

Pre-Service English Language Teachers' Professional Development: Insights from a Self-Regulated Learning Training Model

Hizmet Öncesi İngilizce Öğretmenlerinin Mesleki Gelişimi: Bir Öz
Düzenlemeli Öğrenme Eğitim Modeline Dair Görüşleri

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ABSTRACT: This study investigates how scenario-based self-regulated learning (SRL) training influences pre-service English language teachers' teaching confidence and professional development. Employing a qualitative descriptive design, the study captures the perceptions and experiences of 23 pre-service teachers participating in an eight-week SRL training integrated into a *Teaching Practice* course. Thematic analysis of semi-structured interviews, focus groups, and observations reveals that SRL training enhances classroom management skills, instructional adaptability, and reflective practice. Participants reported increased teaching confidence and a greater capacity to bridge theoretical knowledge with practical classroom application. However, concerns were raised regarding the sustainability of SRL implementation in real-world educational contexts due to institutional constraints. The findings highlight the transformative potential of SRL-based training while emphasizing the need for ongoing mentorship and institutional support. This study contributes to the growing body of research advocating for SRL as a foundational component of teacher education and professional development.

Keywords: Teacher professional development, scenario-based ELT training, self-regulated learning, pre-service EFL teachers, K-12 school contexts.

ÖZ: Bu çalışma, senaryo tabanlı öz düzenlemeli öğrenme (ÖDÖ) eğitiminin hizmet öncesi İngilizce öğretmeni adaylarının öğretim özgüvenlerini ve mesleki gelişimlerini nasıl etkilediğini araştırmaktadır. Niteliksel betimleyici bir tasarım kullanan çalışma, bir *Öğretmenlik Uygulaması* dersine entegre edilmiş sekiz haftalık ÖDÖ eğitimine katılan 23 hizmet öncesi öğretmenin algı ve deneyimlerini ele almaktadır. Yarı yapılandırılmış görüşmelerin, odak gruplarının ve gözlemlerin tematik analizi, ÖDÖ eğitiminin sınıf yönetimi becerilerini, öğretim uyarlanabilirliğini ve yansıtıcı pratiği geliştirdiğini ortaya koymaktadır. Katılımcılar, artan öğretim özgüveni ve teorik bilgiyi pratik sınıf uygulamasıyla birleştirme konusunda daha büyük bir kapasite bildirdiler. Ancak, kurumsal kısıtlamalar nedeniyle ÖDÖ uygulamasının gerçek dünya eğitim bağlamlarında sürdürülebilirliği konusunda endişeler dile getirildi. Bulgular, ÖDÖ tabanlı eğitimin dönüştürücü potansiyelini vurgularken, devam eden mentorluk ve kurumsal desteğe duyulan ihtiyacın altını çizmektedir. Bu çalışma, ÖDÖ'yi öğretmen eğitimi ve mesleki gelişimin temel bir bileşeni olarak savunan büyüyen araştırma literatürüne katkıda bulunmaktadır.

Anahtar kelimeler: Öğretmen mesleki gelişimi, senaryo tabanlı İngilizce Öğretimi (İÖ) eğitimi, öz düzenlemeli öğrenme, hizmet öncesi İngilizce Yabancı Dil (İYDL) öğretmenleri, K-12 okul bağlamları.

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Self-regulated learning (SRL) has emerged as a critical area of focus in educational research, widely regarded as a foundational element for effective teaching and learning. SRL encapsulates the cognitive, metacognitive, and motivational strategies learners use to set goals, monitor progress, and reflect on outcomes, enabling them to take ownership of their learning processes (Schunk & Greene, 2018; Zimmerman, 2001). While much of the existing scholarship has concentrated on the role of SRL in enhancing student achievement and fostering lifelong learning, comparatively less attention has been directed toward its application in teacher professional development (Alvi & Gillies, 2024). This oversight persists despite mounting evidence that SRL is not only essential for learners but also pivotal for teachers aiming to create adaptive, learner-centered environments (Alvi & Gillies, 2024; Kramarski & Michalsky, 2015; Dignath-van Ewijk & van der Werf, 2012).

The integration of SRL strategies into teaching practices has been recognized as transformative, yet many teachers report feeling ill-prepared to model or facilitate these strategies effectively in the classroom (Spruce & Bol, 2015; Cleary, 2018). This disconnect often stems from traditional teacher education programs that emphasize content knowledge over reflective and metacognitive competencies, leaving pre-service teachers under-equipped to foster learner autonomy (Alvi & Gillies, 2024). Furthermore, research underscores the importance of embedding SRL into teacher training as a means of enhancing instructional adaptability and self-efficacy, which are crucial for navigating the complexities of contemporary classrooms (Kramarski & Kohen, 2017; Stronge et al., 2011). However, a significant gap remains in understanding how pre-service teachers perceive and internalize these SRL-focused interventions.

Existing qualitative studies highlight the potential of SRL-based and collaborative models in bridging the gap between theory and practice, offering pre-service teachers opportunities to engage with SRL strategies in authentic, contextually relevant ways (Butler et al., 2004; Perry et al., 2006). These approaches, which integrate guided reflection, practical problem-solving, and peer collaboration, have shown promise in fostering professional growth and instructional resilience (Michalsky & Schechter, 2013; Taranto, 2024). Yet, there is limited exploration of the subjective experiences and perceptions of pre-service teachers participating in such programs, particularly in the domain of English as a Foreign Language (EFL) education, where fostering self-regulation is vital for effective language acquisition (Keller-Schneider, 2021; Latva-aho et al., 2024).

This study addresses this critical gap by exploring the perceptions and experiences of pre-service English language teachers who participated in a scenario-based SRL training program. Through an in-depth qualitative analysis, this research seeks to understand how these experiences shape participants' teaching confidence and readiness to implement SRL strategies in their future classrooms. The findings aim to provide actionable insights for designing more effective teacher education programs, particularly in EFL contexts, and to contribute to the growing recognition of SRL as a cornerstone of transformative teacher training.

Teacher Self-Regulation

Given the dynamic nature of the teaching profession, where instructional practices and educational technologies evolve rapidly, teachers must continuously update their knowledge and skills (Randi et al., 2011). SRL provides teachers with tools to recognize learning opportunities in their everyday professional practices, such as planning lessons or assessing student progress, which can enhance their ability to learn and teach simultaneously (Fullan, 2007; Randi et al., 2011).

Teachers face challenges similar to those of their students, such as balancing cognitive demands, navigating social interactions, and seeking feedback to improve performance (Randi, 2004). SRL equips teachers with strategies to manage these demands effectively, supporting both their professional growth and classroom effectiveness (Alvi & Gillies, 2024; Bembenutty et al., 2024). For instance, fostering self-reflection and motivation through SRL can enhance teachers' resilience and ability to navigate competing priorities, ultimately benefiting their students (Delfino et al., 2010).

If teachers are to succeed in cultivating self-regulated learners, they must first develop SRL competencies themselves (Alvi & Gillies, 2021; Latva-aho et al., 2024). Fortunately, the teaching profession inherently provides opportunities for such development through engagement with meaningful, complex tasks that allow teachers to take ownership of their learning processes (Perry et al., 2008). By integrating SRL principles into teacher training programs, educators can learn to model and implement these strategies effectively. This study explores how pre-service English language teachers perceive and apply scenario-based SRL training in their journey toward professional competence. It focuses on uncovering the nuanced ways in which the training enhances their ability to manage classroom challenges, integrate SRL practices into their pedagogy, and develop adaptive teaching methodologies for diverse learning contexts.

Teachers' Self-Efficacy and Its Connection to SRL

Teachers' self-efficacy reflects their belief in task-specific competencies, such as engaging students, employing effective instructional strategies, and managing classrooms (Tschannen-Moran & Hoy, 2001). These competencies are closely linked to teachers' psychological well-being, with higher levels of well-being enhancing their ability to manage stressors and maintain resilience (Howardson & Behrend, 2015). Importantly, the relationship between self-efficacy and well-being appears to be bidirectional, as higher self-efficacy not only reduces stress but also contributes to greater job satisfaction, commitment, and reduced burnout (Granziera & Perera, 2019).

In the context of SRL, motivation—particularly self-efficacy—plays a pivotal role (Dignath-van Ewijk & van der Werf, 2012). Teachers with strong self-efficacy demonstrate greater confidence in engaging students, even those less motivated, and this belief significantly impacts their teaching practices and student outcomes (Tschannen-Moran & Hoy, 2001).

Research highlights that self-efficacy, much like SRL, can be cultivated through targeted professional development programs. Teachers with higher self-efficacy often display stronger SRL skills, including planning, organization, and adaptability, enabling them to experiment with innovative teaching strategies (Chatzistamatiou et al., 2014;

Tschannen-Moran & Hoy, 2001). Moreover, teachers who actively develop their SRL capabilities are better equipped to promote SRL in their students, bridging the gap between instructional practices and learner autonomy (Howardson & Behrend, 2015; Wu et al., 2025).

Collectively, these findings underscore the importance of fostering teachers' SRL and self-efficacy through professional development. Such efforts not only enhance teachers' instructional effectiveness but also positively influence student learning outcomes, emphasizing the transformative potential of SRL-based interventions in K-12 (primary and secondary schools) education. This study explores these dynamics by focusing on how SRL training influences teachers' self-efficacy and their perceptions of professional growth.

Developing Teachers' Self-Regulated Learning through Training

Research on teachers' SRL beliefs suggest that teacher training programs should prioritize the development of SRL skills among pre- and in-service teachers to foster a more effective K-12 learning environment (Butler et al., 2004; Tillema & Kremer-Hayon, 2002). While various training formats, such as coursework and workshops, can contribute to this goal, ongoing support through instructional coaching is crucial for sustained implementation of SRL strategies (Cleary, 2018). As developing the ability to self-regulate one's learning is a gradual process and takes time, an ongoing relationship with an instructional coach can provide the necessary support to master the skills of implementing effective SRL strategies in the classroom (Moos & Stewart, 2018). This coaching relationship can provide teachers with the necessary guidance and support to develop both the theoretical understanding and practical skills required to effectively incorporate SRL into their instruction (Stronge et al., 2011). By providing opportunities for reflection, feedback, and experimentation, teacher training programs can cultivate a growth mindset and encourage teachers to continuously improve their own practice that could be representative of SRL (Guo et al., 2025; Tillema & Kremer-Hayon, 2002).

Teacher Training Models to Promote SRL

In prior studies, *structured coursework interventions*, *mentoring*, *traditional workshops*, and *instructional coaching* have been identified as essential components of effective teacher training, aligning with the principles of SRL and social cognitive theory (Bandura, 1986; Kramarski & Michalsky, 2015).

Structured Coursework Interventions

Many studies indicate that pre-service teacher education programs can effectively promote SRL development by incorporating structured coursework (Bembenuddy et al., 2015). Previous research has also shown that using planning, monitoring, and reflection logs during pre-service teacher training can enhance their knowledge and implementation of SRL strategies in their future classrooms (Moos & Stewart, 2018). Other research has utilized self- and peer-assessment strategies, such as preliminary self-assessment, project presentations, and peer feedback, to measure changes in teachers' SRL knowledge and skills (Perry, et al., 2008). The results support the idea that teaching SRL strategies to teachers can enhance their own learning and

positively influence their instructional practices (Moos & Stewart, 2018). These findings suggest that SRL can be effectively taught to both students and teachers.

Mentoring

Previous research has also highlighted the role of mentoring in supporting the development of SRL skills (Buzza & Allionette, 2013). Studies on mentoring in SRL have shown that teachers who engage in mentored conversations about SRL develop a deeper understanding of both personal and instructional SRL strategies compared to those who do not receive such mentoring (Perry et al., 2006). These findings align with research on instructional impact cycles and effective pre-service-to-in-service teacher conversations, suggesting that guiding educators in structuring conversations about instructional practices could foster reflective thinking and challenge fixed mindsets (Knight, 2015). When these elements are integrated into teacher training programs, they can significantly enhance teachers' SRL knowledge and skills, leading to improved instructional practices (Bembenutty et al., 2015).

Traditional Workshops

Traditional professional development workshops can provide a valuable foundation for teachers' learning and offer opportunities to acquire new knowledge and skills (Cleary, 2018). However, although they can effectively convey foundational knowledge and skills, they often fall short in fostering the ongoing support and practice necessary for teachers to fully integrate SRL strategies into their classrooms (Wu et al., 2025). To truly empower teachers as self-regulated learners, more sustained and personalized approaches, such as instructional coaching, are essential (Efklides et al., 2017).

Instructional Coaching

Ongoing support from instructional coaches can play a vital role in fostering the development of teachers' SRL skills and promoting the transfer of knowledge into classroom practice (Butler et al., 2004). Effective teacher training programs should incorporate a balanced approach that combines modelling, mentoring, and instructional coaching to support teachers' professional growth (Perry et al., 2006). Furthermore, teachers should be encouraged to engage in SRL strategies, such as goal setting, self-monitoring, and self-evaluation, to enhance their own learning and teaching practices (Kramarski & Michalsky, 2015). An instructional coach can both teach teachers about SRL and guide them in reflecting on their own learning processes, thereby fostering their development as self-regulated learners (Efklides et al., 2017).

Objective of the Present Study

This study seeks to address the gap in research on SRL training for pre-service English language teachers by exploring their perceptions and experiences of scenario-based SRL training. This research is a qualitative follow-up to a prior quasi-experimental study (Yaşar, 2025) that demonstrated the quantitative effectiveness of the same scenario-based SRL training model. In that study, the experimental group, which received the intervention, showed statistically significant improvements in both their self-regulated learning skills and teaching self-efficacy compared to a control group, with large effect sizes confirming the model's impact. Building on these promising

quantitative results, the current study seeks to uncover the qualitative underpinnings of that success. It aims to move beyond what worked to understand how and why the pre-service teachers perceived the training as impactful, thereby providing rich, experiential insights into the model's influence on their teaching confidence and professional development.

While previous studies highlight the positive impacts of SRL training on instructional practices and self-efficacy, little is known about how pre-service teachers experience such training, particularly in terms of its relevance and application to real classroom contexts (Stronge et al., 2011; Taranto, 2024). This research builds on the premise that understanding the subjective experiences of participants can offer deeper insights into the potential of SRL training to foster teacher development and readiness for professional practice. As such, this study seeks to answer the following research question:

RQ: How do pre-service English language teachers perceive the impact of scenario-based SRL training on their teaching confidence and professional development?

Method

Research Design and Participants

The study employed a qualitative descriptive design with thematic analysis (Braun & Clarke, 2006). The participants were pre-service English language teachers enrolled in a *Teaching Practice* course at a Turkish state university during the fall semester of the 2025-2026 academic year. All students in the course (N=84) completed the regular teaching practice requirements. From this cohort, 23 volunteers participated in the eight-week scenario-based SRL training integrated into the course. Nine of these 23 trainees (6 female, 3 male) provided the qualitative data reported here through interviews, focus groups, and observations. These nine participants were in their final year of study (aged 23-26) and had completed all prior methodology courses. During the *Teaching Practice* course, they taught one hour weekly at local K-12 schools (total 10 teaching hours) and engaged in structured observation and reflection tasks. The two-week orientation and eight-week implementation of the SRL training are detailed in the Procedure and Intervention sections below.

As part of the *Teaching Practice* course, the participants were observed twice by their university supervisor, who provided detailed feedback on their teaching performances. These observations and feedback sessions aimed to support the participants in refining their instructional strategies and classroom management skills. In addition to teaching tasks, participants engaged in structured observation activities guided by instructor-prepared questions, as well as reflection exercises designed to deepen their understanding of pedagogical practices. These activities provided a practical foundation for exploring how scenario-based SRL training influenced their teaching readiness and professional development.

Sampling and Data Collection

From the cohort of 84 pre-service teachers, 23 volunteered for the SRL training after purposive sampling (ensuring genuine interest). Of these, nine participants (6

female, 3 male) agreed to take part in the full qualitative data collection, which comprised:

- Semi-structured interviews (individual, via Zoom, lasting 30-45 minutes) conducted immediately after the intervention.
- Focus group interviews (two sessions, each with all 9 participants) held two weeks later in a seminar room, allowing collective reflection.
- Classroom observations (two per participant, at the beginning and end of the semester) conducted by the author during the participants' teaching at K-12 schools, using pre-prepared criteria (Appendix A).

All interviews were recorded, transcribed, and analyzed thematically. Observations were used to triangulate self-reported data. Table 1 summarizes the participant flow and data collection stages.

Table 1

Participant Flow and Data Collection

Stage	Number of Participants
Total pre-service teachers in the <i>Teaching Practice</i> course (initial cohort)	84
Volunteers who received the full SRL training (orientation + 8-week intervention)	23
Core qualitative participants (provided interview, focus group, and observation data)	9

Procedure

The study began with a two-week orientation that introduced SRL concepts and provided basic training through two-hour instructional coaching sessions (twice weekly). This was followed by an eight-week implementation phase integrated into the *Teaching Practice* course. Table 2 summarizes the full timetable.

Table 2

Timetable of the Intervention and Data Collection Procedures (2025-2026, Fall)

Weeks	Implementation & Data Collection
Two weeks (two two-hour sessions per week) (Aug-Sep, 25-5)	Introduction & Orientation
Week 1 (Sep, 8-12)	Implementation
Week 2 (Sep, 15-19)	Implementation
Week 3 (Sep, 22-26)	Implementation & Observations

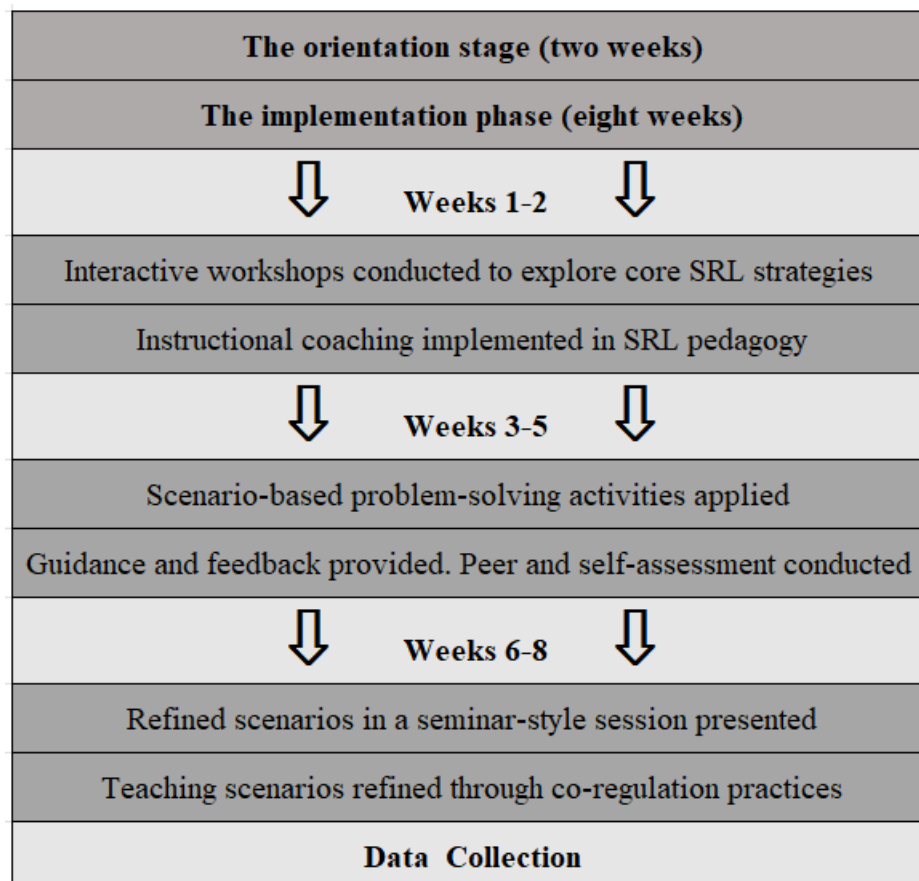
Week 4 (Sep-Oct, 29-3)	Implementation
Week 5 (Oct, 6-10)	Implementation
Week 6 (Oct, 13-17)	Implementation
Week 7 (Oct, 20-24)	Implementation
Week 8 (Oct, 27-31)	Implementation & Observations
Week 9 (Nov, 3-7)	Semi-structured Interviews
Week 10 (Nov, 10-14)	Focus Group Interviews

Intervention

The intervention comprised three phases (see Figure 1 for an overview). During Weeks 1-2, participants attended interactive workshops on foundational SRL strategies (goal setting, monitoring, reflection) and received instructional coaching. In Weeks 3-5, they engaged in scenario-based problem-solving activities, developing their own teaching scenarios (Appendix B) and practicing SRL strategies with peer and self-assessment. The final phase (Weeks 6-8) involved collaborative implementation, seminar-style scenario presentations (Appendix C), and peer review (Appendix D).

Figure 1

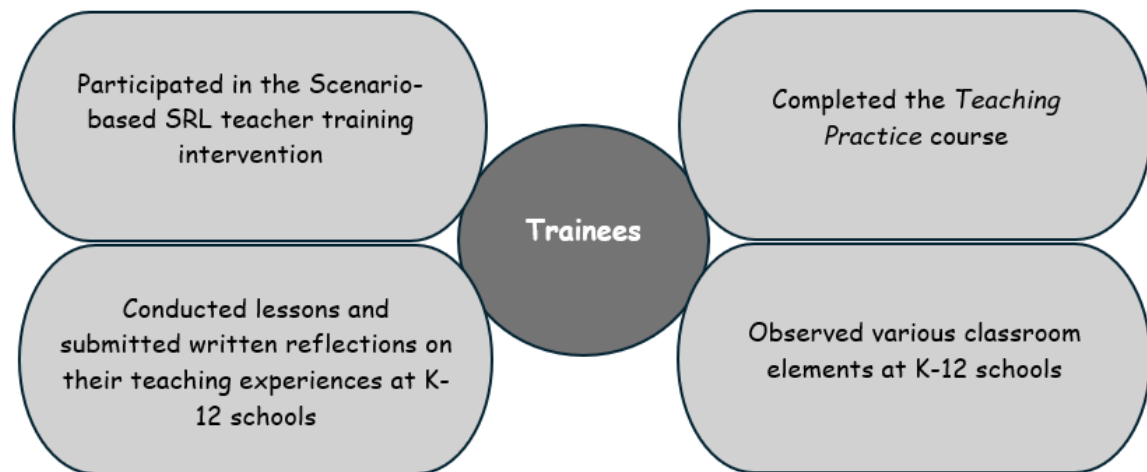
Procedures Followed During the Intervention



Throughout, participants applied the learned strategies during their teaching practice at K-12 schools (Figure 2).

Figure 2

Procedures Followed by the Trainees



The Scenario-based SRL Training

This model emphasizes a multifaceted approach to teacher development, incorporating instructional coaching and mentoring for personalized guidance, scenario-based problem solving for practical application, and co-regulation practices to foster collaborative learning among pre-service teachers. Through a structured yet flexible approach, participants actively develop, implement, and refine SRL strategies. This approach not only enhances the participants' own SRL skills but also equips them with the knowledge and skills to effectively promote these skills in their future students. This model adapted an existing professional development workshop framework (Allshouse, 2016), a SRL guide (Cleary, 2018), and a SRL module (Willems et al., 2015) to create its instructional coaching intervention. All instructional resources were carefully designed to align with the tenets of Zimmerman's (2008) SRL model and its methodological development. This approach provided trainees with a comprehensive framework and equipped them with practical tools and strategies that they could readily apply to implement SRL effectively in their own classrooms.

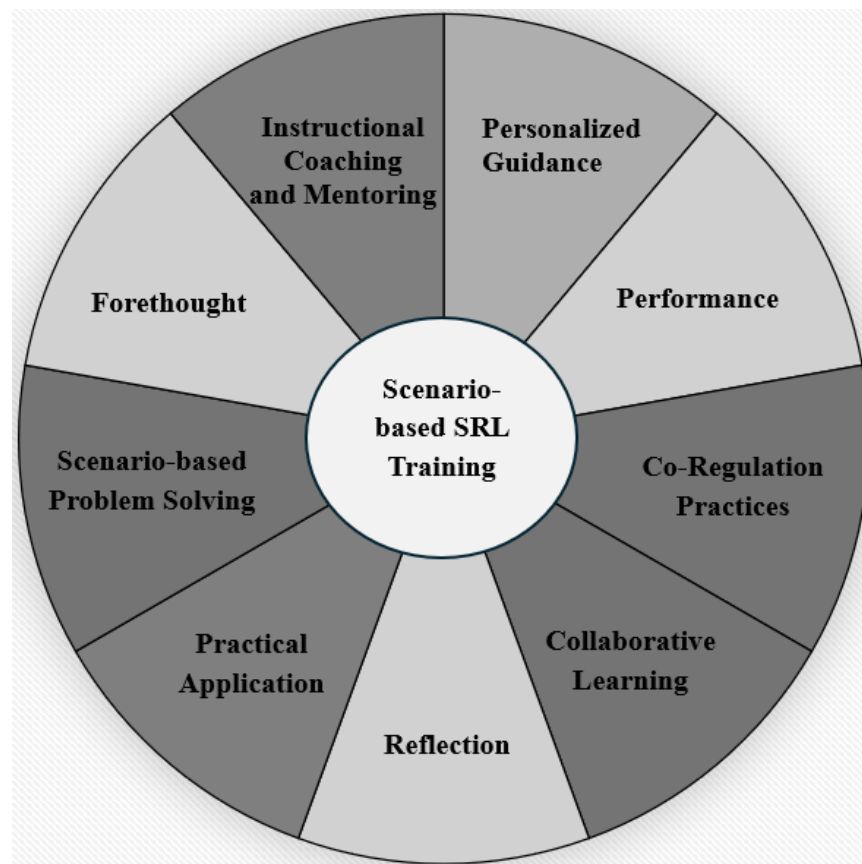
Furthermore, participants were provided with information about a range of different teacher training formats. To guide their understanding, participants were provided with outlines of instructional coaching and mentoring adapted from Allshouse (2016) and Schunk and Mullen (2013) (Appendix E), scenario-based problem solving adapted from Seker (2016) (Appendix F), and co-regulation practices adapted from Saariaho et al., (2016) (Appendix G). To provide a strong theoretical foundation for the training, Zimmerman's (2000) three-phase model of SRL (forethought, performance, and reflection) was explained to the participants. They were also informed about how the various practices within the training program would support their professional growth and development. The forethought phase guided trainees in setting specific learning goals, developing action plans, and motivating themselves. The performance phase encouraged the use of SRL strategies like time management, self-monitoring, and

self-evaluation. The reflection phase prompted trainees to reflect on their learning experiences, assess their performance, and identify areas for improvement, highlighting the importance of self-evaluation and metacognition in the learning process.

The integration of coaching and mentoring practices within the training program provided trainees with individualized guidance and ongoing support. This personalized approach not only boosted their confidence but also enhanced their competence as pre-service teachers. Importantly, applying these strategies during their K-12 teaching experiences enabled trainees to model SRL techniques for their students, thereby demonstrating the practical application of SRL principles and further enhancing their self-efficacy in teaching. By engaging in scenario-based problem-solving activities, trainees were able to address realistic classroom challenges, equipping them with the practical skills necessary to navigate the complexities of teaching. The implementation of co-regulation practices within the training program fostered a collaborative learning environment, promoting mutual accountability and shared reflection among the trainees. These collaborative experiences enhanced their readiness for the complex challenges they would encounter in real-world teaching settings. The scenario-based teacher training model designed to promote SRL is presented in Figure 3 below.

Figure 3

The Pedagogical Model Used for the Scenario-Based SRL Training



Data Analysis

The collected qualitative data were analyzed using thematic analysis to identify recurring patterns and insights into participants' perceptions and experiences with the

scenario-based SRL training. Data from semi-structured interviews, focus group discussions, and classroom observations were transcribed and systematically coded. The analysis followed Braun and Clarke's (2006) six-step thematic approach, applied iteratively across all three data sources as follows:

1. Familiarization: All interview transcripts, focus group recordings, and observation field notes were read and re-read multiple times. Preliminary notes and initial impressions were recorded in a research journal. For example, early reading revealed frequent mentions of “classroom management” and “confidence” across all data sets.
2. Initial coding: The author coded the entire data set line by line using NVivo software. Codes were generated inductively from the data (e.g., “time management struggles”, “use of student names”, “adapting lesson plans”). Each code was tagged with its data source (interview, focus group, observation) to allow cross-source comparison.
3. Identifying themes: Codes were collated into potential themes by grouping related codes. For instance, codes such as “setting expectations”, “giving clear commands”, and “reducing interruptions” were grouped under the candidate theme “classroom management”. This step involved constant comparison between data sources to ensure themes were grounded in multiple types of evidence.
4. Reviewing themes: Candidate themes were reviewed against the coded data and the entire data set. Themes that appeared in at least two data sources (e.g., both interviews and observations) were retained as more robust. Themes with insufficient support (fewer than three participants or only one data source) were either merged or discarded. The theme “scalability concerns”, for example, was retained because it appeared in interviews, focus groups, and observational notes.
5. Defining and naming themes: Each retained theme was refined and given a clear definition. For example, “Navigating Real-Time Classroom Challenges” was defined as “participants’ reported and observed ability to use SRL strategies to manage unexpected classroom events”. Theme names were chosen to reflect participant language where possible (e.g., “I believe in SRL, but will I have the freedom to use it?” informed the sustainability sub-theme).
6. Producing the report: The final themes were written up as the Results section, with each theme supported by illustrative quotes from interviews/focus groups and observational evidence. Member checking was used to verify that the themes accurately represented participants’ experiences.

Integration of Data Sources

Three data collection tools were employed to enable triangulation and to capture a comprehensive picture of participants’ experiences. Semi-structured interviews provided in-depth, individual accounts of perceived changes in teaching confidence and professional development. Focus group interviews encouraged collective reflection and revealed areas of consensus or disagreement among participants. Classroom observations offered direct, real-time evidence of how SRL strategies were applied in authentic teaching contexts, complementing self-reported data.

Integration occurred during the thematic analysis phase. Observational field notes were first coded separately, then compared with codes derived from interview transcripts. Themes that appeared across at least two data sources were retained as more robust. For example, the theme “Navigating Real-Time Classroom Challenges” was supported by both interview statements (e.g., Participant 2) and observational records (R-obs, October 8/November 7, 2025). Where inconsistencies emerged (e.g., a participant claiming high confidence but observations showing hesitation), these were noted and resolved through member-checking. This multi-source integration strengthened the credibility of the findings.

Researcher Positionality and Reflexivity

The author served as both the trainer and the university supervisor, which created a dual role. To mitigate potential bias, multiple data sources (interviews, focus groups, observations) were used for triangulation. Member checks were conducted by sharing preliminary findings with participants to ensure accurate interpretation. Additionally, a reflective journal was kept during the intervention and data analysis to document and critically examine the researcher’s influence on the process.

Ethical Procedures

This research was conducted with the permission obtained from the Bartın University Rectorate Social and Human Sciences Research and Publication Ethics Committee, numbered 17 and dated 10.09.2025, with the decision numbered 2025-SBB-0786 of the evaluation document.

Results

Pre-Service English Language Teachers’ Perceptions of Scenario-Based SRL Training

Type of data is shown by using the following abbreviations. “Int” stands for interviews – i.e. ‘Ss-int’ for semi-structured interviews, ‘Fg-int’ for focus-group interviews, while data from researcher observation notes are presented as ‘R-obs’.

Based on the thematic analysis of participant interviews and observational data, five key themes emerged regarding how scenario-based SRL training influenced pre-service English language teachers’ teaching confidence and professional development. The main themes and sub-themes from the qualitative analysis are shown in Table 3.

Table 3

Emerging Themes and Sub-themes of the Qualitative Findings

(a) Navigating Real-Time Classroom Challenges Through SRL Tools

- Time management and efficiency
- Handling disruptions and hard situations
- Concerns about institutional freedom

(b) From Prescriptive Teaching to Adaptive Practice: The Role of SRL in Shaping Instructional Flexibility

- Moving beyond book-learned instructions
 - Differentiating instruction for diverse learners
 - Integrating technology and student-centered activities
 - Time constraints as a barrier
- (c) Transformative Learning Through Structured Observation and Reflective Feedback
- Learning from mentor teachers' strategies
 - Adopting adaptive techniques (humour, storytelling, feedback)
 - Desire for deeper, collaborative debriefing
- (d) Fostering Student-Centered Engagement Through SRL-Informed Interactions
- Building positive relationships (knowing students' names, etc.)
 - Using personalized rewards, games, and group tasks
 - Scalability concerns in large classes
- (e) Building Professional Identity and Resilience Through Scenario-Based Reflection
- Increased self-confidence and competence
 - Commitment to continuous improvement
 - Remaining unpreparedness for real-world unpredictability

Navigating Real-Time Classroom Challenges through SRL Tools

Participants consistently described how SRL tools helped them move from feeling overwhelmed to managing real-time classroom challenges. Three sub-themes emerged: time management and efficiency, handling disruptions and hard situations, and concerns about institutional freedom. They reported significant improvements in their ability to manage classrooms effectively, attributing this growth to the scenario-based SRL training and practical teaching tasks. The training was particularly influential in helping them transition from theoretical understanding to confident, real-world application. As Participant 2 reflected, "I learned how to use my time efficiently, I know how to handle hard situations... Classroom management skills are something that you improve after numerous tries" (November 3, 2025).

These reported changes were corroborated by classroom observations.

In the early stages, trainees appeared unsure and hesitant when faced with disruptions, often struggling to maintain control. However, as the training progressed, they began employing clearer commands, setting expectations at the start of lessons, and incorporating SRL strategies such as prompting students to set personal goals and reflect on their behaviour. By the final weeks, these strategies resulted in visibly smoother classroom dynamics and a notable reduction in interruptions. (R-obs)

Participant 7 summarized this growth: "The weekly scenario-based activities and teaching practice tasks significantly improved my classroom management skills. Initially, I struggled with maintaining control over noisy or distracted students" (Ss-int, November 13, 2025).

Despite these gains, some participants raised critical concerns about the feasibility of implementing SRL-based classroom management strategies in rigid institutional settings. One participant questioned the structural limitations they might face in the future: "I believe in SRL, but will I have the freedom to use it?" (Participant 5, Fg-int, November 14, 2025). This concern was raised independently by four

participants in the semi-structured interviews and was further discussed in the focus groups, indicating a recurring worry about institutional constraints.

From Prescriptive Teaching to Adaptive Practice: The Role of SRL in Shaping Instructional Flexibility

A noticeable shift from rigid, teacher-centred planning to flexible, adaptive instruction was reported by most participants. Four sub-themes were identified: moving beyond book-learned instructions, differentiating instruction for diverse learners, integrating technology and student-centered activities, and time constraints as a barrier. The scenario-based SRL training encouraged pre-service teachers to move beyond rigid, teacher-centered methodologies and experiment with more flexible, student-centered approaches. Participant 1 shared, “In the beginning, my instructions were more 'book-learned'... I quickly learned that almost every student has different styles of learning, and to accommodate that, I needed to change my tasks and instructions” (Ss-int, November 6, 2025).

Initially, observational data revealed that many trainees adhered closely to their pre-prepared lesson plans and were reluctant to deviate, even when student engagement waned. “Over time, however, they began to demonstrate a greater willingness to modify activities and scaffold content based on student needs. By the final weeks, they were confidently applying differentiated instruction techniques and integrating technology to support diverse learners” (R-obs).

Participant 5 noted, “I learned how to make engaging lesson plans, differentiate instruction to suit various learning styles, and effectively integrate technology” (Ss-int, November 3, 2025). Similarly, Participant 7 described a transition from traditional approaches to interactive learning: “I moved from heavily teacher-centered approaches to integrating more student-centered activities, such as games and interactive tasks” (Ss-int, November 7, 2025).

Despite these advancements, participants acknowledged challenges in sustaining such efforts under real-world constraints. As Participant 3 expressed, “It’s rewarding to see students engaged, but creating these lessons takes a lot of time, and I’m not sure if I’ll have that luxury in a real school setting” (Fg-int, November 14, 2025).

Transformative Learning through Structured Observation and Reflective Feedback

Structured observation tasks were cited as a turning point for understanding how SRL strategies operate in authentic classroom settings. Three sub-themes emerged: learning from mentor teachers’ strategies, adopting adaptive techniques (humour, storytelling, feedback), and a desire for deeper, collaborative debriefing. Observation tasks emerged as a cornerstone of professional development during the training. Through structured observations of mentor teachers and peer sessions, participants gained insight into how SRL strategies could be modelled effectively in authentic classroom environments. This process enhanced their ability to critically analyse teaching methods and adapt them to their own practice. Participant 1 observed, “Observing our mentor teacher was the key... We could see how our mentor teacher used the students’ names, how they approached each student, and how they handled different situations” (Fg-int, November 14, 2025).

Observational data indicated that initially, trainees were hesitant to modify their teaching plans, often sticking rigidly to scripted content. However, as they engaged in observation tasks, they began to adopt more adaptive strategies observed in experienced teachers. “These included using humour, storytelling, and personalized feedback to maintain student interest and manage behaviour. Over time, trainees began reflecting on their own performance, incorporating these techniques into their practice with increasing confidence” (R-obs). This shift is illustrated by Participant 9: “Watching an experienced teacher from the students’ seat allowed me to see which strategies worked and which ones didn’t” (Ss-int, November 6, 2025).

Nonetheless, some participants felt that the observation tasks were overly structured and did not allow for deeper dialogue. “I wish we had more time to discuss our observations with mentors and peers to gain different perspectives,” reflected Participant 8 (Fg-int, November 10, 2025).

Fostering Student-Centered Engagement through SRL-Informed Interactions

Building positive student relationships through SRL-informed interactions was seen as key to increasing engagement. Three sub-themes were identified: building positive relationships (e.g., knowing students’ names), using personalized rewards/games/group tasks, and scalability concerns in large classes. The training emphasized the importance of building positive relationships with students and creating supportive classroom environments to foster engagement. As Participant 1 noted, “Getting to know your students is the key to almost anything you do in the classroom... Knowing their names, how they learn, and their conditions all play a part in my engagement with them” (Ss-int, November 13, 2025).

Initially, classroom observations revealed that trainees struggled to captivate student attention, often relying on teacher-led explanations with limited student interaction. “However, as the training progressed, they began using more student-centered strategies—like personalized rewards, games, and group tasks—that fostered engagement. They also applied SRL principles, such as encouraging goal-setting and reflective thinking, which further enhanced participation and motivation” (R-obs).

Participant 2 described a shift in their approach: “I tried to smile and give them stickers... I assured them that if they make mistakes, it is okay! No one is in trouble just because they made a mistake” (Fg-int, November 10, 2025). Participant 5 echoed this transformation, explaining, “I used fun activities like group discussions, debates, and hands-on projects to keep them interested” (Ss-int, November 4, 2025).

However, concerns about scalability emerged. Participant 6 remarked, “In a small class, it’s easier to build relationships, but I’m not sure how I’ll manage this in a class of 40 students” (Ss-int, November 3, 2025).

Building Professional Identity and Resilience through Scenario-Based Reflection

The scenario-based SRL contributed to a stronger sense of professional identity and resilience, though some uncertainty about real-world unpredictability remained. Three sub-themes emerged: increased self-confidence and competence, commitment to continuous improvement, and remaining unpreparedness for real-world unpredictability. The training had a profound impact on participants’ self-confidence and professional

identity. As they engaged in structured problem-solving and reflective teaching practice, they developed a stronger sense of competence and readiness for classroom challenges. Participant 9 reflected, “I feel like I am much better at class management and instructional strategies... I learned how to develop engaging lesson plans and differentiate instruction to meet the needs of all my students” (Fg-int, November 14, 2025).

This growth was supported by observational data, which showed a shift from cautious, rigid teaching styles to more dynamic and confident instructional delivery. “Trainees who initially relied on traditional, teacher-centered approaches began experimenting with interactive tasks and personalized feedback, demonstrating increased assurance in their teaching choices” (R-obs).

Participant 7 captured this evolution: “After several practice sessions, my confidence grew as I saw tangible improvements in how I managed my class” (Ss-int, November 13, 2025). Likewise, Participant 8 shared, “The scenario-based problem-solving experience has been immensely valuable... It has reinforced my passion for teaching and my commitment to continuous improvement” (Ss-int, November 7, 2025).

Nevertheless, not all participants felt fully equipped to handle the unpredictability of real classrooms. “The training was great, but I still feel unprepared for the unpredictability of real classrooms,” admitted Participant 4 (Fg-int, November 10, 2025).

Discussion and Conclusion

A critical outcome was the reported increase in teaching confidence, with participants describing how SRL strategies helped them manage classroom challenges. This finding not only aligns with previous research (Kramarski & Michalsky, 2015) but also provides a qualitative explanation for the significant gains in self-efficacy quantitatively documented in the previous implementation of this same model (Yaşar, 2025). The themes emerging from this study—such as navigating classroom challenges and building professional identity—directly illustrate the mechanisms behind the earlier measured improvements in the Teacher Sense of Efficacy Scale (TSES) subscales like Instructional Strategies and Classroom Management (Tschannen-Moran & Woolfolk Hoy, 2001).

Consistent with Zimmerman’s (2000) three-phase model of SRL, the training enabled participants to systematically plan, execute, and reflect on their teaching, reinforcing their ability to adapt to dynamic classroom environments. However, while participants reported increased confidence, some expressed concerns regarding the sustainability of SRL implementation beyond the structured training environment. The finding that sustainability concerns were prevalent emerged consistently from interview data and was echoed in observational notes where trainees expressed reluctance to try certain SRL strategies due to perceived school policy limitations. This concern points to a broader tension between innovative, learner-centered approaches and the constraints imposed by standardized curricula and assessment-driven environments.

While SRL supported participants’ classroom management development, its sustainability in traditional contexts remains an open question. This finding aligns with a growing body of recent research indicating that the transition from theoretical

knowledge to practical classroom application remains a persistent challenge for pre-service teachers. Systematic reviews have confirmed that although pre-service teachers often develop theoretical understanding of SRL, they struggle to observe and support it in practice (Latva-aho et al., 2024; Ortube et al., 2024). Similarly, studies show that teachers' professional competencies regarding SRL implementation are often underdeveloped, with many struggling to effectively promote SRL in their classrooms (Alvi & Gillies, 2024; Cleary et al., 2022; Jud et al., 2023; Karlen et al., 2023). The need for ongoing mentoring and institutional support is highlighted by participants who questioned their ability to apply SRL strategies in large, diverse classrooms.

The scenario-based training provided a tangible bridge between theoretical SRL concepts and practical classroom application. Participants described how scenario-based problem-solving enabled them to translate abstract SRL principles into concrete instructional strategies. This is consistent with previous research indicating that experiential learning methods enhance the transfer of theoretical knowledge to practice (Perry et al., 2006). However, some participants found the scenarios artificially structured, raising concerns about whether these experiences accurately reflect the unpredictability of real-world teaching. Observational data corroborated these perceptions, as participants initially adhered rigidly to lesson plans but later demonstrated increased instructional flexibility. This finding supports existing literature that emphasizes the value of scaffolded learning experiences in developing adaptive teaching practices (Michalsky & Schechter, 2013). Nevertheless, the critical insight that 'real classrooms are unpredictable' suggests that short-term training interventions may require reinforcement through longitudinal coaching and reflective practice (Butler et al., 2004; Knight, 2015). Relatedly, participants' concerns about time constraints reflect a broader worry about the feasibility of consistently implementing student-centered approaches in time-pressured and resource-limited school contexts.

Observation and reflective practices emerged as central to participants' professional development. By analysing mentor teachers' instructional strategies, participants were able to identify effective techniques and refine their pedagogical approaches. This aligns with findings from Saariaho et al. (2016), who assert that structured observation fosters reflective thinking and enhances instructional decision-making. Importantly, participants who engaged in collaborative reflection reported deeper insights into SRL implementation, suggesting that peer discourse is a vital component of reflective practice. However, despite these benefits, some participants perceived the observation tasks as overly structured, limiting opportunities for spontaneous, in-depth analysis. This critique resonates with research advocating for more dialogic and collaborative reflection opportunities to foster critical thinking (Alvi & Gillies, 2024). Thus, while observational learning was beneficial in this study, its impact could be enhanced through more collaborative, reflective debriefing sessions. Incorporating more open-ended reflection and peer feedback may further enhance the effectiveness of observation-based learning in teacher preparation programs (Cleary, 2018; Heinz & Swennen, 2025).

A recurring concern among participants was the feasibility of sustaining SRL practices within the constraints of real-world educational systems. Institutional barriers, including rigid curricula and standardized assessments, were cited as potential obstacles to the long-term implementation of SRL strategies. These findings align with prior

research highlighting the tension between innovative pedagogical approaches and systemic constraints (Kramarski & Kohen, 2017). Participants expressed uncertainty regarding whether school policies would allow sufficient flexibility to implement SRL-based approaches effectively. Additionally, the time-intensive nature of designing and delivering SRL-focused lessons was identified as a practical challenge. Participants acknowledged the value of personalized, student-centered instruction but questioned its scalability in high-pressure teaching environments. This highlights a key limitation: while SRL strategies can enhance student engagement, their effectiveness may be challenged by large class sizes and varied student needs. This echoes findings from Cleary (2018), who emphasized the need for institutional support to sustain reflective and differentiated instructional practices over time.

Despite these challenges, a strong consensus emerged regarding the long-term value of integrating SRL into teaching practices. Participants recognized SRL's potential to foster student autonomy and self-efficacy, aligning with research that positions SRL as essential for lifelong learning (Zimmerman, 2008). Many participants expressed a commitment to incorporating SRL strategies in their future classrooms, recognizing their transformative impact on both teacher and student learning outcomes. Nevertheless, sustaining these practices requires ongoing professional development and institutional support. Furthermore, the finding that some participants still felt unprepared underscores the ongoing need for mentorship and practical experience beyond pre-service training to support the transition from confidence-building to classroom resilience. The findings suggest that a comprehensive SRL training model should include post-training mentorship and peer collaboration to reinforce long-term adoption. As previous studies suggest, combining structured training with ongoing reflective practice and professional dialogue is essential for sustaining SRL-driven instructional innovation (Cleary et al., 2022; Guo et al., 2025 ; Wu et al., 2025).

As a result, this study provides valuable insights into the perceptions and experiences of pre-service English language teachers who participated in the scenario-based SRL training program. Together with prior quantitative evidence (Yaşar, 2025), these qualitative findings robustly highlight the transformative potential of SRL training in enhancing teaching confidence, bridging theory and practice, and fostering professional growth. Participants reported significant improvements in their classroom management skills, instructional strategies, and ability to engage students, which contributed to their overall readiness for professional practice. However, the study also identified critical challenges, such as the sustainability of SRL strategies beyond structured training, the scalability of these strategies in diverse classroom contexts, and the potential institutional barriers to their full implementation. These findings underscore the importance of integrating SRL training into teacher education programs and providing ongoing support to pre-service teachers as they transition into real-world teaching environments.

Implications for Teacher Education and Professional Development

The findings of this study have important implications for the design of teacher education and professional development programs. First, the study highlights the need for more comprehensive and sustained SRL training programs that go beyond short-term interventions to provide ongoing support and mentorship for pre-service and in-

service teachers. This could include the integration of SRL principles into teacher education curricula, as well as the provision of instructional coaching and mentoring to support teachers in applying SRL strategies in their classrooms.

Second, the study underscores the importance of experiential and reflective learning in teacher education. Scenario-based learning, observation tasks, and reflective practices should be integrated into teacher training programs to help pre-service teachers bridge the gap between theory and practice and develop the skills and confidence needed for effective teaching. However, these practices should be designed to reflect the complexities of real-world teaching, with opportunities for collaborative reflection and feedback.

Finally, the study highlights the need for systemic changes to support the implementation of SRL strategies in schools. This could include policy changes to promote more flexible curricula and assessment practices, as well as the provision of resources and support for teachers to design and implement student-centered lessons. By addressing these challenges, schools and educational systems can create an environment that supports the development of self-regulated learners and teachers.

Limitations and Recommendations for Future Research

This study on scenario-based SRL training for pre-service English language teachers provides valuable insights, but several limitations warrant further exploration. First, a primary limitation is the reliance on qualitative data from a relatively small sample of 23 participants, with interviews and observations capturing a subset of 9. While these methods offer depth, they limit generalizability. Future research should incorporate mixed-methods approaches, combining quantitative measures such as SRL and self-efficacy scales with qualitative insights to enhance reliability. Second, the single-semester duration may not sufficiently capture the long-term impact of SRL training on teaching practices. Longitudinal studies tracking participants into their early teaching careers would provide a clearer picture of SRL's sustainability and instructional benefits over time. Third, the study also highlighted concerns regarding the applicability of SRL strategies in real-world teaching environments, particularly given institutional constraints such as rigid curricula, large class sizes, and administrative support. Future research should investigate how school policies and professional development frameworks influence the adoption and effectiveness of SRL strategies. Finally, while structured reflection and feedback were included, the role of ongoing mentorship and peer collaboration in reinforcing SRL skills remains underexplored. Examining the impact of instructional coaching, mentorship programs, and collaborative teacher networks could shed light on effective support mechanisms for sustaining SRL competencies beyond training. Addressing these areas in future research would deepen our understanding of SRL's role in teacher education, improving its practical application and long-term benefits for both pre-service and in-service teachers.

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Statement of Responsibility

This study was carried out by a single author.

Conflicts of Interest

The author declares no conflicts of interest.

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References

- Allshouse, A. (2016). *Professional development in self-regulated learning: Effects of a workshop on teacher knowledge, skills, and self-efficacy, and the development of a coaching framework* [Doctoral dissertation]. Rutgers University-Graduate School of Applied and Professional Psychology. Retrieved from <https://www.proquest.com/docview/1847935415?pq-origsite=gscholar&fromopenview=true&sourcetype=Dissertations%20&%20These>
- Alvi, E., & Gillies, R. M. (2021). Promoting self-regulated learning through experiential learning in the early years of school: A qualitative case study. *European Journal of Teacher Education*, 44(2), 135-157. <https://doi.org/10.1080/02619768.2020.1728739>
- Alvi, E., & Gillies, R. M. (2024). Investigating the individual nature of teacher beliefs and practices about self-regulated learning and how this shapes their practices for supporting student learning. *Educational Studies*, 50(4), 516-538. <https://doi.org/10.1080/03055698.2021.1966757>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Bembenutty, H., White, M. C., & Vélez, M. R. (2015). *Developing self-regulation of learning and teaching skills among teacher candidates*. Springer.
- Bembenutty, H., Kitsantas, A., DiBenedetto, M. K., Wigfield, A., Greene, J. A., Usher, E. L., Bong, M., Cleary, T. J., Panadero, E., Mullen, C. A., & Chen, P. P. (2024). Harnessing motivation, self-efficacy, and self-regulation: Dale H. Schunk's enduring influence. *Educational Psychology Review*, 36(4), 1-28. <https://doi.org/10.1007/s10648-024-09969-9>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

- 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), 435-455. <https://doi.org/10.1016/j.tate.2004.04.003>
- Buzza, D., & Allinotte, T. (2013). Pre-service teachers' self-regulated learning and their developing concepts of SRL. *Brock Education Journal*, 23(1). <https://doi.org/10.26522/brocked.v23i1.353>
- 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, 295-310. <https://doi.org/10.1007/s10212-013-0199-9>
- Cleary, T. J. (2018). *The self-regulated learning guide: Teaching students to think in the language of strategies*. Routledge.
- Cleary, T. J., Kitsantas, A., Peters-Burton, E., Lui, A., McLeod, K., Slemp, J., & Zhang, X. (2022). Professional development in self-regulated learning: Shifts and variations in teacher outcomes and approaches to implementation. *Teaching and Teacher Education*, 111, 103619. <https://doi.org/10.1016/j.tate.2021.103619>
- Delfino, M., Dettori, G., & Persico, D. (2010). An online course fostering self-regulation of trainee teachers. *Psicothema*, 22(2), 299-305. Retrieved from <https://reunido.uniovi.es/index.php/PST/article/view/8905>
- Dignath-van Ewijk, C., & Van der Werf, G. (2012). What teachers think about self-regulated learning: Investigating teacher beliefs and teacher behaviour of enhancing students' self-regulation. *Education Research International*, 2012(1), 741713. <https://doi.org/10.1155/2012/741713>
- Efkliides, A., Schwartz, B. L., & Brown, V. (2017). Motivation and affect in self-regulated learning: does metacognition play a role? In D. H. Schunk & J. A. Greene (Eds.), *Handbook of self-regulation of learning and performance* (pp. 64-82). Routledge.
- Fullan, M. (2007). *The new meaning of educational change*. Teachers College Press.
- Granziera, H., & Perera, H. N. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Contemporary Educational Psychology*, 58(4), 75-84. <https://doi.org/10.1016/j.cedpsych.2019.02.003>
- Guo, C., Chen, X., & Chen, J. (2025). Enhancing prospective teachers' professional development through shared collaborative lesson planning. *Behavioral Sciences*, 15(6), 753. <https://doi.org/10.3390/bs15060753>
- Heinz, M., & Swennen, A. (2025). Cultivating scholarly excellence and growth: the value and impact of peer review. *European Journal of Teacher Education*, 48(2), 201–207. <https://doi.org/10.1080/02619768.2025.2481677>
- Howardson, G. N., & Behrend, T. S. (2015). The relative importance of specific self-efficacy sources in pretraining self-efficacy beliefs. *International Journal of Training and Development*, 19(4), 233-252. <https://doi.org/10.1111/ijtd.12060>
- Jud, J., Hirt, C. N., Rosenthal, A., & Karlen, Y. (2023). Teachers' motivation: Exploring the success expectancies, values and costs of the promotion of self-

- regulated learning. *Teaching and Teacher Education*, 127, 104093. <https://doi.org/10.1016/j.tate.2023.104093>
- Karlen, Y., Hirt, C. N., Jud, J., Rosenthal, A., & Eberli, T. D. (2023). Teachers as learners and agents of self-regulated learning: The importance of different teachers competence aspects for promoting metacognition. *Teaching and Teacher Education*, 125, 104055. <https://doi.org/10.1016/j.tate.2023.104055>
- Keller-Schneider, M. (2021). Challenge-appraisal profiles of beginning teachers and inter-profile differences in self-efficacy, self-regulation, and emotions. *European Journal of Teacher Education*, 47(1), 81–103. <https://doi.org/10.1080/02619768.2021.1971647>
- Knight, J. (2015). *Better conversations: Coaching ourselves and each other to be more credible, caring, and connected*. Corwin Press.
- Kramarski, B., & Michalsky, T. (2015). Effect of a TPACK-SRL model on teachers' pedagogical beliefs, self-efficacy, and technology-based lesson design. In C. Angeli, & N. Valanides (Eds.), *Technological pedagogical content knowledge: Exploring, developing, and assessing TPACK* (pp. 89-112). Springer. https://doi.org/10.1007/978-1-4899-8080-9_5
- Kramarski, B., & Kohen, Z. (2017). Promoting preservice teachers' dual self-regulation roles as learners and as teachers: Effects of generic vs. specific prompts. *Metacognition and Learning*, 12, 157-191. <https://doi.org/10.1007/s11409-016-9164-8>
- Latva-aho, J., Näykki, P., Pyykkönen, S., Laitinen-Väänänen, S., Hirsto, L., & Veermans, M. (2024). Pre-service teachers' ways of understanding, observing, and supporting self-regulated learning. *Teaching and Teacher Education*, 149, 104719. <https://doi.org/10.1016/j.tate.2024.104719>
- Michalsky, T., & Schechter, C. (2013). Preservice teachers' capacity to teach self-regulated learning: Integrating learning from problems and learning from successes. *Teaching and Teacher Education*, 30, 60-73. <https://doi.org/10.1016/j.tate.2012.10.009>
- Moos, D.C., Stewart, C.A. (2018). Technology uses in instruction. In M. DiBenedetto (Ed.), *Connecting self-regulated learning and performance with instruction across high school content areas* (pp. 417-440). Springer. https://doi.org/10.1007/978-3-319-90928-8_14
- Ortubé, A. F., Panadero, E., & Dignath, C. (2024). Self-regulated learning interventions for pre-service teachers: A systematic review. *Educational Psychology Review*, 36(4), 113. <https://doi.org/10.1007/s10648-024-09919-5>
- Perry, N. E., Phillips, L., & Hutchinson, L. (2006). Mentoring student teachers to support self-regulated learning. *The Elementary School Journal*, 106(3), 237-254. <https://doi.org/10.1086/501485>
- 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. <https://doi.org/10.1016/j.ijer.2007.11.010>

- Randi, J. (2004). Teachers as self-regulated learners. *Teacher College Record*, 106(9), 1825-1853. <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*, 2011(126), 89-98. <https://doi.org/10.1002/tl.447>
- Saariaho, E., Pyhältö, K., Toom, A., Pietarinen, J., & Soini, T. (2016). Student teachers' self-and co-regulation of learning during teacher education. *Learning: Research and Practice*, 2(1), 44-63. <https://doi.org/10.1080/23735082.2015.1081395>
- Schunk, D. H., & Mullen, C. A. (2013). Toward a conceptual model of mentoring research: Integration with self-regulated learning. *Educational Psychology Review*, 25(3), 361-389. <https://doi.org/10.1007/s10648-013-9233-3>
- Schunk, D. H., & Greene, J. A. (2018). *Handbook of self-regulation of learning and performance*. Routledge.
- Seker, M. (2016). Scenario-based instruction design as a tool to promote self-regulated language learning strategies. *SAGE Open*, 6(4), 1-11. <https://doi.org/10.1177/2158244016684175>
- Spruce, R., & Bol, L. (2015). Teacher beliefs, knowledge, and practice of self-regulated learning. *Metacognition and Learning*, 10, 245-277. <https://doi.org/10.1007/s11409-014-9124-0>
- Stronge, J. H., Ward, T. J., & Grant, L. W. (2011). What makes good teachers good? A cross-case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education*, 62(4), 339-355. <https://doi.org/10.1177/0022487111404241>
- Taranto, D. (2024). A sustainable approach to teacher professional development on Self-Regulated Learning (SRL) implementation. *Discourse and Communication for Sustainable Education*, 15(1), 109-126. <https://doi.org/10.2478/dcse-2024-0008>
- Tillema, H. H., & Kremer-Hayon, L. (2002). "Practising what we preach"—teacher educators' dilemmas in promoting self-regulated learning: a cross-case comparison. *Teaching and Teacher Education*, 18(5), 593-607. [https://doi.org/10.1016/S0742-051X\(02\)00018-5](https://doi.org/10.1016/S0742-051X(02)00018-5)
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Willems, C., Toshalis, E., & Baker-Wright, T. (2015). *Students at the centre. Regulation professional development module*. Retrieved December 8, 2024, from <https://studentsatthecenterhub.org/resource/self-regulation-professional-%20development-module/>
- Wu, L., Qiu, C. A., & Ling, B. (2025). Collaborative emotion regulation and professional development of student language teachers in online teaching: A community of practice perspective. *Teaching and Teacher Education*, 158, 104969. <https://doi.org/10.1016/j.tate.2025.104969>
- Yaşar, M. Ö. (2025). Empowering pre-service english language teachers: The impact of scenario-based SRL training on self-regulated learning and teaching self-

efficacy. *Journal of Language Research*, 9(1), 154-179.
<https://doi.org/10.51726/jlr.1663142>

Zimmerman, B. J. (2000). Attaining self-regulation: A social-cognitive perspective. In M. Boekaerts, P. Pintrich, & M. Seidner (Eds.), *Self-regulation: Theory, research, and applications* (pp. 13-39). Orlando, FL: Academic Press.

Zimmerman, B. J. (2001). Theories of self-regulated learning and academic achievement: An overview and analysis. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed., pp. 1-38). Erlbaum.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166-183.
<https://doi.org/10.3102/0002831207312909>

Appendices

Appendix A

Observation Criteria for the Teaching Practice Course

The following criteria were used to guide observations during the Teaching Practice course to assess participants' engagement with SRL strategies and teaching effectiveness:

1. **Classroom Management:**

- Ability to establish and maintain a positive and orderly classroom environment.
- Use of strategies to handle disruptions effectively and maintain student focus.
- Establishment of clear rules, routines, and expectations.

2. **Instructional Strategies:**

- Application of diverse teaching methods to address various learning styles.
- Use of scenario-based problem-solving activities to engage students.
- Integration of technology and instructional [aids](#) to enhance learning.

3. **Student Engagement:**

- Ability to motivate and involve students in classroom activities.
- Encouragement of active participation, group discussions, and peer collaboration.
- Provision of constructive feedback to promote student growth.

4. **Implementation of SRL Strategies:**

- Evidence of goal setting and task planning in lesson delivery.
- Use of environmental structuring techniques to support learning.
- Encouragement of students' self-evaluation and reflective practices.

5. **Professional Behaviour:**

- Punctuality and preparedness for teaching sessions.
- Responsiveness to feedback from supervisors and mentor teachers.
- Maintenance of professional relationships with students, peers, and mentors.

6. **Adaptability and Development:**

- Ability to adjust lesson plans based on classroom dynamics or feedback.
- Demonstration of growth between the first and second observation sessions.
- Reflection on teaching practices to identify areas for improvement.

Appendix B

Scenario-based Problem-solving Activities to Apply SRL Strategies (Random selection)

Trainees	Scenarios & Context (e.g. population, setting, age groups etc)	Problems	Goals	*Mostly used SRL Strategies
Trainee 3	The story is about 4 students who try to discover their talents especially in group work by using techniques such as help seeking, time management and self-managing.	The students can't work in group they are problematic students.	- They must do some group work and learn how to act and fit in society. - They are supposed to design a poster about charity campaign.	- Help seeking - Collaborative work - Time management - Self-judging
Trainee 5	The story is about four journalists named Ethan, Olivia, Joe and Naomi. They go to an old, abandoned hospital. There is no trace of the hospital's former patients. This mysterious disappearance caused concern among the public. Their goal is to research the hospital's records and find out what happened to them. However, they come across some problems.	- They get stuck in archive room after the door get locked for an unknown reason. - They need to be quick in order not to get stuck in the room again. They also have to take all information with them.	- Getting out of the room and taking the information, they collected on time. - Finding the reason why the door got closed. - Finding the password. - Trying to use time effectively. - Trying to finish task on time.	-Analysing the problem -Planning and goal setting -Time management -Collaboration
Trainee 6	The story is about a friend group who is studying for the university exam. They all have some different problems in self-regulation and through the power of friendship they solve their own individual problems.	- Being distracted by the surroundings and not having a proper study plan. - Being too self-critical and not seeking help. - Being too relaxed not doing any self-evaluation and not correcting mistakes.	- Becoming more self-regulated and succeed in the exam thanks to the self-regulation methods. - Trying to become more self-regulated. - Getting help from friends.	- Help-seeking - Goal setting - Environmental structuring - Self-evaluation
Trainee 9	The story is about a world where creativity is banned. Any form of music, art and science has been banned by government. In this society, three rebellion individuals live. With different passions, character traits and problems, they try to pursue their dreams in such society while trying to solve their issues.	The main problem is the society and the bans. The characters are very passionate about what they do and they're trying to find a way to feed society with forms of art no matter the risk.	- Keeping art alive in a community that wants it gone. - Also, each character's goal changes with the problems they face, such as trying to face procrastination, perfectionism, overthinking etc.	- Goal Setting - Self-Reflection
Trainee 15	The story is set in a post-war world where a group of students must rebuild their education after the destruction of their library and community. They face limited resources, psychological scars, and the challenge of preserving their cultural identity.	Physical Ruin: Lack of infrastructure, resources, and tools to learn. Psychological Scars: Loss of motivation and hope due to trauma. Social Divide: Fractured relationships and lack of trust among students. Cultural Crisis: The risk of losing their cultural heritage without a way to preserve it.	- Rebuilding the library as a physical and symbolic space for education. - Restoring motivation and creating a sustainable learning environment. - Rebuilding trust and fostering collaboration among students. - Preserving cultural knowledge and history for future generations.	The project emphasizes these SRL strategies: - Goal Setting - Self-Monitoring - Self-Reflection - Seeking Help
Trainee 16	Three friends get lost in a forest and they try to get back to safety as a team while solving the problems they face during their journey.	Losing their map and getting lost in a place they don't know anything about.	Getting back to safety as a team, choosing the most logical options, crossing a blocked bridge, and mapping the area.	Goal setting, self-talk, self-judgement, help seeking, peer support, self-monitoring, time management

Appendix C

Scenario Presentations in a Seminar Style Session



Appendix D

Teaching Scenarios in a Collaborative Learning Environment



Appendix E

The Outline for Instructional Coaching and Mentoring

Activity	Description	Objective
1. Initial Goal-Setting Conferences	At the start of the intervention, the trainer conducts one-on-one meetings with participants.	Help participants articulate their professional goals and identify areas where they want to improve their understanding or application of SRL strategies.
2. Ongoing Observation and Feedback	The trainer observes participants' presentations or teaching practice (real or simulated) and provides narrative feedback aligned with SRL strategies.	Offer specific, actionable advice to improve participants' implementation of SRL in teaching contexts.
3. Self-Monitoring and Reflection Discussions	The trainer <u>mentors</u> participants in analysing their learning process during bi-weekly check-ins.	Encourage participants to recognize their strengths, challenges, and how they adapt their strategies.
4. Role-Modelling SRL Strategies	The trainer models effective SRL strategies during workshops or meetings to demonstrate practical applications.	Show participants how SRL can be implemented in real-world teaching scenarios.
5. Tailored Problem-Solving Guidance	The trainer works with participants individually to tackle specific challenges in designing or implementing SRL strategies.	Provide personalized support for unique instructional contexts or difficulties.
6. Reflection after Collaborative Activities	After group activities or presentations, the trainer meets individually with participants to discuss their contributions, challenges, and takeaways.	Help participants internalize feedback and refine their SRL strategies.

Adapted from Allshouse (2016) and Schunk and Mullen (2013)

Appendix F

The Outline for Scenario-based Problem Solving

Activity	Scenario/Objective	Example
1. Designing Lessons for Unmotivated Learners	S: Participants are tasked with creating a lesson plan for a group of students who exhibit low motivation to complete tasks. O: Apply SRL strategies such as <u>goal-setting</u> , self-monitoring, and reflective practices to enhance student engagement.	Participants develop a plan incorporating: Goal Setting: Asking students to set daily learning goals and break them into smaller tasks. Self-Monitoring: Including progress tracking charts for students to check off completed steps. Reflection: Using guided reflection questions like, "What helped me stay on task today?"
2. Managing Disruptive Classroom Behaviour	S: Participants are presented with a classroom scenario where a few students frequently interrupt during lessons, causing a lack of focus for others. O: Identify and implement SRL-based strategies to manage behaviour and create a conducive learning environment.	Participants create strategies such as: Setting clear classroom behaviour goals collaboratively with students. Using self-monitoring tools, like behaviour charts, to track adherence to rules. Facilitating group reflections on how behaviour impacts learning and ways to improve.
3. Addressing Language Barriers in ELT	S: A group of students in an EFL class struggles with comprehension due to language barriers. Participants are asked to create an intervention to support their learning. O: Develop SRL-aligned strategies that help students manage their learning process.	Participants design: Bilingual vocabulary journals for self-monitoring progress in word acquisition. Structured peer support sessions where students discuss their learning challenges and strategies.
4. Differentiating Instruction for Mixed-Ability Groups	S: Participants must develop a lesson plan for a mixed-ability classroom where students have varying levels of English proficiency. O: Encourage participants to use SRL to create flexible and adaptive teaching strategies.	The solution includes: Grouping students by ability and setting group-specific goals. Providing scaffolding tools like step-by-step guides for lower-proficiency students and open-ended tasks for advanced learners.
5. Overcoming Assessment Anxiety	S: Participants are tasked with helping students who feel overwhelmed by formal assessments like exams or quizzes. O: Design SRL-based strategies to reduce anxiety and improve performance.	Participants propose: Pre-assessment goal-setting activities (e.g., setting a goal to review one topic per day leading up to the test). Stress management strategies like mindfulness exercises or positive self-talk incorporated into the preparation process.

Adapted from Seker (2016)

Appendix G

The Outline for Co-regulation Practices

Description	Activity/Objective	Example
1. Group <u>Goal-Setting</u> and Planning	A: Participants work in small groups to design a lesson plan or solve a teaching-related problem, such as creating differentiated activities for students with varied English proficiency. O: Encourage co-regulated <u>goal-setting</u> , planning, and task delegation.	The group sets shared goals (e.g., "Complete the lesson plan draft by Wednesday"). They use collaborative tools like checklists to allocate specific tasks (e.g., one person focuses on materials, another on assessments). Each group member identifies personal sub-goals and monitors their contributions to the shared objective.
2. Real-Time Collaborative Problem Solving	A: Groups are given a classroom scenario (e.g., addressing low participation in a hybrid learning environment) and must develop a collaborative solution during a workshop. O: Use co-regulation to foster collective monitoring, strategizing, and reflecting.	Group members brainstorm solutions together, discussing their thought processes aloud to co-regulate their planning. As the discussion progresses, participants periodically evaluate their ideas' feasibility using prompts like: "Does this solution align with the students' needs?"
3. Peer Feedback Sessions	A: Groups present their projects or teaching plans to their peers and receive structured feedback. O: Foster co-regulation by using peer evaluation to refine work collaboratively.	During feedback sessions, participants identify strengths and areas for improvement in others' work using a rubric focused on SRL elements like <u>goal-setting</u> , adaptability, and self-monitoring.
4. Structured Peer Teaching Activities	A: Groups take turns teaching their peers about specific SRL concepts (e.g., <u>goal-setting</u> , self-monitoring) while others act as learners. O: Foster co-regulation through collaborative teaching and learning.	A group teaches " <u>goal-setting</u> " by creating a mini-lesson, including activities where peers set their own goals. The teaching group reflects on how effectively they worked together to design and deliver the session.

Adapted from Saariaho et al. (2016)



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