



UTAD+SUCESSO: An institutional approach to promote first-year students' academic success

Tatiana Ferreira, University of Trás-os-Montes and Alto Douro (UTAD), Portugal

Gonçalo Cruz, University of Trás-os-Montes and Alto Douro (UTAD) and Research Centre on Didactics and Technology in the Education of Trainers (CIDTFF), Portugal

José Paulo Cravino, University of Trás-os-Montes and Alto Douro (UTAD) and Research Centre on Didactics and Technology in the Education of Trainers (CIDTFF), Portugal

ABSTRACT

Academic success and dropout in higher education are shaped by a range of social, academic, and personal factors. Supporting students' transition to university has therefore become a key priority for higher education institutions, leading to the development of institutional initiatives aimed at promoting first-year students' academic adjustment.

Within this context, the UTAD+SUCESSO project seeks to consolidate and expand initiatives previously developed at the University of Trás-os-Montes and Alto Douro (UTAD), namely the Permanent Observatory on School Dropout and Promotion of Academic Success and the Tutoring and Mentoring Programme (OPAPSE). The initiative reflects the institution's commitment to inclusive, equitable and student-centred education while also contributing to a deeper understanding of the factors influencing student success and dropout.

The project focuses on supporting first-year students through initiatives that promote the development of soft skills, enhance teaching and assessment practices, and implement tools that enable closer monitoring of students' academic progress. Through these actions, UTAD+SUCESSO aims to foster a more engaging, supportive learning environment, helping first-year students develop the skills and resources needed to succeed throughout their higher education journey.

Keywords: academic success, first-year students, higher education, student development, university transition

Introduction

The transition to higher education is marked by adjustments to new academic, social, and personal demands (Thompson et al., 2021). This transition can be challenging for some students and may contribute to dropout, particularly during the first year, when many students leave higher education (Casanova et al., 2023a).

Several factors influence the decision to leave higher education, including vocational difficulties (such as not being admitted to a first-choice study programme), grade point average (GPA), parents' educational background, age, and enrolment in higher education immediately after completing secondary education (Casanova et al., 2021; Casanova et al., 2023b). These factors are consistent with those identified by Kocsis and Molnár (2025), who found gender, GPA, and the number of credits earned to be strong predictors of

academic performance. Similarly, Casanova et al. (2023b) highlighted the relationship between academic difficulties and the number of curricular units successfully completed.

In addition to academic and structural factors, personal and psychological dimensions also play an important role in students' decisions to continue their studies. Authors have highlighted aspects such as motivation, mental health (Lorenzo-Quiles et al., 2023; Trusty et al., 2025), and self-esteem (Schaeper, 2020), as well as the stress associated with adapting to the demands of the higher education environment (Thompson et al., 2021). As noted by Casanova et al. (2021), having a strong social support network during the first year is particularly important, as interpersonal difficulties may contribute to dropout decisions.

Institutional support mechanisms can play a key role in addressing these challenges. For example, peer mentoring programmes have been shown to positively influence retention by facilitating students' adaptation to higher education and contributing to improved mental health, attendance, and completion rates (Le et al., 2024). From the perspective of academic success, factors such as prior knowledge, learning strategies, motivation, and attitudes also appear to influence first-year students' outcomes (Molnár & Kocsis, 2024).

Recognising the complexity and impact of academic dropout, the University of Trás-os-Montes and Alto Douro (UTAD) has offered its students a Tutoring and Mentoring Programme (PTM) since 2015, as well as the Permanent Observatory for Dropout and Promotion of Academic Success (OPAPSE). Although these initiatives have had a positive impact, they have primarily focused on social and peer support dimensions, highlighting the need for a more integrated institutional response.

In this context, UTAD developed the UTAD+SUCESSO project, designed to provide a more comprehensive and coordinated approach to supporting first-year students across different dimensions of student life—academic, social, and personal. This paper presents the initiative, whose main mission is to reduce dropout rates and promote academic success among first-year students at UTAD. The project focuses on academic support, welcoming and integration activities, and the development of soft skills and other competences.

Implementation

The UTAD+SUCESSO project was created to promote academic success and reduce dropout rates among first-year students. It builds on the work developed by the OPAPSE and the PTM, reinforcing UTAD's commitment to inclusive and student-centred education.

The project activities are organised into three lines of action, addressing academic, social, and institutional dimensions of student development while also supporting pedagogical innovation and high-quality teaching.

1. Academic integration of new students and institutional capacity-building

+MEETINGS (+ENCONTROS): Activities aimed at supporting the academic integration of first-year students (mentees) and providing training for mentors (second-year students from the same study programme), tutors (teaching staff) involved in the PTM, and non-teaching staff.

2. Development of academic and social skills

Actions focused on the (re)design, follow-up, and monitoring of first-year “pilot” curricular units with success rates below the institutional average.

+RESOURCES (+RECURSOS): Resources developed to support teaching staff in integrating educational materials and pedagogical tools into their teaching practices, including the development of a Massive Open Online Course (MOOC) for training tutors and mentors involved in the PTM.

+REFERENTIALS (+REFERENCIAIS): Short-term training referentials offered as micro-credentials, designed to complement the study programmes of the pilot curricular units.

3. Academic dropout prevention

+TOOLS (+FERRAMENTAS): Activities aimed at enhancing tools for preventing academic dropout, building on prototypes previously developed within the EDU.IA and SUCESSO@UTAD projects.

What we have achieved to date

1. Academic integration of new students and institutional capacity-building

Regarding initiatives aimed at improving the academic integration of new students, UTAD+SUCESSO has implemented several training activities focused on the development of soft skills, as part of a training plan entitled *Skills aos Montes*. The first edition (2024/2025) addressed a range of competences considered relevant for first-year students, covering topics such as the transition from secondary to higher education, UTAD support services, depression, stress and anxiety in higher education, self-regulation of learning, basic skills for effective academic communication, financial literacy and personal finances, interpersonal relationships and conflict management, and information literacy in higher education.

In this first edition, 68 students enrolled, of whom 29 successfully completed the full programme. A second edition (2025/2026) is currently underway, with 50 students enrolled, maintaining several themes from the previous edition while also introducing new topics, including healthy eating in higher education, healthy relationships, and learning how to learn with artificial intelligence. To evaluate the impact of the training plan, the second edition incorporates a quasi-experimental design, including an experimental group and a control group. Students' academic experiences will be assessed using the Academic Experiences Questionnaire (QVA-r; Almeida et al., 2002) through pre- and post-test assessment.

Training sessions have also been delivered for tutors and mentors involved in the UTAD PTM, aiming to strengthen their capacity to support first-year students. These sessions were organised using a World Café methodology, incorporating branching scenarios that simulate situations related to the first contact and subsequent meetings with new students, allowing participants to explore different approaches to mentoring and student support.

In addition, a series of hackathons open to students from all undergraduate programmes has been promoted. During these events, teams of four students (each including at least one first-year student) collaborate to address challenges related to academic dropout by proposing innovative solutions. Within a roleplay environment, each team has six hours to develop and present its proposal. To date, these hackathons have been implemented in three of the five schools at UTAD, engaging around 150 students. Participants' academic motivation is assessed using the Academic Motivation Scale (AMS; Vallerand et al., 1992) through a one-group post-test design, allowing the analysis of students' motivational profiles following participation in the activity.

2. Development of academic and social skills

A MOOC is being developed to support the initial training of tutors and mentors, which had previously been delivered exclusively in person. The MOOC is currently in its final development phase, following validation

by different focus groups composed of experts, and will be made available for training tutors and mentors in late 2026.

Regarding the pilot curricular units, in the 2024/2025 academic year, six teachers were selected to participate in the initiative, representing a total of 438 first-year students from diverse disciplinary fields. These teachers received close support and guidance, including suggestions for the adoption of student-centred teaching practices and methodologies. In the 2025/2026 academic year, participation expanded to eighteen teachers, involving 507 students so far.

Examples of the pedagogical strategies implemented include Jigsaw Classroom (a collaborative learning strategy in which students become responsible for mastering and teaching a specific part of the topic to their peers), KWL – What I Know, What I Want to Know, What I Have Learned (which encourages students to regulate their learning by connecting prior knowledge, learning goals, and newly acquired knowledge), Think–Pair–Share (a method that promotes student engagement, critical thinking, and communication through individual reflection followed by peer discussion), Peer Instruction (which prioritises conceptual understanding through questioning and structured group discussion), and Exit Tickets (a formative assessment technique used at the end of a class to gather rapid feedback on students' understanding).

As part of this monitoring process, pre- and post-tests were also administered to both students and teachers. These included the University Student Engagement Inventory (USEI; Maroco et al., 2016), used to assess students' academic engagement; the Approaches and Study Skills Inventory for Students (ASSIST; Entwistle & McCune, 2004), used to evaluate students' approaches to studying; and the Teachers' Motivation for Teaching in Higher Education questionnaire (Visser-Wijnveen et al., 2012), used to assess teachers' interest and self-efficacy in relation to their practice.

In addition to the support provided to teachers, a Pedagogical Toolkit is being developed, consisting of practical guides that describe the implementation of these student-centred strategies. Currently, ten strategies are available on the project website (<https://sucesso.utad.pt/repositorio>) in video format. The toolkit therefore serves as a mechanism for disseminating and sustaining the pedagogical innovations developed within the project.

3. Academic dropout prevention

In relation to tools aimed at preventing student dropout and monitoring academic success, the project is currently exploring several approaches and has produced preliminary developments in a number of areas. These include the creation and analysis of datasets to examine patterns of academic performance, the development of artificial intelligence-based classifiers to predict student success and failure patterns, and the use of visual diagnostic tools to assist in the design of curricular units.

In addition, prototypes of innovative applications have been developed. One example is an online application based on EdVee (Trowsdale & McKay, 2023), designed to support the analysis of pedagogical coherence in curricular units. The tool facilitates the examination of constructive alignment by analysing the relationships between learning outcomes, teaching content, learning activities, and assessment methods.

Together, these tools contribute to a multidisciplinary and data-informed approach to understanding and preventing student dropout, supporting both pedagogical decision-making and institutional strategies aimed at promoting academic success.

Conclusions and future directions

Academic dropout is a complex and multifactorial phenomenon. When adapting to higher education, students must deal with a wide range of academic, social and personal changes. Factors such as age, whether students enter higher education immediately after completing secondary education, their parents' educational background, and the support of their social network, among others, can be decisive in their adaptation to the new educational context (Casanova et al., 2021). In this sense, it is important to consider how we welcome new students and the tools and support mechanisms made available to them during the transition to higher education.

As highlighted by Molnár and Kocsis (2024), studying the predictors of academic success is a continuous process, as students and institutional contexts are constantly evolving. The UTAD+SUCESSO project adopts a multidisciplinary approach that seeks not only to foster the integration of new students but also to support them throughout their first year. Nevertheless, there is still room for improvement. The tools currently under development may help to identify specific risks of dropout among UTAD students, enabling the design of more targeted and personalised support strategies. By presenting an integrated institutional approach combining student support, pedagogical innovation, and data-informed monitoring, this paper contributes to current discussions on strategies for promoting first-year student success in higher education.

As the project progresses, data collected from training activities, curricular unit monitoring, and the implementation of predictive analytics tools will be used to evaluate the impact of the interventions and inform future adjustments. This iterative approach supports the continuous refinement of practices and the sustained promotion of academic success. In the short term, the project is expected to contribute to improvements in student engagement and academic performance. More structural indicators, such as the average number of ECTS credits completed and student retention rates, are expected to demonstrate more substantial changes over the longer term.

Several of the project's initiatives — particularly the support provided to teachers in adopting and implementing innovative teaching methodologies and the soft-skills programme designed for first-year students — may be adapted and implemented by other European higher education institutions. In this way, the experience gained through UTAD+SUCESSO may contribute to broader institutional strategies aimed at improving student success and enhancing the quality of the higher education learning experience.

Further information about the project's initiatives and outcomes is available on the project website: <https://sucesso.utad.pt>.

Ethics

Data collection was conducted following approval of the research protocol by the Ethics Committee of the University of Trás-os-Montes and Alto Douro (UTAD) (Doc30-CE-UTAD-2025). Authorisation to use the instruments was obtained from their original authors prior to data collection. Participants were informed about the objectives of the study, the voluntary nature of their participation, and the confidentiality of their data, and provided informed consent. All activities involving data collection were conducted in accordance with the university's research ethics procedures.

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Biographies

Tatiana Ferreira is a non-teaching staff member in the Teaching, Training and Pedagogical Innovation Office (GEFIP) at the University of Trás-os-Montes and Alto Douro (UTAD), Portugal. Her work focuses on dropout prevention, pedagogical training for teachers, and tutoring and mentoring programme.

Gonçalo Cruz is a non-teaching staff member in the Teaching, Training and Pedagogical Innovation Office (GEFIP) at the University of Trás-os-Montes and Alto Douro (UTAD), Portugal. He is also affiliated with the Research Centre on Didactics and Technology in the Education of Trainers (CIDTFF).

José Paulo Cravino is an Assistant Professor (with Habilitation) at the University of Trás-os-Montes and Alto Douro (UTAD), Portugal, and the coordinator of UTAD+SUCESO. He is also a researcher at the Research Centre on Didactics and Technology in the Education of Trainers (CIDTFF).

References

- Almeida, L. S., Soares, A. P., & Ferreira, J. A. (2002). Questionário de Vivências Acadêmicas (QVAr): Avaliação do ajustamento dos estudantes universitários. *Avaliação Psicológica*, 1(2), 81-93.
- Casanova, J. R., Bernardo, A. B., & Almeida, L. S. (2021). Difficulties in academic adaptation and intention to drop out of students in the first-year of Higher Education. *Revista de Estudios e Investigacion En Psicologia y Educacion*, 8(2), 211–228. <https://doi.org/10.17979/reipe.2021.8.2.8705>
- Casanova, J. R., Castro-López, A., Bernardo, A. B., & Almeida, L. S. (2023b). The dropout of first-year STEM students: Is it worth looking beyond academic achievement? *Sustainability*, 15, 1–12. <https://doi.org/10.3390/su15021253>
- Casanova, J. R., Gomes, C. A., Almeida, L. S., Tuero, E., & Bernardo, A. B. (2023a). 'If I were young...': Increased dropout risk of older university students. *Revista Electrónica de Investigación Educativa*, 25(e27), 1–10. <https://doi.org/10.24320/redie.2023.25.e27.5671>
- Entwistle, N., McCune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review* 16(4), 325–345. <https://doi.org/10.1007/s10648-004-0003-0>
- Kocsis, Á., & Molnár, G. (2025). Factors influencing academic performance and dropout rates in higher education. *Oxford Review of Education*, 51(3), 414–432. <https://doi.org/10.1080/03054985.2024.2316616>
- Le, H.-G., Sok, S., & Heng, K. (2024). The benefits of peer mentoring in higher education: findings from a systematic review. *Journal of Learning Development in Higher Education*, 31. <https://doi.org/10.47408/jldhe.vi31.1159>
- Lorenzo-Quiles, O., Galdón-López, S., & Lendínez-Turón, A. (2023). Factors contributing to university dropout: a review. *Frontiers in Education*, 8, 1–13. <https://doi.org/10.3389/educ.2023.1159864>
- Maroco, J., Maroco, A. L., Campos, J.A.D.B., Fredricks, J. A. (2016). University student engagement: development of the University Student Engagement Inventory (USEI). *Psicologia: Reflexão e Crítica*, 29,21. <https://doi.org/10.1186/s41155-016-0042-8>

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- Molnár, G., & Kocsis, Á. (2024). Cognitive and non-cognitive predictors of academic success in higher education: a large-scale longitudinal study. *Studies in Higher Education, 49*(9), 1610–1624. <https://doi.org/10.1080/03075079.2023.2271513>
- Schaeper, H. (2020). The first year in higher education: the role of individual factors and the learning environment for academic integration. *Higher Education, 79*(1), 95–110. <https://doi.org/10.1007/s10734-019-00398-0>
- Thompson, M., Pawson, C., & Evans, B. (2021). Navigating entry into higher education: the transition to independent learning and living. *Journal of Further and Higher Education, 45*(10), 1398–1410. <https://doi.org/10.1080/0309877X.2021.1933400>
- Trowsdale, D., & McKay, A. (2023). EdVee: A visual diagnostic and course design tool for constructive alignment. *Teaching and Learning Inquiry, 11*. <https://doi.org/10.20343/teachlearninqu.11.3>
- Trusty, W. T., Scofield, B. E., Christensen, A. E., White, T. D., Murphy, Y. E., Janis, R. A., Tan, H., Hernandez, N. M., & Hochstedt, K. S. (2025). Psychological symptoms and academic dropout in higher education: A six-year cohort study. *Journal of College Student Mental Health, 39*(4), 776–796. <https://doi.org/10.1080/28367138.2024.2444883>
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C., & Vallières, É. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement, 52*(4), 1003–1017. <https://doi.org/10.1177/0013164492052004025>
- Visser-Wijnveen, G. J., Stes, A., Van Petegem, P. (2012). Development and validation of a questionnaire measuring teachers' motivations for teaching in higher education. *Higher Education, 64*(3), 421–436. <https://doi.org/10.1007/s10734-011-9502-3>