

# Pedagogical Relationship and Teaching Strategies in Higher Education: The Students' Perspective

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## Abstract

The pedagogical relationship and the relational climate in the classroom are dimensions identified as crucial for the academic performance and well-being of university students. Therefore, understanding the dynamics of this relationship and identifying the teaching methods most valued by students is essential to promoting more effective teaching. The present study aimed to answer the following research questions, based on university students' perceptions: How do students characterize their pedagogical relationship with teachers?; How does teacher interaction and involvement influence the student learning experience?; Which classroom models and teaching strategies are most valued by students?; What types of materials and resources provided by teachers are most valued by students? The study involved 151 university students from a Portuguese higher education institution, mostly female (51.7%) and aged between 18 and 54 years old ( $M= 20.15$ ;  $SD= 3.26$ ). The students were attending a bachelor's (94.7%) or master's degree (5.3%) in different areas: Management (66.2%), Psychology (12.6%), double program in Law and Management (11.3%), Economics (5.3%), Accounting and Finance (2.0%), Master of Science (0.7%), Microbiology (0.7%), and Sound and Image (0.7%). They were asked to complete an online questionnaire that included, in addition to sociodemographic characterization questions, six open-ended questions. Sociodemographic data were analyzed using IBM SPSS, and NVIVO facilitated the content analysis of the open-ended questions. The results point to a positive pedagogical relationship, with teachers' availability being particularly notable. Data shows that teacher interaction and involvement are considered essential to the learning experience, as supportive and engaged teachers facilitate content understanding and increase student motivation. Students seem to value class models that combine lectures with debates, case studies, and practical projects, and they appreciate practical materials such as solved exercises and slides presentation. The results will be discussed in light of the practical implications for improving the quality of learning in higher education.

**Keywords:** Higher Education; Pedagogical Relationship; Teaching Strategies; Student Perceptions.

## 1 Introduction

### 1.1 Pedagogical relationship and its influence on students' learning experience

The pedagogical relationship, or student-teacher relationship, involves establishing and maintaining a climate and culture of trust, care, and autonomy within the classroom, forming an integral component of the educational process in higher education (Hollweck et al., 2019; Katsogridakis & Leather, 2025). As such, it is crucial to consider this multidimensional construct in the learning process to foster an environment of care, interaction, and trust, which are essential in the classroom setting (Hagenauer & Volet, 2014; Okoye, 2023; Tormey, 2021).

Based on the literature, Hagenauer and Volet (2014) identify two fundamental dimensions of the pedagogical relationship: affective and supportive. The affective dimension refers to the bond that is established between students and teachers, serving as the foundation for a trust-based relationship. It includes elements such as honesty, trust, and respect. The supportive dimension refers to the assistance provided by teachers to promote and facilitate students' academic success.

The pedagogical relationship involves various social roles that influence the personal and social characteristics of both students and teachers within educational contexts (Okoye, 2023). According to the literature (e.g.,

Aspelin & Jonsson, 2019; Hagenauer & Volet, 2014; Katsogridakis & Leather, 2025; Parnes et al, 2020; Tormey, 2021), positive student-teacher relationships significantly impact the learning experience and development of higher education students. These relationships contribute to enhanced self-perception of effective and meaningful learning; improved academic performance; increased commitment, effort, persistence, motivation, and engagement in the learning process; more positive and adjusted behaviour; perception of a more welcoming learning environment; a greater sense of belonging; and the fostering of intellectual development, including critical thinking skills (Aspelin & Jonsson, 2019; Hagenauer & Volet, 2014; Katsogridakis & Leather, 2025; Parnes et al, 2020). Consequently, strong pedagogical relationships reduce the likelihood of students failing and dropping out of the university (Hagenauer & Volet, 2014; Parnes et al., 2020; Tormey, 2021). This aligns with Okoye's (2023) findings, which show that university students value teachers who create an environment where students feel free to share their opinions, who care about their academic development, and who establish relationships based on mutual respect.

Despite the evidence highlighting the importance of the pedagogical relationship for the learning experience, across all study cycles, but here particularly in higher education, some teachers prioritize establishing this relationship more than others (Hagenauer & Volet, 2014). Some teachers face resistance or difficulty in forming a relationship with their students due to large class sizes, fear of contempt from students, and due to their individual characteristics (Okoye, 2023). Additionally, factors such as the characteristics of the university, the program, the educational philosophies of the teacher, and the characteristics and background (cultural, ethnic, and socioeconomic) of the students and teachers involved influence the establishment and quality of pedagogical relationships (Katsogridakis & Leather, 2025; Parnes et al., 2020).

## 1.2 Teaching strategies in higher education

To enhance the teaching and learning process, it is essential to assess and understand the preferred teaching strategies of higher education students (Bazán-Perkins & Santibañez-Salgado, 2025). By adapting their teaching practices based on these preferences, teachers can not only improve the effectiveness of learning, but also positively influence students' interest, engagement, and academic performance (Bazán-Perkins & Santibañez-Salgado, 2025; Vercellotti, 2018).

The literature identifies two primary approaches to teaching (e.g., Bhardwaj et al., 2025): teacher-centered approach and student-centered approach. In the first one, a more traditional educational paradigm, the teacher occupies a central role in the dissemination of knowledge and serves as the primary authority in the teaching and learning process. This approach involves the teacher structuring the curriculum, preparing and delivering lectures, and evaluating students' performance, typically through final exams (Bhardwaj et al., 2025; Murphy et al., 2021; Woods & Copur-Gencturk, 2024). Students are placed in the passive role of listeners, without any intentional stimulation of fundamental skills for their academic, professional, and personal development, such as critical thinking and problem-solving skills, and creativity (Bhardwaj et al., 2025). In this approach, teachers focus on lectures, with texts and supplementary materials to reinforce the content covered in class (Bhardwaj et al., 2025). However, this approach has been criticized, particularly for its focus on memorizing content (although very effective at conveying foundational knowledge) rather than understanding it, and for not fostering the development of skills needed in the real world (Ahmod & Zhang, 2021; Kálmán et al., 2020). Consequently, this traditional approach has been complemented by active, student-centered methodologies. These methodologies emphasize active learning, incorporating various strategies that prioritize student autonomy and engagement (Freeman et al., 2014). In these methodologies, the focus is on creating meaningful learning experiences aimed at fostering knowledge construction by the student, as well as promoting effective understanding and the development of competencies (Bhardwaj et al., 2025; Freeman et al., 2014). In a student-

centered approach, teachers adapt their teaching strategies to ensure that each student can succeed, empowering them to play an active role in their learning process (Bhardwaj et al., 2025).

Although higher education institutions (HEIs) are (starting to) implementing a student-centered approach and active learning methodologies (Bhardwaj et al., 2025), lectures are still the most common teaching strategy (Ahmod & Zhang, 2021; Álvarez-Álvarez & Falcon, 2023; Bazán-Perkins & Santibañez-Salgado, 2025). Nevertheless, there are other strategies that are often used in higher education, such as seminar and tutorial, independent study, practical learning, fieldwork, enquiry-based learning (EBL), project, e-learning, and learning by research (Ahmod & Zhang, 2021). On the other hand, the teaching strategies least experienced by students in higher education are those related to active learning, as highlighted in the study by Gonsar et al. (2021).

Although there is evidence on the most used teaching strategies in higher education, there are few studies that specifically explore student preferences regarding these methodologies (Álvarez-Álvarez & Falcon, 2023). Nevertheless, Álvarez-Álvarez and Falcon (2023) showed that higher education students prefer teaching practices that emphasize clarity and interaction/relationship, i.e. they value teachers who present ideas and activities in a clear, organized, and well-planned way, as well as methodologies that promote interaction between teachers and students and the students themselves, allowing sharing ideas, concerns, and support during the learning process. This is supported by Gonsar et al. (2021), who showed that students would prefer to have more active learning approaches than they are experiencing, such as peer-assisted learning. Bazán-Perkins and Santibañez-Salgado (2025) also recommend that students work collaboratively, sharing and discussing learning materials with each other. On the other hand, Deslauriers et al. (2019) showed that despite active learning leading to better performance, students tend to perceive they are learning less than in passive classes, making them more likely to prefer lectures.

### 1.3 Purpose of the study

With this theoretical framework in mind, the following research questions were defined:

Based on university students' perceptions:

- 1) How do students characterize their pedagogical relationship with teachers?
- 2) How does teacher interaction and involvement influence the student learning experience?
- 3) Which classroom models and teaching strategies are most valued by students?
- 4) What types of materials and resources provided by teachers are most valued by students?

## 2 Methodological procedures

### 2.1 Participants

The present study was conducted at a Portuguese higher education institution, a multi-campus university located in four cities in Portugal. It offers bachelor's, master's, and PhD programs in different areas, such as: Biotechnology, Dental Medicine, Law, Management, Nursing, Psychology, Social Work, Sound and Image, among others.

The study involved 151 university students, mostly female (51.7%) and aged between 18 and 54 years old ( $M = 20.15$ ;  $SD = 3.26$ ). They were attending a bachelor's (94.7%) or master's degree (5.3%) in different areas: Management (66.2%), Psychology (12.6%), double program in Law and Management (11.3%), Economics (5.3%), Accounting and Finance (2.0%), Master of Science (0.7%), Microbiology (0.7%), and Sound and Image (0.7%).

## 2.2 Materials

For data collection, a questionnaire was developed and administered to the participants. Along with sociodemographic and academic data, it included six open-ended questions, as follows: (i) The pedagogical relationship (teacher-student interactions) and the relational climate in the classroom are important dimensions in the academic performance and well-being of university students. How do you characterize the pedagogical relationship in your experience as a higher education student? (ii) What are the indicators of a good relationship for you? (iii) How does the interaction and involvement of teachers influence your learning experience? (iv) Could you share a specific situation from your university experience in which you felt that the teaching relationship had a positive impact on your learning? (v) Which model of teaching/activities do you value most? (vi) What kind of materials and resources provided by teachers do you value most?

## 2.3 Procedures

The questionnaire was sent by e-mail to all students attending one of the campuses of the Portuguese higher education institution. Therefore, students were asked to complete an online questionnaire via Google Forms between May and July 2024. To ensure ethical and deontological issues, informed consent was obtained from all the participants. They were informed of the objectives of the study, the possibility of withdrawing at any time without any prejudice, and the anonymity and confidentiality of the data was safeguarded, according to the Declaration of Helsinki. Participation in the study was voluntary.

This study received ethical approval from the Ethics Committee in Technology, Social Sciences and Humanities (approval no. CETCH2024-83), of *Universidade Católica Portuguesa*.

Sociodemographic and academic data were analyzed using IBM SPSS software (descriptive statistics) and NVIVO facilitated the content analysis of the six open-ended questions. This qualitative analysis was organized into three stages: pre-analysis, material exploration, and data processing and interpretation (Bazeley & Jackson, 2013). At first, a floating reading of the data was carried out and then the data was categorized into themes and categories, following a semi-inductive analysis (Bazeley & Jackson, 2013; Resende, 2016).

## 3 Results

The presentation of the results will be supported by examples of the participants' answers, safeguarding anonymity and confidentiality.

### 3.1 How do students characterize their pedagogical relationship with teachers?

Most students report having a positive pedagogical relationship with their teachers, describing it as positive/good (67 references), close (25 references), very good (19 references), cordial (6 references), motivating (3 references), welcoming (3 references), calm (2 references), important (2 references), and rewarding (1 reference). Examples from the students' narratives include: "I consider it to be good; teachers were always willing to answer any question, and quickly" (male Management student); "In my experience, the pedagogical relationship in higher education is characterized by accessible and interactive teachers, the use of varied methods, constructive feedback, mutual respect, and encouragement of student autonomy" (male Management student).

Moreover, one notable aspect that emerged from the data was the availability of teachers (45 references), as reported, for example, by a Psychology student: "In a second-year course, I had to give a 45-minute group presentation, and the teacher's involvement was crucial. She consistently made herself available to help us, regularly checked on our progress, and in every meeting, paid close attention to how each student was feeling."

On the other hand, some students perceive their pedagogical relationship with teachers less positively, describing it as negative or distant (16 references), or even “indifferent” (male Economics student), “unsatisfactory” (female double degree student in Law and Management) or “stressful” (male Management student). Examples of negatively perceived pedagogical relationship include: “there is no relationship with most of the teachers, nor do they seem approachable in most cases” (female Management student); “I feel that there is typically some distance, although some teachers try to counteract this” (female double degree student in Law and Management).

Additionally, a few students characterize the pedagogical relationship as reasonable (11 references). One student pointed out that this relationship “varies depending on the teachers and the type of classes. In practical classes it’s easier to have a better pedagogical relationship, as the teacher only interacts with one group of students” (female Management student), while another highlighted the existence of “an unbalanced power relationship” (female double degree student in Law and Management).

Additionally, students identified what they considered to be the indicators of a quality pedagogical relationship. These indicators include aspects such as availability and attentiveness (82 references), effective communication (67 references), respect and empathy (53 references), closeness and trust (32 references), and a professional and inspiring attitude from the teacher (31 references).

### **3.2 How does teacher interaction and involvement influence the student learning experience?**

According to the university students’ perception, the interaction and involvement of teachers influences their learning experience, impacting their motivation and involvement (90 references), and the learning process (64 references) and environment (57 references).

Students believe that increased interaction and involvement from teachers positively impacts their “motivation to perform in the subject” (female Sound and Image student), their desire “to learn” (male Management student), and their willingness “to attend classes and study the subject more deeply” (male Management student), thereby “increasing interest in the subjects” (female Psychology student). This enhanced engagement leads to greater “motivation to attend classes” (female Management student) and, consequently, a “lower risk of dropping out” (female Psychology student). As such, “the interaction and involvement of teachers influences everything related to learning, such as motivation, understanding of the content, interest in it, the classroom environment, among other equally important things” (female Psychology student). Other examples of participants’ responses include: “The interaction and involvement of teachers has a very significant impact on my development as a student. I tend to enjoy the subjects more and feel more motivated when there is a good relationship with the teachers” (female Economics student); “In my experience as a university student, the pedagogical relationship is crucial to academic success. Approachable and caring teachers create a positive learning environment, where doubts are answered with patience and encouragement. Constant interaction and constructive feedback contribute to a healthy relational climate, which in turn fosters student motivation” (female Management student).

In addition to motivation, teacher interaction and involvement also appears to enhance the quality of students’ learning. As one student noted, “If a teacher enjoys what they do, is consistent, relates examples from the real context to the content they are teaching, and shows research and up-to-date knowledge, learning will be more meaningful and closer to what the real experience will be” (female Psychology student). Another student observed “When there is greater support, there is greater evolution and quality in the work produced. When there isn’t, there are negative impacts on academic satisfaction and mental health” (female Psychology student). Additionally, a student shared an experience from a math class: “The teacher used practical examples

and focused on relating the content to real-world situations. He was also always available to answer questions and offered to answer questions outside of teaching hours. This practical approach and constant support had a positive impact on my understanding of the subject and my academic performance" (female Management student).

Moreover, according to the participants, more interactive and involved teachers establish a safe environment for questioning and reflection: "The interactions with the teachers were close and easy to communicate with. This improved my perception of confidence and security in acquiring content as well as putting me at ease to question and reflect on things" (female Psychology student); "Knowing that I can speak without fear of being judged, that the person is really listening to me, and that what they are going to tell me is for my own good" (female double degree student in Law and Management). Additionally, teachers who interact frequently with students "promote a more collaborative and inclusive environment" (female Management student).

Only one male Management student did not consider that the teachers' interaction and involvement influence his learning experience.

### **3.3 Which classroom models and teaching strategies are most valued by students?**

The participants mainly value classes with active methodologies (182 references), such as debates (75 references - "I think debates really prepare us for the job market", male Management student), case studies (53 references), projects (50 references), and teamwork/collaborative work (4 references). With less emphasis, students also value lectures (29 references), classes with practical application (11 references), and classes that combine these two approaches, active lectures (9 references). According to a Psychology student, "if teachers know how to combine the lecture model with other models such as project/work presentations, debates, innovative strategies such as podcasts, among others, students will have more interest and initiative".

Two students also highlighted the importance of "interactive classes" without providing much detail, while another student mentioned the value of "classes with guest speakers."

### **3.4 What types of materials and resources provided by teachers are most valued by students?**

Students value different types of materials and resources provided by teachers: class support material (102 references), knowledge application and assessment resources (56 references), digital and multimedia resources (21 references), and practical and applied resources (20 references). Class support materials encompass PowerPoint presentations (49 references), supplementary texts (25 references), scientific articles (14 references), and summaries of lesson content (13 references). Examples of resources for applying knowledge include exams or tests from previous years (27 references) and exercise solutions (26 references). Digital and multimedia resources primarily consist of videos (13 references), but also include lesson recordings (1 reference), documentaries (1 reference), and podcasts (1 reference). Some digital resources were not specified by the students. Finally, practical resources involve the analysis of real-world cases (11 references) and newspaper reports (3 references), among others.

## **4 Discussion**

The results of the present study indicate that, for the most part, students feel they have a positive relationship with their teachers. Although they didn't elaborate much on this relationship, they did identify the indicators which, for them, constitute a good relationship and which can characterize this positive pedagogical relationship. The indicators identified are in line with two dimensions of the pedagogical relationship: affective (honesty, trust, and respect) and supportive (availability, caring, encouragement) (Hagenauer & Volet, 2014).

These findings are also consistent with those of Ahmod and Zang (2021), who identify that both teachers and students consider respect, a friendly environment, understanding, availability, and concern as essential for effective instruction. The dimensions of care, respect, and concern are also found in the studies of Katsogridakis and Leather (2025) and Okoye (2023). However, some students describe this relationship as distant, suggesting that some teachers value establishing a close relationship with their students more than others (Hagenauer & Volet, 2014). Therefore, some students consider this relationship to be positive and close, while others perceive it to be more distant. As all students are from the same university, possible factors that could explain this difference are the class size, the program, and the characteristics and backgrounds of the students and teachers (Katsogridakis & Leather; Okoye, 2023; Parnes et al., 2020).

According to students' perceptions, teacher interaction and involvement influences their learning experience, as highlighted in the literature (Hagenauer & Volet, 2014; Katsogridakis & Leather, 2025; Okoye, 2023; Parnes et al., 2020; Tormey, 2021), translating into a more positive learning environment and effective learning. This is in line with Okoye (2023) who points that a strong pedagogical relationship, characterized by teacher involvement and interaction, leads to more motivation, more engagement, and better student academic performance. This is also consistent with Hagenauer and Volet (2014) and Parnes et al. (2020), who emphasize that students become more committed, engaged, and harder-working in their learning process when there is greater interaction and involvement from teachers, leading to more effective learning, greater class attendance, and a lower risk of drop-out. Besides, greater teacher interaction and involvement foster a perception of safety, allowing students to feel comfortable sharing their opinions, as also identified by Okoye (2023). Consequently, teachers who are more committed and engaged in the learning process contribute to a better and richer learning experience.

Regarding teaching strategies, lectures, which are typically the most used (Ahmod & Zhang, 2021; Álvarez-Álvarez & Falcon, 2025; Gonsar et al., 2021), are not the strategy most valued by the students in the present study. They prefer active methodologies, emphasizing student-centered teaching and learning (Bhardwaj et al., 2025). Students value moments of interaction, which enable an exchange of ideas and experiences, as is in debates, in line with the findings of Álvarez-Álvarez and Falcon (2025) and Gonsar et al. (2021). The moments of discussion in class, incorporated into the strategies most valued by the students (debates, case studies, projects, and teamwork/collaborative work), are particularly useful for promoting critical thinking skills and the development of knowledge (Ahmod & Zang, 2021). Data also suggests a preference for a combination of the teacher-centered approach and the student-centered one, through active lectures. This strategy emphasizes student involvement and participation during lectures, involving activities and tools to promote high order thinking skills and deep learning (Gregory, 2013).

Although students value exercises and resources that allow them to apply knowledge, the most highly valued are class support material and supplementary texts, typically more associated with lectures (Bhardwaj et al., 2025). Nevertheless, students may prefer more active teaching strategies, but they may study better through more theoretical resources and materials, as they allow for more structure. This information on the strategies, resources, and materials most valued by students can help teachers to plan and structure their lessons. But a question arises: despite being the most valued teaching strategies, are they the ones that lead to the best achievements? This idea was highlighted by Deslauriers et al. (2019) who showed that higher education students may value a particular method but perform better with another one. The most valued strategies may not be the most effective ones for students' development and learning.

## 5 Conclusion

The present study aimed to explore how university students characterize their pedagogical relationship with teachers, how the teacher interaction and involvement influence their learning experience, and the classroom models, teaching strategies, and types of materials and resources most valued by the students.

Most of the students characterize their relationship with teachers as positive, with teachers' availability being highlighted. However, some students characterize this relationship as distant. This relationship and teacher interaction and involvement significantly influences students' learning experience, particularly their motivation and engagement. Teaching strategies also impacts the student learning experience and the participants value more active methodologies. As for the resources and materials provided by the teachers, class support material are the most valued ones. This study also identifies the indicators that constitute, according to students' perceptions, a good pedagogical relationship. Understanding how the students characterize their relationship with teachers, as well as the factors that can contribute to the development of this relationship, can give insights to teachers to promote meaningful relationships and, consequently, optimizing the learning process. Besides, identifying the teaching strategies and the resources and materials most valued by students is also highly relevant, so that teachers can enrich their practices, considering students' interests and, therefore, fostering greater academic development.

On the other hand, the study has limitations such as the possible influence of social desirability bias, with participants responding as they see most appropriate or socially desirable, particularly as we are addressing issues involving teachers. Moreover, many studies focus on the student-teacher interaction, but a few analyze or describe the quality of that relationship (Hagenauer & Volet, 2014). The present study aimed to explore this relationship and the influence of teacher interaction and involvement, but focusing on students' perceptions. In future studies, this could be complemented by a quality evaluation of this relationship through validated instruments. The investigation also showed the teaching strategies, resources, and materials most valued by higher education students, but it would be also interesting and relevant to identify those that have the greatest impact on their learning. Are the most valued ones also the most effective? Addressing this question in future work could provide valuable insights for evidence-based pedagogical practices.

Based on this study, it is important to note that, despite the challenges teachers may face, establishing a quality relationship with students is crucial. Teachers could develop and maintain a climate and culture of trust, availability, and care (Hollweck et al., 2019), and so teacher training should emphasize the development of relational skills. Although teachers recognize some student resistance to active learning, they value this methodology and express a desire to experience it more frequently (Gonsar et al., 2021). Therefore, teachers may consider incorporating active learning strategies into their practices to enhance the educational experience. In terms of implications for higher education, this study suggests that curricula could be structured to promote student-centered learning environments by integrating active methodologies that foster interaction, collaboration, and autonomy.

To conclude, student-teacher relationship, teacher interaction and involvement, and teaching strategies are crucial to developing a positive and effective learning environment. By focusing on these dimensions, HEIs and academic staff can significantly enhance student learning.

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