THE RELATIONSHIP BETWEEN PROFESSIONAL TEACHING AND SELF-REGULATED LEARNING AMONG SECONDARY SCHOOL STUDENTS'

Lesta Mega[1], Mahdum[2], Supriusman[3]
[1,2]University of Riau, Pekanbaru, Riau

*Corresponding author: lesta.mega7484@grad.unri.ac.id

Abstract
The study investigates the correlation between professional teaching practices and self regulated learning (SRL) development among secondary school students. In the shift toward learner-centered education, teachers increasingly function as facilitators rather than mere transmitters of knowledge. Professional teaching, characterized by pedagogical competence, reflective practice, and responsive instruction, is theorized to affect students' capacity to regulate their learning processes significantly. A quantitative correlational approach was applied, involving 100 students and five teachers at SMPN 37 in Pekanbaru. The findings reveal a significant positive correlation between professional teaching and SRL, especially in goal setting, self-monitoring, and self-evaluation. These results underscore continuous professional development's importance in strengthening teachers' instructional strategies that promote student autonomy and metacognitive skills.
Keywords: Professional Teaching, Self-Regulated Learning, pedagogical competence, reflective practice, secondary education

INTRODUCTION

In the 21st-century educational landscape, the emphasis has shifted from teacher-centered instruction to student-centered learning, requiring learners to become autonomous, motivated, and strategic. One critical competency for students in this context is self-regulated learning (SRL), which refers to learners' ability to control and monitor their cognitive, motivational, and behavioral processes toward learning goals (Zimmerman, 2002).

In addition to Zimmerman's (2002) model, the theory of Social Cognitive Theory (Bandura, 1991) provides a strong basis for understanding how students develop self-regulatory learning behavior. According to this theory, individuals learn not only through their own experiences but also by observing others. Therefore, teachers are role models in demonstrating metacognitive strategies and motivational regulation, making professional teaching essential for SRL development.

Moreover, Vygotsky's Sociocultural Theory emphasizes the role of social interaction and scaffolding in learning (Vygotsky, 1978). Professional teachers who provide timely

feedback and adjust their instructional approach based on student needs are more likely to support the development of independent learners. Further, Pintrich's SRL model (2000) highlights the motivational dimension of SRL, where students' beliefs about their competence and the value of tasks affect their engagement.

This connects directly with the teacher's ability to create meaningful and supportive classroom environments, a central aspect of professional teaching. Professional teaching practices, encompassing not only pedagogical skills but also reflective and adaptive teaching, play a vital role in fostering SRL. Teachers are no longer viewed merely as knowledge transmitters but as facilitators who empower students to take ownership of their learning. According to OECD (2018), professional teaching includes instructional design, formative assessment, reflection, and responsiveness to student's needs, all of which can support SRL.

Several studies have established that teacher effectiveness positively influences students' SRL development, particularly in promoting metacognitive awareness and learning autonomy (Panadero, 2017; Dignath & Veenman, 2020). However, empirical investigations on this linkage remain limited in the Indonesian context, particularly in public secondary schools. This study explores the relationship between professional teaching practices and SRL among students of SMPN 37 in Pekanbaru.

METHOD

This study utilized a quantitative correlational research design to investigate the relationship between professional teaching practices and self-regulated learning (SRL) among secondary school students. This design is appropriate for identifying statistical associations between independent (professional teaching) and dependent (SRL) variables without manipulating them (Creswell, 2012). The participants included 100 secondary school students (Grade 8 and 9) and 5 teachers from SMPN 37 Pekanbaru. Students were selected using stratified random sampling to ensure representation across grades and gender.

Two instruments were used:

• Professional Teaching Practices Scale (PTPS): Adapted from Tschannen-Moran & Hoy (2007) and OECD TALIS (2018) indicators. The scale consists of 15 items across three domains: pedagogical competence, reflective practice, and responsive instruction.

• Self-Regulated Learning Questionnaire (SRLQ): Adapted from Zimmerman’s SRL model (2002), covering goal setting, self-monitoring, strategic planning, and selfevaluation. This questionnaire has 20 items rated on a 5-point Likert scale.

The reliability scores (Cronbach’s Alpha) were:

• PTPS: $\alpha = 0.89$

• SRLQ: $\alpha = 0.91$

Descriptive statistics, Pearson correlation analysis, and linear regression were performed using SPSS 26 to determine the relationship between the variables.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Variabel N Mean SD Professional Teaching Practice (PTS) 100 3.98 0.54 Self-Regulated Learning (SRL) 100 4.12 0.49

Correlation Analysis

Variabel r p-value

PTP-SRL 0.621** 0.000

Note: $p < 0.01$, significant correlation.

The correlation coefficient ($r = 0.621$) indicates a moderate to strong positive correlation between professional teaching practices and students' self-regulated learning.

Regression Analysis

Model R^2 F β Sig.

PTP → SRL 0.386 62.153. 0.621 0.000

Approximately 38.6% of the variance in students' SRL is explained by professional teaching practices, suggesting a substantial predictive relationship.

DISCUSSION

The findings show a statistically significant and positive relationship ($r = 0.621$, $p < 0.01$) between professional teaching and SRL, supporting the hypothesis that teachers play a pivotal role in fostering students' autonomous learning behaviors. This aligns with research by Panadero (2017), which emphasizes the influence of metacognitive and motivational support provided by teachers in cultivating SRL.

The regression analysis revealed that professional teaching practices account for 38.6% of the variance in SRL scores. This suggests that teaching practice is a major factor, other

influences such as parental involvement, peer interaction, and individual student traits may also contribute to SRL development (Vrieling et al., 2018; Dent & Koenka, 2016).

Furthermore, teachers who actively reflect on their instruction, adapt to students' learning needs, and implement formative assessment are more likely to build students' confidence in setting goals and monitoring progress. This supports Dignath & Büttner's (2018) assertion that SRL is best developed in classrooms where teachers deliberately scaffold learning.

The strong correlation between professional teaching and SRL found in this study aligns with Pintrich's (2000) claim that instructional context significantly influences learners'

motivation and regulation strategies. For instance, when teachers provide autonomy support and scaffold complex tasks, students are more likely to develop confidence in managing their own learning (Reeve, 2006).

In addition, Boekaerts (2011) emphasized the role of emotion regulation in SRL, which can be nurtured through responsive instruction. Teachers who maintain emotionally safe classroom environments enable students to manage frustration, sustain motivation, and persist in the face of challenges key attributes of effective self-regulated learners.

These findings are consistent with OECD (2020) policy recommendations that emphasize the importance of teacher professionalism in enhancing student agency. Teachers with high instructional quality not only transfer knowledge but shape learning strategies, habits, and dispositions.

In the Indonesian context, these findings highlight the urgency for ongoing professional development focusing on SRL-supportive pedagogies. Many teachers still rely on traditional content-delivery approaches that may not encourage student autonomy. Therefore, schools and education authorities should invest in capacity building through workshops, peer mentoring, and reflective teaching communities (OECD, 2018; Schunk & Greene, 2018).

CONCLUSION

This study provides empirical evidence of a significant relationship between professional teaching practices and self-regulated learning among secondary school students. Emphasizing professional teaching in terms of pedagogical competence, reflective practice, and responsive instruction can enhance students' ability to regulate their learning. Policy efforts and professional development programs should prioritize teacher strategies that foster autonomy, metacognition, and motivation in students.

This study affirms the theoretical propositions of Zimmerman (2002), Bandura (1991), and Pintrich (2000), showing that professional teaching substantially contributes to fostering self-regulated learners. Professional competence, especially in providing scaffolded instruction and reflective feedback, equips students with the metacognitive tools necessary for academic independence. Therefore, education systems should prioritize teacher training programs that explicitly focus on SRL-supportive strategies, such as formative assessment, cooperative learning, and task structuring. Future studies are encouraged to explore how other variables such as emotional support, digital pedagogy, and socio-economic background moderate the relationship between teaching and SRL.

REFERENCES

Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50(2), 248– 287. https://doi.org/10.1016/0749-5978(91)90022-L

Boekaerts, M. (2011). Emotions, emotion regulation, and self-regulation of learning. In B. J. Zimmerman & D. H. Schunk (Eds.), Handbook of Self-Regulation of Learning and Performance (pp. 408–425). Routledge.

Creswell, J. W. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th ed.). Pearson Education.

Dignath, C., & Büttner, G. (2018). Teachers direct and indirect promotion of selfregulated learning in primary and secondary classrooms Insights from videobased classroom observations and teacher interviews. Metacognition and Learning, 13(2), 127–157. https://doi.org/10.1007/s11409-018-9181-x

Dignath, C., & Veenman, M. V. J. (2020). The role of direct strategy instruction and indirect activation of self-regulated learning Evidence from classroom observation studies. Educational Psychology Review, 32(1), 613–649. https://doi.org/10.1007/s10648-020-09511-0

Dent, A. L., & Koenka, A. C. (2016). The relation between self-regulated learning and academic achievement across childhood and adolescence: A metaanalysis. Educational Psychology Review, 28(3), 425–474.

OECD. (2018). Teaching for the Future: Effective Classroom Practices to Transform Education. OECD Publishing. https://doi.org/10.1787/9789264293243en

OECD. (2020). Teachers and Leaders in Vocational Education and Training. OECD Publishing. https://doi.org/10.1787/59d4fbb1-en

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. Frontiers in Psychology, 8, 422. https://doi.org/10.3389/fpsyg.2017.00422

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). Academic Press.

Perry, N. E., VandeKamp, K. O., Mercer, L. K., & Nordby, C. J. (2020). Investigating teacher support of self-regulated learning in the primary classroom. Metacognition and Learning, 15(2), 145–169.

Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. The Elementary School Journal, 106(3), 225–236.

Schunk, D. H., & Greene, J. A. (2018). Handbook of Self-Regulation of Learning and Performance (2nd ed.). Routledge.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of selfefficacy beliefs of novice and experienced teachers. Teaching and Teacher Education, 23(6), 944–956.

Vrieling, E., Bastiaens, T., & Stijnen, S. (2018). Effects of increased self-regulated learning opportunities on student teachers' motivation and use of metacognitive skills. Australian Journal of Teacher Education, 43(6), 1–21.

Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2