

Beyond Independent Learning: How EFL Students Navigate Flipped Grammar Learning through Self-Regulation, Peer Support, and Lecturer Scaffolding

Johari Afrizal*, Maslawati Mohamad, Melor Md Yunus

Faculty of Education, Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia

*Corresponding Author Email: p91447@siswa.ukm.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBS/v16-i10/29177>

Published Date: 11 October 2026 2026

Abstract

Grammar learning requires students to connect grammatical forms with meaning and use, yet students may still struggle when learning responsibility shifts beyond the classroom. This qualitative case study explored how EFL students navigated flipped grammar learning through self-regulation, peer support, and lecturer scaffolding. Eighteen Indonesian university students participated in the study. Data were collected through semi-structured individual interviews (II), a focus group interview (FGI), and reflective journals (RJ), and analysed using Braun and Clarke's thematic analysis. The findings indicate that students did not rely on independent study alone. They prepared for class, reviewed and adjusted their learning strategies, sought alternative explanations, discussed difficulties with peers, and approached the lecturer when further clarification was needed. Peer interaction provided accessible explanations and opportunities to compare understanding, while lecturer scaffolding became important when individual and peer-based strategies did not resolve a difficulty. Learner navigation involved recognising a problem, deciding what to try, evaluating available support, and adjusting the next step. The study suggests that autonomy in flipped grammar learning is expressed not through working alone, but through purposeful decisions about strategies, resources, peers, and lecturer support.

Keywords: Flipped Grammar Learning, Learner Navigation, Lecturer Scaffolding, Peer Support, Self-Regulated Learning

Introduction

Understanding grammar requires students to connect grammatical forms with meaning and use rather than only memorise rules. Students may recognise a structure in an exercise but still have difficulty explaining why it is used in a particular context. Recent work therefore gives greater attention to contextualised grammar instruction that connects grammatical knowledge with meaningful language use (Mustafa & Al Bajalani, 2024; Vidal et al., 2024). In

a flipped classroom, some of this learning can begin before class, leaving face-to-face time for clarification, practice, interaction, and application.

As students encounter learning materials before class, flipped instruction places greater responsibility on them to decide how to prepare and what to do when understanding is incomplete. Its effectiveness depends partly on the relationship between pre-class preparation and in-class activity (Baig & Yadegaridehkordi, 2023; Fisher et al., 2024). Research in Indonesian higher education has reported both opportunities and challenges in flipped learning and grammar instruction (Lestari, 2021; Lubis et al., 2026), while studies in other EFL settings have connected flipped learning with engagement, learner responsibility, and self-regulation (Chang, 2026; Nam et al., 2025; Zhong, 2025). These findings make it important to explore not only what students do before class, but also how they respond when their initial approach does not resolve a learning problem. This becomes particularly important in grammar learning, where students may understand an initial explanation but still experience difficulty applying grammatical rules, interpreting examples, or resolving misunderstandings without additional support.

The way students manage this responsibility is closely related to self-regulated learning (SRL). Students need to plan, monitor, use strategies, and reflect on whether those strategies are working. Zimmerman (2002) describes SRL as a cyclical process involving forethought, performance, and self-reflection, while Panadero (2017) presents it as a multidimensional process involving cognition, motivation, behaviour, and strategies. Research in flipped EFL settings has linked flipped learning with students' self-regulatory practices (Samadi et al., 2024; Zhong, 2024). However, students do not necessarily become self-regulated simply because learning responsibility is shifted to them. Flipped learning needs to provide conditions that help students regulate their learning (Liu et al., 2024), and recent research has also described the flipped classroom as a contextual scaffold for online self-regulated learning (Güven & Eğmir, 2026).

Self-regulation may also involve interaction with others. Peer interaction can provide one source of support when students experience difficulties. Students may first try to solve a grammar problem on their own and then ask classmates for help when they cannot resolve it. Research on co-regulation and learner agency suggests that regulatory activity can develop through interaction with peers and the learning environment (Cengiz & Atas, 2025; He et al., 2024). Peer interaction can provide alternative explanations and opportunities to compare interpretations, while peer feedback in technology-mediated learning has also been associated with self-regulated learning (Liu & Kang, 2026). Seeking help from peers may therefore be part of how students regulate their learning rather than a sign of dependence.

Lecturers can provide another form of support in this process. Students may receive initial explanations through videos or written materials, but they may still need direct clarification when difficulties remain. Teachers can support self-regulation through strategy guidance, resources, feedback, and supportive learning environments (Wang et al., 2024). Studies of flipped grammar instruction have also reported positive learning outcomes and student perceptions while highlighting the importance of instructional design and teacher involvement (Gebregziabher et al., 2025; Harrison, 2025). Recent work on flipped grammar

learning also shows that students' experiences can vary with self-regulation, interaction, and technology (Jitpanich, 2026).

Although these studies address SRL, peer interaction, lecturer support, and flipped grammar learning, the dimensions are often considered separately. What remains less clear is how students connect these strategies and resources when they encounter difficulties. A student may revisit a video, search for another explanation, ask a classmate, and then seek clarification from the lecturer. The issue, therefore, is not simply whether support is available, but how students recognise their learning needs, evaluate available resources, and move among different sources of support while continuing to regulate their learning. Understanding this process is important because the effectiveness of a flipped classroom may depend not only on the availability of learning resources, but also on students' ability to decide when and how to use different forms of support. This is particularly relevant in Indonesian higher education, where flipped learning research has documented both opportunities and challenges (Lestari, 2021; Lubis et al., 2026).

The present qualitative study addresses this gap by exploring how students manage their learning when different forms of support are available and how they move among these resources when difficulties persist. Learner navigation is used here as an integrative lens for understanding how self-regulation, peer support, and lecturer scaffolding appear in students' accounts of flipped grammar learning. The focus is on what students do when they encounter a difficulty: whether they revisit the material, try another resource, ask a peer, seek clarification from the lecturer, or return to independent practice. In this view, learner independence does not mean working alone. It includes recognising a problem, deciding what kind of help is useful, and adjusting the next step when an initial approach does not work. The study therefore considers how students move across individual, peer, and lecturer resources while managing their own learning. The study addresses two questions:

1. How do EFL students navigate flipped grammar learning through self-regulation?
2. How do peer support and lecturer scaffolding shape students' navigation of flipped grammar learning?

Literature Review

Self-Regulation and Learner Independence in Flipped Learning

Flipped learning changes where and when learning takes place by moving some activities to the pre-class stage and using classroom time for clarification, practice, interaction, and application. Baig and Yadegaridehkordi (2023) argue that its effectiveness depends on the connection between pre-class and in-class activities, while Fisher et al. (2024) highlights its potential to increase engagement and interaction in EFL contexts. This arrangement gives students greater responsibility for preparing before class, monitoring understanding, and managing learning strategies.

The increased responsibility associated with flipped learning makes self-regulated learning (SRL) particularly important. Zimmerman (2002) describes SRL as a cyclical process involving forethought, performance, and self-reflection, while Panadero (2017) presents it as a multidimensional process involving cognitive, motivational, behavioural, and strategic aspects. In flipped EFL learning, Samadi et al. (2024) found a positive relationship between flipped learning, SRL, and higher-order thinking, while Zhong (2024) identified instructional

and contextual factors influencing self-regulation. Liu et al. (2024) emphasised guidance and opportunities to practise regulatory strategies, and Güven and Eǧmir (2026) showed that flipped practices can support preparation, monitoring, environmental organisation, and participation.

However, greater responsibility does not automatically produce effective independent learning. Students may experience difficulties with time management, learning materials, technology, or selecting appropriate strategies. Research on flipped grammar learning suggests that students' experiences vary according to their ability to regulate learning and respond to instructional demands (Jitpanich, 2026). Learner independence can therefore be understood as an ongoing capacity to plan, monitor, evaluate, and adjust learning rather than simply working without assistance.

This distinction is important in grammar learning, which requires students to connect grammatical forms, meanings, rules, examples, and contextual use. Research on contextualised grammar teaching stresses the connection between grammatical knowledge and meaningful language use (Mustafa & Al Bajalani, 2024; Vidal et al., 2024). In flipped grammar learning, students may understand an explanation before class but still need to clarify how a grammatical form operates in context. Gebregziabher et al. (2025) and Harrison (2025) reported positive experiences and learning outcomes associated with flipped grammar instruction, while Nam et al. (2025) emphasised interaction and personalised support. Thus, learner independence also involves recognising when an existing strategy is insufficient and deciding what to do next.

From Individual Regulation to Social Regulation

Self-regulation does not occur entirely in isolation. Although students may begin by managing their learning independently, their regulation can develop through interaction with peers, lecturers, instructional materials, and digital resources. In this process, help-seeking is not necessarily a sign of dependence. Rather, recognising that an initial strategy is insufficient and deciding to seek assistance can itself be part of self-regulation. Cengiz and Ataş (2025), for example, found a relationship between online self-regulation and in-class co-regulation in a flipped EFL writing classroom, suggesting that students' regulatory activity can extend from individual preparation into interaction with others.

Such interaction can provide students with additional explanations, opportunities to compare interpretations, and feedback that may not be available through individual study. In tertiary EFL contexts, He et al. (2024) found that learner agency in peer review involved both proactive self-regulation and reciprocal interaction with peers. Similarly, Liu and Kang (2026) demonstrated the potential of peer feedback to support cognitive and self-regulatory processes. Together, these findings suggest that independent and supported learning should not necessarily be viewed as separate processes. Students can remain responsible for their learning while drawing on interaction with others to regulate how they understand and respond to learning difficulties.

This connection between individual and social regulation is particularly relevant to flipped learning. Because students encounter instructional materials before class, they may initially try to resolve difficulties on their own before turning to classmates for assistance. Zhong

(2025) found that students in flipped EFL learning combined learning strategies with resource management, peer learning, and help-seeking. This pattern suggests that students may assess whether their current approach is working and then shift to another available resource, when necessary, rather than relying on a single strategy throughout the learning process.

At the same time, peer interaction does not automatically lead to effective learning. Classmates may provide incomplete explanations or reinforce inaccurate interpretations, meaning that students still need to evaluate the usefulness of the support they receive. In practice, they may compare answers, discuss grammatical rules, ask for alternative explanations, or seek confirmation before deciding what to do next. Thus, the regulatory value of peer support depends partly on how students engage with and evaluate peer input. The studies by Cengiz and Ataş (2025), He et al. (2024), and Liu and Kang (2026) collectively indicate that peer interaction can become a meaningful regulatory resource when students use it purposefully to address their learning needs. In this sense, peer support does not necessarily reduce learner independence; instead, it can become part of how students maintain and extend control over their learning.

Lecturer Scaffolding as Part of the Learning Environment

The increased responsibility given to students in flipped learning does not eliminate the role of the lecturer. Lecturers remain important sources of clarification, feedback, guidance, and additional support. Liu et al. (2024) emphasised guidance alongside opportunities to practise self-regulation, while Güven and Eǧmir (2026) described teacher guidance as contextual support within flipped learning. Wang et al. (2024) similarly identified strategy instruction, resource support, capacity support, emotional support, and a supportive learning environment as important forms of teacher support in technology-enhanced language learning.

In flipped grammar learning, lecturer scaffolding may include explaining grammatical concepts, providing examples, clarifying misunderstandings, giving feedback, recommending resources, and guiding practice. Nam et al. (2025) emphasised interaction and personalised support, while Gebregziabher et al. (2025) and Harrison (2025) highlighted the continuing importance of instructional design and teacher involvement. Student responsibility and lecturer support should therefore not be viewed as competing principles.

Lecturer scaffolding can complement students' self-regulation. A student may begin by watching a pre-class video or reviewing written material but remain uncertain about a grammatical form. The student may then consult another resource, ask a peer, or approach the lecturer. Such support can address an immediate learning need while providing information that can be used later. Wang et al. (2024) show that teacher support can address strategic and contextual aspects of technology-enhanced learning, while Liu et al. (2024) highlight its role in supporting self-regulatory development.

The important issue is not simply whether students receive assistance, but how they recognise when assistance is needed and use it. Lecturer scaffolding may be temporary and responsive: a lecturer provides an explanation or prompt, after which students return to independent practice. Support therefore does not necessarily indicate dependence; it can

form part of the process through which students regulate learning and develop better learning decisions.

Learner Navigation as an Integrative Lens

The literature above points to a learning process that involves more than individual self-regulation. Flipped-learning research highlights student responsibility and SRL, studies of peer interaction emphasise co-regulation, peer learning, and help-seeking, and research on teacher support shows that students may still need guidance at particular points in the learning process. Samadi et al. (2024) and Zhong (2024) show the importance of regulation in flipped EFL learning, while Cengiz and Ataş (2025), He et al. (2024), and Zhong (2025) point to the roles of interaction, peer learning, resource management, and help-seeking. Liu et al. (2024) and Wang et al. (2024) also show that instructional and contextual support can shape students' opportunities to regulate their learning.

The present study brings these strands together through the term learner navigation. It is used as an integrative lens, not as a new psychological construct or a fourth form of regulation. In practical terms, it refers to how students respond to learning demands by considering what they understand, what is still unclear, and what they can do next. This may involve changing a learning strategy, using another resource, asking a peer, or seeking lecturer clarification. The term is useful for understanding the links between self-regulation and the social and instructional resources available in a flipped grammar classroom.

This perspective is particularly relevant to flipped grammar learning because students may face different problems at different stages. A student may try to understand a grammatical rule independently, replay a pre-class video, search for another explanation, compare an answer with a peer, and ask the lecturer about a point that remains unclear. The sequence is not necessarily the same for every student. What matters is that students respond to the difficulty by deciding what to try next. Zhong (2025) highlights connections among learning strategies, resource management, peer learning, and help-seeking, while Cengiz and Ataş (2025) show how individual regulation and classroom co-regulation can occur within the same learning process.

Learner navigation is therefore concerned with how students use and connect learning resources and strategies, rather than simply whether those resources are available. This also allows learner independence to be understood without equating it with working alone. Replaying a video, searching for another explanation, consulting a peer, or asking a lecturer can all be part of a student's learning process when these actions follow a recognised difficulty. He et al. (2024) connect learner agency with proactive regulation and interaction, while Liu and Kang (2026) show how peer feedback can support regulation.

Learning difficulties may prompt students to reconsider what they are doing. Jitpanich (2026), for example, highlights challenges related to self-regulation, interaction, and technology in flipped grammar learning. The present study is less concerned with difficulty as an outcome than with students' responses to it. This makes it possible to look at the small decisions through which students change strategies, seek help, or return to independent work when their first attempt is not enough.

Accordingly, three substantive dimensions guide the analysis: self-regulation, peer support, and lecturer scaffolding, while learner navigation serves as the integrative lens connecting these dimensions. Self-regulation concerns how students plan, monitor, evaluate, and adjust learning; peer support represents an interpersonal resource that can extend individual regulation; and lecturer scaffolding represents responsive pedagogical support. Learner navigation brings these dimensions together by focusing on how students coordinate strategies and resources as their learning needs change. This formulation is consistent with research on flipped learning and SRL (Samadi et al., 2024; Zhong, 2024), social regulation and peer interaction (Cengiz & Ataş, 2025; He et al., 2024), teacher support (Liu et al., 2024; Wang et al., 2024), and flipped grammar learning (Nam et al., 2025; Jitpanich, 2026).

Methodology

Research Design

A qualitative case study was used to explore how EFL students navigated learning demands within a technology-supported flipped grammar classroom. The design enabled attention to students' accounts of their strategies, interactions, and decisions as these occurred within the course setting (Creswell & Poth, 2018; Yin, 2018). The present study focuses on how students navigate learning demands by coordinating self-regulation, peer support, and lecturer scaffolding. Learner navigation serves as an integrative interpretive lens rather than a fourth substantive dimension.

Research Context and Participants

The research took place in an Intermediate English Grammar course in an English language education programme at an Indonesian university. The course incorporated a technology-supported flipped approach into regular teaching practice. Students received instructional videos and supporting PDF materials before class, while face-to-face meetings were used for discussion, collaborative work, grammar practice, presentations, and clarification of points that remained difficult.

The participants were 18 first-year students (10 female and 8 male), aged 18–21 years. Their English proficiency, based on the university placement test, ranged from lower-intermediate to upper-intermediate. Participation was voluntary, and all participants provided verbal informed consent. The students were identified as S1–S18 in the analysis and reporting.

Data Collection

Three complementary sources informed the analysis: semi-structured individual interviews (II), one focus group interview (FGI), and reflective journals (RJ). All 18 participants completed an individual interview lasting approximately 20–30 minutes. Questions addressed pre-class preparation, use of digital materials, learning strategies, responses to difficulties, interaction with classmates, help-seeking, and experiences of lecturer support. The interviews also explored how students decided what to do when a learning strategy or resource was not sufficient.

One FGI, lasting approximately 45–60 minutes, was conducted to allow participants to respond to one another and elaborate on shared or contrasting experiences. The discussion was particularly useful for understanding peer interaction, including the ways students

compared answers, exchanged explanations, discussed grammar problems, and judged whether peer assistance had resolved a difficulty.

Each participant completed two reflective journals during the course. The journals recorded learning activities, difficulties, decisions, strategies, and reflections as students progressed through the learning process. Taken together, the interviews, FGI, and journals provided individual, collective, and written accounts that could be compared during analysis.

The interviews were conducted in Indonesian so that participants could express their experiences in detail and with ease. Before data collection, the interview protocol was reviewed by two experts in English language education. Their feedback was used to improve the clarity and ordering of the questions, consistent with guidance for developing semi-structured interview protocols (Kallio et al., 2016).

Data Analysis

The three data sources were analysed using Braun and Clarke's (2006) six-phase thematic analysis. Interview and FGI transcripts and reflective journals were read repeatedly to establish familiarity with the dataset. Coding began inductively, allowing categories to develop from participants' descriptions rather than assigning responses to the study dimensions in advance.

Analysis centred on learning episodes in which students encountered a difficulty or learning demand and then selected a response. Initial codes captured actions such as revisiting digital materials, replaying videos, looking for alternative explanations, comparing resources, asking classmates, seeking lecturer clarification, evaluating a strategy, and returning to individual study.

The initial codes were compared and grouped into broader patterns, with attention to how students' actions related to one another. For instance, an episode could involve reviewing a video, consulting another source, discussing the issue with a peer, and subsequently asking the lecturer. These sequences were explored to understand how students altered their approach when an earlier strategy did not provide enough clarification.

The emerging patterns were interpreted through three substantive dimensions: self-regulation, peer support, and lecturer scaffolding. Self-regulation referred to students' planning, monitoring, evaluation, and adjustment of learning (Zimmerman, 2002; Panadero, 2017). Peer support referred to interpersonal assistance that could extend individual learning, whereas lecturer scaffolding referred to responsive pedagogical guidance. Learner navigation was not coded as a separate fourth dimension. Instead, it was used as the integrative interpretive lens for understanding how students connected strategies and available forms of support as their learning needs changed. The data were compared across participants and data sources to identify recurring patterns, convergence, complementarity, and variation. Contrasting accounts were retained so that the findings represented differences in students' learning experiences and navigation processes.

Trustworthiness and Ethical Considerations

Trustworthiness was supported through data-source triangulation involving individual interviews, the FGI, and reflective journals (Carter et al., 2014; Lincoln & Guba, 1985). Accounts were compared across participants and sources to identify recurring patterns as well as differences. Emerging patterns were reviewed and refined to ensure that interpretations remained grounded in participants' accounts, particularly regarding how students moved between independent strategies, peer support, and lecturer assistance.

Participation was voluntary, and informed consent was obtained before data collection. Participants were informed that their responses would be treated confidentially and that their identities would not be disclosed. Participant codes S1–S18 were used throughout the analysis and reporting.

Findings

The findings revealed three interconnected dimensions that shaped students' learning experiences in the flipped grammar classroom: self-regulation, peer support, and lecturer scaffolding. The themes and subthemes identified from the data are summarized in Table 1.

Table 1

Themes and Subthemes

Theme	Subthemes
Self-Regulation	Learning preparation; Monitoring understanding; Strategy adjustment
Peer Support	Peer discussion; Peer explanation; Collaborative learning
Lecturer Scaffolding	Clarification and explanation; Guidance and facilitation; Feedback and support

Note. Learner navigation was treated as an integrative interpretive lens rather than a separate substantive theme

Self-Regulation: Managing Learning Before and Beyond the Classroom

Self-regulation emerged as the first substantive dimension through which students managed learning in the technology-supported flipped grammar classroom. Before class, students were expected to prepare independently, monitor their understanding, and respond to difficulties. Their accounts show that this involved controlling the pace of learning, taking notes, identifying unclear points, reviewing materials, and looking for alternative explanations. Students often adjusted their learning pace by pausing or replaying videos. S11 explained, *"Maybe every time I watch a learning video, I make notes so I can understand better, I rewrite it"* (S11, FGI). In her reflective journal, she added, *"I opened the video that was sent once, sometimes pausing to write down the information in the video"* (S11, RJ). This allowed students to work through the materials at a pace suited to their understanding.

Self-regulation also involved monitoring understanding before class. S1 reported, *"Usually, after watching the video, we make a summary, then prepare questions if there is material that we don't understand"* (S1, FGI). S8 similarly described watching the videos, taking notes, identifying unclear points, and asking the lecturer about them the following day (S8, II). Pre-class preparation thus helped students identify what they understood and what still needed attention. Students also changed strategies when their first attempt was insufficient. S7

explained, *"The first time, if there is a part that I do not understand, I try to repeat that part, and if I do not understand it too, I will note it in a notebook and I will look for it from other sources about it"* (S7, II).

S6 similarly searched the internet or YouTube when the lecturer's materials were difficult to understand (S6, FGI). Self-regulation therefore included changing strategies rather than continuing with an ineffective approach. S13 reported that other assignments sometimes left insufficient time for preparation. S14 similarly noted, *"If the video is too long, I sometimes lose my concentration while watching it"* (S14, II). Self-regulation, therefore, involved monitoring understanding and deciding what to do next. This process provided the basis for students' subsequent use of other learning resources.

Peer Support: Extending Individual Learning Through Interaction

Peer support provided an important interpersonal resource within the flipped learning process. Students discussed grammar difficulties, compared answers, exchanged materials, and explained concepts to one another both in class and through digital communication. S2 described moving from individual study to peer discussion: *"To first learn by myself, I watch the video, then if I do not understand, I will discuss it with a friend. Via WhatsApp often"* (S2, II). S3 also described WhatsApp study groups in which students could ask classmates about difficult material and receive explanations (S3, FGI). Peer interaction thus extended learning beyond the formal classroom.

Students valued classmates partly because their explanations could be easier to follow. S9 stated, *"I prefer to ask friends, because sometimes there are some things that I do not understand, and I understand better if a friend explains it"* (S9, II). S3 similarly said, *"The language is easier if it comes from friends"* (S3, II). Peer support was also part of classroom grammar practice. S13 reported that students helped one another complete exercises, discussed answers, and explained difficult concepts to classmates (S13, II). Through these interactions, students could compare their understanding and apply grammar knowledge together. Peer support, however, did not replace lecturer guidance. Students could use classmates as an accessible source of explanation and still seek further clarification from the lecturer. Peer support was therefore one resource among several that students could draw on when working through learning difficulties.

Lecturer Scaffolding: Responding to Students' Learning Needs

Lecturer scaffolding formed the third substantive dimension. Although students were expected to prepare before class, the lecturer remained important for clarification, guidance, and feedback. Students described the lecturer's role as responding to difficulties that emerged during classroom activities. S18 emphasized, *"The lecturer's role is very important because... we can't rely 100% on the flipped classroom"* (S18, II). Students described the lecturer's role as more like a facilitator who provided additional explanations when they had not understood the material. The flipped model therefore changed the lecturer's role without removing direct instructional support.

S15 described this relationship as follows: *"Students are expected to play a more active role because we need to study the materials before coming to class. Meanwhile, the lecturer acts more as a facilitator who guides the discussion and helps students understand the lesson"*

during the face-to-face session" (S15, II). Student responsibility and lecturer support consequently worked together. Question-and-answer sessions, group discussions, presentations, and grammar exercises provided opportunities for the lecturer to address unresolved difficulties. Students' accounts suggested that face-to-face time could concentrate on points that required further explanation rather than repeat all the pre-class content. The need for lecturer support differed among students. S7 explained that *"not all material can be understood through the video"* and that some points needed direct explanation from the lecturer (S7, FGI). Lecturer scaffolding was therefore particularly important when students' independent preparation or peer discussion did not fully resolve a difficulty.

Learner Navigation: Coordinating Learning Resources and Support

The three dimensions were closely connected in students' actual learning experiences. Students did not rely on one strategy or source of support throughout the learning process. Instead, they moved among independent learning, digital resources, peers, and lecturer assistance as their needs changed. This pattern supports the use of learner navigation as an integrative lens rather than a fourth substantive dimension. Students' accounts make this movement particularly clear. S7 explained, *"The first time, if there is a part that I do not understand, I try to repeat that part, and if I do not understand it too, I will note it in a notebook and I will look for it from other sources about it"* (S7, II). She first repeated the material, recorded the difficulty, and then searched for another source. Her next action depended on whether the previous strategy had worked.

A similar pattern appeared in S2's account: *"To first learn by myself, I watch the video, then if I do not understand, I will discuss it with a friend"* (S2, II). Here, peer assistance followed an individual attempt. S8 described another route: *"I watch the videos, then I take notes. Then I write down the parts that I still don't understand, and the next day I ask sir about them"* (S8, II). In this case, lecturer support was based on difficulties identified during pre-class preparation. These sequences show that students did not always follow the same route when learning became difficult. They sometimes stayed with an individual strategy, but they could also try another digital resource, ask a peer, or consult the lecturer. What they did next depended on whether the previous step had helped. In this sense, navigation was visible in the adjustments students made as they worked through a problem. This also provides a more nuanced view of autonomy. Seeking help did not necessarily indicate a lack of independence.

In the examples above, students sought assistance after making an effort to understand the material themselves. The important issue was how they recognized the need for additional support and decided which resource to use. Students' choices were also shaped by the conditions surrounding learning. Video quality, internet access, limited classroom time, and competing assignments affected their use of available resources. Some students valued pre-class preparation because it allowed classroom time to focus on difficult points, whereas others found lengthy videos or insufficient preparation time problematic. Learner navigation therefore brings the three substantive dimensions together. Self-regulation helped students identify difficulties and make an initial response; peer support provided another source of explanation and discussion; and lecturer scaffolding offered further clarification when needed. Students did not use these resources according to a fixed sequence. Their choices depended on the problem they faced and on whether the previous response had been

sufficient. The flipped grammar classroom was consequently not simply a shift from lecturer-led teaching to independent learning. Students remained active in deciding what to do, while also drawing on peers, digital resources, and lecturer support. Learner navigation captures this movement across resources and shows how students coordinated different forms of support as their learning needs changed.

Discussion

The findings indicate that the flipped grammar classroom did not simply transfer learning activities from the lecturer to students. Across self-regulation, peer support, and lecturer scaffolding, students decided what to study, when to seek assistance, and which resource could address a difficulty. This supports research showing that flipped learning can strengthen self-regulated learning through planning, monitoring, and reflection (Öztürk & Çakıroğlu, 2021; Samadi et al., 2024). It also corresponds with evidence that flipped environments can promote learner autonomy and self-directed learning (Izadpanah, 2022; Kim & Yoon, 2021). However, the findings extend this perspective by suggesting that autonomy involves not only independent learning but also navigating different forms of support.

Self-Regulation: Managing Learning Before and Beyond the Classroom

Students demonstrated self-regulation through strategies for managing learning before and beyond classroom sessions. They paused and replayed instructional videos, took notes, wrote summaries, and searched for alternative explanations when grammatical concepts were difficult to understand. These behaviours show active monitoring and strategy adjustment. Such findings are consistent with Öztürk and Çakıroğlu (2021), who found that flipped EFL learning can support self-regulated learning through planning, monitoring, and strategy use. Similar relationships have been reported by Samadi et al. (2024) and Wang (2023).

Greater flexibility, however, does not automatically produce effective self-regulation. Students encountered difficulties related to assignments, videos, technology, and preparation. This reflects research identifying workload, technology, student readiness, and the need for greater structure as challenges in flipped learning (Baig & Yadegaridehkordi, 2023; Linling & Abdullah, 2023; Li & Li, 2022). One student's decision to replay material and seek another explanation illustrates this adaptive dimension. Rather than abandoning the task when the first resource was insufficient, the student changed the learning pathway, consistent with research linking successful flipped learning to students' capacity to adapt strategies and regulate learning processes (Öztürk & Çakıroğlu, 2021; Wang, 2023).

This interpretation is also supported by Huang et al. (2023), who explored students' self-regulated learning experiences in MOOC English reading courses. Their findings indicate that students may experience difficulties in effectively navigating and selecting learning resources when sufficient guidance is unavailable. They further show that students respond to limited instructor guidance by using online resources, forums, and peer interaction. While Huang et al. (2023) discuss navigation and resource selection within an online learning environment, the present study extends this perspective by conceptualising learner navigation as a broader process through which students coordinate individual strategies, peer interaction, and lecturer support within a flipped grammar classroom.

Peer Support: Extending Individual Learning Through Interaction

Peer support extended students' individual learning by creating an accessible space for discussing grammatical difficulties. Students used WhatsApp and other forms of peer communication to compare answers, discuss grammar, and explain concepts to one another. These interactions were particularly valuable when students found a peer's explanation easier to understand than a formal explanation. Such findings correspond with research showing that collaborative activities can strengthen learning in flipped EFL environments (Fischer & Yang, 2022; Wang, 2023). Social-media-supported flipped learning has likewise been associated with increased opportunities for interaction and language learning (Han, 2022; Zhao & Yang, 2023).

Peer support did not replace lecturer support. Instead, it provided an intermediate layer through which students could clarify problems before seeking formal guidance. Birova et al. (2023) and Fischer and Yang (2022) similarly demonstrate the value of collaborative interaction in flipped EFL contexts. Peer interaction therefore complements individual learning and contributes to learner navigation.

Lecturer Scaffolding: Responding to Students' Learning Needs

The lecturer's role remained central but differed from that of a conventional knowledge transmitter. Rather than providing all explanations beforehand, the lecturer responded to difficulties emerging from independent and collaborative learning. This role is consistent with research describing flipped learning as a shift towards facilitation, guidance, and interaction rather than the complete removal of teacher instruction (Wei, 2021; Baig & Yadegaridehkordi, 2023). Research on learner autonomy in blended and flipped environments similarly indicates that student independence can coexist with continuing teacher support (Kim & Yoon, 2021).

The sequence is important: students prepared before class, encountered questions during learning, discussed some difficulties with peers, and then sought lecturer scaffolding when necessary. This indicates that scaffolding was responsive. Students sought lecturer scaffolding when their individual strategies or peer discussions did not fully resolve a difficulty. Such a role is consistent with findings that teacher–student interaction can enhance engagement in flipped classrooms (Wei, 2021) and that instructional guidance remains important when students assume greater responsibility for learning (Birova et al., 2023; Baig & Yadegaridehkordi, 2023).

Lecturer scaffolding also supported navigation by helping students identify misconceptions, evaluate explanations, and determine how to proceed when existing strategies were insufficient. This complements Huang et al.'s (2023) observation that students can struggle to navigate and select resources when adequate guidance is lacking. Lecturer scaffolding can therefore make navigation more purposeful without removing students' responsibility.

Learner Navigation as an Integrative Lens

The three dimensions were closely connected in students' accounts of actual learning. Students did not describe one strategy or source of support as sufficient for every difficulty. Instead, they sometimes moved from individual study to another digital resource, then to a peer or the lecturer, depending on what remained unclear. This pattern supports the use of learner navigation as an integrative lens rather than a fourth substantive dimension.

The examples also show how learner navigation differs slightly from self-regulation. Self-regulation concerns how students plan, monitor, and manage their learning, whereas navigation draws attention to the choice of the next resource or person when a problem remains. Peer support and lecturer scaffolding are sources of assistance; navigation concerns how students decide to use them. The three dimensions are therefore linked through students' responses to particular learning needs.

This distinction helps clarify the contribution of the study. Huang et al. (2023) show that students may need to navigate and select resources in an online learning environment, especially when guidance is limited. In the present study, students' accounts show this process extending across independent strategies, peer interaction, and lecturer support within a flipped grammar classroom. Navigation is thus not only about finding a resource. It also involves deciding when to change course and when the available support is sufficient to continue.

From this perspective, learner autonomy is not the same as learning without assistance. Students remained active in their learning when they decided to keep working on a problem themselves, compare their understanding with a peer, or ask the lecturer for clarification. This interpretation is consistent with research linking flipped learning with autonomy, independence, and self-directed learning (Izadpanah, 2022; Kim & Yoon, 2021), while recognising that students' agency develops within instructional and social settings (Baig & Yadegaridehkordi, 2023; Li & Li, 2022). In the present data, autonomy was therefore visible in students' choices about how to respond to difficulties.

This perspective also shifts attention away from pre-class completion alone. Preparing before class remained important, but students' accounts showed that difficulties could continue after the initial material had been studied. What happened next replaying a video, looking for another explanation, discussing an answer, or asking the lecturer was part of the learning process. Research on flipped learning has likewise emphasised engagement, interaction, instructional support, and the conditions that shape participation (Linling & Abdullah, 2023; Li & Li, 2022). Learner navigation helps describe the decisions students make within these conditions.

Taken together, the findings show a flipped grammar classroom in which students used several sources of support rather than working through every problem in the same way. Self-regulation helped them manage individual study; peers offered opportunities to compare and clarify ideas; and lecturer scaffolding was used when some difficulties remained unresolved. The connection among these dimensions was visible in students' decisions about what to try next. Learner navigation provides a useful way to describe this process because it keeps the focus on how students adjusted their learning as their needs changed.

Conclusion

This study explored how students experienced learning in a technology-supported flipped grammar classroom, focusing on self-regulation, peer support, and lecturer scaffolding. The findings show that flipped learning did not simply shift responsibility from the lecturer to students. Instead, it created a learning environment in which students actively managed their learning, interacted with peers, and sought lecturer support according to their needs. Self-

regulation was evident in students' use of strategies such as replaying instructional videos, taking notes, monitoring comprehension, and searching for alternative explanations. Peer support extended individual learning by enabling students to compare answers, discuss grammatical difficulties, and clarify concepts through accessible explanations. Lecturer scaffolding remained important for addressing persistent misunderstandings and guiding students when independent and peer-based strategies were insufficient.

The central contribution of this study is the use of learner navigation as an integrative lens for understanding these three dimensions. In the students' accounts, navigation involved noticing a difficulty, deciding what to try, using a resource or seeking another person's help, and adjusting the next step when necessary. This perspective broadens the usual view of learner autonomy in flipped learning. Students could remain active and responsible for their learning while also relying on peers or the lecturer at particular points. The findings therefore suggest that participation in flipped grammar learning involves not only preparation and independent study, but also students' ability to decide how to respond when their initial approach is not sufficient.

Acknowledgments

The authors would like to express their sincere appreciation to the students who participated in this study and generously shared their learning experiences and reflections. The authors also gratefully acknowledge the university and relevant institutional authorities for granting permission and providing access to conduct the study. Their cooperation and support made the data collection process possible.

References

- Baig, M. I., & Yadegaridehkordi, E. (2023). Flipped classroom in higher education: A systematic literature review and research challenges. *International Journal of Educational Technology in Higher Education*, 20, Article 61. <https://doi.org/10.1186/s41239-023-00430-5>
- Birova, L., Ruiz-Cecilia, R., & Guijarro-Ojeda, J. R. (2023). Flipped classroom in EFL: A teaching experience with pre-service teachers. *Frontiers in Psychology*, 14, Article 1269981. <https://doi.org/10.3389/fpsyg.2023.1269981>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545–547. <https://doi.org/10.1188/14.ONF.545-547>
- Cengiz, B. C., & Ataş, A. H. (2025). Exploring the correlation and influential factors of online self-regulation and in-class co-regulation in a flipped EFL writing classroom. *Computer Assisted Language Learning*, 38(4), 951–986. <https://doi.org/10.1080/09588221.2024.2342869>
- Chang, D. Y.-S. (2026). Flipping EFL low-proficiency students' learning: An empirical study. *Language Teaching Research*, 30(4), 1962–1983. <https://doi.org/10.1177/13621688231165474>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

- Fischer, I. D., & Yang, J. C. (2022). Flipping the flipped class: Using online collaboration to enhance EFL students' oral learning skills. *International Journal of Educational Technology in Higher Education*, 19, Article 15. <https://doi.org/10.1186/s41239-022-00320-2>
- Fisher, R., Tran, Q. T. T., & Verezub, E. (2024). Teaching English as a foreign language in higher education using flipped learning/flipped classrooms: A literature review. *Innovation in Language Learning and Teaching*, 18(4), 332–351. <https://doi.org/10.1080/17501229.2024.2302984>
- Gebregziabher, H. A., Filate, A. Y., & Bishaw, K. S. (2025). Grammar learning in a flipped classroom: Measuring achievement and students' perceptions. *Discover Education*, 4, Article 265. <https://doi.org/10.1007/s44217-025-00641-0>
- Güven, S., & Eǧmir, E. (2026). Flipped classroom practices as contextual scaffolds for online self-regulated learning and academic achievement in secondary EFL education. *Discover Education*, 5, Article 544. <https://doi.org/10.1007/s44217-026-01555-1>
- Han, S. (2022). Flipped classroom: Challenges and benefits of using social media in English language teaching and learning. *Frontiers in Psychology*, 13, Article 996294. <https://doi.org/10.3389/fpsyg.2022.996294>
- Harrison, M. F. (2025). The effect of the flipped learning model on grammar test scores and student perceptions in a South Korean EFL setting. *Asian-Pacific Journal of Second and Foreign Language Education*, 10, Article 29. <https://doi.org/10.1186/s40862-025-00332-1>
- He, J., Wang, H., Xia, J., & He, X. (2024). An ecological perspective on learner agency: The case of Chinese tertiary-level EFL students in peer reviews. *System*, 121, Article 103222. <https://doi.org/10.1016/j.system.2024.103222>
- Huang, Q., Mohd Mokhtar bin Muhamad, M., Nur Raihan binti Che Nawî, N. R., & Li, W. (2023). Exploring college students' self-regulated learning experiences in MOOC English reading courses. *International Journal of Academic Research in Business and Social Sciences*, 13(11). <https://doi.org/10.6007/IJARBS/v13-i11/12290>
- Izadpanah, S. (2022). The impact of flipped teaching on EFL students' academic resilience, self-directed learning, and learners' autonomy. *Frontiers in Psychology*, 13, Article 981844. <https://doi.org/10.3389/fpsyg.2022.981844>
- Jitpanich, T. (2026). Developing grammar lessons: A flipped learning approach to elevate Thai EFL learners' grammatical competence and writing performance. *Cogent Education*, 13(1), Article 2686488. <https://doi.org/10.1080/2331186X.2026.2686488>
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- Kim, N.-Y., & Yoon, S. Y. (2021). A comparative study on blended learning and flipped learning: EFL students' learner autonomy, independence, and attitudes. *Korean Journal of English Language and Linguistics*, 21, 171–188. <https://doi.org/10.15738/kjell.21..202103.171>
- Lestari, I. W. (2021). Flipped classroom in Indonesian higher education: A mixed-method study on students' attitudes and experiences. *Studies in English Language and Education*, 8(1), 243–257. <https://doi.org/10.24815/siele.v8i1.17636>
- Li, Z., & Li, J. (2022). Learner engagement in the flipped foreign language classroom: Definitions, debates, and directions of future research. *Frontiers in Psychology*, 13, Article 810701. <https://doi.org/10.3389/fpsyg.2022.810701>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

- Linling, Z., & Abdullah, R. (2023). The impact of COVID-19 pandemic on flipped classroom for EFL courses: A systematic literature review. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440221148149>
- Liu, L., Hew, K. F., & Du, J. (2024). Design principles for supporting self-regulated learning in flipped classrooms: A systematic review. *International Journal of Educational Research*, 124, Article 102319. <https://doi.org/10.1016/j.ijer.2024.102319>
- Liu, S. H. J., & Kang, W. C. (2026). Enhancing self-regulated learning through peer feedback: Insights from EFL and JFL learners in a CMC environment. *Taiwan Journal of TESOL*, 23(1). [https://doi.org/10.30397/TJTESOL.202604_23\(1\).0003](https://doi.org/10.30397/TJTESOL.202604_23(1).0003)
- Lubis, A. H., Triarisanti, R., & Sulaiman, S. (2026). The merits and challenges of flipped English grammar learning among Indonesian first-year undergraduate non-ELT students. *Indonesian Journal of EFL and Linguistics*, 11(1), 61–79. <https://doi.org/10.21462/ijefl.v11i1.989>
- Mustafa, P. O., & Al Bajalani, F. R. H. (2024). The effects of contextualized grammar teaching on developing EFL university students' writing skills and grammatical accuracy. *Zanco Journal of Human Sciences*, 28(Special Issue A), 456–467. <https://doi.org/10.21271/zjhs.28.SpA.27>
- Nam, T., Courtney, M. G. R., & Naghdipour, B. (2025). Enhancing grammar instruction for EFL secondary school students: Leveraging the flipped approach as a pedagogical intervention. *The JALT CALL Journal*, 21(3). <https://doi.org/10.29140/jaltcall.v21n3.2302>
- Öztürk, M., & Çakiroğlu, Ü. (2021). Flipped learning design in EFL classrooms: Implementing self-regulated learning strategies to develop language skills. *Smart Learning Environments*, 8, Article 2. <https://doi.org/10.1186/s40561-021-00146-x>
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8, Article 422. <https://doi.org/10.3389/fpsyg.2017.00422>
- Samadi, F., Jafarigohar, M., Saeedi, M., Ganji, M., & Khodabandeh, F. (2024). Impact of flipped classroom on EFL learners' self-regulated learning and higher-order thinking skills during the COVID-19 pandemic. *Asian-Pacific Journal of Second and Foreign Language Education*, 9, Article 24. <https://doi.org/10.1186/s40862-023-00246-w>
- Vidal, F. G., Frigolé, N., & Suárez, M. M. (2024). EFL grammar teaching applying the Just-in-Time Teaching methodology: An exploratory study. *Language Teaching Research Quarterly*, 39, 202–216. <https://doi.org/10.32038/ltrq.2024.39.14>
- Wang, J., Zhou, H., Chen, S., Tong, H., & Yang, Y. (2024). How teachers support secondary school students to become self-regulated learners in technology-enhanced language learning. *System*, 123, Article 103313. <https://doi.org/10.1016/j.system.2024.103313>
- Wang, Y. (2023). Enhancing English reading skills and self-regulated learning through online collaborative flipped classroom: A comparative study. *Frontiers in Psychology*, 14, Article 1255389. <https://doi.org/10.3389/fpsyg.2023.1255389>
- Wei, Y. (2021). Enhancing teacher–student interaction and students' engagement in a flipped translation classroom. *Frontiers in Psychology*, 12, Article 764370. <https://doi.org/10.3389/fpsyg.2021.764370>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.

- Zhao, X., & Yang, Y. (2023). Impact of social media-supported flipped classroom on English as a foreign language learners' writing performance and anxiety. *Frontiers in Psychology*, 13, Article 1052737. <https://doi.org/10.3389/fpsyg.2022.1052737>
- Zhong, L. L. (2024). Towards the pivotal factors for the influence of flipped classroom on students' self-regulated learning and EFL speaking competence. *Cogent Education*, 11(1), Article 2351733. <https://doi.org/10.1080/2331186X.2024.2351733>
- Zhong, L. L. (2025). The implementation of integrating flipped classroom and self-regulated learning in enhancing EFL speaking competence. *Cogent Education*, 12(1), Article 2584510. <https://doi.org/10.1080/2331186X.2025.2584510>
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64–70. https://doi.org/10.1207/S15430421TIP4102_2