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MEDIATION OF LEARNING IN HIGHER EDUCATION, ACADEMIC FAILURE AND DROPOUT [1]

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ABSTRACT: From an epistemological point of view, it is knowledge that enables the construction of a society in its concrete and symbolic structure. The learning process understands knowledge as a subjective production that takes place from the contact of subjects with objects in the world. In formal teaching-learning contexts, the teacher is responsible for mediating learners' relationships with cultural artifacts and systematized knowledge. When considering the importance of the epistemological relationship and its surroundings, this research investigated teaching stances and related them to the variables academic retention and evasion in an undergraduate program in Psychology at a federal university in the northeast region. Laurence Bardin´s content analysis was adopted as a method. Semi-structured interviews were conducted with 11 instructors from the beginning, middle, and end of the program, which were categorized into activity planning, teaching stance, theoretical foundation, assessment, and mediation. The results suggest that markedly interactionist stance are inversely related to the increase in delayed graduation, dropout, and low academic performance rates.

Keywords: higher education; interactionism; evasion.

MEDIAÇÃO DA APRENDIZAGEM NO ENSINO SUPERIOR, INSUCESSO ACADÊMICO E EVASÃO

RESUMO: De um ponto de vista epistemológico, o saber contribui para a construção de uma sociedade em sua estrutura concreta e simbólica. O processo de aprendizagem compreende o saber como uma produção subjetiva que se realiza a partir do contato dos sujeitos com objetos do mundo. Em contextos de ensino-aprendizagem formais, o professor é responsável por mediar as relações dos aprendizes com artefatos culturais e conhecimentos sistematizados. Ao considerar a importância da relação epistemológica e de seu entorno, a presente pesquisa investigou posturas de ensino e as relacionou com as variáveis retenção e evasão acadêmicas em um curso de graduação em psicologia de uma Universidade Federal da região Nordeste. Como método, adotou-se a análise de conteúdo de Laurence Bardin. Foram realizadas entrevistas semiestruturadas com 11 docentes do início, meio e final do curso, às quais foram categorizadas em planejamento de atividades, postura docente, fundamentação teórica, avaliação e mediação. Os resultados sugerem

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que posturas marcadamente interacionistas estão inversamente relacionadas com o aumento de taxas de retenção, evasão e de baixo desempenho acadêmico dos estudantes.

Palavras-chave: ensino superior; interacionismo; evasão.

MEDIACIÓN DEL APRENDIZAJE EN EDUCACIÓN SUPERIOR, FRACASO ACADÉMICOS Y DESERCIÓN

RESUMEN: Desde un punto de vista epistemológico, es el conocimiento el que posibilita la construcción de una sociedad en su estructura concreta y simbólica. El proceso de aprendizaje entiende el conocimiento como una producción subjetiva que se da a partir del contacto de los sujetos con los objetos del mundo. En contextos formales de enseñanza-aprendizaje, el maestro es responsable de mediar en las relaciones de los alumnos con los artefactos culturales y el conocimiento sistematizado. Al considerar la importancia de la relación epistemológica y su entorno, este estudio analizó las posturas docentes y las relacionó con las variables retención y evasión académica en un curso de licenciatura en Psicología de una universidad federal de la Región Nordeste. Se adoptó el análisis de contenido de Laurence Bardin como método. Se realizaron entrevistas semiestructuradas con 11 docentes de inicio, medio y final del curso, los cuales fueron categorizados en: planificación de actividades, postura docente, fundamento teórico, evaluación y mediación. Los resultados sugieren que las posturas marcadamente interaccionistas están inversamente relacionadas con el aumento de la retención, la deserción y el bajo rendimiento académico de los estudiantes.

Palabras clave: educación superior; interaccionismo; deserción.

Introduction

The expansion of higher-education opportunities and youth engagement in the academic sphere are part of Goal 12 of the National Education Plan, cited in Law No. 13,005 of June 25, 2014. By 2024, the State's commitment is directed toward raising the gross enrollment rate in higher education to 50% and the net enrollment rate to 33% of the population aged 18 to 24, while ensuring the quality of this provision and expanding public universities by 40%.

Based on a survey conducted by the National Institute of Educational Studies and Research Anísio Teixeira[6], a total of 12 million higher education enrollments were registered in 2019, across both public and private institutions. Of this total, about 30% of students either suspended enrollment, withdrew, or transferred in undergraduate programs (National Institute of Educational Studies and Research Anísio Teixeira [INEP], 2020).

Academic failure and student dropout have been detrimental to Brazilian education, since leaving without completing the program, that is, without obtaining a diploma, leads to substantial losses for students, instructors, and institutions, especially in financial, social, professional, and time resources. In general terms, attrition, whether from a program, an institution, or higher education itself, is defined as the non-completion of a study program,

[6]A federal agency under the Ministry of Education that conducts studies, research, and regular evaluations of the Brazilian educational system, with the aim of supporting public policies for education.

course, training, qualification, specialization, or any form of education that leads to specialized learning. (Fialho, 2014).

Among the most common reasons for withdrawing from the system are poor quality of education; limited student funding policies; early choice of professional specialization; difficulty with student mobility; rigid requirements for program authorization and recognition; Brazilian law regarding nonpayment; and lack of faculty preparation to handle the teaching-learning process or the student (Campos et al., 2017; Santos Júnior & Real, 2017; Davok & Bernard, 2016; Lobo, 2012).

Academic failure, in turn, is defined as failing exams and courses, which prevents program completion and degree attainment. However, to grasp the complexity of the topic, it would be necessary to go beyond grades from assessments in the subjects, and to explore the process underlying poor academic performance (Vanz, et al., 2016; Procópio, 2014). Thus, examining conceptions and observing how educators manage the learning process becomes a valuable means of understanding and addressing dropout and academic failure.

Under the positivist paradigm, the criteria for validating knowledge became universalization and generalization. Teaching practice, therefore, based on this premise, began to prioritize learning through memorization. This approach treats knowledge in an arbitrary and literal way, undermining the acquisition of new meanings (Ross, 2018). In contrast to this paradigm, the concept of meaningful learning emerged. It is defined as the interaction of ideas in a non-arbitrary and substantive way, enabling the expansion between prior and new knowledge and fostering greater cognitive stability (Moreira, 2013).

Currently, active methodologies are frequently referenced (Lacerda & Santos, 2018), as they emphasize a meaningful teaching-learning process through dynamic strategies. Their objective is to make the learner more autonomous, active, and critical, within dialogical learning environments and less hierarchical relationships Alves & Teo, 2020; Barbosa & Moura, 2013). These approaches are consistent with interactionist principles, supported primarily by Piagetian cognitivism (Yamazaki et al., 2019) and Vygotsky's sociocultural theory (Alves & Teo, 2020).

Piaget emphasized the need for learners to engage in cognitive activities, particularly the relationships among structures, content, and invariant functions (Correia et al., 2021; Bezerra & Correia, 2019). In the relationship between the subject and the object of knowledge, cognitive imbalances are required for knowledge construction. That is, learners advance cognitively through problem-solving activities, cognitive conflicts, and challenges (Lemos & Prado, 2021; Jesus et al., 2020; Moro, 1990).

Vygotsky (2001), in turn, emphasized the impact of culture on the constitution and development of typically human learning processes. In formal education, teaching-learning processes, when properly organized, become triggers for higher psychological development (Santos et al., 2020). This author left an important legacy for reflections on the relationships between learning and development, learning and teaching, and learning and intervention. Educational activity came to be understood as a complex triad involving teaching, learning, and psychological development. In this way, the semiotic and interactional characteristics of learning processes become central to the realization of intentional teaching processes (Correia et al., 2021).

Contemporary society, with its new fabrics of interaction and its relationship with objects of knowledge, calls for transformations in educational institutions (Sousa et al., 2019; Lacerda & Santos, 2018). Questioning the mediation of learning processes in the relationship between educators and students therefore represents a fundamental nexus for innovating the higher education system. Accordingly, this study sought to analyze teaching

stances — classified as Interactionist or Non-Interactionist — in an undergraduate program in higher education, along with their relationships with two increasingly prevalent phenomena at this level of education: academic failure and dropout.

In line with the initial hypothesis, courses taught by instructors adopting predominantly interactionist stances were expected to present lower rates of dropout and retention, whereas those taught by instructors with non-interactionist stances would display higher rates. Therefore, the objective is to emphasize the implications of teaching mediation for the teaching-learning process in higher education.

Method

Participants. The sample consisted of 11 faculty members from the undergraduate psychology program at a federal university located in Northeastern Brazil. Sample selection and structuring were based on two criteria: (a) institutional evaluation scores assigned to faculty, collected semiannually from students, and (b) the course's placement within the curriculum, classified by temporal location as beginning, middle, or end of the program. At each stage, the two highest-rated and the two lowest-rated instructors, as evaluated by students, were selected, resulting in four courses from the beginning of the program, four from the middle, and three from the final stage.

Instruments. Data were collected using the Student Evaluation and Self-Evaluation Instrument (*Instrumento de Avaliação e Autoavaliação Discente*), available on the Integrated System for Academic Activity Management (SIGAA) platform, a semi-structured interview guide, and a voice recorder.

The purpose of the Student Evaluation and Self-Evaluation Instrument is to assess the instructor's teaching approach, the professor–student relationship, type of evaluation, updating of available content, pedagogical planning, instructor commitment, and student satisfaction with the course. The semi-structured interview guide consisted of 17 items designed to gather detailed information on conceptions of learning and teaching; types of activities and assessments conducted; the planning and monitoring of assessment; the professor–student relationship; resources used in content mediation; and faculty training and ongoing professional development. For validation, the interview guide was submitted to three experts, each holding a doctorate and specializing in the study of learning processes and the relationship between psychology and education, for potential additions or corrections. A pilot study was carried out with four faculty members, aiming to adjust the instrument and to provide training for the researchers responsible for conducting the interviews.

Data collection procedure. The results of the instructor evaluation, as rated by students, were obtained from the undergraduate program department for courses taken in 2018 and located at the beginning, middle, or end of the program. Following access to the evaluation data, a mapping was conducted to identify the highest-rated and lowest-rated courses within each selected period. Subsequently, the instructors responsible for the respective courses were contacted and invited to take part in the interview. Following the signing of the informed consent form (Termo de Consentimento Livre e Esclarecido - TCLE), the semi-structured interview was conducted by one of the researchers, using a voice recorder to document the responses, in a private location chosen by the instructor. All the interviews were transcribed for subsequent analysis. All ethical guidelines were observed, in accordance with Resolution No. 510 (2016) of the National Health Council (approval No. 2,694,435).

Data analysis procedures. In line with Bardin's (1995) approach, the analysis began with a preliminary reading, intended to provide an initial overview of the material and enhance familiarity with the documents. Subsequently, the analytical *corpus* of the 11 interviews was formulated and submitted for evaluation by the research group that formulated and applied the interview guide; the initial analytical categories were then proposed for the selection of excerpts. The following step consisted of grouping similar subcategories and defining each category.

Results and discussion

Exploring professors' discourses

The analysis of the interviews highlighted five categories of responses, in line with the following topics: activity planning, teaching stance, theoretical foundation, assessment, and mediation. Each category comprised at least three subcategories, illustrated as follows and subsequently summarized in Table 1. These subcategories show different teaching stances in relation to the teaching-learning process, as well as their frequency in relation to the responses provided.

The category "Activity Planning" involves the types of activities implemented by the professor (P), as well as the way in which they are conceived, planned, and executed. In other terms, what the instructor intends to promote or foster among students, for instance, group work, debates, and discussions. This response category was divided into four subcategories: group work, individual work, flexibility, and inflexibility in activity planning.

The subcategory "Group Work" included mentions of the instructors (discourses presented verbatim) referring to activities involving three or more students, carried out inside and outside of the classroom under the professor's guidance, such as developing a pre-project, holding discussions about movies and texts, presenting seminars, and producing texts, as illustrated by the professors' discourses.

> Well, besides the directed study, you know, which, for example, can be done in pairs. [...] Up to three still works. They're gonna study the content through questions based on what we planned for that day, or those days, and then, after that […] debate and discuss the content based on everyone's answers (Professor-04).

> They get together in the classroom for the group to talk about how they're gonna do the research and present the topic. So, they do the research at home, and then at some point we make a spiderweb in the classroom: whoever's number 1 goes up and shares their message (P-09).

The subcategory "Individual Activities" was constructed from accounts of producing texts or summaries on an individual basis within the courses. These discourses placed little emphasis on knowledge as a way to build or attribute new meanings (Ross, 2018). The instructors justified this choice by referring to the difficulty of managing classroom activities with a large number of students; the extent of the syllabus content; and the perceived lack of credibility of group work when used for assessment. Thus, the work was emphasized as a product, to the detriment of the process, demonstrating conceptions with characteristics more closely aligned with a traditional approach, in which learning is seen as a product, and educational standards are established *a priori* (Ross, 2018; Cunha, 2017; Mizukami, 1992).

> Well, I wouldn't really call it suggesting group work, since the experiments are kind of done in pairs, that still counts. But tests, for example, exams… that doesn't really work. So I'd rather do something more individualized (P-02).

I do suggest [group work], but we never have time, because the syllabus for [course name] is really long, really extensive. Since I want to follow what I think is the right thing, the syllabus (P-05).

The subcategory "Planning Flexibility" was described through references to variations in the syllabus and in the plan developed by the instructor, justified by the instructor's prior experiences with the course content; the need for a literature review to improve understanding of the object of knowledge; and the implementation of adaptations on contingencies arising from the semester and the students.

The good thing about teaching a course for a while is that you start building the dynamics and you see what works and what doesn't [...] Each class reacts differently (P-01).

The exam dates are already scheduled, everything's set in advance. But it can always change depending on how the semester goes (P-08).

The subcategory "Planning Inflexibility" is based on a single statement, which indicated strict adherence to the syllabus.

There's a syllabus, right? I follow the syllabus, and I plan a lot around the area I work in, that I really identify with (P-10).

The second category, "Teaching Stance," concerns the instructor's conception of the educator's role in settings designed to foster learning. The subcategories were organized according to three emergent themes in the discourses: stance of "Orientation and Guidance"; "Assimilation and Correction of Content"; and "Knowledge Exchange".

In the subcategory "Orientation and Guidance" there was a convergence of discourses that characterize the professor's role as functioning like a filter, aimed at facilitating student learning and supporting expanded knowledge production and construction.

I'm going to make things easier in terms of motivation and help sort out what's interesting; what's important, actually (P-03).

I think it's really important to give the students some direction [...]. When we step in by forming groups, even handing them the text to read, [...] and giving a few guiding questions (P-07).

The subcategory "Assimilation and Correction of Content" was described according to the professor's role as a shaper, verifier, and transmitter of knowledge. In other words, a more hierarchical understanding, in which the concepts are assimilated by the student, and the professor's role is to ensure that acquisition.

The professor's role is to verify how the content is being delivered, if the student is taking it in, and if the guidance that's given is actually being assimilated (P-02).

[Course name] is really frustrating because you come to university as a free person, a citizen, then you get here and I have to shape you into [course name], since no other professor does it (P-05).

Finally, the subcategory "Knowledge Exchange" was formulated based on the understanding that teaching stances must enrich learning by fostering student agency and be oriented toward a non-hierarchical professor–student relationship, in which the instructor withdraws from the role of sole possessor of knowledge (Correia et al., 2021; Alves & Teo, 2020; Lacerda & Santos, 2018).

It's really about exchanging knowledge, not just bringing knowledge. It wouldn't have been right if I'd said something like "bringing knowledge to those in the dark" (P-06).

There are moments in the conceptual network when I take the floor again, make the most of what the students are bringing [...] and add new elements for them to research and reflect on the topic. [...] all while respecting student agency (P-09).

The third category, called “Theoretical Foundation,” involves scientific foundations, theories, or scholars that guide teaching practice in relation to conceptions of learning, regardless of whether this stance is framed by empiricist-associationist, innatist-maturationist, or social interactionist parameters, or even whether there is a teaching stance or practice consciously grounded. Based on these guidelines, the following subcategories of stances were established: Grounded; In Transition; and Not Grounded.

The subcategory “Grounded Teaching Stance” comprised discourses that developed, at least minimally, a conception of learning in a more direct manner, with the aim of expanding the explanation of the concepts involved and/or linking them to teaching practice.

Because I believe, like Carl Rogers, that learning has to involve feelings too […] it can’t just stay at the level of cognition, you know? (P-04).

Turning education into a liberating practice really is essential to me. If you’ve studied Paulo Freire, you’ll notice that a lot about the way I am in the classroom is connected to that, you know? (P-09).

The second subcategory, “In Transition”, encompassed instructors’ statements that referred to concepts related to conceptions of learning, yet without clearly connecting them to any scholar or theoretical framework. Or, on the other hand, making reference to related scholars without, however, developing the concepts or reflections implied.

Learning is a continuous process. It is a gradual process. It's like climbing the small steps of a staircase. You have to start with the basics, and then gradually consolidate this knowledge [...] so that you can really learn (P-01).

In the field of learning, I’m familiar with Bandura, with Watson, you know? Skinner’s theory of radical behaviorism is a teaching philosophy (P-05).

The last subcategory linked to Theoretical Foundation, called “Not Grounded Stance”, included discourses that cited authors and theories without further elaborating on the concepts. These discourses also lacked coherence among what was stated and practiced, the concepts related to learning, and the theoretical approaches cited.

No [guiding theory]. [...] I did my teaching degree, [...] and I also had a Didactics class. [...] I try to utilize all the tools to instigate learning (P-07).

Of learning? Can I say, I don't know, Paulo Freire? Maybe? I am not sure if Vygotsky too? If he works with that as well... I don't know much about it (D-10).

The fourth category, called "Assessment", is defined based on the type of assessment proposed by the instructors in their respective courses, as well as the manner in which the assessment results are addressed with the students. We sought, therefore, to examine conceptions regarding "mistake" and/or "academic failure." Based on these guidelines, five subcategories emerged, namely, "objective tests; subjective tests; continuous assessment; mixed-format tests; and self-evaluation."

The subcategory "Objective Tests" refers to the instructor who employed non-essay questions on the grounds that this format prevents mistakes in exam grading. According to Maceno and Guimarães (2013), such conceptions rely on a fragile sense of neutrality, presuming the possibility of an exact account of social reality and of rational activity devoid of opinions or questioning.

These days, in my assessments, I’m using objective tests more and more […] because that way there’s no room for doubt when it comes to grading (P-02).

The subcategory "Subjective Tests" is based on accounts that highlighted aspects connected to the possibility of critical contribution from the students in knowledge construction (Alves & Teo, 2020; Lacerda & Santos, 2018) and connections with other interpretations and experiences articulated with the knowledge conveyed in the course.

They're subjective tests [...] four, five, six subjective questions. But it's not like I ask them to describe everything (P-03).

[Open-ended tests] have a clear purpose, which is to make students read the texts and write, analyzing and critically articulating the contribution of each text (P-08).

The subcategory "Continuous Assessment" was represented in only one discourse regarding an evaluation model that, in this case, consisted of the instructor moving among student discussion groups in the classroom.

P-01: I give three partial exams, sometimes right in class, or I let them take time at home and hand them in later. That's what I do, and I think it's the best way [...].

The subcategory "Mixed-format tests" encompassed possibilities for assessing learning through exams, whether with subjective (open-ended) or objective (multiple-choice) items, as well as other forms of assessment. It concerns the diverse ways in which instructors address the content taught in class in order to analyze students' acquisition of knowledge.

P-04: It used to be mostly open-ended questions, but they started to freak out. So I said, let's do it half and half, right? And I really like self-evaluation too.

P-07: I use objective tests, I assign written work to check their writing, and also seminars.

Finally, the subcategory "Self-Evaluation" was consolidated based on the discourse of a single instructor. This faculty member valued the student's own evaluation of the knowledge built throughout the course, a practice that fosters self-knowledge and self-reflection.

The fifth response category, called "Mediation", is more directly connected to the instructor's efforts to influence the learning process and to the consideration of essential components of the teaching-learning process, such as interactions instructor-student and student-student; mediation instruments and strategies, for example, technological resources; responses to collective as well as individual demands; students' prior knowledge; and the meaningful presentation of content—for instance, by contextualizing, relating it to other disciplines and areas of knowledge, or using metaphors, among other possibilities (Lacerda & Santos, 2018; Ross, 2018; Moreira, 2013). Thus, based on the instructors' discourses, four subcategories were formed: interdisciplinarity, contextualization, technological tools, and challenges proposed to the students.

The subcategory "Interdisciplinarity" concerns the instructor's efforts to connect course discussions with other areas of knowledge and courses, with the aim of building bridges and drawing on contributions for the construction of new knowledge. These articulations may occur directly, for example, by inviting other professionals to extend discussions, or indirectly, by drawing on examples from other educational contexts.

P-07: We try to tie it in with the core courses.

P-11: It's a dialogic class, you know? […] I also call on some people to share a few points, you know?

The subcategory "Contextualization" encompassed the use of personal experiences in connections established with the course, whether originating from the instructor or the students, and occurring within or beyond the academic setting. Furthermore, it included

examples drawn from relevant literature or historical contexts, provided they aimed to support knowledge acquisition or to impart meaning to the content at hand.

P-05: I start with the Stone Age, then Middle Ages, the Greeks and Romans, and I keep contextualizing until I get to psychology.

P-08: Seminars in which students progressively articulate one approach [...] with the principles of another, while attempting to analyze a lived experience in light of the content studied.

The subcategory 'Technological Tools,' in turn, encompassed speech acts associated with the use of resources to mediate the learning of course content—for example, those made available online by the university, such as the Integrated System for Academic Activity Management (SIGAA); the use of PDF files to provide access to texts; the use of slide presentations, videos, and educational movies; and the formation of groups through social media with the aim of facilitating communication among instructor, teaching assistants, and students. In this subcategory, despite the positive accounts, a common point that emerged was the perception that technology may also be detrimental to the learning process, depending on how it is used. At least, in line with discussions in the literature, regarding the role of these tools in genuinely stimulating the desired cognitive actions—questioning, reflection, and the attribution of new meanings to knowledge (Santos & Soares, 2011).

P-03: I use the online library on SIGAA.

P-11: I send everything through SIGAA. Everything is already scheduled: exams, makeups [...].

Lastly, the subcategory "Challenges for Students" was characterized by the instructor's provocation of questions, reflections, and attribution of new meanings among students regarding the theme addressed in class (Lemos & Prado, 2021; Jesus et al., 2020; Moro, 1990).

P-01: My goal is to spark their curiosity, to really get them interested.

P-09: What I really like is deconstruction, stirring things up, challenging the student, getting them involved.

In summary, in this section, although the analysis was limited to a single undergraduate program with its own learning process as an object of study, varied stances, actions, and foundations became evident, ranging from more hierarchical orientations to greater student agency, the latter in line with active learning pedagogies (Correia et al., 2021; Alves & Teo, 2020; Lacerda & Santos, 2018; Barbosa & Moura, 2013).

Articulations between discourses and stances

A detailed analysis of the instructors' discourses made it possible to examine the prevalence of stances within different approaches to the teaching-learning process (Cunha, 2017; Oliveira, 2010; Mizukami, 1992). Therefore, in mapping tendencies in the practices of the instructors interviewed—Interactionist (I) or Non-Interactionist (NI)—based on speech turns grouped into five categories and nineteen subcategories, it was possible to verify the frequency of responses across the different base characteristics (Table 1).

Table 01

Frequencies of instructors' responses in the five categories and nineteen subcategories

CATEGORIES	SUBCATEGORIES	FREQUENCY (%)
Activity planning	**Group work (I**)	**11.25**
	Individual work (NI)	2.5
	Planning flexibility (I)	**10.0**
	Planning inflexibility (NI)	1.25
	Subtotal	*25.0*
Teaching stance	Orientation and Guidance (NI)	6.25
	Assimilation and Correction of Content (NI)	3.75
	Knowledge exchange (I)	3.75
	Subtotal	*13.75*
Theoretical foundation	Grounded	2.5
	In transition	6.25
	Not grounded	5.0
	Subtotal	*13.75*
Assessment	Continuous (I)	1.25
	Objective (NI)	1.25
	Subjective (I)	**3.75**
	Mixed-format (I)	**5.0**
	Self-evaluation	1.25
	Subtotal	*12.5*
Mediation	Interdisciplinarity (I)	7.5
	Contextualization (I)	**8.75**
	Technological tools (I)	**13.75**
	Challenge proposition (I)	5.0
	Subtotal	*35.0*
	TOTAL	100%

Source: The authors, drawing on data from semi-structured interviews conducted with higher-education instructors.

From the highlights in Table 01, it may be noted that most subcategories are linked to teaching stances characterized as interactionist (constructivist or sociohistorical), whose actions within the teaching-learning process emphasize the student's active participation in the construction of knowledge; attribution of new meaning to the available content; connections with other experiences; focus on qualitative cognitive progresses rather than the accumulation of accumulation; attention to the relations among the re-elaboration of knowledge, the socialization of knowledge, and affective-emotional aspects (motivation); and consistent proposition of surmountable challenges (Correia et al., 2021; Alves & Teo, 2020; Barbosa & Moura, 2013).

The fact that subcategories such as "Orientation and Guidance," related to assessment, and "In Transition," linked to the theoretical foundation of teaching practice, also appear among the most frequent subcategories may indicate both the need for a stronger theoretical foundation, so that changes in stances may be implemented, and the complex process of transition from traditional practices to more progressive ones, even when the discourse already signals progress. It refers, furthermore, to the responses for interview questions pertaining to training and/or professional development undertaken by the higher education faculty member, linked to the role of professor/mediator. And these

activities emphasized solely graduate degrees or activities strictly connected to the content that the instructor taught or researched, rather than training that could support the management of the teaching-learning process, the know-how within the context of mediation, as Alves e Teo (2020) also pointed out. Such associations are in accordance with the highest frequency in the subcategory "In Transition", and relate to the further development in knowledge connected to the learning process. This data would probably be even less promising in the discourses of instructors whose training and degrees did not involve the learning process as an object of study.

By revisiting the variables of failure and attrition, and shedding light on the rates related to the program under study, it is observed that these numbers are notably low, at only 1.5%, especially when compared to other undergraduate programs at the same institution. Another relevant point in this discussion, given that the majority of instructors' responses indicated methodological approaches with more interactionist characteristics, is the fact that the undergraduate program under study received the highest score in the National Student Performance Exam[7] (ENADE) (*Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira* [INEP], 2019). This information points to relations among teaching stance, knowledge construction, and implications for growing phenomena such as poor academic performance, failure, and attrition. These results, therefore, are consistent with the literature, which highlights the multifactorial influence on these phenomena and the necessary emphasis on aspects related to teaching methodologies (Santos Júnior & Real, 2017; Barbosa & Moura, 2013).

From this standpoint, studies on student attrition in higher education should be considered in government policies aimed at improving the quality of academic teaching, in order to direct investments into faculty development with regard to learning mediation. This would result in improvements in the technical, ethical, and creative training of future professionals, as already noted in other studies (Alves & Teo, 2020; Lobo, 2012).

As the discussion draws to a close, and considering the results highlighted, it is important to emphasize that this research did not aim to evaluate or establish hierarchies of value among different psychological approaches to the teaching-learning process. The focus of the analysis was on the relationship between interactionist stances, represented by active methodologies, and the learning process, while also hypothesizing the impact of this relationship on phenomena such as academic failure and student attrition. And this focus did not aim to exhaust the complexity of the educational process, acknowledging the need for new studies to broaden the analytical variables potentially involved in academic success, failure, and dropout rates.

Furthermore, teaching, in its mediational nature, is defined by the existence of complex interactions between formal competencies, linked to systematized and abstract knowledge, and pragmatic competencies, characterized by concrete actions, both overt and covert, that occur during educational activity. It is expected that the more the instructor masters knowledge and formal competencies pertinent to the teaching-learning process, the greater the possibilities of producing actions consistent with such knowledge. Nevertheless, it is necessary to consider the existence of instructors who have mastered formal competencies and yet are unable to apply them effectively in their practices, as well as instructors who have not mastered formal competencies and, intuitively, are effective in

[7]Instrument that evaluates undergraduate programs in Brazil's higher education system through a written exam assessing the performance of graduating students. It is based on the national curricular guidelines for undergraduate programs, on the development of skills and competencies, and on up-to-date knowledge of Brazilian and global realities.

mediating student learning. However, such stances are not desirable in the context of formal education, particularly in higher education.

Finally, from a strictly epistemological perspective, it is important to understand the classroom as a highly complex cultural practice, where subjects and objects of knowledge engage in joint activities supported by semiotic and instrumental mediation. More directly put, this study does not exhaust the complexity of this process, but it indicates a tendency toward a connection between teaching-learning and failure and attrition processes.

Final considerations

This research sought to analyze possible relations among teaching stances related to the teaching-learning process, academic failure, and attrition rates in higher education. The results shed light on the interface between teaching praxis in the classroom and the rates of failure and attrition, making it possible to establish that the more grounded the teaching stance is on interactionist (and socio-interactionist) suppositions, the lower these rates appear to be. Beyond variables such as the pedagogical program design, in terms of courses in the curriculum, and the student support provided by the institution, the teaching stance also appears to influence the outcomes of the student's academic trajectory.

Evidence suggests the existence of positive repercussions in the learning environment when instructors demonstrate closer alignment with knowledge related to the learning process, as reflected in the aforementioned rates and national student evaluations, taking into account indicators of failure and attrition as well as the observed scores in the national undergraduate program evaluation.

It is important to conduct studies of undergraduate programs both with and without learning as their focus, to allow comparative analyses, confirm this study's findings, and explore new hypotheses about factors affecting the cited rates. Lastly, we emphasize the need to expand studies on the themes addressed, with the aim of fostering student retention policies in higher education and reducing academic failure and dropout rates, which have risen significantly in recent years (INEP, 2019, 2020).

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