

Pedagogical Innovation in Online Learning Environments: Students' Perspectives on Learning Governance

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Abstract

Grounded in the concepts of self-regulated learning and metacognition as key competences in higher education, this study explores adult online students' perceptions of the governance of their own learning. The study was guided by the following research question: *Who governs your learning?* In this study, learning governance refers to students' perceived agency and responsibility in directing, monitoring and regulating their own learning processes. A qualitative thematic analysis was conducted on 166 written reflections produced by adult university students enrolled in a pedagogical training course. The analysis identified five main categories: Learner Agency; Self-Regulation and Learning Management; Procrastination and Self-Regulatory Barriers; Contextual Support and Social Influences; V. Most participants perceived themselves as the primary agents of their learning, emphasising autonomy, responsibility and self-discipline, while also acknowledging the influence of factors such as procrastination, fatigue and competing external demands. The prevalence of metacognitive reflection suggests a high level of awareness of the learning process and of the strategies required to regulate it effectively. The findings indicate that learning governance is primarily perceived as an individual responsibility, although it is shaped by the continuous interaction between personal agency and contextual influences. These results highlight the importance of fostering self-regulation and metacognitive competences through pedagogical practices that promote autonomous learning, particularly in online higher education, where students' active engagement is fundamental to academic success.

Keywords: self-regulated learning, online higher education, metacognition, thematic analysis

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Introduction

Grounded in the concepts of self-regulated learning (Zimmerman, 2002) and metacognition as key competences in higher education (Flavell, 1979), this study explores adult online students' perceptions of the governance of their own learning. Specifically, it seeks to answer the following research question: *Who governs your learning?* In this study, **learning governance** refers to students' perceived agency and responsibility in directing, monitoring and regulating their own learning processes.

Self-regulated learning (SRL) has been extensively investigated in educational psychology and the learning sciences, and is widely recognised as a key determinant of academic success, particularly in online learning environments and among adult learners engaged in lifelong learning (Pintrich, 2004; Zimmerman, 2002). Learning how to learn involves the development of metacognitive, motivational and behavioural competences that enable learners to set goals, monitor their progress and adapt their learning strategies in response to emerging challenges (Schunk & Greene, 2018).

Metacognition, defined as the ability to reflect on one's own thinking and learning processes, is considered fundamental for enabling students to assume responsibility for their educational development (Efklides, 2008; Flavell, 1979). These processes become particularly important in online higher education, where learners are expected to manage their time, learning resources and motivation with a high degree of autonomy (Barnard-Brak et al., 2010).

Research has also highlighted the influence of contextual factors—including teacher support, collaborative learning networks, and family or professional responsibilities—which may either facilitate or constrain students' capacity for self-regulation (Hadwin & Oshige, 2011; Shea & Bidjerano, 2010). Understanding how adult online students perceive the governance of their own learning therefore provides valuable insights for the design of more effective, learner-centred pedagogical practices that foster autonomy, self-regulation and academic success.

Literature Review

Contemporary educational research consistently recognises self-regulated learning (SRL) as a fundamental determinant of academic success, particularly in online learning environments and lifelong learning contexts (Dent & Koenka, 2016; Panadero, 2017). Zimmerman (2002) conceptualises SRL as a cyclical process in which learners set goals, select appropriate strategies, monitor their progress, and adapt their actions in response to feedback and learning outcomes. This perspective positions learners as active agents who assume responsibility for directing and regulating their own learning.

More recent developments have extended this individual perspective by acknowledging the social, emotional and contextual dimensions of learning. Hadwin et al. (2018), for example, argue that regulation may occur not only at the individual level but also through co-regulated and socially shared processes, particularly within collaborative online learning environments. Consequently, learning is no longer viewed solely as an individual cognitive activity but as a relational process shaped by interactions with others and by the surrounding learning context. This perspective is especially relevant in online higher education, where collaboration and peer support play an important role despite geographical separation.

Metacognition remains one of the cornerstones of self-regulated learning. Originally defined by Flavell (1979) as the awareness and regulation of one's own cognitive processes, metacognition enables learners to evaluate their understanding, monitor their progress and adapt their learning strategies. More recent studies (Hofer & Yu, 2022; Zepeda et al., 2019) have shown that learners with higher levels of metacognitive awareness are more likely to regulate their study strategies effectively, manage their time efficiently and overcome distractions—competences that are particularly valuable in online learning environments, where external structure is limited and learner autonomy is considerably greater.

Motivation also plays a central role in the self-regulation process. Self-Determination Theory (Ryan & Deci, 2000) suggests that autonomous and persistent learning is fostered in environments that support learners' needs for autonomy, competence and relatedness. Consistent with this perspective, Cho and Shen (2013) and Cazan (2022) found that students with clearly defined learning goals and a strong sense of personal responsibility demonstrate higher levels of persistence, engagement and academic achievement, even when confronted with significant challenges.

In addition to individual characteristics, external factors such as teacher support, professional and family responsibilities, and the characteristics of digital learning environments significantly influence students' capacity to regulate their learning (Broadbent & Poon, 2015; Kizilcec et al., 2017). For adult learners studying online, balancing academic demands with work and family commitments often represents a major challenge, requiring considerable emotional, motivational and organisational resources.

Taken together, these studies suggest that learning governance extends beyond individual responsibility and emerges from the dynamic interaction between personal agency, metacognitive competence, motivation and contextual conditions. Exploring how adult online students perceive the governance of their own learning may therefore contribute to a better understanding of learner autonomy while informing pedagogical practices that provide appropriate cognitive, motivational and organisational support for successful online learning.

Methodology

Research Design

This study adopted a qualitative descriptive-interpretative approach using qualitative content analysis to explore adult students' perceptions of the governance of their own learning in an online higher education context.

Context and Participants

The study was conducted within an undergraduate course offered by a Portuguese distance-learning university. A purposive, non-probability sample comprising 166 adult students (both male and female) participated in the study. Participants had a mean age of 46 years and were enrolled in fully online study programmes. All were attending a pedagogically oriented course designed to promote reflection on learning processes and the development of learning-to-learn competences.

Data Collection

Data were collected through an individual reflective task based on the following question: *Who governs your learning?* Students were invited to answer this question after reading Letter 6 from *Letters from Gervásio to His Navel*, an educational text specifically designed to stimulate metacognitive reflection. Participants were asked to provide a personal, critical and well-reasoned response, which they submitted via the university's virtual learning environment in a dedicated online discussion forum (*Challenges Forum*).

Data Analysis

The data were analysed using qualitative content analysis. As an initial step, generative artificial intelligence (ChatGPT) was employed to support the preliminary identification of potential thematic categories. These preliminary categories were subsequently reviewed, refined and validated by the researcher through an iterative analytical process. Five overarching categories were identified and operationalised through a set of response indicators designed to capture the nuances of participants' discourse. Representative excerpts were then selected to illustrate the most salient dimensions emerging within each category.

Ethical Considerations

Participation was voluntary and formed part of the normal learning activities of the course, without any impact on students' academic assessment. All responses were anonymised prior to analysis to ensure participants' confidentiality and were used exclusively for research purposes.

Results

A qualitative content analysis of the students' responses to the discussion forum question, *Who governs your learning?*, identified five overarching categories that reflect participants' perceptions of learning governance. Responses ranged from unequivocal assertions of personal responsibility to the recognition of contextual influences and psychological barriers affecting the learning process.

The five categories, together with their corresponding response indicators, descriptions and illustrative quotations, are presented in **Table 1**.

Table 1*Categories Emerging From the Qualitative Content Analysis*

Category	Core idea	Typical indicators	Interpretation	Illustrative quotation
1. Learner Agency	Students perceive themselves as the primary agents responsible for directing their own learning.	Personal responsibility; autonomy; self-direction; decision-making; control.	Learning governance is primarily understood as an expression of personal agency, where academic success depends on the learner's own commitment and actions.	"I am the one who governs my learning." "I am responsible for my learning. Everything depends on me."
2. Self-Regulation and Learning Management	Students emphasise planning, organisation and monitoring as essential elements of effective learning.	Planning; time management; goal setting; prioritisation; implementation; self-monitoring; self-evaluation.	Learning is viewed as a structured and intentional process requiring continuous planning, monitoring and adjustment of strategies.	"Students need to plan, carry out and evaluate every learning task." "I organise a study schedule with activities, deadlines and reminder notes."
3. Procrastination and Self-Regulatory Barriers	Internal and external obstacles frequently interfere with students' capacity to regulate their learning.	Procrastination; distractions; fatigue; stress; lack of motivation; competing demands.	Although learners recognise their responsibility, they also acknowledge that maintaining self-regulation requires overcoming persistent psychological and contextual barriers.	"My learning is often influenced by external factors such as work, family and leisure." "Sometimes I feel lost. I know what I should do, but I cannot always put it into practice."
4. Contextual Support and Social Influences	Learning is influenced by interactions with teachers, peers and personal circumstances.	Teachers; classmates; family; employment; personal life; learning resources.	Learning governance is perceived as a socially situated process in which external support and life circumstances shape learners' opportunities for success.	"My teachers support me, but I also need to organise my own study." "I rely on the collaboration of teachers and classmates because online learning is a collaborative process."
5. Metacognitive Awareness and Learning Development	Students demonstrate awareness of their learning processes and recognise that effective learning can be developed over time.	Self-awareness; reflection; self-evaluation; learning to learn; continuous improvement.	Metacognitive reflection enables learners to monitor their progress, recognise strengths and weaknesses, and progressively improve their learning strategies.	"This course taught me that my self-regulatory and metacognitive abilities enabled me to monitor my progress and adjust my focus whenever necessary."

Source: Prepared by the author based on the qualitative content analysis of participants' responses.

Description of the Emergent Categories

1. Learner Agency

Learner agency emerged as the dominant category across participants' responses. Students consistently positioned themselves as the primary agents responsible for directing their own learning, using expressions such as *"I am the one who governs my learning," "It depends on me,"* and *"Only I can govern my learning."* These responses reflect a strong sense of personal responsibility and autonomy, with academic success being perceived as largely dependent on individual commitment, motivation and decision-making.

Rather than attributing learning outcomes to external circumstances, participants emphasised their own capacity to make decisions and assume responsibility for their educational progress. Learning governance was therefore closely associated with personal agency and self-determination.

2. Self-Regulation and Learning Management

The second category highlights students' emphasis on self-regulation as a structured process involving planning, implementation and evaluation. Participants frequently referred to study schedules, calendars, weekly planning, task lists, summaries and the organisation of work across different courses.

These responses indicate that students view successful learning not simply as a matter of motivation but as the result of deliberate planning and continuous monitoring. Self-regulation was therefore described as the practical mechanism through which learners translate intentions into effective learning behaviours.

3. Procrastination and Self-Regulatory Barriers

Procrastination emerged as the principal obstacle to effective learning governance. Participants described a range of internal and external barriers, including distractions, fatigue, stress, competing responsibilities and difficulties maintaining focus.

These accounts reveal an awareness that autonomy alone does not guarantee effective learning. Instead, students recognise that sustaining self-regulation requires continuous effort to overcome behaviours and circumstances that interfere with goal attainment.

4. Contextual Support and Social Influences

Although personal responsibility dominated participants' accounts, many responses acknowledged the contribution of teachers, peers, family members and workplace demands in shaping the learning experience.

Learning governance was therefore not perceived as an entirely individual endeavour but as a socially situated process. Participants recognised that pedagogical support, collaborative relationships and favourable learning conditions facilitate their capacity to regulate learning effectively.

5. Metacognitive Awareness and Learning Development

The final category reflects students' awareness of their own learning processes and their capacity to evaluate and improve them over time. Participants frequently referred to *learning how to learn*, recognising the importance of reflecting on what works, identifying weaknesses and adapting learning strategies accordingly.

Several responses also echoed the central message conveyed throughout the course that effective learners are not born but developed through practice, reflection and continuous self-improvement. This perspective illustrates a strong metacognitive orientation towards learning as a developmental process.

Summary of Findings

Taken together, the five categories reveal a coherent understanding of learning governance among adult online students. Participants overwhelmingly perceived learning as an individual responsibility, exercised through self-regulation, strategic planning and metacognitive reflection. At the same time, they recognised that successful learning is influenced by contextual factors, including social support, professional commitments and family responsibilities.

Overall, the findings portray learning as an active, intentional and continuously regulated process rather than a passive acquisition of knowledge. Learning governance therefore emerges as a dynamic interaction between personal agency, self-regulatory competence and contextual influences. While participants acknowledged the challenges posed by procrastination and competing life demands, they also demonstrated a strong commitment to developing strategies that enable them to maintain control over their learning and achieve their academic goals.

Taken together, the findings support a conceptual understanding of learning governance as a dynamic and multidimensional process. Learner agency emerges as its core dimension, enacted through self-regulation and metacognitive awareness, while simultaneously shaped by self-regulatory barriers and contextual influences.

Discussion

The findings of this study indicate that adult online students perceive themselves as the principal agents responsible for directing and governing their own learning. This perception is consistent with the extensive body of research on self-regulated learning, which conceptualises learners as active participants who plan, monitor, regulate and evaluate their own learning processes (Zimmerman, 2000; Zimmerman & Moylan, 2009). Rather than describing learning as the passive acquisition of knowledge, participants portrayed it as an intentional, goal-directed and continuously regulated process.

The prominence of learner agency across participants' accounts represents one of the most significant findings of the study. Expressions such as *"I am the one who governs my learning"* or *"Everything depends on me"* reveal a strong sense of personal responsibility and ownership of the learning process. These findings reinforce previous research demonstrating that successful online learners assume an active role in managing their

learning and recognise autonomy as a prerequisite for academic success (Rosales-Marquez et al., 2023).

Participants' accounts also highlighted the practical implementation of self-regulated learning strategies. Frequent references to planning, time management, goal setting, prioritisation and self-monitoring closely correspond to the cyclical phases described in classical models of self-regulated learning (Pintrich, 2000, 2004; Zimmerman, 2000). Rather than merely expressing positive attitudes towards autonomous learning, participants described concrete strategies that translate intentions into effective learning behaviours. This finding suggests that self-regulation is not perceived as an abstract competence but as a practical set of behaviours through which learners exercise agency.

Motivation also emerged as an important component of learning governance. References to determination, persistence, discipline and confidence indicate that participants perceived successful learning as dependent not only on effective strategies but also on sustained motivational engagement. This finding aligns with Self-Determination Theory (Ryan & Deci, 2000), which emphasises that autonomous learning is fostered when individuals experience autonomy, competence and relatedness.

At the same time, participants acknowledged that exercising learner agency is neither automatic nor free from challenges. Procrastination, fatigue, competing responsibilities and digital distractions were frequently identified as barriers that interfere with self-regulation. These findings are consistent with previous studies describing procrastination as a failure of volitional regulation, whereby learners struggle to maintain effort and persistence despite their intentions (Panadero & Tapia, 2014). The recognition of these barriers demonstrates that participants understand learning governance as a continuous process of self-monitoring and behavioural regulation rather than a stable personal characteristic.

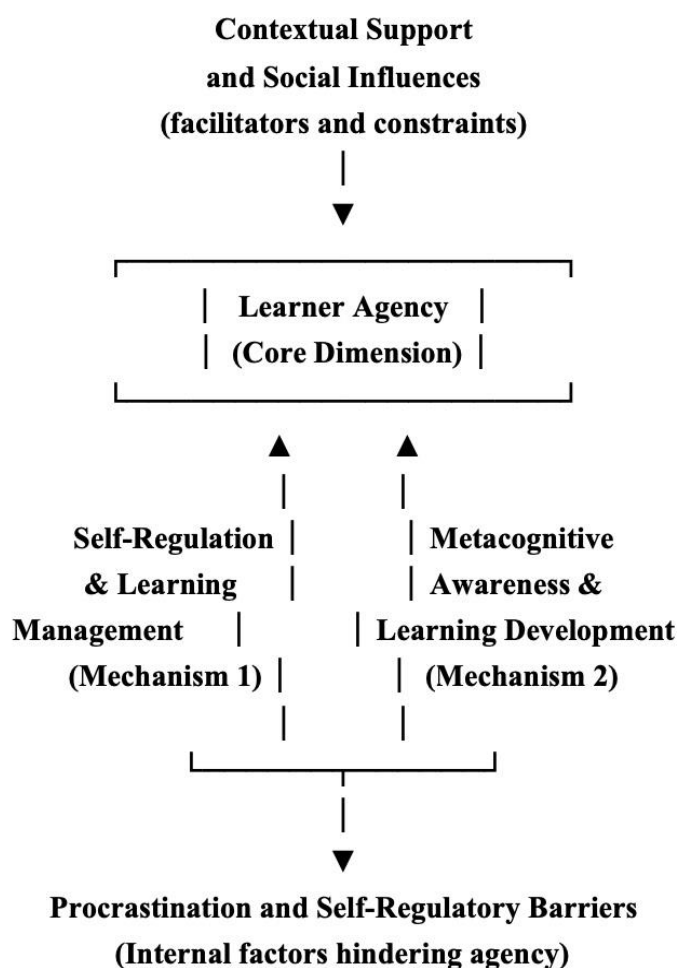
Metacognitive awareness constitutes another central dimension of the findings. Participants demonstrated the ability to reflect critically on their learning strategies, evaluate their effectiveness and make adjustments when necessary. Such responses illustrate the metacognitive processes described by Flavell (1979) and further developed by Panadero and Tapia (2014), confirming that effective learners continuously monitor and refine their approaches to learning. Rather than viewing academic success as the result of innate ability, participants emphasised learning as a competence that can be progressively developed through reflection and deliberate practice.

Taken together, these findings support a conceptual understanding of learning governance as a dynamic and multidimensional process. Based on the empirical evidence, we propose a *Conceptual Model of Learning Governance in Online Higher Education* (Figure 1), in which learner agency represents the central dimension. This agency is enacted through two complementary mechanisms—self-regulation and learning management and metacognitive awareness—while simultaneously influenced by self-regulatory barriers, such as procrastination, and by contextual support and social influences, including teachers, peers and learners' personal circumstances. The proposed model suggests that learning governance is neither exclusively individual nor entirely context-dependent; rather, it emerges from the dynamic interaction between personal agency, regulatory competences and environmental conditions.

From a pedagogical perspective, these findings have important implications for online higher education. Promoting learner autonomy requires more than providing flexible learning opportunities. Educational practices should intentionally foster self-regulatory and metacognitive competences while creating supportive learning environments that help students manage the motivational and contextual challenges associated with adult online learning. Consequently, learning governance should be understood not merely as an individual responsibility but as a developmental process that can be strengthened through appropriate pedagogical design and institutional support.

Figure 1

Conceptual Model of Learning Governance in Online Higher Education



Source: Author's conceptualisation derived from the empirical findings.

Conclusion

This study explored adult online students' perceptions of the governance of their own learning through a qualitative analysis of their reflective accounts. The findings indicate that students predominantly perceive themselves as the principal agents responsible for directing and regulating their learning. At the same time, they recognise that effective learning governance depends on the interaction between personal agency, self-regulatory competences, metacognitive awareness and the contextual conditions in which learning takes place.

Building on these findings, this study proposes a *Conceptual Model of Learning Governance in Online Higher Education*, in which learner agency constitutes the central dimension of the learning process. This agency is enacted through self-regulation and learning management and metacognitive awareness, while simultaneously influenced by self-regulatory barriers, such as procrastination, and by contextual support and social influences. The model contributes to extending current understandings of self-regulated learning by integrating these dimensions into a coherent framework that reflects students' own perceptions of learning governance.

The findings also reinforce the view that effective learning is not an innate characteristic but a competence that can be progressively developed through deliberate practice, reflection and strategic regulation. Participants' emphasis on planning, time management, self-monitoring and continuous improvement aligns with contemporary perspectives that conceptualise self-regulation as a learnable and transferable competence rather than merely a study technique.

From a pedagogical perspective, the study highlights the importance of designing online learning environments that intentionally foster learner agency, self-regulatory competences and metacognitive reflection. Supporting students in developing these capabilities may enhance not only academic performance but also their capacity for lifelong learning and autonomous professional development.

This study is not without limitations. The findings are based on reflections collected from students attending a single pedagogically oriented course within one Portuguese distance-learning university. Consequently, the results should be interpreted within this specific educational context. Future research could examine the proposed conceptual model across different higher education institutions, disciplinary areas and cultural settings, while also exploring its relationships with academic performance, persistence and student engagement through mixed-methods or longitudinal research designs.

Overall, the study suggests that learning governance should be understood as a dynamic, multidimensional and developmental process, emerging from the continuous interaction between learner agency, self-regulatory competences and contextual influences. This perspective offers a meaningful contribution to contemporary discussions on self-regulated learning in online higher education and provides a framework for future research and pedagogical innovation.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that ChatGPT, an AI-assisted writing software, was used as a tool to support the initial coding, with the researcher responsible for reviewing, interpreting and validating the categories.

It was also used in proofreading and refining the language used in the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity.

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