, which influences future SRL development and possibilities in turn.

#### *Professional Development in Supporting Teachers*

Furthermore, the teacher stated there is limited availability of continuing teacher training and professional development that discuss the way how teachers should promote SRL in their classroom practice. She noted that current teacher professional development programs more focus on subject content than on pedagogical approaches leaving them without adequate support to implement SRL effectively.

Teacher: *"Well, as a certified teacher, I still don't fully understand the complete details about SRL. I understand that students should be able to learn independently or engage especially in the 'Merdeka Belajar,' curriculum, students' learning autonomy always be emphasized but as for the specifics of SRL, we've never received in-depth training on it."*

Despite being a certified teacher, the participant admits to not fully grasping the nuances of SRL. This suggests that professional certification programs may not adequately cover advanced or contemporary pedagogical and detailed concepts such as SRL. While the teacher understands the broader principle that students should learn independently, the lack of detailed knowledge points to a gap in training or resources available to teachers.

This issue is linked to another challenge identified in the results about the deficiency in on-going training and professional development. Studies have indicated that teachers lack both topic knowledge and pedagogical content knowledge regarding SRL (Spruce and Bol, 2015). The teacher confirms they are certified teachers but also notes they have not had thorough SRL instruction. This draws attention to a significant difference in professional development initiatives whereby teachers could be exposed to the idea of SRL but lacks the knowledge, resources, or understanding required for good application (Peeters, Et al, 2014).

#### ***Time and Curriculum Constraints***

A further challenge stems from the constraints imposed by the curriculum. Teachers stated that the curriculum prioritizes covering a specific volume of content within a fixed timeframe. This leaves teachers with little room to incorporate SRL strategies, such as project-based learning, inquiry-based tasks, or reflective exercises, which may require more time to execute effectively. The pressure to "complete the syllabus" often takes precedence over fostering deeper learning skills.

Teacher: *During the observation, you've seen my teaching modules yourself. There's a lot of material that we have to cover, even though the time students have in class is very limited. On top of that, there are often interruptions, like other activities or events that cut into class time. So, I just try to be realistic—what's most important is that the material is delivered. I don't push myself to use too many complicated teaching techniques."*

This highlights the restrictive nature of standardized curricula, which often prioritize content delivery over the development of transferable learning skills like SRL. A further problem implied by certain teachers emphasizing the precedence of subject matter instruction over self-regulated learning (SRL) is the constrictive nature of the curriculum for both the content and pedagogical approach employed in the course. Research indicates that teachers' metacognitive skills as self-regulated learners significantly influence their understanding and promotion of SRL in students.

However, standardized curricula often emphasize content delivery, leaving little room for teachers to develop and apply these skills, thereby affecting their capacity to foster SRL in the classroom (Brenner, C.A., 2022). Teachers, therefore, may feel pressure to focus predominantly on covering content, rather than on teaching students how to regulate their learning processes. This emphasis on content delivery limits the opportunities for students to practice SRL, as activities that foster self-regulation—like goal setting, self-monitoring, or self-assessment—can take time away from the strict adherence to content coverage (Chitra E, Hidayah N, Chandratilake M, Nadarajah VD., 2022).

#### **4. Conclusion**

Teachers also see their roles evolving from traditional knowledge deliverers to facilitators and guides who provide students with the necessary support to actively manage their learning. This shift reflects a more modern educational philosophy, where the teacher's role is to scaffold learning, create opportunities for self-discovery, and provide constructive feedback that helps students improve their self-regulation skills. This is consistent with research by Zimmerman (2013), which suggests that students benefit from guidance on overcoming obstacles and developing strategic thinking to solve problems on their own. Moreover, the study reveals that teachers employ a variety of strategies to encourage students' cognitive and metacognitive development.

The study identifies several critical barriers to effectively implementing self-regulated learning (SRL) in the classroom. One major challenge is students' preference for structured, teacher-driven learning. Many students expect clear instructions and detailed materials, preferring a more passive role where they wait for teachers to define learning objectives and steps. This reliance on teacher-led guidance makes it difficult to foster the independent thinking and self-management skills necessary for SRL.

Another significant barrier is the lack of sufficient professional development and training for teachers. Without adequate training on how to integrate SRL strategies into their teaching, many teachers may struggle to adopt these approaches effectively. Teachers often report feeling unprepared or unsupported in developing the skills to help students become self-regulated learners. This gap in professional development can limit the effective implementation of SRL practices in the classroom.

Curriculum demands also play a role in hindering the adoption of SRL. In many educational systems, curricula are tightly structured with specific content that must be covered within a set time frame. This can limit the flexibility teachers need to incorporate SRL strategies, which often require more open-ended and student-centered approaches. Teachers may feel pressured to focus on meeting curriculum objectives and preparing students for assessments, leaving little time for fostering the skills that contribute to self-regulated learning.

Furthermore, the diversity of students in the classroom adds another layer of complexity. Students come to class with varying levels of readiness and ability in terms of self-regulation. Some students may already possess the skills needed for independent learning, while others may struggle with setting goals, monitoring their progress, and reflecting on their learning. This disparity requires teachers to differentiate their instruction and adapt their strategies to meet the needs of all students, which can be challenging, particularly in classrooms with large numbers or varying student abilities.

To overcome these challenges, the study suggests the need for a more flexible and tailored approach to teaching SRL. Teachers would benefit from ongoing professional development focused on SRL strategies and learning how to create environments where students feel empowered to take ownership of their learning. Additionally, adapting the curriculum to provide more space for student-driven learning and offering personalized support for students at different stages of self-regulation could help address the diverse needs within the classroom.

## 5. References

- Anggrella, D. P., Izzati, L. R., & Sudrajat, A. K. (2023). Improving the quality of learning through lesson plan preparation workshops for an independent learning model. *Journal of Community Service and Empowerment*, 4(1), 162–171.
- Bandura, A. (2012). Social Cognitive Theory. Dalam Lange. P. A. M. V.; Kruglanski, A.W; & Higgins, E.T. (editor). *Handbook of theories of social psychology*. Volume 1. London: Sage Publications Ltd.
- Berman, R., & Cheng, L. (2001). English academic language skills: Perceived difficulties by undergraduate and graduate students, and their academic achievement. *Canadian Journal of Applied Linguistics/Revue canadienne de linguistique appliquée*, 4(1), 25-40.
- Butler, D. L., Schnellert, L., & Cartier, S. C. (2013). Layers of self-and co-regulation: Teachers' co-regulating learning and practice to foster students' self-regulated learning through reading. *Education Research International*, 2013, 1–19.
- Cartier, S. C., Butler, D. L., & Bouchard, N. (2010). Teachers working together to foster self-regulated learning through reading by students in an elementary school located in a disadvantaged area. *Psychological Test and Assessment Modeling*, 52(4), 382–418.
- Dignath, C. (2021). For unto every one that hath shall be given: Teachers' Competence profiles promoting self-regulated learning moderate the effectiveness of short-term teacher training. *Metacognition and Learning*, p. 16, 555e594. <https://doi.org/10.1007/s11409-021-09271-x>
- Dignath, C., Buettner, G. & Langfeldt, H.P. (2008). How can primary school students learn self-regulated learning strategies most effectively? A meta-analysis on self-regulation training programmes. *Educational Research Review*. (in press).
- Donker, A. S., de Boer, H., Kostons, D., Dignath van Ewijk, C. C., & van der Werf, M. P. C. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review*, 11, 1e26. <https://doi.org/10.1016/j.edurev.2013.11.002>
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256e273. <https://doi.org/10.1037//0033-295x.95.2.256>

- Galante, A. (2018). Drama for L2 Speaking and Language Anxiety: Evidence from Brazilian EFL Learners. *RELC Journal*, 49(3), 273–289. <https://doi.org/10.1177/0033688217746205>
- Goh, C.C.M., & Vandergrift, L. (2021). *Teaching and Learning Second Language Listening: Metacognition in Action* (2nd ed.). Routledge. <https://doi.org/10.4324/9780429287749>
- Hartwig MK, Dunlosky J. (2012) Study strategies of college students: are self-testing and scheduling related to achievement? *Psychon Bull Rev.* 19(1):126-34. doi: 10.3758/s13423-011-0181-y. PMID: 22083626.
- 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), 972e996. <https://doi.org/10.1111/bjep.12402>
- Herwiana, S., Purwati, O., & Anam, S.(2023). Promoting Self-Regulated Learning of Reading Ability in University Students: EFL Lecturers' Perspective. *ELITE Journal*, 5(1), 155-166.
- Kramarski, B., Desoete, A., Bannert, M., Narciss, S., & Perry, N. (2013). New perspectives on integrating self-regulated learning at school. *Education Research International*, 2013, doi:10.1155/2013/49821
- Latifi, M., Tavakoli, M., & Dabaghi, A. (2014). The effects of a self-regulatory approach on the listening comprehension achievement of EFL learners. *International Journal of Research Studies in Education*, 3(3), 67-78.
- Lombaerts, Koen & Engels, Nadine & Vanderfaellie, Johan. (2007). Exploring Teachers' Actions to Promote Self-Regulated Learning Practices in Primary School. *The Australian Educational and Developmental Psychologist*. 24. 4-24. 10.1017/S0816512200029187.
- Lombaerts, Koen & Engels, Nadine & Athanasou, James. (2007). Development and validation of the Self-Regulated Learning' Inventory for Teachers. *Perspectives in Education*. 25. 29-47.
- Lombaerts, K., De Backer, F., Engels, N., Van Braak, J., & Athanasou, J. (2009). Development of the self-regulated learning teacher belief scale. *European Journal of Psychology of Education*, 24(1), 79–96. <https://doi.org/10.1007/BF03173476>
- Lourenço, A. A., & Paiva, M. O. (2024). Academic Performance of Excellence: The Impact of Self-Regulated Learning and Academic Time Management Planning. *Knowledge*, 4(2), 289-301. <https://doi.org/10.3390/knowledge4020016>
- Mendelsohn, D. (1995). Applying learning strategies in the second/foreign language listening comprehension lesson. In D. Mendelsohn, and J. Rubin (eds.), *A guide for the teaching of second language listening*. (pp. 132– 50). San Diego: Dominie Press.
- Musyarrofah, H., Setiawan, S., Munir, A., Lestari, L. A., & Anam, S. U. (2023). Indonesian Tertiary Students' Self-Regulated Language Learning Strategy Use: Does Demographic Background Matter?. *Proceedings of EEIC*, 3.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). Elsevier Inc. <https://doi.org/10.1016/B978-012109890-2/50043-3>
- Perry, N. E., Hutchinson, L., & Thauberger, C. (2008). Talking about teaching self-regulated learning: scaffolding student teachers' development and use of practices that promote self-regulated learning. *International Journal of Educational Research*, 47(2), 97–108.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Salamah, F. A., & Kurniasih, E. (2022). Comprehending Analytical Exposition Text Through Self-Regulated Learning Strategy in Senior High School. *Journal on Teacher Education*, 3(3), 235-248.
- Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological Bulletin*, 143(6), 565e600. <https://doi.org/10.1037/bul0000098>

- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26, 113–125. <https://doi.org/10.1023/A:1003044231033>
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7(4), 351–371. <https://doi.org/10.1007/BF02212307>
- Schunk, D. H., & Greene, J. (Eds.). (2017). *Handbook of self-regulation of learning and performance* (2nd ed.). Taylor and Francis. <https://doi.org/10.4324/9781315697048>
- Spruce, R., & Bol, L. (2015). Teacher beliefs, knowledge, and practice of self-regulated learning. *Metacognition and Learning*, 10(2), 245e277. <https://doi.org/10.1007/s11409-014-9124-0>
- Teng, L. S. (2021). Individual differences in self-regulated learning: Exploring the nexus of motivational beliefs, self-efficacy, and SRL strategies in EFL writing. *Language Teaching Research*, 28(2), 366–388. <https://doi.org/10.1177/13621688211006881> (Original work published 2024)
- Veenman, M. V. J., Van Hout-Wolters, B. H. A. M., & Afflerbach, P. (2006). Metacognition and learning: Conceptual and methodological considerations. *Metacognition Learning*, 1, 3e14. <https://doi.org/10.1007/s11409-006-6893-0>
- Veenman, M. V. J., Haan, N., & Dignath, C. (2009). An observation scale for assessing teachers' implicit and explicit use of metacognition in the classroom. 13th Biennial Conference for Research on Learning and Instruction, EARLI, Amsterdam.
- Veenman, M. V. (2017). Assessing metacognitive deficiencies and effectively instructing metacognitive skills. *Teachers College Record*, 119(13), 1–20.
- Vosniadou, S., Darmawan, I., Lawson, M. J., Van Deur, P., Jeffries, D., & Wyr, M. (2021). Beliefs about the self-regulation of learning predict cognitive and metacognitive strategies and academic performance in pre-service teachers. *Metacognition and Learning*. <https://doi.org/10.1007/s11409-020-09258-0>
- Wardani, A., Munir, A., Lestari, L., & Anam, S. (2023). SELF-REGULATED LEARNING STRATEGIES AND THEIR RELATIONSHIP TO GRAMMAR ACHIEVEMENT OF UNDERGRADUATE ENGLISH DEPARTMENT STUDENTS. *LLT Journal: A Journal on Language and Language Teaching*, 26(2), 634–649. [doi:https://doi.org/10.24071/llt.v26i2.6638](https://doi.org/10.24071/llt.v26i2.6638)
- Zimmerman, B. J., & Campillo, M. (2003). Motivating self-regulated problem solvers. In J. E. Davidson & R. J. Sternberg (Eds.), *The psychology of problem-solving* (pp. 233–262). Cambridge University Press. <https://doi.org/10.1017/CBO9780511615771.009>
- Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In D. H. Schunk & B. Zimmerman (Eds.), *Handbook of self-regulation of learning and performance* (1st ed., pp. 63–78). Routledge. <https://doi.org/10.4324/9780203839010>