ASERS

Journal of Research in Educational Sciences

Bi-annually
Volume XVI,
Issue 2(20) Winter 2025
ISSN: 2068 – 8407
Journal DOI: https://doi.org/10.14505/jres

ASERS Publishing

Who we are ...

ASERS Publishing was founded in 2010 and is one of the first online academic publishers of Romania.
Its objectives are excellence in research, scholarship, and education by publishing worldwide. We publish for a range of audiences in print and digital formats that work best for them.
Our academic publishing program serves scholars, instructors, and researchers, publishing and discovering research across subject areas in the social sciences, sciences, and humanities.

Mission

ASERS Publishing serves the needs of the academic community with a mission to help them accelerate knowledge for a better, more innovative and knowledge-intensive world, and we do this by facilitating critical information and decision-making for customers in the global research and academic ecosystems, and making science open – so that scientists can collaborate better and innovate faster.
Research is the foundation of modern society and it's thanks to advances in science that we enjoy longer, healthier and more prosperous lives than ever before in human history. We want to make science even more powerful by ensuring it is openly available. This way, society will be able to generate more knowledge and accelerate innovation, health and prosperity for all.

Our core values are a golden thread through everything we do, and are key to achieving our mission. We are unwavering in our mission and act with urgency to make all science openly available. We know that immediate, free access to high-quality research is vital for achieving this. With open access publishing, knowledge is being shared immediately, without restrictions, enabling researchers to collaborate better and innovate faster to solve the critical challenges we face as humanity.

Scientists power modern society. It is thanks to advances in science that we enjoy longer, healthier and more prosperous lives than ever before in human history. That's why every decision we make starts with one consideration: what's best for the researcher – the people doing the science? Our role is to provide the world's scientists with the best, the fastest, and the most efficient publishing experience. This approach forms the basis of our core values, which we believe are crucial to achieving our mission.

Collaboration. We are dedicated to building communities and working together to empower each other.

Innovation. We are bold in our decision-making, driven by technology and innovation, and constantly making improvements.

Because informed decisions lead to better outcomes. We are proud to help research and academic community advance science and improve health outcomes by combining quality information and data sets with analytical tools to facilitate insights and critical decisions. We help researchers share knowledge, collaborate and make discoveries. We deliver insights that help universities, research institutions, governments and funders achieve strategic goals**.** ASERS Publishing supports R&D-intensive corporations, research institutes and universities with data-led insights that drive innovation.

Serving the research community. We place the researcher at the center of everything we do.

Driving confidence in research. Building on more than 15 years of collaboration with the research community we help ensure that quality research can be accessed, trusted, shared and built upon to accelerate progress in society. We work to ensure information is validated and discoverable so that your work can make a difference, and we create tools and platforms to help you showcase your impact.

Helping people access quality research. We are rigorous in everything we do and committed to only the highest quality standards. Every researcher has a fundamental right to publish in the way that works for them. We offer you a choice of publishing open access or through the subscription model depending on what is right for you.

Inclusion diversity, and equity in research. By bringing together diverse ideas and different perspectives gender, race, ethnicity, and geography we can help you drive progress more effectively. With a diverse group of people creating solutions for customers worldwide, ASERS Publishing is helping to lay the groundwork for more diverse communities in science, and helping you create a more equitable future.

Vision

Our vision is to support the seekers, the changers, the innovators, those who see knowledge as a force for a better, more innovative and knowledge intensive world and building bridges to knowledge - supporting the development of ideas through the research process.

Volume XVI, Issue 2(20), Winter 2025

ASERS Publishing
http://www.asers.eu/asers-publishing
Journal of Research in Educational Sciences
https://journals.aserspublishing.eu/jres
ISSN 2068 – 8407
Journal DOI: https://doi.org/10.14505/jres
Issue DOI:
https://doi.org/10.14505/jres.v16.2(20).00

Table of Contents

1 **From Developers to Players: Exploring the Dual Impact of Game-Based Learning on Student Engagement, Learning and Skill Development** …31
Alice Canavesi, Laura Cattaneo, Francesco Bertolotti, Giacomo Buonanno, Luca Mari, Aurelio Ravarini

2 **"What Makes a Good Class?" - Assessing University Students and Teachers' Perceptions** …51
Ana Moura, Carolina Gomes, Teresa Jacques, Eunice Macedo, Mariana Veloso Martins

3 **Integrating Economic Philosophy into Sierra Leone's Educational System: A Comparative Strategy for Sustainable Socio-Economic Development** …61
Emerson Abraham Jackson

4 **Development of Students' Workbook with STEAM-Real World Problem to Improve Middle School Students' Problem-Solving Skills on Temperature and Heat Material** …68
Aprilia Cahyaningtyas, Fatin Aliah Phang, Erni Yulianti

5 **Nonlinear Dynamic Language Learning Theory in AI-Mediated EFL: From Theory to Practice** …89
Akbar Bahari

6 **Multifaceted Factors Contributing to the Closure of Valley Forge Military Academy an Examination of Management, Economic, Legal, and Social Influences** …128
Walter Rosado

7 **Enhancing Students' Fraction Comparison Skills Through Teacher Development** …135
Cecilia Sveider, Joakim Samuelsson

Call for Papers
Volume XVII, Issue 1(21)
Journal of Research in Educational Sciences

The Journal is designed to promote scholars' thought in the field of education with the clear mission to provide an interdisciplinary forum for discussion and debate about education's most vital issues. We intend to publish papers that contribute to the expanding boundaries of knowledge in education and focus on research, theory, current issues and applied practice in this area.

The Editor in Chief would like to invite submissions for the **Volume XVII, Issue 1(21), Summer 2026** of the **Journal of Research in Educational Sciences** (JRES).

The primary aim of the Journal has been and remains the provision of a forum for the dissemination of a variety of international issues, empirical research and other matters of interest to researchers and practitioners in a diversity of subject areas linked to the broad theme of educational sciences.

The aims and scope of the Journal includes, but is not limited to; the following major topics as they relate to the Educational Sciences:

- Educational Psychology;
- Engagement and Community;
- Leadership in Education;
- School Improvement;
- Human Resources in Education;
- Education and Information Science;
- Global strategies in Higher Education;
- Learner's Needs in the 21st Century;
- The Role of Education in The Globalization World;
- Technology-Based Learning.

All papers will first be considered by the Editors for general relevance, originality and significance. If accepted for review, papers will then be subject to double blind peer review.

Deadline for Submission:	25th May 2026
Expected Publication Date:	June 2026
Web:	https://journals.aserspublishing.eu/jres
E-mail:	jres@aserspublishing.eu

https://doi.org/10.14505/jres.v16.2(20).02

"What Makes a Good Class?" - Assessing University Students and Teachers' Perceptions

Ana MOURA
Centre for Research and Intervention in Education (CIIE) at University of Porto, Portugal, and
Instituto de Saúde Pública, University of Porto, Portugal, and
Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional
ORCID: 0000-0003-4587-6797
ana.moura@ispup.up.pt

Carolina GOMES
Centre for Research and Intervention in Education (CIIE) at University of Porto, Portugal
ORCID: 0009-0001-1060-3855
up201904268@edu.fpce.up.pt

Teresa JACQUES
Faculty of Psychology and Education Sciences, University of Porto, Portugal, and
Centre for Psychology at University of Porto (CPUP), Portugal
ORCID: 0000-0001-9371-3779
tjacques@fpce.up.pt

Eunice MACEDO
Centre for Research and Intervention in Education (CIIE) at University of Porto, Portugal, and
Faculty of Psychology and Education Sciences, University of Porto, Portugal
ORCID: 0000-0003-1200-6621
eunice@fpce.up.pt

Mariana Veloso MARTINS
Faculty of Psychology and Education Sciences, University of Porto, Portugal, and
Centre for Psychology at University of Porto (CPUP), Portugal
ORCID: 0000-0001-6489-0290
Corresponding author: mmartins@fpce.up.pt

Article info: Received 15 September 2025; Revised 29 September 2025; Accepted 6 October 2025; Published 30 December 2025.

Abstract: This study explores the perceptions of university students, teachers, and researchers on what constitutes a 'good class' in higher education. Using qualitative data from 733 participants at a large Portuguese public university, the study applies Bronfenbrenner's ecological model to identify three key systems influencing these perceptions: microsystem, mesosystem, and exosystem. The microsystem highlights the importance of student-teacher interactions, teaching skills, and student engagement. The mesosystem emphasizes pedagogical methods, advocating for interactive and innovative teaching approaches, while the exosystem focuses on structural factors like class size and facilities. The findings reveal the critical role of these systems in shaping class quality, offering insights for improving higher education by aligning teaching practices with the expectations of students and educators. The study also calls for pedagogical innovation to address contemporary challenges and meet diverse student needs, providing valuable guidance for educators and policymakers.

Keywords: higher education; learning; student engagement; teaching method; pedagogical innovation.

JEL Classification: I21; I23; I25; I28; A22; C38.

Introduction

Current societal challenges have extended to Higher Education, requiring changes in how teaching is conceptualised and operationalised. Globalisation, changes in pedagogical theories and practices, and technological advancements (van Dijk *et al.* 2020), especially relevant in a post-pandemic period, pushed academia to a transition to andrological methods and adaptations to the digital generation, transforming how the classroom is conceptualised. Recent analyses of global higher education also highlight how structural and societal challenges continue to reshape teaching and learning practices (Tonkonog 2025).

Although the core mission of higher education remains the transmission of knowledge to prepare students for their careers and enhance human capital (Olo, Correia, and Rego 2021), several factors have shifted the focus in organizing the pedagogical offerings. These factors include changes in student profiles, an increasing number of university students, growing internationalisation, and the ambition to improve the quality of higher education (Berbegal-Mirabent, Mas-Machuca, and Marimon 2018). The importance of student and teacher involvement has been recognized even when integrating information and communication technologies (ICT) in a pedagogical manner that highlights its usefulness (Dumpit and Fernandez 2017). Given the importance of class quality in higher education and the need to engage academic communities in addressing these issues, it is essential to understand the factors that influence perceptions of a good class.

1. Framework

One way to conceptualise the interaction between teachers and students and how they bring and adapt to pedagogical innovation is using Bronfenbrenner's ecology of human development (1979, 1995) as a foundational rationale. The work of Bronfenbrenner on the analysis of individual human development emphasises the impact of interconnected environmental systems on human development over time, from immediate family and school interactions to broader cultural and societal influences (Bronfenbrenner 1979). Shortly, the microsystem includes the immediate environments where people interact directly, (*e.g.*, classrooms); the mesosystem refers to the interrelations among the microsystems (*e.g.*, family-school interactions); the exosystem encompasses broader cultural, economic, and societal influences that affect higher education, such as the policies and practices of the university administration or *curriculum* changes; and the macrosystem encompasses the several groups with shared values or beliefs in which the student is embedded, such as the culture and subculture of the academic institution. The influence of complex bioecological systems has been recognized for decades in how high-education students learn (*e.g.*, Bluteau, Clouder, and Cureton 2017) and engage (Skinner *et al.* 2022). Examining these systems also provides valuable insights into students' characteristics (Kitchen *et al.* 2019; Mulisa 2019).

Pedagogical innovation is a crucial theme in education (Law 2014). Traditional teaching methods based on transmission and memorization are being challenged and replaced by more innovative approaches (Carvalho *et al.* 2021). These new methods shift the role of the teacher towards that of a facilitator of learning. In this model, the student is central to the learning process and plays a crucial role in making decisions about their education (Carvalho *et al.* 2021; Freire 2014)

While implementing and widely accepting these new methods is necessary, it is also important to maintain their initial characteristics (Walder 2014). Pedagogical innovation contributes to creating and disseminating knowledge, helping education achieve new goals and processes and promoting significant changes in perspectives (Law 2014). This innovation has been shown to improve student motivation and deepen learning experiences (Carvalho *et al.* 2021). Authors have also noted the importance of integrating new technologies into the educational context alongside new teaching practices to avoid reverting to conservative pedagogical methods, even when they appear modern (Galeano-Salgado and Álvarez-Rivadulla 2025).

While much has been written about innovative pedagogical practices and the need to implement them in the classroom (*e.g.*, Santos, Figueiredo, and Vieira 2019; Suyo-Vega, Fernández-Bedoya, and Meneses-La-Riva 2024), there is still no consensus on what constitutes quality teaching in higher education (van Dijk *et al.* 2020). The quest for quality in higher education is multifaceted, and there is paradoxical evidence of its most important components. Rather than viewing education as the delivery of knowledge, contemporary approaches increasingly conceptualize learning as a situated, relational, and socially mediated process (Rogoff, 2003; Vygotsky, 1978). This shift emphasizes the importance of participation, dialogue, and the co-construction of meaning in learning environments. In this light, the notion of a "good class" cannot be reduced to predefined criteria or universal metrics of effectiveness. Instead, it must be understood in relation to the social practices, roles, and interactions that take place within specific institutional and cultural contexts. The perspectives of both students and teachers are similar regarding the value attributed to the teacher-student relationship (Dicker *et al.* 2019). However, blended learning has shown equivalent learning outcomes despite significantly reduced classroom time between

30 and 80% (Müller and Mildenberger 2021). Students appreciate classes that are less lecture-focused (Güvendir 2014) and more participatory (O'Connor 2013), but still highly value the ability of the teacher to explain content clearly (Reverter-Masia and Hernandez-Gonzalez 2021). More insight is needed into how university teachers should balance these demands to integrate new pedagogical and learning theories while keeping the perception of a good class.

Understanding what constitutes a good class in higher education is multifaceted, influenced by various factors ranging from individual perceptions to broader systemic structures within educational institutions. In this context, the perceptions of both students and teachers play a crucial role in shaping the discourse around educational quality. This paper seeks to delve into these perceptions, examining and assessing the discourses around education provision, expectations and quality – and how these elements interplay to contribute to the conceptions of a good higher education class.

2. Method

The targeted population comprised the academic community of the University of Porto. Around 2200 teaching faculty and 34000 students were invited by email to participate in the study. The final sample included 733 participants. Participants were from 13 different departments and faculties of a large Portuguese public university. Four participants were affiliated with other Portuguese universities. Table 1 presents the participants' type of affiliation to the University. The majority of the sample was comprised of first year bachelor students, while researchers were the smaller group in the sample. No other information regarding the participants was collected.

Table 1. Participants' type of affiliation to the university.

Affiliation	***n***
1st Year Bachelor Students	254
2nd/ 3rd Year Bachelor Students	196
Master's Students	133
PhD Students	39
Professors	85
Researchers	4
Other*	25

* Erasmus/mobility students, students of other courses, participants that indicated more than one category, and retired professors.

The procedures for this study were performed in line with the principles of the Declaration of Helsinki. The (blinded for peer review) Ethics Committee conducted a preliminary review of our study design. Following an initial assessment confirming that data collection did not involve identifiable respondent information, the Committee determined that the study was exempt from IRB review (November 10, 2023). The Pedagogical Council then sent an email invitation to all students and teaching staff. Participants voluntarily completed an anonymous online form, which included their affiliation type within the university and the open-ended question: *"What makes a good class?"* The questionnaire remained accessible for one week.

3. Research Methodology

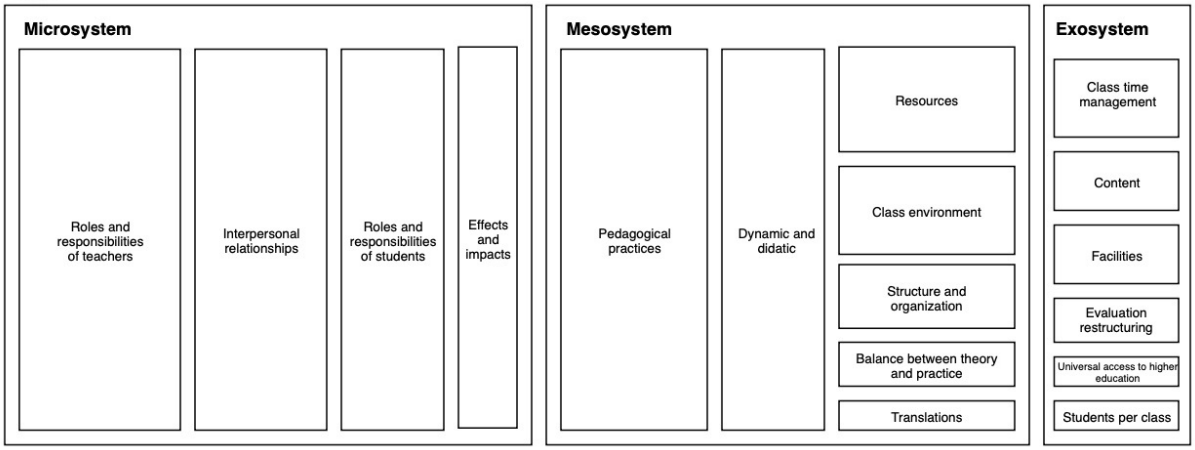
In this study, we adopted a relativist ontological position, recognizing that perceptions of a "good class" are diverse and constructed through the individual experiences of participants within their educational contexts. This ontological stance aligns with the belief that each participant's social and academic realities are dynamic and shaped by a multitude of interconnected factors (Smith, Sparkes, and Caddick 2014). As such, we approached this research with constructionist epistemology, seeking to interpret and understand the participants' experiences and perceptions from their perspectives, acknowledging the role of individual agency in shaping their understanding of classroom quality. The researchers acknowledge that these perceptions are dynamic and influenced by various interconnected factors, such as technological integration, pedagogical innovation, and the teacher-student relationship. By focusing on the participants' unique perspectives, the study aims to explore how they construct their understanding of classroom quality, using Bronfenbrenner's bioecological systems theory as a guiding framework. Reflexivity was maintained throughout to ensure an accurate and nuanced interpretation of the data.

Data were analyzed using QSR Nvivo 12 (Version 2012) to identify and comprehend patterns of meaning across the answers (Braun and Clarke 2012). Based on the research question 'What constitutes a good class for members of the academic community?' and after familiarizing with the data, a systematic coding process was carried out. Answers with similar meanings were inductively synthesised into categories and themes. After refining and defining these categories, three themes were created: 1) microsystem; 2) mesosystem; 3) exosystem. In addition to the theoretical saturation and information power model, triangulation strategies were applied to ensure the rigour and quality of the analysis. These included: i) researchers' triangulation; and ii) theory triangulation (Carter *et al.* 2014). AM and CG analysed the answers and identified the themes and categories, defining the coding framework. All other authors accompanied the process and collaborated to build the final coding tree. During the process of triangulation, the authors realized that there were vertices in common with Bronfenbrenner's ecological systems theory, therefore, the naming of the themes and data organization were aligned. All disagreements were discussed between the authors and resolved by consensus. Finally, the most illustrative *verbatim* quotes were selected and translated. (Bronfenbrenner, 1979)

4. Research Results

Results showed that three main systems influence a good class: microsystem, mesosystem, and exosystem (Figure 1).

Figure 1. Thematic map of students' and teachers' perceptions of 'what makes a good class'.



It was immediately apparent that the microsystem, which refers to the roles of teachers and students, their relationships, and the effects of classes, is the most influential system on perceptions of what constitutes a good class. Participants identified specific roles and responsibilities of teachers that significantly shape these perceptions. They generally emphasized the importance of a good teacher, which can be grouped into three sub-categories: teaching competencies, interpersonal skills, and professional attitudes. Regarding teaching competencies, participants highlighted communication skills, as well as the interest, motivation, and dedication of teachers, as central elements of a good class. Additionally, they mentioned the importance of encouraging student participation, adaptability, and the use of humor and creativity. Interpersonal skills were associated with the teacher's ability to be captivating, empathetic, and understanding, and to be available to clarify doubts. Concerning professional attitudes, participants pointed out the need for scientific rigor and proactivity.

Interpersonal relationships were frequently mentioned in participants' answers, with an emphasis on interaction. Participants believed that a good class depends on close interaction between teachers and students, which reduces power dynamics and increases students' confidence and motivation. One participant stated, 'A good class must have good interaction between students and teachers, but above all, it must not have positions of power that could reduce students' confidence in expressing their ideas and being able to learn' (A401, PhD student, Sport Science). Additionally, the values guiding interactions influence perceptions of a good class. Participants felt that classes should be framed by values such as respect, liberty, equity, and empathy. Effective communication between stakeholders and horizontal sharing logic were also identified as key elements of a good class.

Also, the roles and responsibilities of students for the existence of good classes were highlighted. Students' engagement, participation, motivation, attention, and interest seem to influence the existence of good

classes. Moreover, students' behavior in classes - specifically being quiet, using critical thinking, and respecting the teachers - seems to be a prerequisite for good classes.

The effects and impacts classes can have on students were identified as key elements of a good class, such as enhancing critical thinking and curiosity, being engaging, providing a sense of fulfillment, promoting the acquisition of new knowledge, and creating positive experiences.

Initially, the mesosystem was conceived as interactions between different microsystems where individuals are involved. However, adjustments were made to focus on interactions between the organizational systems of teachers (before and during classes) and students within this study. Participants emphasized that the quality of a class is highly dependent on the pedagogical practices employed. They highlighted interactive teaching methods such as debates, examples, application exercises, innovative approaches (*e.g.*, field trips, quizzes, games), linking content to practical applications and future professions, and addressing student doubts. Additionally, they emphasized the need for integrating challenges, using questioning techniques, fostering teamwork, providing feedback, and employing technologies to enhance class presentations. Furthermore, participants identified pedagogical practices that promote co-construction of knowledge and democratic learning processes, as well as effective class management. They stressed the importance of practices that deepen understanding and summarize learning content. Some participants also mentioned the use of the flipped classroom model.

Participants emphasized that a good class should be dynamic and didactic, fostering interest, stimulation, attention, and motivation. As one participant stated: 'Didactic and dynamic so that everyone understands the content and remains awake during the process.' (A382, Master Student, Engineering). Resources and the importance of audiovisual aids were also highlighted, such as well-structured, clear, and organized visual presentations that accompany lectures. Other mentioned resources were films, videos, illustrations, QR codes, and photographs. They underscored the value of providing materials in advance, as noted by a student: 'Good visual support (clear and appealing presentations, made available to students in advance).' (A655, Bachelor student, Medicine and Biomedical Sciences). Additionally, participants emphasized the importance of diverse and appealing resources, including written materials like books, to support learning.

Within the mesosystem, the classroom environment emerged as crucial for a good class. Participants emphasized the need for a safe, calm, and comfortable environment that fosters open communication and learning. Despite highlighting the importance of silence, participants also stressed the value of relaxed, cheerful, and creative class atmospheres. They emphasized the importance of structured and organized class sessions (preparation, delivery, and follow-up), clear objectives, content coherence, and providing support materials in advance. As one participant shared: 'In my opinion, a good class should start with a central theme followed by a brief explanation (from either teacher or students), contextualization, and discussion and reasoning exercises analyzing real-life situations/problems.' (A678, PhD student, Pharmacy).

Additionally, participants highlighted the importance of balancing theory and practice within the mesosystem of a good class. They believed that an excessive focus on theoretical content could diminish student autonomy, emphasizing the need for practical components to stimulate curiosity and active learning. As one participant noted: 'If the class is too focused on exposition, it reduces student autonomy. Mixing exposition with exploration of specific content arouses curiosity for learning.' (A116, Bachelor student, Psychology and Educational Sciences). Lastly, three mentions were made about the importance of translation for mobility students as an influencing factor of what a good class is

Finally, participants discussed the exosystem, which encompasses the influence of higher education structures, policies, and guidelines on perceptions of a good class. They emphasized the importance of effective class time management, including breaks to maintain concentration. *'A good class must have breaks because a young person cannot be 100% concentrated for more than 50 minutes'* (A300, Bachelor Student, Farmacy). Participants also highlighted the significance of structured, relevant, and scientifically rigorous content that advances academic knowledge. Infrequently mentioned factors included the importance of comfortable facilities with good acoustics, lighting, air conditioning, and seating conducive to interaction. As reinforced: *'A room with good space, comfort, climatic and technological conditions.'* (A597, Master student, Arts and Humanities). Participants also noted the restructuring of evaluations, the importance of universal access to higher education for all students (public, free, and quality higher education), and smaller class sizes to enhance learning experiences.

5. Discussions

The quality of higher education classes has been a subject of significant interest, especially following recent changes and pedagogical innovations (Núñez-Canal, de Obesso, and Pérez-Rivero 2022). The findings from this study provide a comprehensive view of what constitutes a 'good class' from the perspectives of both students and

teachers in higher education. Adapting Bronfenbrenner's ecological perspective facilitated a nuanced understanding of the multifaceted interactions between different ecological systems, illuminating how factors at different levels of influence intersect the understanding of what a good class in higher education means (B. Johnson 2008).

At the most immediate level, the surveyed academic community referred mainly to the microsystem, which encompasses the direct interactions between students and instructors, as well as the physical and social elements of the classroom itself. Despite the integration of new technologies in higher education, our results revealed that the role of the teacher remains central to student learning outcomes and engagement (Pantić 2017; Redecker 2017). This suggests that instructors who foster an engaging, supportive, and intellectually challenging microsystem can cultivate high levels of student engagement and deep learning (Shernoff, Tonks, and Anderson 2014). Therefore, it seems logical that the interaction occurring within that particular class group and with a particular teacher was the second most frequent category perceived as important for a good class experience. Learning encompasses a social aspect, which includes developing communication skills, empathy, and collaborative abilities, and is significantly enhanced through human interaction (Pianta, Hamre, and Allen 2012). The teacher-student dynamic not only drives academic achievement but also plays a pivotal role in the socio-emotional development of students, which is essential for their overall growth and future success. Recent findings corroborate that students' perceptions of respectful and supportive teacher behaviours strongly influence both engagement and well-being (Vicencio-Clarke *et al.* 2025). This positive interaction is, of course, interconnected both with the teacher's ability to engage students and with the students' engagement. The role and responsibility of the student emerged as an independent but interconnected category of the microsystem, fostered by attention, motivation and engagement. Motivation and engagement are pivotal for students' participation in class and the establishment of both student-student and teacher-student relationships (Xerri, Radford, and Shacklock 2018). Interestingly, participants pointed out that a good class must have a personal impact. Students, teachers and researchers felt that a good class has to create a sense of increasing knowledge, critical thinking, curiosity or engagement. These results align with the findings of a randomized controlled trial that demonstrated how positive first-day experiences can increase academic performance by the end of the term (Wilson and Wilson 2007).

Beyond the microsystem, the mesosystem encompasses the connections and relationships between the various settings and contexts students and teachers navigate. The mesosystem was the second theme present in most of our participants' answers, with pedagogical practices being the most frequent category. Many of the practices experienced positive involved collaborative learning (*e.g.*, working in groups; flipped classrooms). Besides increasing engagement, collaborative learning has proven beneficial in improving relationships among students and mental health (D.W. Johnson, Johnson, and Smith 2024). Furthermore, flipped classroom studies indicate that alignment between students' perceived and actual learning strategies is crucial for maximizing the benefits of these collaborative approaches (Han and Yang 2025). The incorporation of technology in the classroom was also highly mentioned. Nonetheless, this positive attribution to technology was contextualized in support of interactive and student-centered learning. In effect, when these approaches are present and the classroom is felt as dynamic, the use of technology has been shown improve learning outcomes and satisfaction (Means *et al.* 2013). However, our results show that the use of technologies and other teaching aids or resources has to be diverse. This leads to the interconnected category of balance between theory and practice. The balance between theory and practice is crucial, as excessive theoretical focus can reduce student autonomy and engagement, while practical components stimulate curiosity and active learning (Prince 2004). The use of diverse and dynamic practices while employing different pedagogical practices and balancing theory and practice requires a large dedication to structuring and organization, and participants acknowledged this in their reports. Lastly, the promotion of a comfortable and inclusive classroom environment was highlighted by the academic community. Inclusive pedagogy has been linked to better engagement and academic performance, particularly among traditionally underrepresented student groups (Felten and Lambert 2020), which seems to be the ones who suggested that a good class has the written materials translated.

Besides microsystem and mesosystem categories, broader influences and structural factors were also perceived as important to a good class. Effective time management, including regular breaks, was highlighted as vital for maintaining student concentration and engagement. The quality of classroom facilities, such as acoustics, lighting, and seating, was also mentioned as a contributing factor. Additionally, participants emphasized the importance of accessible and equitable education. Smaller class sizes and the restructuring of evaluations were suggested to enhance the learning experience. The optimal length of higher education classes and the ideal number of students per class have been subjects of considerable research over the past decade. For instance, Deslauriers *et al.* (2019) found that class periods of about 50 to 75 minutes are effective for maintaining student

engagement and cognitive performance, as shorter classes might not allow enough time for deep learning, while longer sessions risk diminishing returns in terms of attention and retention. Regarding class size, a systematic review concluded that smaller class sizes (typically under 30 students) enhance individual attention from instructors, increase student participation, and improve academic performance (Cuseo 2007).

Curiously, while we know that the overarching sociocultural, political, and economic forces that influence the educational system as a whole, Bronfenbrenner's macrosystem level of the model did not emerge as a theme from the analyzed data. This might be explained by the fact that participants chose to refer to the experiences they live most closely and tend not to prioritize societal attitudes towards higher education, government priorities and policies, and the state of the labor market can all play a role in shaping perceptions of what constitutes an optimal learning environment (Amali *et al.* 2023).

Taken together, the findings of our study reveal that the teachers and students still underscore the necessity for pedagogical innovation in higher education. Traditional teaching methods focused on transmission and memorization are increasingly being replaced by more dynamic and interactive approaches. These new methods position the teacher as a facilitator of learning, encouraging student participation and co-construction of knowledge. Innovative practices were identified as effective in promoting a deeper understanding of the material and fostering a more engaging learning environment. These practices align with the challenges and opportunities presented by the digital age and the need for higher education institutions to adapt to the evolving educational landscape.

Despite the valuable insights provided by this study, several limitations should be acknowledged. First, the study is limited by its sample size and scope, which almost exclusively includes participants from one large Portuguese public university. Although it can be assumed that the public higher education system is very similar in Portugal, this restricts the generalizability of the findings to other contexts and institutions. Second, the data collection method, relying on self-reported perceptions through an online survey, may introduce biases such as social desirability bias or response bias. Additionally, the cross-sectional nature of the study does not allow for an examination of changes in perceptions over time or the impact of specific interventions. Furthermore, while the study employs Bronfenbrenner's ecological systems theory to categorize responses, it may oversimplify the complex interactions between various factors influencing perceptions of a good class. Future research could benefit from a more nuanced analysis that considers additional variables and their interplay.

Still, this study has several strong points that enhance its contribution to the field of higher education research. The use of a well-established theoretical framework, Bronfenbrenner's ecological systems theory, provides a structured approach to analyzing and understanding the data. This theoretical grounding enables a comprehensive examination of the multiple layers of influence on perceptions of a good class. Another strength is the use of qualitative insights from open-ended responses. This approach allows for a richer, more detailed understanding of participants' views and experiences. The study also highlights the importance of both student and teacher perspectives, offering a balanced view of the factors contributing to effective teaching and learning. Finally, the emphasis on practical implications and pedagogical innovation provides actionable insights for educators and policymakers. The identification of specific teaching methods and classroom management strategies that enhance student engagement and learning can inform the development of more effective educational practices.

Conclusion

In conclusion, this study highlights the multifaceted nature of what makes a good class in higher education. The findings suggest that both micro-level classroom dynamics and macro-level institutional policies significantly influence students' and teachers' perceptions. The integration of practical components with theoretical knowledge, effective class management, and supportive learning environments is a key aspect of fostering a positive educational experience. Additionally, the push for pedagogical innovation reflects the need for higher education to evolve in response to contemporary challenges and to better meet the needs of a diverse student body. These insights provide valuable guidance for educators and policymakers aiming to enhance the quality of higher education. By understanding and addressing the factors that contribute to a good class, institutions can create more effective and engaging learning environments that support student success and academic achievement.

Acknowledgments:

The authors would like to thank all the members of the Pedagogical Council of the University of Porto Faculty of Psychology and Education Sciences for the discussion of ideas, as well as the participants for their valuable contributions.

Credit Authorship Contribution Statement:

Ana Moura: Conceptualization, Investigation, Methodology, Formal analysis, Writing – original draft, Data curation, Writing – review and editing;
Carolina Gomes: Conceptualization, Investigation, Methodology, Formal analysis, Data curation, Writing – review and editing;
Teresa Jacques: Conceptualization, Validation, Writing – review and editing;
Eunice Macedo: Conceptualization, Writing – original draft, Validation, Writing – review and editing,
Mariana V. Martins: Conceptualization, Project administration, Writing – original draft, Supervision, Validation, Writing – review and editing.

Declaration of Competing Interest:

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Use of Generative AI and AI-Assisted Technologies:

The authors declare that they have used/not used generative AI and AI-assisted technologies during the preparation of this work.

References

[1] Amali, Nurul Amirah Khairul, Muhammad Usamah Mohd Ridzuan, Noor Hanim Rahmat, Hui Zanne Seng, and Norliza Che Mustafa. (2023). Exploring learning environment through Bronfenbrenner's ecological systems theory. *Journal of Academic Research in Progressive Education and Development,* 12 (2): 144-162. DOI: https://doi.org/10.6007/IJARPED/v12-i2/16516

[2] Berbegal-Mirabent, Jasmina, Marta, Mas-Machuca, and Frederic, Marimon. (2018). Is research mediating the relationship between teaching experience and student satisfaction? *Studies in Higher Education,* 43 (6): 973-988. DOI: https://doi.org/10.1080/03075079.2016.1212321

[3] Bluteau, Patricia, Lynn, Clouder, and Debra, Cureton. (2017). Developing interprofessional education online: An ecological systems theory analysis. *Journal of Interprofessional Care,* 31 (4): 420-428. DOI:https://doi.org/10.1080/13561820.2017.1301892

[4] Braun, Virginia, and Victoria, Clarke. (2012). *Thematic analysis*. American Psychological Association.

[5] Bronfenbrenner, Urie. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

[6] Bronfenbrenner, Urie. (1995). The bioecological model from a life course perspective: Reflections of a participant observer.

[7] Carter, N., D. Bryant-Lukosius, A. DiCenso, J. Blythe, and A. J. Neville. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum,* 41 (5): 545-547. DOI: https://doi.org/10.1188/14.Onf.545-547

[8] Carvalho, Andreia, Sergio Jesus, Teixeira, Leonilde, Olim, Sancha, de Campanella, and Teresa, Costa. (2021). Pedagogical innovation in higher education and active learning methodologies–a case study. *Education + Training,* 63 (2): 195-213. DOI: https://doi.org/10.1108/ET-11-2020-0368

[9] Cuseo, Joe. (2007). The empirical case against large class size: Adverse effects on the teaching, learning, and retention of first-year students. *The Journal of Faculty Development,* 21 (1): 5-21

[10] Deslauriers, Louis, Logan S., McCarty, Kelly, Miller, Kristina, Callaghan, and Greg, Kestin. (2019). Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. *Proceedings of the National Academy of Sciences,* 116 (39): 19251-19257. DOI:https://doi.org/10.1073/pnas.1821936116

[11] Dicker, Ronald, Michael Garcia, Alison Kelly, and Hilda Mulrooney. (2019). What does 'quality' in higher education mean? Perceptions of staff, students and employers. *Studies in Higher Education,* 44 (8): 1425-1441. DOI: https://doi.org/10.1080/03075079.2018.1445987

[12] Dumpit, Duvince Zhalimar, and Cheryl Joy Fernandez. (2017). Analysis of the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model. *International Journal of Educational Technology in Higher Education,* 14: 1-16. DOI: https://doi.org/10.1186/s41239-017-0045-2

[13] Felten, Peter, and Leo M Lambert. (2020). *Relationship-rich education: How human connections drive success in college*. Johns Hopkins University Press.

[14] Freire, Paulo. (2014). *Pedagogia da autonomia: saberes necessários à prática educativa*. Editora Paz e Terra.

[15] Galeano-Salgado, Andres Mauricio, and María José Álvarez-Rivadulla. (2025). Cross-class interactions and subjective inequality: perceptions, beliefs and distributive preferences at a Colombian elite university. *Frontiers in Sociology,* 10: 1619937. DOI: https://doi.org/10.3389/fsoc.2025.1619937

[16] Güvendir, Meltem. (2014). A scaling research on faculty characteristics that higher education students prioritize. *College Student Journal,* 48 (1): 173-183

[17] Han, Feifei, and Jingpeiyi Yang. (2025). Consistency between self-reported and log data to understand students' experience of learning in flipped classrooms. *Scientific Reports,* 15 (1): 34369. DOI:https://doi.org/10.1038/s41598-025-34369

[18] Johnson, Bruce. (2008). Teacher–student relationships which promote resilience at school: A micro-level analysis of students' views. *British Journal of Guidance & Counselling,* 36 (4): 385-398. DOI:https://doi.org/10.1080/03069880802364528

[19] Johnson, David W., Roger T., Johnson, and Karl A., Smith. (2024). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching,* 25 (3&4): 85-118

[20] Kitchen, Joseph A., Ronald E., Hallett, Rosemary J., Perez, and Gwendelyn J., Rivera. (2019). Advancing the use of ecological systems theory in college student research: The ecological systems interview tool. *Journal of College Student Development,* 60 (4): 381-400. DOI: https://doi.org/10.1353/csd.2019.0035

[21] Law, Nancy. (2014). Comparing pedagogical innovations. In *Comparative education research: Approaches and methods*, 333-364. Springer.

[22] Means, Barbara, Yukie, Toyama, Robert, Murphy, and Marianne, Baki. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record,* 115 (3): 1-47

[23] Mulisa, Feyisa. (2019). Application of bioecological systems theory to higher education: Best evidence review. *Journal of Pedagogical Sociology and Psychology,* 1 (2): 104-115

[24] Müller, Claude, and Thoralf, Mildenberger. (2021). Facilitating flexible learning by replacing classroom time with an online learning environment: A systematic review of blended learning in higher education. *Educational Research Review,* 34: 100394. DOI: https://doi.org/10.1016/j.edurev.2021.100394

[25] Núñez-Canal, Margarita, Mª de las Mercedes de Obesso, and Carlos Alberto, Pérez-Rivero. (2022). New challenges in higher education: A study of the digital competence of educators in Covid times. *Technological Forecasting and Social Change,* 174: 121270. DOI: https://doi.org/10.1016/j.techfore.2021.121270

[26] O'Connor, Kevin. (2013). Class participation: Promoting in-class student engagement. *Education,* 133 (3): 340-344.

[27] Olo, Daniela, Leonida, Correia, and Conceição, Rego. (2021). Higher education institutions and development: Missions, models, and challenges. *Journal of Social Studies Education Research,* 12 (2): 1-25.

[28] Pantić, Nataša. (2017). An exploratory study of teacher agency for social justice. *Teaching and Teacher Education,* 66: 219-230.

[29] Pianta, Robert C., Bridget K., Hamre, and Joseph P., Allen. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In *Handbook of research on student engagement*, 365-386. Springer.

[30] Prince, Michael. (2004). Does active learning work? A review of the research. *Journal of Engineering Education,* 93 (3): 223-231.

[31] Redecker, Christine. 2017. *European framework for the digital competence of educators: DigCompEdu*. Joint Research Centre (Seville site).

[32] Reverter-Masia, Joaquin, and Vicenço, Hernandez-Gonzalez. (2021). Basic abilities a good university teacher should have: case study at the University of Lleida, Spain. *Revista Espacios,* 42 (3)

[33] Santos, Julia, Amelia Simoes, Figueiredo, and Margarida, Vieira. (2019). Innovative pedagogical practices in higher education: An integrative literature review. *Nurse Education Today,* 72: 12-17

[34] Shernoff, David J., Stephen M., Tonks, and Brett, Anderson. (2014). The impact of the learning environment on student engagement in high school classrooms. *Teachers College Record,* 116 (13): 166-177.

[35] Skinner, Ellen A, Nicolette P., Rickert, Justin W., Vollet, and Thomas A., Kindermann. (2022). The complex social ecology of academic development: A bioecological framework and illustration examining the collective effects of parents, teachers, and peers on student engagement. *Educational Psychologist,* 57 (2): 87-113.

[36] Smith, Brett, Andrew C., Sparkes, and Nick, Caddick. (2014). Judging qualitative research. In *Research methods in sports coaching*, 192-201. Routledge.

[37] Suyo-Vega, Josefina Amanda, Víctor Hugo, Fernández-Bedoya, and Monica Elisa, Meneses-La-Riva. (2024). Beyond traditional teaching: a systematic review of innovative pedagogical practices in higher education. *F1000Research,* 13: 22.

[38] Tonkonog, VV. (2025). The analysis of modern problems and challenges of Russian medical education: the sociological survey results. *Problems of Social Hygiene, Public Health and History of Medicine,* 33 (4): 706-713.

[39] van Dijk, Esther E., Jan van Tartwijk, Marieke F. van der Schaaf, and Manon Kluijtmans. (2020). What makes an expert university teacher? A systematic review and synthesis of frameworks for teacher expertise in higher education. *Educational Research Review* 31: 100365. DOI: https://doi.org/10.1016/j.edurev.2020.100365

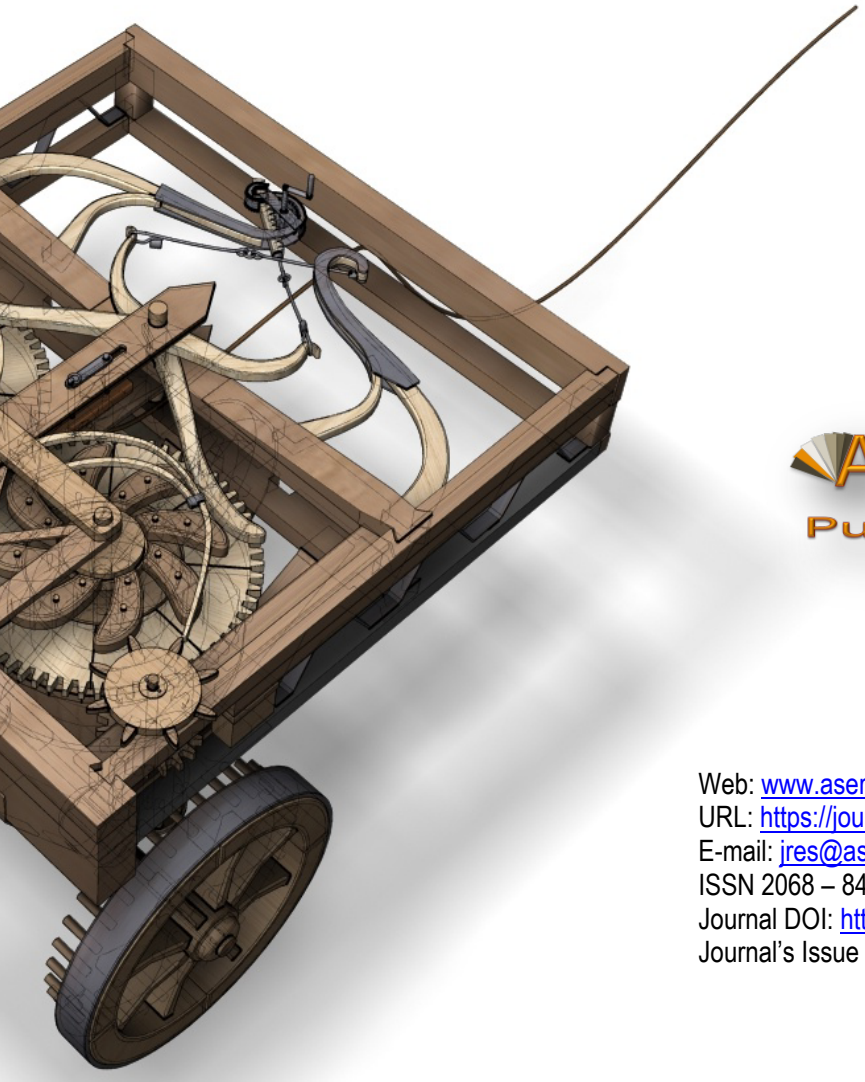
[40] NVivo Qualitative Data Analysis Software.

[41] Walder, Anne Mai. (2014). The concept of pedagogical innovation in higher education. *Education Journal,* 3 (3): 195-202.

[42] Wilson, Janie H, and Shauna B Wilson. (2007). The first day of class affects student motivation: An experimental study. *Teaching of Psychology,* 34 (4): 226-230.

[43] Xerri, Matthew J., Katrina Radford, and Kate Shacklock. (2018). Student engagement in academic activities: a social support perspective. *Higher Education,* 75: 589-605.

SERS



ASERS Publishing

Web: www.aserspublishing.eu
URL: https://journals.aserspublishing.eu/jres
E-mail: jres@aserspublishing.eu
ISSN 2068 – 8407
Journal DOI: https://doi.org/10.14505/jres
Journal's Issue DOI: https://doi.org/10.14505/jres.v16.2(20).00