

Peer academic monitoring in a gamified digital environment: educational foundations and pedagogical architecture of the Monion Platform¹



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Abstract: This article analyzes the foundations of peer academic monitoring and discusses the Monion Platform as a proposal for the digital mediation of this practice through gamification. The study is theoretical-descriptive, developed from a literature review and document analysis of materials related to the Platform. The study concludes that the platform can contribute to making peer support practices more systematic, traceable, and recognizable in everyday academic life.

Keywords: Peer academic monitoring; Digital mediation; Gamification.

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Monitoria acadêmica entre pares em ambiente digital gamificado: fundamentos educacionais e arquitetura pedagógica da *Plataforma Monion*

Resumo: O artigo analisa os fundamentos da monitoria acadêmica entre pares e discute a Plataforma Monion como uma proposta de mediação digital dessa prática considerando a gamificação. O estudo é teórico-descritivo, desenvolvido a partir de revisão de literatura e análise documental de materiais da Plataforma. O estudo conclui que a plataforma pode contribuir para tornar as práticas de apoio entre pares mais sistemáticas, rastreáveis e reconhecíveis no cotidiano acadêmico.

Palavras-chave: Monitoria acadêmica entre pares; Mediação digital; Gamificação.

Monitoría académica entre pares en un entorno digital gamificado: fundamentos educativos y arquitectura pedagógica de la *Plataforma Monion*

Resumen: El artículo analiza los fundamentos de la tutoría académica entre pares y examina la Plataforma Monion como una propuesta de mediación digital de esta práctica. Se trata de un estudio teórico-descriptivo, desarrollado a partir de una revisión de la literatura y del análisis documental de materiales de la plataforma. Se concluye que la plataforma puede contribuir a que las prácticas de apoyo entre pares sean más sistemáticas, trazables y reconocibles en la vida académica cotidiana.

Palabras clave: Aprendizaje entre pares; Mediación tecnológica; Gamificación.

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1 INTRODUCTION

In Brazilian Higher Education, peer academic monitoring can be understood as a practice situated at the intersection of pedagogical support, collaborative learning, and student development, fostering the creation of spaces for dialogue in which students share questions, study strategies, and modes of knowledge appropriation. The articulation between academic guidance and student agency shifts learning toward a more horizontal dynamic, in which interaction among students also constitutes part of the educational process.

The literature has highlighted that, for the students receiving support, academic monitoring favors more active and self-regulated learning by enabling the review of content, the clarification of questions, and the development of study strategies. For students who serve as monitors, the experience contributes to deepening curricular knowledge and to becoming familiar with pedagogical mediation practices and initial dimensions of teaching (Alves; Freitas, 2021; Frison, 2016; Natário; Santos, 2010). In contexts marked by difficulties in adapting to university life and by demands for support beyond regular class time, this practice assumes an even more relevant role in building academic bonds among students and in enhancing the quality of the formative trajectory (Dias et al., 2019).

Despite the recognition of the pedagogical value of academic monitoring, studies indicate that its implementation does not occur in a homogeneous or consolidated manner across institutions. In a previous study conducted by the authors of this article (in press), we found that, alongside the formative contributions attributed to this practice, problems are also observed, such as low institutional visibility, insufficient pedagogical supervision, limited recognition of the activities carried out, and difficulties in maintaining continuity and organization of academic monitoring in everyday university life.

This diagnosis finds resonance in studies such as that by Oliveira and Vosgerau (2021), who draw attention to the still unstable and, in many cases, fragile character of academic monitoring in certain contexts of Brazilian public universities. Thus, rather than reaffirming its pedagogical value, it becomes necessary to examine the concrete conditions that favor or hinder its implementation, particularly regarding activity scheduling, venues for sessions, institutional visibility, pedagogical supervision, and recognition of the participation of both monitors and supported students.

Parallel to this debate, contemporary transformations in the relationship between social life and technology also reposition the ways in which educational practices are organized. Floridi (2015)

argues that we live in an onlife reality, marked by the weakening of boundaries between the physical and the digital. In the educational field, this condition expands the possibilities for organizing, communicating, and sustaining collaborative practices through digital technologies, provided they are articulated with consistent pedagogical purposes (Selfa-Sastre et al., 2022). In the case of academic monitoring, digital mediation can contribute to increasing the visibility, systematicity, and reach of interactions among students, without eliminating the institutional challenges that permeate its implementation.

Given this context, this study presents the description and analysis of an innovative digital pedagogical resource: the Monion Platform, developed through a partnership between the State University of Montes Claros (Unimontes) and the State University of Minas Gerais (UEMG), with funding from the Minas Gerais State Research Support Foundation (Fapemig). Monion is characterized as a free, open-access gamified digital environment in which students from any institution can autonomously offer or receive pedagogical support through pre-scheduled, certified synchronous virtual sessions.

As described by Ribeiro and Moreira (2026), the platform was conceived as a digital resource aimed at organizing, mediating, and recognizing peer monitoring practices among students. Its purpose is not only to enable online meetings but also to offer an infrastructure capable of supporting the scheduling, recording, certification, and institutional visibility of these interactions. In this way, Monion is part of an effort to address recurring problems in the consolidation of and access to academic monitoring in Higher Education, especially those related to the dispersion of initiatives, the difficulty of supervision, and the fragility of institutional recognition in certain contexts.

In view of this, this article aims to analyze the educational foundations of peer academic monitoring and to discuss the Monion Platform as a proposal for digital mediation aimed at organizing, supervising, and recognizing this practice. Initially, we discuss academic monitoring as a pedagogically relevant practice, yet one that is institutionally strained. Next, we examine its foundations in collaborative peer learning and in the technological mediation of educational practices. Finally, we describe the pedagogical conception and functional architecture of Monion, analyzing its potential to lend greater systematicity, visibility, and recognition to academic support practices among students.

2 METHODOLOGICAL PROCEDURES

This article is a theoretical-descriptive and analytical-interpretive study, developed from a literature review and document analysis. This design was chosen based on the study's objective: to analyze the educational foundations of peer academic monitoring and to discuss the Monion Platform in terms of its pedagogical conception and functional architecture, without examining, at this stage, empirical data concerning the effective uses of the platform by students.

The literature review aimed to construct the conceptual framework supporting the discussion on academic monitoring, collaborative peer learning, self-regulated learning, and technological mediation in educational practices. To this end, studies considered relevant to the object were mobilized, with emphasis on works addressing: a) the formative contributions of academic monitoring in Higher Education; b) the institutional challenges related to its implementation, continuity, and recognition; c) the foundations of peer learning; and d) the role of digital technologies in organizing collaborative practices. Part of this review is based on a previous survey on academic monitoring in Brazilian Higher Education conducted by the authors (in press), in which ten studies were selected for the analysis of their formative contributions and institutional challenges. The studies were selected based on their relevance/convenience for answering the defined questions (a, b, c, d).

The document analysis used as its corpus materials related to the conception and operation of the Monion Platform, especially the Platform's presentation booklet (Ribeiro; Moreira, 2026), documents concerning its development process, and direct access to its digital interface (www.monion.unimontes.br). These materials were considered as records of the platform's pedagogical proposal and technical-functional configuration, making it possible to examine the ways in which Monion organizes the flows of registration, search, scheduling, execution, assessment, gamification, recording, and certification of academic monitoring activities.

It is worth noting that this investigation does not aim to evaluate Monion's impacts on learning, student retention, or academic engagement, since such effects would require empirical studies with Platform users. What this article presents is a descriptive-interpretive analysis of its pedagogical proposal and functional architecture, understood as articulated dimensions of a strategy for organizing, mediating, and recognizing peer monitoring practices.



3 FOUNDATIONS OF ACADEMIC MONITORING AND COLLABORATIVE PEER LEARNING

In the university context, it is not uncommon for students to encounter subjects, content, and study methods that are still unfamiliar to them, and whose understanding demands forms of mediation that go beyond the recommended readings, the classes scheduled in course curricula, and even the individual effort of appropriation. When facing learning difficulties, insecurities, feelings of distress, and questions that do not always find space for elaboration within the regular time of courses, the support of a peer can favor both the understanding of certain content and student retention in the program, as argued by Dias et al. (2019).

From this perspective, peer academic monitoring can be defined as a pedagogical support practice that expands learning possibilities beyond the regular class time and individual study. Through the connection between students at different levels of mastery of certain content, academic monitoring creates conditions for questions, study strategies, modes of explanation, and alternative forms of understanding to circulate within a less hierarchical relationship than the one that traditionally organizes teacher-student interaction. It is not, therefore, a matter of replacing teaching or of reproducing, on a smaller scale, the class taught by the professor, but rather of establishing a specific formative situation in which peer proximity favors listening and the construction of joint paths more closely tailored to the concrete difficulties of students.

This practice is therefore of interest due to its dual formative impact. For the students receiving support, the interaction can favor the review of content, the confrontation of academic difficulties, and even the development of greater autonomy in the learning trajectory. For student monitors, it contributes to deepening knowledge, developing communication skills, and becoming familiar with pedagogical mediation practices and teaching initiation (Alves; Freitas, 2021; Frison, 2016). Academic monitoring, in this way, goes beyond simply "supporting students with difficulties," constituting a broader formative practice that affects the different subjects involved in academic life and the modes of (re)construction and circulation of knowledge within the university.

From a historical perspective, academic monitoring, today widely associated with contemporary Higher Education, dates back to earlier experiences of mutual teaching and support provided by more experienced students to others in the learning process, identified even in educational practices developed among the Jesuits (Frison; Moraes, 2010; Frison, 2016). In Brazil, its formal presence in Higher Education gained clearer contours with Law No. 5,540/1968 and was subsequently

reaffirmed by the Law of Directives and Bases of National Education, which provides for student participation in teaching and research activities, including monitoring functions, according to academic performance and study plan (Brasil, 1968, 1996).

This institutionalization, however, does not in itself guarantee a stable, homogeneous, or pedagogically sound implementation of academic monitoring across the different institutions of a country with continental dimensions such as Brazil. On the contrary, studies on the subject indicate that it can take on different formats, objectives, and degrees of consolidation, depending on course pedagogical projects, institutional teaching support programs, monitor training, and faculty/institutional supervision (Oliveira; Vosgerau, 2021). For this reason, academic monitoring should not be viewed as an automatically effective practice, as if its mere institutional existence were sufficient to ensure consistent formative effects. The potential of this practice depends on the ways in which it is organized, supervised, sustained, consolidated, and legitimized in the everyday life of institutions.

From this perspective, despite its clear formative contribution, academic monitoring may, in certain spaces, operate precariously and, as a result, have its effectiveness drastically reduced, as noted in the introduction. The literature shows that the success of this practice depends on concrete institutional conditions, which are not restricted to the opening of positions or the formal designation of student monitors. The adequate dissemination of activities, for example, is decisive for students to recognize academic monitoring as a real possibility of support, just as institutional pedagogical supervision is necessary to prevent the practice from becoming an isolated or improvised activity.

In this process, the existence of logistical infrastructure, scholarships, certification, or other forms of recognition strengthens the continuity of academic monitoring and its legitimacy within the institution, while clarity regarding the roles of the monitor and the supported student contributes to avoiding mistaken expectations about each participant's function, as suggested by authors such as Oliveira and Vosgerau (2021) and Gonçalves and collaborators (2021). It is from this perspective that peer academic monitoring can be defined as a pedagogically relevant yet institutionally strained practice: although its formative value is widely recognized, its implementation depends on the conditions that make it visible, accessible, supervised, and sustainable.

When sustained by such conditions, academic monitoring contributes significantly to enhancing the quality of university education in different dimensions. For supported students, it offers a complementary, non-compulsory space in which questions can be revisited with less embarrassment,

content can be reorganized at a different pace, and learning strategies can be developed from difficulties actually experienced. For monitors, it constitutes an opportunity to reorganize knowledge, explain content, plan interventions, select examples, listen to comprehension obstacles, and experience initial forms of pedagogical mediation. In this sense, teaching and learning are articulated within a single formative dynamic: those who receive support can advance in their understanding of content, while those who offer support also learn by explaining, reformulating, adjusting their language, and reflecting on their own knowledge.

It is in this direction that Frison (2016) understands academic monitoring as a teaching modality capable of favoring collaborative and self-regulated learning. Peer academic monitoring therefore finds one of its main foundations in peer learning, understood not as the simplified transmission of content from a student who "knows more" to another who "knows less," but as a practice of interaction through language in which questions, explanations, metacognitive strategies, and modes of understanding are shared. Learning, from this perspective, goes beyond the passive activity of "receiving" information from someone more experienced. This action, on the contrary, presupposes participating in interactions in which knowledge is revisited, reorganized, and elaborated within a relational dynamic. Collaboration among students thus shifts learning from a strictly individual logic to a communicative and relational experience, in which the other actively participates in the construction of knowledge.

This conception aligns with the Freirean understanding of education as a practice of communication and dialogue. For Freire (1983), teaching does not correspond to the transfer of knowledge, but to the encounter between subjects who seek to produce meanings about the world. In the case of academic monitoring, this principle takes on specific contours: the monitor does not occupy the teacher's place, nor is the supported student a mere receiver of explanations. Both participate in a more horizontal situation of dialogue in which knowledge is revisited, reorganized, and reconstructed based on concrete learning needs. It is, therefore, a practice that distances itself from the logic of banking education, criticized by Freire, by valuing listening, the active participation of the student, and the shared production of meanings in the formative process.

The historical-cultural perspective also contributes to understanding the pedagogical value of this practice. By distinguishing the level of actual development from the zone of proximal development, Vygotsky (1991) shows that certain learning becomes possible when the subject relies on the mediation of another. In academic monitoring, this mediation occurs between students who



occupy similar positions within academic culture, although they possess different degrees of mastery of certain content. This proximity tends to favor more accessible language, providing greater freedom to express questions and forms of explanation more closely attuned to the difficulties experienced by students themselves. In this way, the difference in content mastery does not break the peer relationship; on the contrary, it is precisely this difference that enables the constitution of a situated mediation, in which the more experienced student can support the peer's progress without nullifying their active participation in the learning process.

At this point, the notion of scaffolding helps to understand the pedagogical function of academic monitoring. In Bortoni-Ricardo and Sousa (2006), scaffolding is understood as provisional support that enables the learner to advance in a given practice or domain of knowledge. In academic monitoring, the student with greater mastery of a content offers support so that the peer can advance in their understanding, functioning as a scaffold, without this support becoming a permanent dependence. On the contrary, its purpose is precisely to favor the progressive autonomy of the supported student, as they understand the content more deeply, develop study strategies, and gain confidence to face new learning situations. Thus, academic monitoring functions as situated and transitory support, activated according to the formative needs of students and reconfigured with each new content, course, or academic trajectory. In other words: those who offer academic monitoring today may come to need it in another content tomorrow.

This dimension also aligns with the debates on self-regulated learning. When seeking academic monitoring, students must recognize their difficulties, formulate questions, and reflect on what they have understood and what they have not yet understood. When acting as monitors, they must reorganize their knowledge, anticipate comprehension obstacles, and adjust their explanations to the needs of the other. Thus, academic monitoring can favor processes of self-reflection on learning for both those who receive and those who offer support (Frison; Moraes, 2010; Frison, 2016). By understanding how their own reasoning operates, whether for learning or for teaching, monitor and supported students also learn about the ways in which they learn, explain, interpret, and re-elaborate knowledge.

This occurs because the practice of academic monitoring mobilizes a metacognitive dimension, since it leads students to take their own learning process as an object of reflection. As Schraw (1998) points out, metacognition involves the knowledge and regulation of one's own cognition: while cognitive activity concerns the skills mobilized to perform a task, metacognitive



activity consists of consciously monitoring, evaluating, and regulating this process. In the same direction, Ribeiro, Franco, and Campos (2021, p. 32) state that "the metacognitive system occurs concurrently with the cognitive system, monitoring and regulating it," which contributes to enhancing the quality of learning. In academic monitoring, this dimension manifests when students make their questions explicit, reconstruct paths of understanding, evaluate study strategies, reformulate explanations, and recognize more effective ways of learning and teaching.

By articulating mediation, dialogue, scaffolding, self-regulation, and peer learning, academic monitoring shows that learning at the university goes beyond individually appropriating content: it means participating in social practices of knowledge construction, learning, circulation, and re-elaboration. Given that academic monitoring relies on peer interaction and the gradual development of student autonomy, the question that arises from this is how digital technologies can reorganize this practice, making it more accessible, visible, and trackable, without, however, resolving all the institutional challenges that condition its implementation.

4 TECHNOLOGICAL MEDIATION OF COLLABORATIVE PRACTICES

In contemporary educational practices, digital technologies no longer appear merely as auxiliary resources. Today, they participate in the organization of time, spaces, records, and forms of interaction that sustain teaching and learning, which now occur predominantly in a hybrid manner (between the virtual and the physical). Virtual environments, educational applications, accessibility resources, management systems, research tools, and gamification features show that technological mediation has come to compose, in an increasingly ordinary way, social life beyond educational practices.

This presence should not be understood as an absolute rupture with earlier forms of mediation. We must not forget that technology accompanies human history and participates in the constitution of culture, from elementary work instruments to complex digital systems of communication and interaction (Gama, 1986). What changes in the present is the intensity with which digital media have come to permeate social, institutional, and formative practices, making the boundaries between the in-person and the digital increasingly less distinct.

It is in this sense that the notion of onlife, proposed by Floridi (2015), helps to understand the current scenario. For the author, we live in a reality marked by the increasingly massive integration

between physical and digital experiences, by the abundance of information, and by the centrality of networked interactions. In the educational field, this means that technologies, beyond altering the medium, modify the conditions of access, communication, monitoring, and continuity of pedagogical interactions.

In the educational context, the presence of these technologies no longer generates estrangement, as can be seen from the use of digital technologies as assistive technologies (voice-controlled software, audio description applications, YouTube's automatic caption generation, sign language videos, and AI-based chats) to support for organizing and preparing classes, gamification instruments, the promotion of interactive pedagogical activities, and even the structuring/platformization of entirely distance-learning courses.

This potential, however, must be viewed with caution. Technology does not, by itself, produce collaboration, enhanced learning, or democratized access. The effects depend on the pedagogical design that guides its use, on the institutional conditions of implementation, and on the way in which subjects appropriate the available resources, that is, they depend on human agency. It is evident that problems such as the low valuation of academic monitoring, fragile pedagogical supervision, and resource precariousness, for example, are not resolved by the mere introduction of digital resources.

In this process, if academic monitoring relies on peer interaction, mediation, and the gradual development of student autonomy, digital environments can contribute to making it more accessible, trackable, and institutionally recognizable. Naturally, technological possibilities for scheduling, records, assessments, and certificates do not, in isolation, guarantee pedagogical quality, but they can offer conditions for interactions that were previously dispersed or scarcely visible to be better organized, recognized, and operationalized within institutions. In other words, we do not refrain from emphasizing: technology can expand the reach and visibility of academic monitoring, but its effectiveness remains linked to institutional design and the support provided to those involved.

It is within this horizon that the Monion Platform is situated, which certainly does not constitute an automatic solution to the challenges of academic monitoring, but rather a proposal for the digital organization and supervision of collaborative practices among students. Its architecture is based on the recognition that academic monitoring, when mediated by adequate institutional conditions, can gain greater visibility, continuity, and possibilities for supervision through resources aimed at the meeting, recording, assessment, and certification of peer learning experiences. Thus, the platform presented in this text results from a reflection on the ways in which technological mediation

can contribute to structuring collaborative learning practices without shifting to technology the responsibility for pedagogical processes that fundamentally depend on the subjects, the institutions, and the concrete conditions for the implementation of academic monitoring.

5 THE MONION PLATFORM: PEDAGOGICAL-DIGITAL ARCHITECTURE OF PEER MONITORING

The Monion Platform was conceived as a digital environment aimed at organizing peer academic monitoring practices. Developed through a partnership between the State University of Montes Claros (Unimontes) and the State University of Minas Gerais (UEMG), the platform seeks to connect students who wish to offer academic support and students who seek guidance in certain content or courses. Its proposal consists not only of creating a virtual space for synchronous meetings but also of organizing the conditions of access, scheduling, recording, assessment, and certification of these interactions.

In this section, the focus is on describing Monion's pedagogical-digital architecture, that is, the way in which its functionalities seek to give form to an already existing educational practice: collaboration among students. The description does not aim to evaluate impacts on learning or student retention, since such an endeavor would require empirical investigation with users. What is examined at this stage is how the platform organizes flows and resources that can address recurring weaknesses of academic monitoring, such as the dispersion of initiatives, difficulty of supervision, low visibility, and limited institutional recognition.

5.1 Origin and Objectives of the Platform

The project originated within an interinstitutional partnership between professors from the Graduate Program in Education at the State University of Montes Claros (PPGE/Unimontes) and the State University of Minas Gerais (UEMG). In this regard, Ribeiro and Moreira (2026), in the platform's presentation booklet, introduce it as an expression of these institutions' commitment to innovation in teaching and to the promotion of more collaborative and socially engaged educational experiences, and, above all, as an effort to devise ways of organizing academic monitoring capable of addressing recurring weaknesses of this practice in the contemporary educational context.



In this direction, the platform was conceived as a free and open digital environment aimed at connecting students for academic monitoring sessions, based on the relationship between learning needs and the support possibilities offered by their peers. Its central objective is therefore not limited to connecting users in a virtual space; it also consists of creating more accessible and recognizable conditions for practices of academic collaboration (Ribeiro; Moreira, 2026). Although the proposal can reach different stages of schooling, its formulation is particularly relevant for contexts in which students require more continuous support in specific content, as frequently occurs in Higher Education.

Below, we describe the main obstacles the platform proposes to address. The first concerns the heterogeneity of learning processes, since, in formal education contexts, students do not present the same mastery of all content, nor do they follow homogeneous learning trajectories (Topping, 2005). Based on this recognition, the platform seeks to shift the difference in mastery levels from a logic of individual deficit to a logic of peer collaboration, in which certain academic abilities can be converted into mutual support. Thus, the proposal seeks to create an infrastructure in which teaching and learning appear as interchangeable positions in formative trajectories marked by unevenly distributed competencies.

The second issue concerns the concrete barriers that hinder students' access to more stable forms of academic support (institutional or otherwise). As Dias and collaborators (2019) show, the university trajectory is permeated by difficulties that are not restricted to content itself but also involve economic, logistical, and relational conditions. In view of this, the platform seeks to expand the accessibility of academic monitoring by reducing obstacles such as travel, communication difficulties, schedule incompatibility, and dependence on informal contact networks. Moreover, it extends this support beyond institutional boundaries, since it connects students from all over Brazil in a network of mutual interests. This means that the search for offering/receiving academic monitoring can occur through individual motivation, even if a given institution does not have an established program. With internet access, any student can seek to interact with other students on this learning platform. At this point, the configuration resembles that of a social network.

There is also a third point of a more directly institutional nature: the fragility of organization, visibility, and recognition of academic monitoring activities within institutions. Even when peer support practices occur frequently, they do not always produce sufficient records, supervision, or academic legitimacy to be incorporated as institutionally recognized formative experiences. By



providing resources such as session recording, reciprocal assessments, and automatic certification, the platform seeks to address precisely this gap, converting interactions that often remain episodic into more systematized, verifiable practices that are eligible for curricular recognition.

These are the main obstacles — learning inequality, barriers to accessing academic support, and the low institutional legitimacy of academic monitoring — that define the platform's objectives. These objectives, in turn, guide the construction of the Platform's operational architecture, which will be explored below.

5.2 Structure and Operational Dynamics

At the operational level, the platform is organized around two user profiles: *monitor* and *student*. Initial registration requires the user to choose one of these profiles (Figure 1), although movement between positions is possible, since the same individual can offer academic monitoring in areas in which they have greater mastery and, simultaneously, seek support in other content. The fluid nature of this positionality is based on the assumption that skills and difficulties are heterogeneously distributed among subjects and that teaching and learning can constitute interchangeable functions within a single formative trajectory (Ribeiro; Moreira, 2026; Topping, 2005). Both types of profiles must: indicate their level of education, the educational institution to which they are affiliated, and write a concise self-introduction.

Figure 1 — Profile selection on the Monion Platform

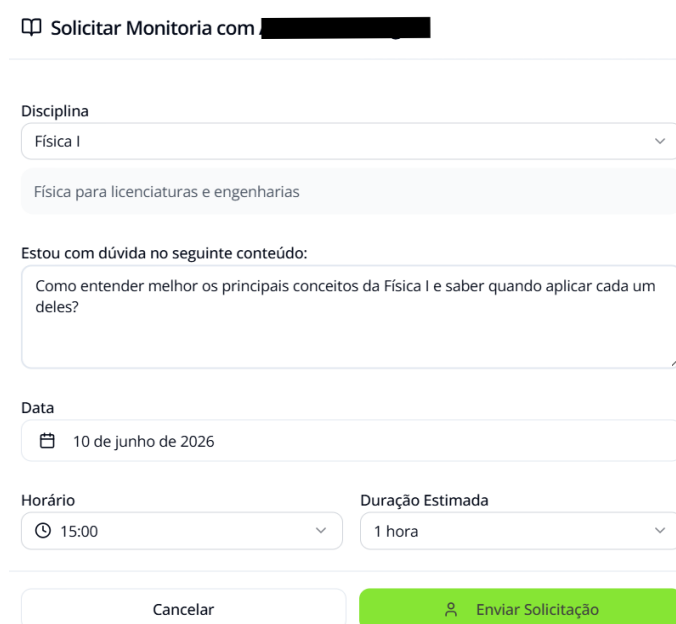


Source: Monion Platform: <https://monion.unimontes.br>

For the monitor profile, the platform also requires the completion of areas or courses of practice, as well as available days and times. All these elements compose a public profile that comes to concentrate information relevant to the student's choice, such as the number of sessions conducted and assessments received. The profile structure thus operates as a mechanism for the traceability and pedagogical legibility of the monitor's work.

On the student side, after creating their profile, the flow begins with searching the system for the area or course in which they wish to deepen or develop their learning. The platform returns a list of available monitors and allows the student to consult profiles, specialties, assessments, service history, and schedule availability before sending a request (Figure 2). The intentions of this process are to structure selection criteria, organize information about offerings and support, and transform the search for academic monitoring into a more transparent, predictable, stable, and comparable procedure. Thus, instead of depending on personal recommendation networks, the student relies on an environment that organizes the supply of academic help in a more public and accessible manner.

Figure 2 — Scheduling request for academic monitoring on the Monion Platform



The screenshot shows a web form titled "Solicitar Monitoria com [redacted]". The form includes the following fields and options:

- Disciplina:** A dropdown menu with "Física I" selected. Below it, a light blue box contains the text "Física para licenciaturas e engenharias".
- Estou com dúvida no seguinte conteúdo:** A text area containing the question: "Como entender melhor os principais conceitos da Física I e saber quando aplicar cada um deles?".
- Data:** A date picker showing "10 de junho de 2026".
- Horário:** A time picker showing "15:00".
- Duração Estimada:** A dropdown menu showing "1 hora".
- Buttons:** At the bottom, there are two buttons: a white "Cancelar" button and a green "Enviar Solicitação" button with a person icon.

Source: Monion Platform: <https://monion.unimontes.br>

Regarding scheduling, after selecting the monitor, the student chooses a day and time based on the availability previously registered and sends their request, describing their specific need for support in that session. Confirmation of the request depends on the monitor's response, who must



accept or decline the meeting according to their availability. If declined, the monitor must provide a justification to be sent to the student and may use the platform's rescheduling function. Once the request is confirmed, the session appears on the site's scheduling panel. Participants then receive reminders in advance via email and WhatsApp (a communication application widely used in the Brazilian context), and, if the account is integrated with Google Calendar, the link for the synchronous virtual meeting via Google Meet is generated and added to the users' Calendar, arriving by email. All these resources aim to reduce logistical obstacles that potentially compromise the continuity of collaborative initiatives, constituting a trackable infrastructure for organizing peer encounters and reducing communication mismatches.

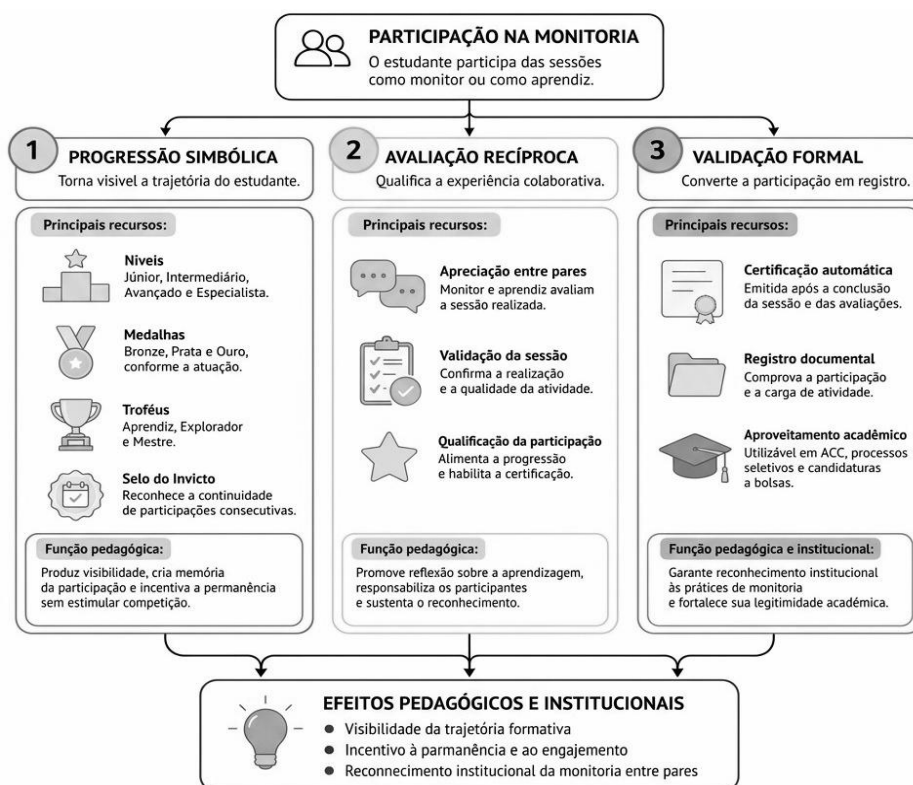
At the end of the meeting, mutual assessment begins, a crucial stage of the process. The platform establishes that the session will only be counted and certificates will only be generated when both parties have completed their assessments. Users award up to 5 stars to their peers and select qualities compatible with the monitor/student, such as "attentive and participatory," "clear and objective explanation," and "engaging teaching approach." After this, certificates are generated automatically and sent to users via email.

The steps necessary for conducting an academic monitoring session on Monion have been described in a pragmatic manner. We emphasize that this is a dynamic journey, permeated by interactive virtual elements that aim to foster user engagement and retention within that environment, which will be described below.

5.3 Pedagogical and Engagement Resources

The resources employed by the platform to sustain user participation can be understood through three complementary axes, namely: symbolic progression, reciprocal assessment, and formal validation. The available resources are presented in Figure 3 below.

Figure 3 — Monion Platform Resources



Source: prepared by the authors.

In the first axis are the gamification devices, which act as a set of mechanisms that symbolically organize user participation. In addition to encouraging platform use through playful elements, these devices seek to give visible form to the trajectory constructed by the student throughout the academic monitoring sessions. In this logic, participation becomes inscribed as a trackable trajectory, subject to internal distinction within the digital environment itself, in different facets.

There is the distinction of progression levels, which are elevated according to the user's activity on the site. As they conduct more sessions, they move through the Junior, Intermediate, Advanced, and Specialist categories, and see their work situated on a developmental scale internal to the platform. The medals — bronze, silver, and gold — indicate broader progression in platform use, functioning as markers of intensity or consolidation of activity. They introduce a logic of more specific differentiation, through which certain forms of participation become highlighted and featured on the student's profile. The trophies — such as Apprentice, Explorer, and Master — condense symbolic

profiles of participation, producing a more expressive naming of the user's trajectory. There is also the Undeclared Badge, which introduces the valuation of consistency, recognizing consecutive participations and drawing attention to the continuity of engagement with the practice, focusing on the temporal continuity of engagement. Thus, gamification devices function as forms of narrativization of the trajectory, since the platform accounts for, records, and internally rewards each student's path, valuing the time and commitment devoted to the activities.

If, on the one hand, it can be argued that gamified instruments and rankings introduce an element of competitiveness among users — although this is not the platform's intention (Ribeiro; Moreira, 2026) — on the other hand, the visible trajectory and the achievement of new levels, medals, or titles are factors that potentially intensify the retention and engagement of new students on Monion, as they are visual and eye-catching markers of their progress in their studies, constituting yet another way of perceiving their activity as a formative trajectory endowed with value.

The second axis consists of the reciprocal assessment conducted at the end of the sessions, a resource that introduces a moment of appreciation and validation of the lived experience. The platform asks participants, whether monitors or supported students, to assess one another and rate the session conducted, adding to the interaction a reflective and verificatory gesture, and causing the activity to be appreciated and re-inscribed into the system based on the perception of those involved. This closing step of the session contributes to validating the occurrence of the activity, providing elements for the qualitative appreciation of the experience and of the parties involved, and feeding the subsequent mechanisms of scoring, certification, and recognition.

Added to this incentive architecture is the automatic certification mechanism offered by the platform. While gamification elements act primarily at the level of symbolic valuation and the stimulation of retention, the certificate system constitutes an instance of institutional validation responsible for converting effective participation into documentary record. As mentioned, once the sessions are completed and the peer assessments are carried out, the user immediately receives, via email, the validated certificates. Such documents can be used to fulfill Complementary Academic Activities (Atividades Acadêmicas Complementares – ACC) at the respective educational institution, as well as presented in selection processes and scholarship applications.

Overall, the items described above make it possible to understand that the Platform proposes a dynamic of recognition articulated in multiple layers. On the one hand, the playful devices give visibility to the participant's progression and reward their consistency within the network. On the other

hand, certification confers formality to this trajectory, making it eligible for verification in institutional spheres. Thus, through stimuli that combine the lightness of play with the seriousness of academic validation, the platform seeks to encourage the retention of its members. All these mechanisms contribute to sustaining a culture of collaborative learning in which the acts of participating, returning, and remaining are also recognized and valued dimensions of the formative experience.

6 FORMATIVE POTENTIAL OF ACADEMIC MONITORING IN A DIGITAL ENVIRONMENT

In this section, we interpret how the Monion Platform's architecture can address recurring weaknesses of academic monitoring previously identified in a study conducted by the authors and revisited throughout this article. The different functions and tools employed are presented in Box 1 below and explored throughout the section.

Box 1 – Weaknesses of academic monitoring and Monion Platform functionalities

Fragilidade identificada na literatura	Funcionalidade da plataforma	Contribuição pedagógica/institucional esperada
Baixa visibilidade da monitoria	Perfis públicos de monitores; busca por área/disciplina; histórico visível	Amplia a encontrabilidade e o reconhecimento do apoio acadêmico e torna a monitoria mais visível no interior da instituição
Descontinuidade das interações	Agendamento; lembretes; integração com agenda; organização de horários	Favorece continuidade, previsibilidade e permanência nos percursos de monitoria
Fragilidade de acompanhamento	Histórico de atendimentos; avaliações recíprocas; registro das sessões	Produz rastreabilidade, registro e melhores condições de acompanhamento
Baixo reconhecimento institucional	Certificação automática; registro documental da participação; visibilidade do monitor	Converte participação em evidência reconhecível certificada e fortalece a legitimação acadêmica da monitoria
Isolamento discente	Conexão entre estudantes de diferentes turmas, cursos e instituições	Amplia redes de apoio, pertencimento e circulação de saberes entre pares
Desestímulo para estudantes sem bolsa	Níveis, medalhas, troféus, selo de continuidade, avaliação e certificação	Oferece visibilidade, reconhecimento simbólico e formal (certificação), incentivando engajamento mesmo sem remuneração

Source: prepared by the authors.

The first topic in Box 1 concerns the visibility of activities. This involves the way the Platform reorganizes the search for and supply of academic support, identifying what can be sought/found and offered. In contexts where access to academic monitoring often depends on prior connections or immediate proximity among students, the publicization of profiles, areas of practice, and service histories tends to shift academic help from a relatively limited circuit to a more open and findable system. It is not uncommon for students to say they do not know who the monitors are at their institution or, conversely, for monitors to say they are not being sought out by students. The Platform operationalizes this search and even extends it beyond institutional boundaries, if so desired.

Another important effect concerns the distributed accountability of the subjects involved. The platform's architecture requires participants to describe demands, respond to requests, assess the experience, and record their participation. In this way, academic monitoring assumes, more vigorously, the character of a relational practice that demands reciprocal commitment. This is an interesting point from a pedagogical standpoint, since it moves students away from a more passive position regarding academic support, causing both monitor and supported student to become co-responsible for the execution, qualification, and validation of the activity.

A benefit arising from the process of requiring the identification of content/difficulty and the assessment of the session conducted is the fostering of a more explicit form of metacommunication about learning. By requiring this entire process, the Platform tends to stimulate a certain degree of reflection on the very process of learning and teaching. Although this reflection is not, in itself, equivalent to systematic pedagogical work on self-regulation, it tends to create conditions for participants to name their needs more adequately, perceive advances, recognize limits, and attribute formative meaning to the experience.

There is also a relevant contribution at the level of producing institutional legibility. In many experiences, academic monitoring does occur, but it does not always achieve a sufficiently clear inscription into institutional life, which weakens its visibility and its recognition as a formative experience. Studies point out, in this sense, that academic monitoring programs still face problems of dissemination, misinformation about the roles performed, and limited understanding of the monitor's formative role (Gonçalves et al., 2021). With the functions of recording sessions, organizing assessments, and issuing certificates, the platform can contribute to transforming academic monitoring into a more documentable practice.



The Platform also makes it possible to think of academic monitoring beyond the immediate local scale. By connecting students from different classes, courses, and, potentially, institutions, the platform can favor the constitution of expanded academic support networks, situating academic monitoring within an interinstitutional sphere of collaboration. In this case, we characterize this as a promising point, as it allows imagining learning communities less circumscribed to previously established connections. That is, the platform opens the possibility of a broader circulation of knowledge, study strategies, and forms of explanation among students with distinct trajectories, yet brought together by the same disposition to teach and learn.

This interinstitutional dimension should not be read merely as a quantitative expansion of the network, but as a possibility for producing a culture of shared learning. The gathering of students around recurring practices of support, explanation, listening, and reciprocal assessment can contribute to strengthening academic values linked to collaboration, commitment to the other, and the recognition that learning also means participating in a community in which knowledge circulates among peers.

Finally, an aspect that deserves emphasis is the fact that the Platform offers alternative forms of incentive in contexts where participation in academic monitoring is not always accompanied by scholarships or remuneration. The combination of gamification, assessment, and certification can also be understood as an attempt to build a symbolic and academic system of valuing participation, in which the student finds recognition for their consistency, for the quality of their work, and for the trajectory they build on the platform. In contexts marked by budgetary restrictions or limited scholarship offerings, this type of recognition does not replace material valuation, but it can function as a complementary mechanism of engagement and retention.

In view of the described set of functionalities and resources, we can argue that the expected contribution of the Monion Platform seems to lie less in the promise of resolving, by itself, the problems of academic monitoring by inserting it into the virtual environment, and more in its capacity to reconfigure some of its conditions of possibility. It is in this sense that it can be understood as an innovative didactic-technological resource, because it seeks to offer an infrastructure capable of lending greater consistency, intelligibility, and reach to collaborative learning practices among students.



7 FINAL CONSIDERATIONS

This article analyzed the educational foundations of peer academic monitoring and discussed the Monion Platform as a proposal for digital mediation aimed at organizing this practice. We began from the understanding that academic monitoring occupies a relevant formative place in Higher Education, as it articulates pedagogical support, collaborative learning, self-regulation, and student agency. We also sought to show that its potential does not derive from its mere institutional provision, but from the concrete conditions that enable visibility, continuity, supervision, and legitimization in everyday academic life.

In this direction, the analysis made it possible to understand that the Platform positions itself less as a technological solution to the problems of academic monitoring and more as an attempt to reorganize some of its conditions of possibility. By structuring flows of registration, search, scheduling, execution, assessment, gamification, and certification of sessions, the platform can contribute to making peer support practices more systematic, traceable, and institutionally recognizable. The formative potential, therefore, does not reside in the offer of synchronous virtual meetings, but above all in the construction of a pedagogical-digital infrastructure capable of lending greater intelligibility to interactions that often remain dispersed, poorly supervised, or insufficiently valued.

Nevertheless, this contribution must be understood with caution. The platform does not replace institutional academic monitoring policies, does not eliminate inequalities in digital access, nor does it, by itself, ensure pedagogical quality in interactions among students. Its effects depend on user engagement, pedagogical mediation, institutional validation, and the material and symbolic conditions that sustain the participation of the subjects. Thus, technological mediation only gains educational relevance when articulated with a pedagogical project that recognizes the centrality of human agency, collaboration, and institutional commitment to student retention and development.

In this scenario, we conclude that the Monion Platform offers a pertinent contribution to the operationalization of and debate on academic monitoring by proposing a digital architecture oriented toward the organization, recording, and recognition of peer learning. Within the limits of this article, this contribution was examined at the level of its pedagogical conception and functional structure, without any intention of evaluating its empirical effects on learning, engagement, or student retention. The results presented point to the need for further investigation: it will be necessary to analyze, based





on the effective uses of the Platform, to what extent its scheduling, assessment, gamification, and certification resources have repercussions on learning, on concrete academic monitoring practices, and on the institutional forms of recognition of this experience in Higher Education.

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