Merging Self-Regulatory Strategies with GTA Pedagogical Practices: Enhancing Student Autonomy and Engagement

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Abstract

Graduate Teaching Assistants (GTAs) play a dual role in higher education, balancing their research responsibilities with teaching duties. This dual identity provides a unique vantage point for GTAs to implement innovative teaching practices that encourage students to utilize self-regulated learning (SRL) strategies. This paper explores how GTAs can adopt teaching practices centered on promoting SRL among students. Drawing on data from focus groups and surveys conducted with five GTAs, the study identifies key techniques—such as reflective journals, peer assessments, and technology-enhanced learning tools—that GTAs can incorporate into their teaching. The intervention was conducted over one semester in an English proficiency course tailored for students with low English proficiency. Findings indicate that these strategies not only enhance student engagement and motivation but also improve critical thinking and problem-solving skills. The paper underscores the positive impact of SRL on student learning outcomes and discusses how GTAs can effectively integrate and promote these strategies in their pedagogical practices.

Keywords: GTAs, self-regulation, student autonomy, engagement, motivation.

GTAs Navigating Dual Roles

'Our GTAs filled several roles in this course: each taught at least one workshop session and assisted in our computer labs. Thus they experienced teaching in two distinct environments. The GTAs were expected to attend all lectures, participate in several labs each week, conduct one or two workshops, and hold regular office hours. They also monitored and graded tests.'

(Richards, 2000, p. 14)

Graduate Teaching Assistants (GTAs) play a crucial role in higher education. Their position involves several responsibilities (as evident from the above quote) that they need to fulfill as teaching assistants apart from their own research which in itself is highly demanding as it involves continuous learning, deep engagement with the field of study, and the generation of new knowledge. Reflecting on my own experience as a postgraduate teaching assistant, I manage a range of responsibilities, including planning lessons, conducting tutorials and discussion sessions, designing and grading assignments, and offering support and feedback to my learners besides my own research commitments. Juggling the dual role of an educator and researcher can be challenging and overwhelming as it demands creating a fine balance between teaching responsibilities and advancing one's own research.

Initially, time management was a significant challenge for me. However, early in my teaching assistantship, I realized the importance of effective time management and organizational skills. Implementing innovative teaching practices was key to maximizing my efficiency and effectiveness in the classroom. It was during this period that my research on self-regulated learners, combined with my reading of Teng's (2022) book *Self-regulated Learning and Second Language Writing: Fostering Strategic Language Learners*, profoundly influenced my approach. Teng emphasizes that a key educational objective is to teach students to become self-regulated learners—individuals who manage their own learning by employing various self-regulated learning (SRL) strategies in the process of acquiring knowledge (Zimmerman, 2002). This insight

significantly informed my teaching methods, leading to more effective and autonomous student learning.

The integration of self-regulatory strategies into teaching practices offers a promising avenue for enhancing student engagement and autonomy. This approach not only addresses the diverse needs of students but also complements the demanding schedules of GTAs. By fostering self-regulation, GTAs can create a learning environment where students are empowered to take charge of their own educational journeys. This can lead to improved academic outcomes (Lavasani, Mirhosseini, Hejazi, & Davoodi, 2011), increased motivation, and student engagement (Mmassy, 2024).

The concept of self-regulation can be seamlessly integrated into various pedagogical approaches, benefiting both students and GTAs. Reflective journals, for example, encourage students to engage in metacognition and self-assessment, while peer assessments promote collaborative learning and critical thinking. Technology-enhanced learning tools offer innovative ways for students to track their progress and receive real-time feedback. Similarly, encouraging students to use reflective journals and peer assessment practices reduces the frequency and intensity of individual feedback sessions, as students learn to self-assess and monitor their own progress. Moreover, utilising technology-enhanced tools, such as learning management systems (LMS) and educational apps, helps GTAs streamline administrative tasks like tracking the progress of students.

Within this context, this paper will explore how GTAs can effectively promote SRL strategies in their pedagogical practices. It will examine the specific techniques employed, review relevant literature on SRL, and discuss the implications for student learning outcomes based on the findings from focus groups and surveys. Through this exploration, the aim is to provide practical insights and recommendations for GTAs seeking to enhance their teaching effectiveness and support the development of self-regulated learners in higher education.

The GTA Workload and the Need for Self-Regulatory Strategies

GTAs occupy a unique and often challenging position within academia. In this regard, Bahmani and Hjelsvold (2019) emphasized the dual identities of Teaching Assistants (TAs) as both students and teachers. Their study highlighted that this dual role often results in ambiguity and strain. TAs frequently face challenges in balancing their responsibilities, such as completing their own coursework and research while fulfilling their teaching duties. This dual burden can lead to conflicting priorities and increased stress, ultimately affecting their performance in both capacities.

Moreover, the mental health of postgraduate students, especially those who work alongside their studies as teaching assistants, has been increasingly scrutinized. For instance, Mounsey et al. (2013) in their study emphasized that students often suffer from depression, burnout, and acute anxiety. This is compounded by the significant pressure to balance their academic responsibilities with work commitments. The high levels of stress associated with these dual roles can have detrimental effects on their mental health and overall well-being.

Furthermore, in a study conducted in Australia, Devlin et al. (2008) found that the demands of work as teaching assistants significantly impact the academic engagement of postgraduate students. Many working postgraduates struggle to attend classes regularly and become disengaged from university resources and activities that could enhance their academic success. This disengagement not only affects their learning experience but also limits their access to vital support systems within the university.

Hovdhaugen (2015) further explored the impact of these stressors on postgraduate students' academic performance. The study revealed that the negative effects of stress, such as depression and anxiety, can lead to poor academic outcomes. In some cases, the strain becomes so overwhelming that students ultimately drop out of formal education. This dropout phenomenon highlights the urgent need for institutions to address the challenges faced by working postgraduates.

Despite the extensive research on the challenges faced by GTAs, there remains a significant gap in the literature regarding solutions that address these dual roles' inherent stress and workload. While studies like those by Bahmani and Hjelsvold

(2019), Mounsey et al. (2013), Devlin et al. (2008), and Hovdhaugen (2015) have detailed the mental health issues, academic disengagement, and overall strain experienced by GTAs, none have explored the potential of integrating self-regulatory strategies into their teaching practices. The current body of research lacks a comprehensive examination of how self-regulation can empower GTAs to manage their dual responsibilities more effectively and foster a more autonomous and motivated student body. This study aims to fill this gap by investigating how reflective journals, peer assessments, and technology-enhanced tools can be used to incorporate selfregulatory strategies into GTA teaching methods, thereby addressing their unique challenges and enhancing both GTA and student outcomes.

Self-Regulatory Strategies: An Overview

Self-regulated learning (SRL) involves a range of skills and processes that enable learners to manage their own learning effectively. According to Zimmerman's (2002) cyclical model of SRL (see Figure 1), learners move through three interconnected phases: Forethought, Performance, and Self-Reflection. These phases guide the learning process and are critical to improving academic outcomes. Importantly, collaborative learning is also intertwined with SRL, as it provides opportunities for students to engage with peers, share knowledge, and enhance their self-regulation skills (Järvelä & Hadwin, 2013).

In the Forethought Phase, learners set specific proximal goals, creating clear, achievable objectives that align closely with their current abilities and immediate tasks. This phase also involves strategic planning, where learners adopt targeted study methods or problem-solving techniques tailored to achieving these goals. Collaborative learning during this phase can enhance goal setting and strategic planning, as students work together to clarify objectives and share effective strategies. Successful collaboration requires each group member to take responsibility for their own self-regulated learning while also supporting fellow group members in regulating their learning (co-regulated learning). This planning stage is key to keeping learners

motivated, particularly through self-efficacy, where learners believe in their capacity to succeed.

In the Performance Phase, learners apply the strategies they developed during the Forethought Phase. They engage in self-control techniques, such as focusing attention or using time management strategies to maintain progress. Simultaneously, learners may engage in collaborative activities, allowing them to monitor their performance through peer interactions. Self-monitoring includes assessing their performance and identifying areas needing improvement, often facilitated by feedback from peers. This collaborative environment can enhance self-regulation, as group members provide support and accountability to one another. Learners may also restructure their context by adjusting physical and social environments—such as creating a conducive study space or collaborating with peers—to further support goal attainment.

After completing the task, learners move into the Self-Reflection Phase. Here, they engage in self-evaluation, critically assessing the effectiveness of their strategies and learning methods. Collaboration can also play a role in this phase, as discussing their experiences with peers can provide valuable insights. Learners attribute causation, reflecting on reasons for their successes or failures, which shapes their future learning strategies and influences their self-belief. Successful collaboration continues in this phase, with the group coming together to collectively regulate their learning processes in a synchronized and productive manner (shared regulation of learning). Finally, learners adapt future methods, modifying their strategies and approaches based on these evaluations to improve their overall learning outcomes. These interconnected skills form the core of self-regulation, empowering learners to take control of their educational journey and continuously refine their approach to learning.



Figure 1: Adapted from Zimmerman's (2002) Cyclical Model of SRL

The impact of self-regulatory strategies has been recognized across various academic disciplines. Research consistently shows that students who implement SRL strategies achieve higher academic success. Pedrosa et al. (2017) demonstrated that students who employed SRL strategies, such as organization, planning, and time management, were able to overcome difficulties in programming tasks more effectively. These strategies helped them structure their approach to solving complex problems, which is essential in courses like programming where challenges are often multifaceted. Similarly, Lin et al. (2022) highlighted the benefits of self-regulatory strategies in higher education, particularly in the transition period from secondary school to university. The study emphasizes that students who adopt self-regulatory strategies, such as goal-setting, planning, and self-monitoring, perform better academically than those who struggle with regulation. Self-efficacy and self-regulation strategies positively predicted students' GPAs, showing that self-regulation fosters better academic results.

Main Study

Implemented Intervention: Integrating Self-Regulatory Strategies in GTA-Led English Proficiency Courses

The intervention aimed to enhance student autonomy, engagement, and academic performance in English proficiency courses taught by Graduate Teaching Assistants (GTAs) for students with low proficiency levels. Over the course of one semester, five GTAs participated in this initiative, focusing on integrating self-regulatory learning (SRL) strategies into their pedagogical practices.

Preparation Phase

Prior to the implementation, I conducted a preparatory phase where I provided the GTAs with training on self-regulatory learning strategies, emphasizing the importance of fostering student autonomy and engagement. This included a review of the relevant literature on SRL, including Zimmerman's (2002) cyclical model and practical examples of how to integrate SRL strategies in the classroom. The training sessions covered:

- **Reflective Journals**: Techniques for encouraging students to document their learning experiences, set personal goals, and self-assess their progress.
- **Peer Assessments**: Methods for structuring peer feedback sessions, where students could provide and receive constructive critiques on their work, thereby promoting co-regulation and collaborative learning.
- **Technology-Enhanced Learning Tools**: Introduction to various platforms and apps that could aid students in tracking their learning progress and facilitate interaction, such as Learning Management Systems (LMS) and educational apps.

Implementation of Self-Regulatory Strategies

Once the GTAs were prepared, the intervention commenced. Each GTA integrated selfregulatory strategies into their English proficiency courses through the following methods:

Integrating Self-Regulatory Strategies into GTA Pedagogical Practices

The integration of self-regulated learning (SRL) strategies into Graduate Teaching Assistants' (GTAs) pedagogical practices offers an effective way to enhance student autonomy and engagement while also addressing the unique challenges that GTAs face in balancing teaching and research. By embedding SRL strategies such as reflective journals, peer assessments, and technology-enhanced learning tools into their teaching, GTAs can create a more student-centered, flexible, and efficient learning environment. This section explores practical techniques that GTAs employed to implement these strategies effectively.

1. Reflective Journals

GTAs encouraged the use of reflective journals to foster metacognition, allowing students to monitor and evaluate their learning processes. In alignment with Zimmerman's focus on self-evaluation and strategy adaptation, GTAs introduced reflective journals at the beginning of the course. They assigned periodic prompts that guided students to critically assess their learning patterns. For instance, GTAs asked students to reflect on:

- Their understanding of the course material.
- Strategies they employed to overcome learning challenges.
- Adjustments they plan to make for future tasks based on past performance.

According to Moon (1999), reflective journals help students to engage in metacognitive processes, critically review their learning materials, and empower themselves as learners. GTAs emphasized the importance of integrating reflection throughout the course, as noted by Bowers (2003), suggesting that reflective questions should progressively increase in complexity to challenge students further. To support effective reflection, GTAs clearly outlined criteria for successful journaling, following the recommendations of Smith and Yancey (2000). They also ensured that reflection was a consistent part of the course, allowing for open discussions about students' responses, as advocated by Conway (1994).

Through regular journaling, GTAs enabled students to document their learning goals, strategies, challenges, and progress, fostering self-awareness essential for self-regulation. This practice also allowed GTAs to gauge student progress and identify areas needing additional support without the need for constant one-on-one feedback. As a result, reflective journals became a valuable tool for both formative assessment and personal growth, empowering students to take ownership of their learning journey.

2. Peer Assessment

GTAs implemented peer assessment as an effective strategy for promoting selfregulation and collaborative learning. This approach encouraged students to engage in critical evaluation and provide constructive feedback while learning from the diverse perspectives of their peers. By structuring peer assessment activities around major assignments, GTAs facilitated a sense of community in the classroom and helped students develop critical thinking and self-assessment skills.

During peer assessment sessions, GTAs provided clear rubrics and guidelines to ensure that feedback was constructive and focused on key learning outcomes. For example, students participated in peer reviews of essays and presentations, where they were required to evaluate each other's work based on predetermined criteria. Research supports that peer assessment significantly enhances learners' metacognitive skills (Zariski, 1996) and boosts self-esteem and motivation (Biri, 2014). GTAs noted that students who engaged in peer assessments were more likely to take responsibility for their learning, striving for continuous improvement. Additionally, by distributing the responsibility of feedback among students, GTAs found that peer assessments reduced their grading workload, making the process more collaborative and efficient.

3. Technology-Enhanced Learning Tools

GTAs effectively utilized technology-enhanced learning tools to support self-regulation in their courses. Learning management systems (LMS) and educational apps offered features such as real-time feedback, progress monitoring, and interactive learning experiences. GTAs demonstrated how these technological tools could simplify administrative tasks, improve communication, and provide students with prompt feedback on their performance. This immediate feedback helped students track their progress, set goals, and adjust their learning strategies based on real-time data.

Zimmerman (2002) emphasizes that incorporating technology into learning enables students to access a wide range of resources and engage in interactive activities. GTAs leveraged these benefits by introducing tools like Moodle and Blackboard, creating self-paced learning environments where students could complete modules, receive instant feedback on quizzes, and monitor their progress over time. Additionally, digital tools such as Trello and Google Calendar were introduced to help students manage their time effectively by setting deadlines and prioritizing tasks.

For example, GTAs set up LMS modules that allowed students to navigate at their own pace, integrating quizzes with auto-grading features to provide immediate feedback. They also encouraged the use of mindfulness apps or Pomodoro timers to help students manage distractions and stay on track during study sessions. For a quick overview of how GTAs implemented self-regulatory strategies into their pedagogical practices, refer to the table below (Table 1).

Table 1: How GTAs Integrated Self-Regulatory Strategies into Their PedagogicalPractices?

Strategy	How GTAs Implemented	Practical Steps	Tools/Platforms	Benefits
Reflective Journals	Introduced at	 Assigned 	• LMS	 Encourages
	the start of the	weekly	(Moodle,	self-
	course, with	reflections.	Blackboard)	awareness
	clear prompts.	 Provided 		and
		prompts	Google	metacognitive
		related to	Docs for	reflection.
		course	collaborativ	 Tracks
	1	1		

		objectives.	e reflection.	student progress over time.
	Used for self- assessment and formative feedback.	 Set clear expectations for regular reflection. Gave occasional feedback on journal entries. 	 Google Keep (digital journaling). 	 Reduces the need for frequent individual feedback. Helps students selfassess and monitor progress.
Peer Assessments	Incorporated Structured peer review sessions around major assignments.	 Created clear rubrics for assessment. Provided training on constructive feedback. 	 Google Docs for sharing and reviewing assignment s. Rubrics in LMS or Google Forms. 	 Promotes critical thinking and collaboration. Reduces the GTA's grading workload.
	Used in small groups for in- depth reviews.	 Divided students into small peer groups for reviewing 	 LMS forums for discussion. Padlet or Slack for 	 Develops evaluative skills and deeper learning

		assignments • Held feedback training.	peer feedback and collaboratio n.	through peer interaction.
Technology- Enhanced Learning Tools	Used tools to help students track progress and manage time.	 Introduced tools like Trello or Google Calendar for time managemen t. Demonstrate d how to use them. 	 Trello or Asana for task manageme nt. Pomodoro apps (Focus Booster). 	 Encourages better time management and self- discipline. Increases accountability
	Leveraged LMS for self- paced learning and automated feedback.	 Set up self- paced modules in the LMS with quizzes and assignments . Used auto-grading features. 	 Moodle or Blackboard for self- paced modules. Kahoot for quizzes. 	 Provides instant feedback and reduces grading time. Helps students monitor their learning.

Feedback Collection: Questionnaire and Focus Group Discussions

After implementing these strategies, a questionnaire (see appendix for questionnaire) was distributed to the five GTAs who participated in the study to gather their feedback on the benefits, challenges, and overall effectiveness of the approach. The questionnaire was divided into four sections namely: General Experience, Observed Benefits, Challenges, and Overall Effectiveness, and contained a mix of question types. The questionnaire mostly had Likert scale questions, multiple-choice questions, and checkboxes. It was administered online using Google Forms to facilitate easy access and efficient data collection.

Later, focus-group discussions were also done with the GTAs to know their responses to primarily 3 questions:

- 1) What do you believe were the most significant benefits of using self-regulatory strategies with students who have low English proficiency?
- 2) What were the biggest challenges you encountered while implementing these strategies, and how did you address them?
- 3) Do you have any suggestions for improving the implementation of self-regulatory strategies in GTA-led courses?

Findings from the Questionnaire

Based on the responses from five Graduate Teaching Assistants (GTAs), the following findings highlight the impact, challenges, and effectiveness of integrating self-regulatory strategies (SRL) into English proficiency courses.

1. Familiarity with Self-Regulatory Learning Strategies

Out of the five GTAs, three were *somewhat familiar* with SRL strategies before the intervention, one was *very familiar*, and one was *not familiar*. This range indicates that the GTAs had diverse levels of experience with SRL before the intervention. The presence of varying familiarity levels suggests that while some GTAs entered the

intervention with confidence in their understanding of SRL, others needed more foundational support. This variation may have influenced their ability to implement the strategies seamlessly and could highlight the need for more tailored training that accounts for differences in baseline knowledge. GTAs who were less familiar with SRL may have experienced more initial challenges, particularly in guiding students through the reflective process and facilitating peer assessments.



Figure 2: Familiarity with SRL Strategies Before the Intervention

Improvement in Student Engagement

Four out of five GTAs *agreed* that the use of SRL strategies improved student engagement, with two *strongly agreeing*. This indicates that SRL strategies were generally effective in encouraging students to actively participate in their learning processes. The positive impact on engagement suggests that tools like reflective journals and peer assessments helped students become more involved in their own learning. However, the varying degrees of agreement may indicate that some GTAs observed more immediate or pronounced effects, while others may have faced challenges that tempered the impact. This variance could be attributed to the students' different levels of familiarity with independent learning, as those more accustomed to traditional teacher-led instruction might have taken longer to adapt to self-regulatory practices.



Figure 3: Improvement in Student Engagement Due to SRL Strategies

Challenges in Implementing SRL Strategies

The main challenges reported by GTAs included:

- Difficulty in guiding students through reflective journaling (reported by all 5 GTAs)
- Student resistance to peer assessment activities (reported by 3 GTAs)
- Technological issues with the tools used (reported by all 5 GTAs)
- Monitoring student progress across different strategies (reported by 2 GTAs)

While the integration of SRL strategies presents significant benefits for student learning, the integration of SRL strategies did not come without challenges. All five GTAs reported difficulty in guiding students through reflective journaling. This widespread challenge suggests that students may not have been adequately prepared to engage in deep reflection about their learning processes, a skill that requires both guidance and practice. To address this, GTAs may need more resources and structured prompts to scaffold students' reflective skills, ensuring that they can connect their reflections to tangible learning outcomes.

Additionally, three GTAs mentioned student resistance to peer assessments. This resistance may stem from students' discomfort with evaluating their peers or receiving

critiques from classmates, especially in a low English proficiency context. This points to the need for a classroom culture that fosters trust and emphasizes the constructive value of peer feedback, potentially through peer assessment training early in the course.

Technological issues were another key challenge, reported by all five GTAs. The reliance on technology for SRL strategies, such as using Learning Management Systems (LMS) and educational apps, requires students and instructors to be proficient with these tools. The widespread reporting of technical difficulties underscores the importance of providing technical support and training for both GTAs and students to ensure smooth integration of digital tools.

Two GTAs also highlighted difficulties in monitoring student progress across different SRL strategies, indicating that the lack of a centralized system to track students' work in reflective journals, peer assessments, and technology tools created challenges. Developing a more unified approach to tracking student progress could help GTAs identify students who need more support and ensure that SRL strategies are effectively integrated.



Figure 4: Challenges GTAs Faced in Implementing SRL Strategies

Effectiveness of SRL Strategies on Student Outcomes

Four GTAs reported that the SRL strategies were *very effective* in improving student outcomes, particularly in promoting critical thinking and academic engagement. The combination of reflective journals, peer assessments, and technology-enhanced tools appeared to contribute positively to these outcomes. The one *neutral* response suggests that not all GTAs saw the same level of effectiveness, potentially due to variability in student engagement or the aforementioned challenges. Despite this, the overall positive response indicates that SRL strategies can be powerful tools for improving student autonomy and learning outcomes, particularly when effectively implemented and supported.

This finding aligns with existing research on SRL, which emphasizes that strategies like goal-setting, self-monitoring, and reflection can significantly enhance student learning, especially when they are guided by educators who are well-prepared to facilitate these processes. However, to further maximize the effectiveness of SRL, ongoing support, particularly in areas like reflective journaling and peer assessments, will be crucial for both students and instructors.



Figure 5: Overall Effectiveness of SRL Strategies on Student Outcomes

Reduction in GTAs' Teaching Workload

Three GTAs reported that promoting the use of self-regulatory in their classes *significantly reduced* their workload. On the other hand, two GTAs mentioned that their workload was *somewhat reduced*. Overall, self-regulatory strategies were effective in reducing the need for direct individual feedback, particularly when students fully embraced reflective practices and peer assessments. However, the varying levels of workload reduction highlight that the success of these strategies depends on factors such as student engagement, technological ease, and the GTAs' familiarity with SRL tools.



Figure 6: Reduction in GTAs' Teaching Workload

The findings from the questionnaire highlight both the strengths and challenges of implementing SRL strategies in a real-world classroom context. While the GTAs recognized the potential of SRL strategies to improve student engagement and outcomes, the challenges they faced suggest that more attention needs to be given to scaffolding these strategies. In particular, ensuring students are well-prepared to engage in reflective practices and peer assessments is essential for these strategies to be effective. Furthermore, the reliance on technology for monitoring progress and facilitating learning indicates the need for robust technical support systems to prevent technological barriers from impeding the implementation of SRL.

Future interventions should consider providing GTAs with ongoing professional development, additional training on SRL strategies, and resources that can help them manage the more challenging aspects of implementation. By addressing these areas, the effectiveness of SRL strategies can be enhanced, ultimately leading to improved student autonomy, critical thinking, and engagement.

Findings from Focus Groups

Impact of Self-Regulation on Student Learning Outcomes

Based on feedback from focus-group discussions, the integration of self-regulatory strategies into GTA-led English proficiency courses had a noticeable impact on student learning outcomes. GTAs reported several key benefits:

- Increased Student Autonomy: One GTA mentioned, 'Students began taking more control over their learning, especially when setting goals and tracking their own progress in the reflective journals. They were more proactive in seeking resources and asking questions.' This aligns with the goal of fostering autonomy, as students were able to identify their learning needs and take steps to address them without constant guidance from the GTAs.
- Improved Engagement: 'I noticed a significant increase in student engagement, particularly during peer assessments. They were more invested in both giving and receiving feedback, which helped them improve their speaking and writing skills,' noted another GTA. Students were actively involved in the learning process, both individually and through collaborative activities like peer assessments, which enhanced their overall participation in the class.
- Enhanced Critical Thinking and Problem-Solving: GTAs agreed that students demonstrated improved critical thinking skills, especially when reflecting on their learning in journals and during peer assessments. One GTA said, 'The reflective journals encouraged students to critically assess their strengths and

weaknesses. It wasn't just about completing the tasks but about understanding their progress.' Students learned to self-monitor and adjust their learning strategies, which improved their problem-solving abilities in language learning.

Challenges and Considerations in Implementing SRL in GTA Contexts

The GTAs also encountered challenges when implementing self-regulatory strategies, particularly in the context of working with students with low English proficiency.

- Initial Resistance and Lack of Familiarity: 'Some students struggled with the concept of self-regulation initially,' one GTA remarked. 'They were used to more direct instruction and found it difficult to take responsibility for their learning.' This challenge required GTAs to provide additional support and clear instructions on how to use reflective journals and participate in peer assessments.
- **Consistency in Reflective Journaling**: Several GTAs noted that maintaining consistency with reflective journaling was difficult for some students. 'Students would start out strong but lose momentum halfway through the semester. We had to provide frequent reminders and more detailed prompts to keep them engaged,' said one GTA. This highlights the need for ongoing support and scaffolding to help students internalize the self-regulatory process.
- Technological Barriers: Although technology-enhanced learning tools were helpful, a few GTAs mentioned that some students encountered difficulties with accessing or fully utilizing the platforms. *'We had some technical issues, especially with students who were not familiar with using apps like Trello or the LMS,'* one GTA reported. This required additional time for troubleshooting and technical support.

Recommendations for GTAs to Foster Self-Regulated Learning

During the focus-group discussions, GTAs provided valuable suggestions for improving the implementation of self-regulatory strategies in GTA-led courses, particularly for students with low English proficiency.

- More Training and Support for Students: One of the key recommendations
 was to provide more detailed training at the start of the course. 'We need to
 invest time in training students on how to reflect and assess themselves. This will
 help them embrace the self-regulation process earlier in the course,' said one
 GTA. By offering workshops or step-by-step guides on reflective journaling and
 peer assessments, students can develop confidence in these practices from the
 beginning.
- Smaller, Frequent Peer Assessments: Another suggestion was to break peer assessments into smaller, more frequent activities. One GTA mentioned, 'It would be more effective to have shorter peer assessments throughout the course rather than a few large ones. This way, students can build confidence in giving and receiving feedback.' This approach would make the peer assessment process more manageable and encourage regular feedback loops.
- Increase Use of Simple Technology Tools: While technology played a positive role, GTAs suggested focusing on simpler, more user-friendly tools. 'Some of the tools we used were too complex for students, especially those who weren't tech-savvy. We should streamline the tools we recommend and provide tutorials,' said one GTA. This would help students focus on learning rather than struggling with technology, ensuring a smoother integration of tech-enhanced learning.

The findings from focus groups indicate that while the self-regulatory strategies were largely effective in improving student autonomy, engagement, and critical thinking, further adjustments such as additional training, simplified technology, and more frequent peer assessments could make the implementation even more successful.

Conclusion

The feedback gathered from the GTAs (both from questionnaires and focus groups) indicates that the integration of self-regulated learning strategies into GTA-led courses has great potential for improving both teaching and learning experiences. SRL strategies effectively foster student autonomy, engagement, and critical thinking while reducing the teaching workload for GTAs. However, there are still areas that need further refinement. Addressing challenges related to student resistance, consistency in reflective practices, and technological barriers will be key to enhancing the success of SRL strategies in the future. By incorporating the GTAs' recommendations—such as providing more comprehensive training for both students and instructors, simplifying technology tools, and breaking down peer assessments into smaller tasks—future courses can create a more supportive environment for students to engage fully with self-regulatory learning. With these adjustments, the potential of SRL to foster independent, reflective learners can be maximized, ultimately leading to better academic outcomes.

Limitations of the Study and Scope for Future Research

One major limitation of the study is the small sample size—the findings are based on the experiences of only five GTAs. While their insights provide valuable perspectives on the integration of SRL strategies, the small sample size limits the generalizability of the findings. The study was also conducted in a specific context—an English proficiency course for students with low proficiency—so the findings may not be fully applicable to other disciplines or student populations.

Future research could expand on this study by incorporating a larger and more diverse group of GTAs across different subject areas to explore how SRL strategies are implemented in varied contexts. Additionally, longitudinal studies that track the impact of SRL strategies on student outcomes over multiple semesters could provide deeper insights into the long-term effectiveness of these practices.

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Appendix

Questionnaire for GTAs on Implementing Self-Regulatory Strategies in Pedagogical Practices

Instructions: Please answer the following questions based on your experience integrating self-regulatory strategies (e.g., reflective journals, peer assessments, technology-enhanced learning tools) into your English proficiency courses. Your responses will help us better understand the impact and challenges of these strategies. **Scale for Likert-scale Questions:**

- 1 = Strongly Agree
- 2 = Agree
- 3 = Neutral
- 4 = Disagree

5 = Strongly Disagree

Section 1: General Experience

1. How familiar were you with self-regulatory learning strategies before this intervention?

- Very familiar
- Somewhat familiar
- Not familiar

2. To what extent do you feel the self-regulatory strategies (reflective journals, peer assessments, technology-enhanced tools) were easy to integrate into your teaching practices?

- Very easy
- Somewhat easy
- Neutral
- Somewhat difficult
- Very difficult

Section 2: Observed Benefits

3. The use of self-regulatory strategies improved student engagement in the course.

- 1
- 2
- 3
- 4
- 5

4. Reflective journals helped students become more aware of their learning goals and progress.

- 1
- 2
- 3
- 4

• 5

5. Peer assessments encouraged students to take responsibility for their learning and improved their critical thinking skills.

- 1
- 2
- 3
- 4
- 5

6. Technology-enhanced tools (e.g., Moodle, Trello) helped students manage their time and track their learning progress more effectively.

- 1
- 2
- 3
- 4
- 5

7. Students demonstrated greater autonomy by setting personal learning goals and self-monitoring their progress.

- 1
- 2
- 3
- 4
- 5

Section 3: Challenges

8. What were the main challenges you faced while integrating self-regulatory strategies into your teaching practices? (Check all that apply)

• Lack of time for implementation

- Difficulty in guiding students through reflective journaling
- Student resistance to peer assessment activities
- Technological issues with the tools used
- Monitoring student progress across different strategies
- Other (please specify): ______

9. How would you describe the students' initial response to using self-regulatory strategies?

- Very positive
- Somewhat positive
- Neutral
- Somewhat negative
- Very negative

10. What support or resources would have made the implementation of these strategies easier?

- More training on using self-regulatory strategies
- Access to better technology or tools
- Clearer guidelines on how to use reflective journals or peer assessments
- More time for preparation and follow-up
- Other (please specify): ______

Section 4: Overall Effectiveness

11. Overall, how effective do you think self-regulatory strategies were in improving student outcomes in the English proficiency course?

- Very effective
- Somewhat effective
- Neutral
- Somewhat ineffective
- Very ineffective

12. To what extent did self-regulatory strategies reduce your teaching workload (e.g., less need for individual feedback)?

- Significantly reduced
- Somewhat reduced
- No effect
- Increased my workload

13. How likely are you to continue using self-regulatory strategies in your future teaching practices?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely