# Universidade Aberta

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**Abstract**: This chapter provides an overview of the historical, administrative, financial, and pedagogical developments of Universidade Aberta (UAb) in Portugal. The authors examine the institution's pedagogical model and staff development to help readers understand how the university operates and its unique features compared to other universities in the country. UAb was established in 1988 to meet the needs of adult learners and has evolved from a correspondence and tele-learning model to an intelligent flexible learning model in 2008 with the adoption of the Virtual Pedagogical Model® (VPM). The institution has continuously focused on modernising its educational systems, vital to improving the openness environment. Currently, UAb faces three key challenges: using generative AI, learning analytics, and digital assessment to ensure a more personalized and tailored learning experience for students, and to ensure the quality of education.

**Keywords**: Universidade Aberta, Distance education, Virtual pedagogical model, Openness, Learning flexibility.

## Historical Development in the National Contexts

The Portuguese higher education (HE) sector stands out in comparison to its European counterparts, shaped profoundly by the nation's democratic heritage. Notably, Portugal is the home of one of the world's oldest universities, the University of Coimbra, founded in 1290. While a handful of other universities were founded between the 16th and early 20th centuries, it was not until the democratic revolution of 1974 that Portugal witnessed a rapid expansion of its HE system. This landscape encompasses large institutions alongside much smaller ones, each with varying strategic and operational focuses, spanning from local and regional to international spheres (Teixeira, 2021). Likewise, the Portuguese higher education system operates within a binary system, encompassing university and polytechnic education. Universities, primarily research-oriented, offer a spectrum of academic pursuits. On the other hand, polytechnic institutes deliver both undergraduate and postgraduate programs with a distinct emphasis on professionally-oriented vocational training and advanced technical education (Teixeira, 2021). The Portuguese system is also divided between public (state-funded) and private institutions, and both can be Universities and Polytechnic Institutes. Higher Education Institutions (HEIs) in Portugal have autonomy in scientific, pedagogical, cultural, and disciplinary realms. Furthermore, they possess the prerogative to craft curricula, delineate objectives for modules, devise teaching methodologies, allocate resources, and determine processes for assessing knowledge.

The requirement of having a diverse ecosystem of universities justified the foundation of the Universidade Aberta (UAb) in 1988 following the advent of distance education in other European countries and the creation of other Open and Distance Learning HEIs such as the Open University UK in 1969 and the Universidad Nacional de Educación a Distancia (UNED), in Spain in 1972. UAb is the sole state-funded distance learning HEI in Portugal, renowned within the national context for its substantial contribution to education. Since its establishment, it has employed distinctive teaching methodologies, and more recently it has enabled students to pursue education irrespective of their place of residence since the deployment of digital assessment. Tens of thousands of Portuguese and Portuguese-speaking students worldwide have accessed UAb's range of accredited undergraduate and postgraduate programs, as well as fully online continuous professional development programs. UAb has quickly emerged as the go-to university for the adult population who due to their professional and personal commitments would not have attended a traditional face-to-face teaching experience.

Distance Education is also a preferred mode of learning for Portuguese emigrants or those in Portuguese-speaking countries. In the early years of its foundation, the mode of learning relied on the correspondence and tele-learning model, further moving to an intelligent flexible learning model in 2008. Acknowledging the pedagogical potential of this new era, UAb started building a new pedagogical model for virtual education. This process culminated with the widespread adoption of the Virtual Pedagogical Model® (VPM) across all its educational programs in 2008 (Pereira et al., 2008). Among other practices, the VPM introduced new forms of interaction between students and teachers, as well as among peers. The adoption of these principles by the educational community triggered significant changes in the conceptions and practices of distance teaching and learning, promoting a departure from the idea of sequential learning and evolving into a networked learning system. The development of the VPM gave shape to an organisational culture leading to a student-centred University based on the principles of inclusion, flexibility, and interaction. The VPM has become a reference for technology-mediated teaching in Portugal.

Although it is important to recognize UAb's historical connection with distance education in Portugal, the new decree-law established in 2019[1] provided a structured approach to the development and expansion of distance learning programs across various institutions. This led to increased accessibility to education for a wider audience and also spurred collaboration between UAb and other face-to-face institutions, fostering the sharing of resources and expertise to improve the design of distance programs further. Internationally, UAb is part of the European Association for Distance Teaching Universities –(EADTU) (almost since its foundation.

**Administration and Governance**

UAb operates within the framework of the Portuguese Legal regime for higher education institutions (RJIES). The institution adheres to the governing bodies mandated by RJIES, including the General Council, the Rector, and the Management Board, with their competencies outlined in both the law and the University's Statutes. The General Council, consisting of 22 members representing various stakeholders, ensures diverse representation from teachers, students, professional staff, and external bodies. The Rector, guided by legal directives and Statutes, oversees academic, administrative, and financial matters, proposing overarching policies and strategies to the Senate and General Council. The University Senate,

[1] Decree-Law No. 133/2019, dated September 3

a statutory advisory body to the Rector, consists also of elected teachers and professional staff, along with six members appointed by the Rector.

UAb's academic structure consists of four Departments focusing on different scientific domains, each facilitating scientific-pedagogical organization and resource management: the Department of Education and Distance Learning (DEED); the Department of Humanities (DH); the Department of Science and Technology (DCET), and the Department of Social and Management Sciences (DCSG). These Departments operate within the University's strategic framework while enjoying autonomy in alignment with its mission. Furthermore, a Lifelong Learning Unit is responsible for developing non-degree programs, including Micro-credentials, short learning programs, and postgraduate diplomas.

In terms of its scientific and pedagogical structures, UAb adopts a streamlined departmental model, featuring a Scientific Council and Pedagogical Council. The Scientific Council integrates departmental and research unit representation, alongside external members, with its president elected by tenured full professors. The Pedagogical Council comprises an equal representation of teachers and students, each elected by their peers. Under the Rector's guidance, an Administrator oversees daily operations and service coordination. Research units maintain administrative and scientific autonomy and collaborate with Departments to enrich the educational offering. Additionally, specific councils, such as the International Advisory, Editorial, and Evaluation Councils, contribute to UAb's policies and initiatives.

**Finance and Budget**

The funding structure of Portugal's Higher Education system operates within a three-tiered framework, encompassing contributions from the State, HEIs, and students. Presently, public institutions primarily receive governmental funding for first-cycle programs (Portaria n.º 101/2024/1 de 13 de Março, 2024). This funding is determined through a multifaceted model, integrating three key dimensions:

1. **Stabilization component:** Integrating historical funding and previous endowments.
2. **Performance component:** Evaluating program effectiveness or institutional research performance through various indicators.
3. **Activity component:** Calculated based on student enrollment, weighted according to program costs.

By considering these dimensions, the funding model aims to ensure a balanced allocation of resources while incentivizing both academic excellence and efficiency within the higher education landscape (Portaria n.º 101/2024/1 de 13 de Março, 2024). In addition to government funding, institutions can request tuition fees from students. Currently set at 697 euros per year per student, tuition fees may vary over time according to government policy, with efforts made to compensate HEIs for fee decreases. Institutions also have the autonomy to attract private sector funding or research grants, typically driven by research and development initiatives.

UAb deviates from this funding model. Its scheme is based on historical data and an institutional development contract outlined in the decree-law regulating distance learning (Decreto-Lei 133/2019, 2019).This contract aims to specialize the university's competencies, promote widespread access to resources, facilitate collaboration with other institutions, and exclusively deliver distance learning programs. Despite being mandated by law, the establishment of this contract between UAb and the Ministry of Higher Education has not yet

occurred. As a result, UAb has been relying on student tuition fees for sustainability, being underfunded compared to other HEIs - see for further information in the UAb's annual financial report (Relatório de Atividades 2023). Students currently pay 11.61 euros per ECTS credit, resulting in yearly fee of 697 euros (60 ECTS). The underlying principle of UAb's cost model being tied to the ECTS credit is rooted in its pedagogical approach, which affords students the flexibility to enroll in the desired number of modules. In other words, students only pay the modules they are enrolled in each semester. In the past five years, the university has received an increased number of paying students presenting a financially sustainable outlook.

**Operational Model and Technologies Used**

The UAb Virtual Campus embodies an innovative approach to student engagement built upon the VPM (Pereira et al., 2008). It is a pivotal hub where students interact with UAb, fostering a dynamic learning environment. At its core lies a tailored version of the LMS Moodle, maintained and updated by a dedicated team of learning technologists (Rocio, 2022). This web-based system not only facilitates activities and content delivery but also fosters virtual collaboration between students and educators.

Complementing the Virtual Campus is a suite of tools and applications aimed at enhancing the learning journey. Turnitin aids in assessment management and plagiarism detection, whilst WISEflow (Küppers & Schroeder, 2018) offers a robust platform for remote assessments. Authoring tools such as H5P and Genially empower the creation of engaging e-learning content, while educational videos are accessible via Vimeo and YouTube. Moreover, Colibri Zoom (based on a Zoom licence provided by the Scientific Computing Unit of the Foundation for Science and Technology) and MS Teams facilitate video conferencing and collaborative work among students (Tan et al., 2023) and staff.

Discipline-specific resources further enrich the learning experience, with virtual laboratories catering to various fields such as languages and computer engineering. Additionally, students benefit from access to the consortium B-on (Baptista Melo & Pacheco Pires, 2011) and a plethora of online libraries, expanding their academic horizons across diverse domains.
The UAb ecosystem extends beyond teachers, providing students with essential tools and resources for seamless administrative and financial management. Office365 licenses enable access to productivity software, while the University's VPN facilitates secure connectivity to a range of services.

Crucially, the online academic portal empowers students with comprehensive access to administrative and financial information, enabling them to navigate the academic journey with ease. This seamless integration of technology enables UAb students to pursue their education remotely, eliminating the need for physical presence on campus.

**Instructional System and Academic Programs**

UAb has been instrumental in shaping the landscape of higher education in Portugal, emerging as a premier institution that caters to students seeking flexible learning options to balance their personal, professional, and social responsibilities through distance education. Through a predominantly asynchronous and fully remote pedagogical approach, UAb offers a compelling alternative to traditional face-to-face programs, aligning with the Legal Framework for Distance Higher Education.

At the heart of UAb's educational framework lies the VPM, which has evolved since its inception in 2007 to become the cornerstone of Distance Education in Portugal. Catering to the diverse backgrounds of UAb's predominantly non-traditional student body, the VPM fosters student-centered learning and enables students to take an active role in constructing their knowledge..

Tailored to accommodate individuals with varied personal and professional experiences, the VPM fosters an inclusive learning environment that promotes engagement and commitment within the constraints of students' lives. By nurturing a sense of community and empowerment, UAb aims to facilitate meaningful learning experiences that enable students to excel amidst their personal and professional obligations. The VPM frames the pedagogical activity of UAb based on the following principles (Pereira et al., 2008):

- **Student-Centred Learning**: At UAb, the richness of students' backgrounds is recognised as a vital asset that enriches their learning journey. This approach forms the backbone of the institution's teaching philosophy, creating an environment where students actively learn from each other's experiences. This collaborative exchange of knowledge allows teachers to continually enhance the curriculum. Through active participation in forums, collaborative activities, and the sharing of new resources, students play an integral role in shaping their educational experience and contributing to the on-going evolution of teaching practices at UAb.
- **Flexibility**: Distance learning offers the advantage of flexibility, freeing students from time constraints and the need for physical travel. The VPM, which is primarily asynchronous, enables students to engage at their own pace. This flexibility allows students to absorb information, reflect on it, and engage meaningfully when convenient. It promotes personalized learning pathways tailored to individual needs and preferences.
- **Interaction**: Interaction is central to the VPM, fostering engagement between students, content, tasks, peers, teachers and tutors. Each module is crafted around a diverse array of learning and assessment activities, known as e-activities, encompassing exposition, discussion, collaboration, production, practice, and questioning (Martinho et al., 2016; Moreira et al., 2017). Instructors and students support this dynamic ecosystem through group discussions, personalised feedback, and peer assessment. Learning is anchored on various activities tailored to each unit and discipline.
- **Inclusion**: The institution prioritises inclusion, not only as a feature of its teaching framework but as an integral part of its ethos. Digital accessibility is provided to all students, ensuring inclusivity in the learning process. Moreover, UAb offers an orientation module preceding each program, granting students the chance to adapt to the learning environment and familiarise themselves with various modes of communication and interaction.

Teachers present the outline of the learning and assessment activities to students on the VPM. For undergraduate programs, the module plan delineates learning outcomes, e-activity timelines, and assessment criteria along with grade release schedules and feedback dates, and essential resources. A similar structure is used for postgraduate programs. Each module page features a news forum and a learning card, serving as a cumulative record of student grades for assessment activities. These elements are consistently used by all teachers, aiding students in their adaptation to a novel learning model.

Assessment is a vital tool for distance learning and the VPM allows for the contextualisation of the students' learning progress while providing critical feedback on their performance and identifying areas for improvement. The VPM's flexibility empowers students to opt for their preferred assessment method (continuous or final), select modules for the academic year, and determine the timing of their formative and assessment activities. In undergraduate modules, a typical arrangement comprises two elements of continuous assessment and one final assessment, fostering on-going feedback and enhancement. For postgraduate programs, assessment activities are diversified and specified by the teacher in the *Learning Contract* of each module. The learning contract is an agreement between the student and the teacher that outlines the responsibilities, expectations, and mutual commitments related to the student's academic journey. It is part of the institution's distance learning model and helps ensure clear communication and understanding of academic duties, course objectives, and assessment methods.

In 2024, UAb offers an extensive range of educational opportunities, encompassing 12 bachelor's degrees, 21 master's programs, and 11 PhD options. Furthermore, it offers a diverse selection of non-degree programs, such as postgraduate diplomas and Micro-credentials, catering to over 2,000 students annually (Caetano et al., 2023).

**Learning Support Network**

At UAb, a dedicated team of highly skilled professionals supports its programs. These experts cover technical, administrative, and managerial areas to ensure smooth operations. For distance learning, the institution relies on two essential services: the Educational Technology Support Services (SSTE) and the Information Technology Support Services (ITSS). These services are easily accessible online whenever necessary. The SSTE employs six senior technicians who focus on assisting students and teachers, particularly with the online learning platform. Similarly, the ITSS has qualified staff who handle student queries through the central authentication system, the university's communication platform. UAb also manages academic services, scholarships, and payments online.

Support for exams and local learning centres (CLA) is also available. CLA are distributed nationwide in 18 locations and serve as support hubs for the students. UAb provides remote assistance to all students, including training sessions to enhance digital and academic skills. The recently created *Student Academic Path Monitoring Office* which has the objective of monitoring and supporting students throughout their academic journey also provides support to students.

UAb has developed over the years, within the framework of its pedagogical model, as an organisation that facilitates support and collaboration with teachers at the helm of curriculum design of study plans and study materials. Firstly, the role of tutors stands out as specialised staff who provide students with pedagogical support following the scientific guidance and tutoring plan developed by the module leader. Concurrently, teachers have access to a center of expertise for distance learning, staffed by four instructional designers hired to assist teachers in content and pedagogical material production (Campos et al., 2022). Additionally, there is the Digital Production Service (SPD), ensuring the capture, production, and editing of images and videos for the development of pedagogical materials. Lastly, teachers also receive support from documentation services in identifying and providing bibliographic content, and from the senior technicians of the SSTE in configuring and validating the module template, as well as offering training sessions in the use of distance learning support tools.

**Quality Assurance Mechanisms**

The Agency for Assessment and Accreditation of Higher Education (A3ES) is tasked with safeguarding the quality and accreditation of both public and private Higher Education Institutions (HEIs) and their programs. A3ES has the role of accrediting higher education by using, for this endeavour, the standards and guidelines for quality assurance (Standards and Guidelines for Quality Assurance in the European Higher Education Area - ESG, 2015). Operating independently from governmental influences and institutional pressures, A3ES plays a pivotal role in guaranteeing the standards of higher education in Portugal (Rosa & Sarrico, 2011). As part of institutional accreditation, A3ES evaluates the institution according to its institutional governance; education; research and knowledge transfer; internationalisation and cooperation; and resources. Furthermore, the agency also scrutiniszes the internal quality assurance system which annually has the sole objective of monitoring the quality of all the above dimensions of the institutions (Universidade Aberta, 2021). Every six years, the accreditation process is conducted with the assistance of an external evaluation committee consisting of both national and international experts. This committee, tasked with recommending accreditation decisions to the agency, relies on a comprehensive self-evaluation form encompassing the  dimensions above, alongside a series of interviews involving internal and external stakeholders.

A similar process happens every time an HEI wants to submit a new study program for accreditation or to renew its accreditation. All credit-bearing programs in Portugal will have to undergo an accreditation or reaccreditation process to be able to fully function. In addition to accrediting programs, A3ES also recommends a maximum enrolment capacity for each program (Teixeira, 2021). In 2019, the Government introduced the Legal Framework for Higher Distance Education (Decreto-Lei 133/2019, 2019) to bolster online learning offerings in higher education and to promote an increase access to HE for non-traditional students. This regime offers a comprehensive approach to sector regulation, encompassing requirements for providers, programs, and quality assurance criteria. It also designates a new role for UAb within the national HEI system as the national research and resource centre for distance and eLearning.

Teixeira (2021) argues that such law came in response to apprehensions voiced by UAb, a key player in distance education, regarding the looming threat of quality deterioration stemming from the unchecked influx of new entrants in the market. Acknowledging the imperative for stringent regulation, a specific provision for distance education was integrated into the overarching legislative framework. A3ES has instituted a novel mechanism for accrediting distance learning programs. This mechanism, in addition to traditional benchmarks, mandates the implementation of a pedagogical model tailor-made for distance education. Furthermore, it necessitates the presence of academically trained staff proficient in distance pedagogy, along with an online environment and infrastructure capable of facilitating teacher and student engagement in creating effective teaching materials, activities, and assessments, among other criteria (Decreto-Lei 133/2019, 2019).

The UAb has made quality a vital element of its organizational culture. This commitment is evidenced by the appointment of a member of the Rectoral team (as vice-rector) who is responsible for this area, for outlining a policy and a strategy and for creating a quality manual (Universidade Aberta, 2021) and for the constant evolution of this area in a dynamic, dialogical, and sustained approach. As part of the institution's auality assurance, it is worthwhile outlining the role that students and teachers have in evaluating and self-evaluating their educational experience. Students can use the student evaluation questionnaire

each semester to assess their experience across various aspects of the module structure. These include the quality of design and planning, resources and activities, assessment and feedback, and e-moderation and interaction. Additionally, for program evaluations, students can evaluate the design and planning, program coordination, resources, online experience, personal development, and the quality of the research supervision (for 2nd and 3rd cycles only). Overall, the quality of UAb's programs is high, ranging from 84.7% satisfaction at the bachelor level to 92% at the PhD level (Universidade Aberta, 2024).

Teachers at UAb engage in an annual process of self-evaluation for their modules and programs. They use various performance indicators to evaluate progress compared to previous years. Following this, they are required to formulate improvement plans, which are subjected to scrutiny and evaluation by the program coordination team. The coordination team analyzes the individual reports against the key performance indicators to prepare its own monitoring evaluation form. Subsequently, an internal committee comprising students, teachers, and professional staff evaluates each program report and provides recommendations. This procedure forms an integral part of UAb's internal quality assurance system. Similar systematic evaluation mechanisms have been implemented university-wide to oversee various aspects of university operations, including research and internationalisation.

**Enrollment and Success Trends**

UAb has circa 11,000 students, with approximately 10% enrolled in Master's and PhD programs in the 2023/24 academic year. Over recent years, the university has experienced a steady growth in its student population, averaging between 11% and 19% annually, particularly in its undergraduate programs (Table 1).

**Table 1 - UAb enrolment numbers**

| | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 |
|---|---|---|---|---|---|
| Number of students | 6389 | 7495 | 8941 | 10018 | 11089 |
| Variation of student population | | +17% | +19% | +12% | +11% |

This growth can be attributed to several factors. Firstly, there has been a surge in the popularity of distance education, driven by both global trends influenced by the COVID-19 pandemic and the growing demand for flexible learning opportunities. Secondly, economic factors such as financial constraints resulting from recent economic crises and the escalating costs of accommodation in Portugal, notably in university towns, have also played a significant role. Finally, the implementation of legislation governing distance education has offered additional momentum, with the objective of expanding access to higher education for adult learners aspiring to refine their professional competencies and validate their professional knowledge through certification. In addition to the growing student population, the University has also secured additional funding through a new government-backed development program and several successful research grants.

The typical age of UAb students is 42 years, with the youngest cohort, predominantly in Informatics Engineering, averaging 38 years. One in four UAb students is over 50 years old (22%), and over 95% are currently employed (Abrantes et al., 2018). This demographic trend underscores UAb's primary market of adult learners, which aligns with the overarching objective of the country's distance learning framework. Developed to enhance access to higher education for non-traditional students (Teixeira, 2021), UAb's emphasis on adult learners reflects this strategic alignment. Moreover, UAb has cultivated strong ties with international students, especially those from Portuguese-speaking countries and the

Portuguese diaspora. Approximately 13% of UAb's student population lives abroad, with a significant portion coming from Brazil. Regarding gender distribution, around 56% of UAb students are female, although this varies across different cohorts. For example, in the field of Informatics Engineering, approximately one out of every five students is female (20.62%), while in Education, only 19.57% are male. However, no clear correlation has emerged regarding the gender attainment gap within these programs. The number of female students has been steadily increasing over the last three years (see Figure 1).

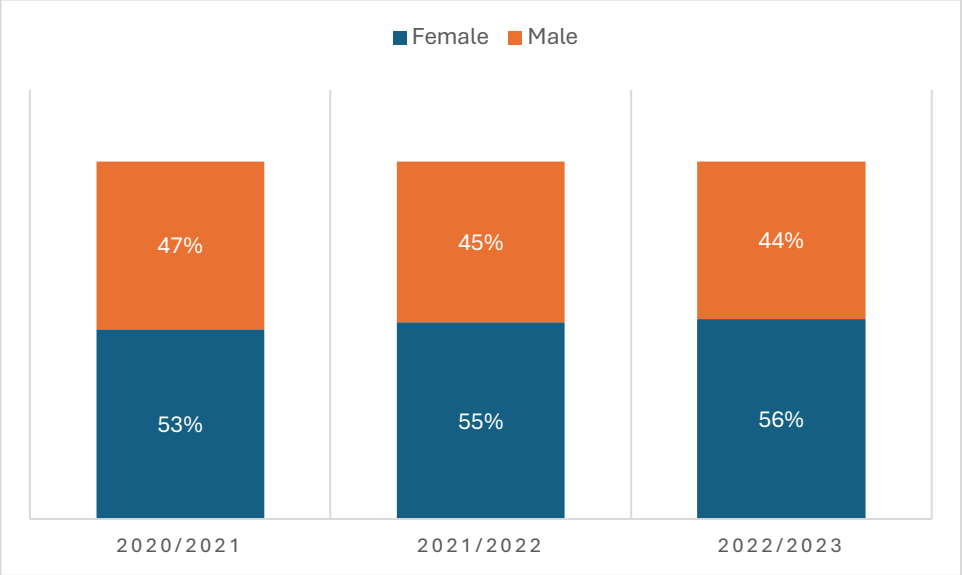


**Figure 1:Gender distribution over the years** (Universidade Aberta, 2023[2])

In terms of gender distribution among teachers, 56% are female, aligning with the broader demographics of Portuguese academia. However, similar to other universities in Portugal, certain fields such as education and informatics show gender imbalances (Cardoso et al., 2022).

**Staff Development and Research Contributions**

UAb has a historical commitment to professional development, providing induction programs for new teachers and refreshment courses for all permanent staff. These opportunities are designed to enable reflection on both pedagogy and technology and the application of these skills in real scenarios (Casanova & Pessoa, 2020; Huet & Casanova, 2021).

A pivotal pillar of support for teachers and researchers is the UAb Pedagogical Training Plan (PF-UAb), which has been consistently implemented, updated, and reinforced since 2019. Training initiatives include short programs on e-activities development; digital assessment or e-moderation and feedback (Caetano, Casanova & Moreira, 2023). Simultaneously, a series of webinars are offered to enhance technical competencies aimed at increasing teachers' presence in their modules and improving the quality of learning resources and activities (e.g., podcasts, narrated PowerPoint, H5P, Wiseflow, or Turnitin). Grounded in research on eLearning innovation and best pedagogical practices, as well as feedback from students and teachers, this plan prioritise the refinement and expansion of teaching methods.

[2] https://portal.uab.pt/wp-content/uploads/2023/04/Plano-para-a-Igualdade-e-Diversidade-da-Universidade-Aberta.pdf

The DigCompEdu CheckIn self-assessment questionnaire (Moreira, Nunes & Casanova, 2023) revealed that teachers exhibited a notably overall high level of digital competence. However, specific areas for improvement were identified, particularly in digital technologies resources and assessment, andthe core pedagogical components of DigCompEdu.

UAb is also committed to listening to students' voices. For example, in 2023 feedback from student satisfaction surveys highlighted the need to enhance the quality of learning resources and activities, as well as to refine assessment and feedback mechanisms. Additionally, suggestions included increasing teacher presence through short videos and facilitating synchronous engagement to better cater to students' needs. Moreover, students expressed a desire for clearer evaluation criteria and personalised feedback to enhance their learning experience (Sistema Interno de Garantia Da Qualidade: Relatório Anual de 2022).

**Openness Analysis**

In this section, we analyse UAb's openness (Table 2) using Mishra (2023)'s framework. This framework evaluates HEI commitments to open education based on a series of dimensions.

**Table 2: Universidade Aberta openness**

| Criteria | Score | Explanatory note |
|---|---|---|
| Entry requirements | 8 | UAb allows for different types of entry including specific access exams to transfer from other institutions. |
| Study location | 10 | Students can study from home although they have localised learning centres across the country. |
| Time of learning | 10 | Pedagogical model is fully asynchronous and available anytime. Although organised in semesters, students can access learning activities according to their own pace and time. |
| Curricular flexibility | 3 | Programs are fixed and accredited which suggests some rigidity. However, optional modules are available, which ensure some degree of choice from students. |
| Pedagogical approach | 8 | The pedagogical model relies heavily on students' collaboration and discussions. However, group work assessments are seldom performed in undergraduate degrees. |
| Technology use | 6 | Although the core technology is institutionally supported (e.g., Moodle, Turnitin, WISEflow, Zoom), etc., there is space for teachers and students to use other technology and open tools. |
| Learning resources | 7 | There is a policy in place for open education resources and these are often made available within and outside the academic community. However, due to some restrictions and copyright from external sources some learning material is made available in a closed environment in Moodle. |
| Assessment | 2 | Assessment in undergraduate programs is fixed. There is some degree of flexibility as students can choose whether they want to be assessed continuously or through a final assessment. Final assessments have a pre-determined date and are made available to all students at the same time. Post-graduate assessments are more flexible in terms of dates of submission, although multiple paths are not common. |
| Recognition of credentials | 10 | Due to the Bologna process, credentials are recognised everywhere in Europe. Equally, UAb has an internal mechanism for recognizing prior learning. |
| Cost of education | 9 | Cost of education for students is very low in Portugal and heavily supported by government funding. |

Concerning entry requirements for undergraduate programs, the UAb approach is notably flexible, catering to the diversity of the student population. Unlike traditional students, who

apply to higher education through qualification entrance exams, UAb students can enter the university through various pathways, such as:

- **Specific access**: This pathway accommodates individuals over the age of 21 or 18 if they are employed, who must undergo a written test to their chosen degree. Candidates are required to have completed secondary education or its legal equivalent.
- **Access for candidates over 23 years old**: Designed for students aged 23 and above without a higher learning access certificate, this pathway assesses applicants based on the quality of their academic and professional backgrounds, along with the completion of a written examination and questionnaire.
- **Direct access**: Reserved for students already holding an academic degree from higher education institutions.
- **Readmission and transfer**: This route caters to individuals seeking re-entry or transfer between institutions and/or programs.

The flexibility provided in admissions is particularly relevant to ensure wider access to higher education. UAb students have an average age of 42 years who choose UAb as an entry point to a flexible and inclusive HE.

As previously outlined, UAb students have the flexibility to study from anywhere in the world, facilitated by the asynchronous nature of the VPM and online assessments. This approach enables students to learn at their own pace, meaning that education at the institution transcends geographical boundaries and time constraints. While programs adhere to a set curriculum, students have the freedom to select modules without being bound by minimum requirements per semester. Study plans have often optional modules or minors which students can choose according to their preference.

The programs at UAb offer a diverse array of learning activities that do not rely on lecturing. Students are required to complete e-activities, often in collaboration with their peers. These activities are all available within the institutional LMS. Teachers are freedom to select various technological resources to manage these e-activities, which can be integrated into the VLE. Often these learning resources are open source, and teachers are encouraged to prioritise their use whenever possible. Equally, there is a policy in the institution that all open educational resources should be made available in the institutional platform RCAAP – Portugal's Open Access Scientific Repository[3].

With regards to assessment in undergraduate programs, the final exam is administered digitally via WISEflow™. The University decided exam time slots at the beginning of the academic year. However, the scheduling of continuous assessments is at the discretion of the program instructor.

Despite final assessments being managed by a centralized team to ensure robustness and fairness, students have two assessment pathway options:

- **Continuous assessment pathway**: This includes a continuous assessment that accounts for 40% of the final grade.
- **Final exam only pathway**: Students are assessed solely through a single final exam.

[3] https://www.rcaap.pt/search.jsp

Postgraduate students are usually assessed through program work and deadlines are often decided in dialogue with the lead teacher.

Regarding recognizing credentials, it is important to highlight that UAb follows the Bologna process at a European level. The Bologna process created a framework for national and European-level accreditation of learning outcomes and transferability of credits (as per ECTS) which facilitates institutional recognition of degrees and programs taken elsewhere in the European Higher Education Area. Nevertheless, UAb has an internal mechanism for accreditation of prior learning and professional experience.

As mentioned above, the cost of education at UAb is notably low, as students only pay for the modules they are enrolled in, allowing them to complete the course at their own pace. This allows the students a degree of choice that is not common in the Portuguese HE sector.

Overall, UAb is an institution characterized by a high level of openness. Two areas that require further development are curriculum flexibility and assessment methods.

Concerning curriculum flexibility, it is noteworthy to discuss the limitations caused by existing law in Portugal that requires standardization of degrees, particularly at the undergraduate level. Programs are accredited by the quality assurance agency with the assumption that there is a rigid study plan with clearly defined learning outcomes. Flexibility is minimal and often dependent on optional modules and/or minors in specific fields. Minors are also usually linked to the major scientific area which does not allow the combination of two different areas of study (arts and engineering, for example).

Concerning assessment at the undergraduate level, one can argue that there is still work to be done in terms of ensuring more flexibility and openness. The massification of HE in Portugal with a steady increase in student population, the tensions caused by suspicions of academic misconduct, and the introduction of Generative AI in HE may perhaps justify some reluctance to adopt a more flexible assessment approach. However, one may argue that new technological development recommends a different and more open strategic approach to assessment.

Overall, the total score of 73 shows UAb's commitment in terms of openness to education.

**Reflections and Lessons for the Future**

As a distance learning university, navigating the education landscape in the 21st century involves embracing and harnessing cutting-edge technologies to enrich learning experiences. Among the array of advancements, Generative Artificial Intelligence (GenAI), assessment methodologies, Mixed Reality (MR), and personalization emerge as both challenges and opportunities. GenAI holds promise for revolutionising educational content creation. With GenAI algorithms capable of generating text, images, and even videos, educators can produce personalized and adaptive learning materials at scale. However, ensuring the accuracy, relevance, and ethical considerations of AI-generated content remains a significant challenge. Striking a balance between automation and human oversight is essential for upholding educational integrity and quality. This balance is particularly challenging to maintain during student learning assessments.

Assessment methodologies are undergoing a paradigm shift in the digital era. Traditional methods, such as exams and essays, are evolving to encompass more dynamic and interactive

formats (Amante, Oliveira & Gomes, 2019). AI-driven assessment tools can provide real-time feedback, identify learning gaps, and tailor learning paths to individual students. Yet, ensuring the fairness, validity, and reliability of AI-based assessments requires rigorous validation and continuous refinement. One must reflect on the value and meaning of assessment in higher education, particularly in a university that is directed towards a cohort of adult students who are professionally driven and have their own pre-acquired experiences and knowledge.

Personalisation lies at the heart of effective distance learning. By leveraging data analytics and AI algorithms, educational platforms can deliver customised learning experiences tailored to each student's preferences, abilities, and progress. Personalization maybe the crucial step to motivate this student cohort and to maximise what they can bring to the learning experience (Casanova, 2021). Yet, striking the right balance between personalization and privacy concerns is essential to safeguarding learner data and maintaining trust in the educational ecosystem.

Another area that will bring some further opportunities to distance education is Mixed Reality (MR), especially when it becomes more costly and accessible for students and when generating content becomes more accessible and easier. MR offers immersive learning experiences that blend the physical and digital worlds (Beck, Morgado & O'Shea, 2023). From virtual laboratories to interactive simulations, MR enables students to engage with complex concepts in a hands-on manner, regardless of their physical location. However, implementing MR technologies necessitates investment in infrastructure, technical expertise, and instructional design to ensure seamless integration into the curriculum.

In conclusion, as a distance learning university, embracing the challenges and opportunities presented by IA, assessment methodologies, MR, and personalization is essential for staying at the forefront of educational innovation. By leveraging these technologies thoughtfully and ethically, institutions can empower learners worldwide to thrive in the digital age.

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