



ATiENA

Bringing Accessibility and Design for All into Higher Education Curricula

Work Package 3

Report on Consultations and Cooperations of Macro-Level Bodies on the Integration of Accessibility and Design for All in Higher Education Curricula and their Activities



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ATHENA partners



Associated partners



International Association
of Accessibility Professionals



Executive Summary

The ATHENA¹ project focuses on the integration of accessibility and Universal Design² principles into higher education curricula across different disciplines. As part of this initiative, a European consultation was conducted to gather feedback from macro-level stakeholders, including quality assurance agencies, accreditation bodies, pedagogical institutions and higher education organisations.

The aim of the consultation was to assess the feasibility of a set of recommendations included in Deliverable 2.2 “Recommendations on the integration of accessibility and Universal Design in higher education curricula, including sample modules”, identify potential challenges and gain insight into practical strategies for implementation. In total, 17 representatives from macro-level bodies in the five project countries (Austria, Belgium, Cyprus, Czechia and Spain) provided their perspectives through an online survey conducted between November and mid-December 2024.

This report summarises their feedback and identifies the most common challenges, such as resistance to change, lack of expertise and resource constraints. It also details the solutions proposed by respondents, including specialised training, clear guidelines and collaborative approaches to effectively embed accessibility and Universal Design in higher education curricula.

¹ This report has been developed as part of the ATHENA project, funded by the European Education and Culture Executive Agency (EACEA) under Erasmus+ and the EU Solidarity Corps A.2 – Skills and Innovation.

² Originally, the project was proposed with the concept of "Design for All." During the project, the project partners agreed on using "Universal Design" as it encompasses a broader scope.

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Abbreviations

AI	Artificial Intelligence
AEQES	l'Agence pour l'Evaluation de la Qualité de l'Enseignement Supérieur, en Fédération Wallonie-Bruxelles (Agency for Evaluation of the Quality of Higher Education Wallonia - Brussels Federation)
ACQUIN	Accreditation, Certification, and Quality Assurance Institute (Austria)
AQ Austria	Agency for Quality Assurance and Accreditation Austria
BOFUG	Bologna Follow-Up Group Austria
CYQAA	Cyprus Agency of Quality Assurance and Accreditation in Higher Education (Cyprus)
CyPI	Cyprus Pedagogical Institute
CyRC	Cyprus Rectors' Conference
EACEA	European Education and Culture Executive Agency
ENQA	European Association for Quality Assurance in Higher Education
FHK	Fachhochschulkonferenz (Austrian University of Applied Science Conference)
HE	Higher Education
HEI	Higher Education Institutions
LLM	Large Language Models
LO	Learning Outcome
NVAO	De Nederlands-Vlaamse Accreditatieorganisatie (Accreditation Organisation of the Netherlands and Flanders)
NLP	Natural Language Processing
UDL	Universal Design for Learning
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNIKO	Universitätenkonferenz (Austrian University Conference)
WCAG	Web Content Accessibility Guidelines
WP	Work Package

Introduction

The ATHENA³ project focuses on integrating accessibility and Universal Design principles into higher education (HE) curricula across a variety of disciplines, aiming to foster inclusive learning environments and promote equity in education.

Within Work Package 2 (WP2), the project partners accomplished two foundational tasks:

- Task 2.1: Developing recommendations for implementing accessibility and Universal Design principles across higher education curricula.
- Task 2.2: Designing sample courses to demonstrate the integration of these concepts.

Building on this foundation, Work Package 3 (WP3) focused on dissemination and communication activities. Specifically, Task 3.3 involved reporting on consultations with key stakeholders to gather feedback on the recommendations.

The recommendations developed by ATHENA partners are comprehensive, addressing a broad spectrum of stakeholders, including policymakers, quality assurance agencies, accreditation bodies, educational leaders, curriculum developers, instructors, and user representatives. They highlight critical areas such as legal frameworks, financial support, curriculum design, staff training, and desired learning outcomes.

To evaluate the applicability and practicality of these recommendations, a European consultation was conducted. This consultation targeted accreditation bodies and educational stakeholders to gather insights on effective strategies for integrating accessibility and Universal Design into higher education curricula.

This report presents the findings of the consultation, summarizing feedback from macro-level bodies across the five project countries (Austria, Belgium, Cyprus, Czechia, and Spain). It highlights challenges, opportunities, and actionable steps for embedding these principles in higher education, while reflecting the diverse contexts of European education systems.

Methodology

The survey was conducted online from early November to mid-December 2024 across the five project countries (Austria, Belgium, Cyprus, Czechia, and Spain). The primary participants in the survey were macro-level bodies. 17 representatives of these macro-level bodies participated in the consultation process. These

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representatives reflect a diverse range of stakeholders, including independent agencies focused on evaluating higher education and fostering continual development through stakeholder engagement. The group includes quality assurance organizations and accreditation institutes working to improve program quality and comparability within higher education, as well as pedagogical institutions dedicated to teacher training and professional development to drive educational innovation.

The participants consulted represent

- 2 pedagogical institutes,
- 5 quality assurance agencies and institutions,
- 2 organizations,
- 2 universities,
- 1 Rectors' Conference of Universities
- 1 Rectors' Conferences of University Colleges of Teacher Education,
- 1 accreditation manager,
- 1 higher education experts' group, and
- 1 university senate.

The detailed list of respondents can be found in the Appendix.

The aim was to gather insights from macro-level bodies on the recommendations about the integration of accessibility and Universal Design into higher education curricula developed in Deliverable 2.2.

The survey consisted of open questions designed to capture a wide range of perspectives on the recommendations made by the ATHENA project. These questions focused on gathering feedback on the feasibility, challenges, and resource requirements for implementing the recommendations, as well as identifying any gaps or additional suggestions relevant to specific fields of expertise. All participants received two documents: one including the full set of recommendations and another one including the following questions:

- What do you think about our recommendations for integrating accessibility and Universal Design in higher education curricula?
- Are there recommendations missing for your field of expertise? If yes, which?
- What suggestions do you have for improving our list of recommendations, if any?
- What actions could be taken to promote and implement the recommendations?
- What resources and tools would you need to promote and implement the recommendations?

- Which challenges do you foresee in promoting and implementing the recommendations, if any? How would you solve these challenges?

Participants were asked to assess the relevance and completeness of the recommendations, propose any missing elements, and suggest improvements to the list. They were also invited to reflect on the necessary actions, tools, and resources needed to promote and implement the recommendations, as well as to identify potential challenges and their possible solutions.

The following recommendations, as of November 2024, were developed as part of the ATHENA project to provide guidance on integrating accessibility and Universal Design into higher education curricula. They form the basis for the questions posed to stakeholders and serve as a foundation for the subsequent analysis of their responses. These recommendations were a draft version and revised later in the project.

Recommendations

(draft version, November 2024)

ABOUT THE INTEGRATION OF ACCESSIBILITY AND UNIVERSAL DESIGN IN HIGHER EDUCATION CURRICULA

To policymakers and governments

- Advocate for the inclusion of accessibility and Universal Design training as legal requirements for any higher education curricula.
- Provide financial resources for including accessibility and Universal Design in higher education curricula and for implementing such curricula.

To quality agencies

- Include the integration of accessibility and Universal Design in curricula as a mandatory requirement for the approval of higher education programmes.
- Provide guidance on how to integrate accessibility and Universal Design in higher education programmes.

To educational leaders

- Embed accessibility and Universal Design in the university statutes and strategic plans.
- Promote initiatives aimed at raising awareness about accessibility and Universal Design, involving diverse stakeholders such as organisation of persons with disabilities, accessibility experts, and advocates.
- Provide training opportunities for staff regarding accessibility and Universal Design principles.

To programme creators

- Include accessibility and Universal Design principles across all fields of knowledge, raising awareness about key concepts, user needs, and solutions.
- Include diverse stakeholders from society in the design and implementation of higher educational programmes.

To instructors

- Take part in training programmes on accessibility and Universal Design aimed at higher education instructors.
- Include the concept and principles of accessibility and Universal Design in the training activities and materials.

To stakeholders (such user representatives and employers)

- Get involved in designing, implementing, and evaluating higher education curricula.
- Promote connections with educational leaders and programme creators.

SPECIFIC RECOMMENDATIONS

To programme creators

- Include at least one learning outcome in each programme, on Universal Design and accessibility.

Suggested learning outcome for all areas of knowledge

Students shall be able to explain the needs of diverse users, identify solutions based on accessibility and Universal Design principles, and produce accessible digital documents.

Tips:

All university students, regardless of their area of knowledge, should be able to create accessible digital documents.

We can get inspiration from the work done in relation to the gender perspective across areas of knowledge.

- Include learning outcomes that cover accessibility and Universal Design principles specifically adapted to each field.

Suggested learning outcome for specific areas of knowledge

Translation Studies. Students will be able to recognize the communicative and cultural needs of a diverse society and effectively respond to these needs within various contexts.

Educational Sciences. Students will be able to assess the learning materials that are available at school and know how to apply accessibility requirements in their own practice.

Computer Sciences. Students will be able to develop software incorporating accessibility and Universal Design principles.

Architecture. Students will be able to integrate accessibility considerations into their designs and projects, ensuring inclusivity for a wide range of users across residential and public spaces.

Nursing. Students will be aware of the available resources for people with disabilities when receiving medical care.

Medicine. Students will be equipped to provide quality, rights-based care.

To instructors

- Request students to produce accessible digital documents and provide support, where necessary.
- Evaluate students mirroring real-world situations related to accessibility and Universal Design, fostering critical thinking and problem-solving skills.

SAMPLE COURSES

Although accessibility and Universal Design principles should be applied transversally, some degrees may require a dedicated compulsory course.

Suggested evaluation strategies

Translation studies. To evaluate the quality of the service provided.

Architecture. To evaluate the effectiveness and inclusivity of the design solutions proposed by students.

Educational Sciences. To evaluate the ability of assessing learning materials available at school and know how to apply accessibility requirements in their own practice.

ICT. To evaluate the capacity to perform accessibility checks.

Key findings of the consultation

Feedback on the recommendations for integrating accessibility and Universal Design in higher education curricula

In **Austria**, the recommendations were described as important and well-structured. Respondents appreciated the focus on embedding accessibility and Universal Design into both education and society. However, some stressed that legal obligations and simple checklists for curricula are insufficient. Instead, a more holistic and culturally rooted approach was recommended for achieving sustainable inclusion. Challenges were identified, particularly in creating accessible digital learning materials and ensuring adequate teacher training. Suggestions included defining the key terms accessibility and Universal Design and increasing awareness at all levels to support implementation.

Feedback from **Belgium** supported the aim of strengthening accessibility and Universal Design in higher education. While the recommendations were appreciated for their inclusiveness and stakeholder involvement, some respondents felt that requiring at least one specific learning outcome (LO) in every curriculum might be too rigid. Tailoring recommendations to the specific needs of different sectors was seen as a better approach. Suggestions included providing brief descriptions of each stakeholder group to clarify their roles and emphasizing the importance of financial and human resources for successful implementation.

In **Cyprus**, respondents appreciated the recommendations for being inclusive, comprehensive, and practical. They highlighted their adaptability to different contexts and their clear focus on engaging key stakeholder groups, including policymakers, quality assurance agencies, and educators. Strengths of the recommendations included addressing legal, social, and ethical dimensions and providing actionable strategies for integrating accessibility into specific fields like Translation Studies, Architecture, and Computer Science. Suggestions included strengthening the focus on digital tools, adopting international standards like WCAG (Web Content Accessibility Guidelines), and incorporating student feedback to refine strategies further.

In **Czechia**, respondents emphasized the importance of integrating accessibility and Universal Design into education. They recommended creating opportunities for hands-on experience through internships and direct engagement with people with disabilities. Events such as the INSPO Conference which focuses on assistive technologies, digital accessibility and inclusion of people with disabilities in education and employment were highlighted as excellent examples of providing students with practical insights and opportunities to connect with the target group.

In **Spain**, respondents found the recommendations to be appropriate and aligned with the existing regulatory framework.

In **conclusion**, the recommendations were widely seen as relevant, clear, and actionable. Their emphasis on stakeholder involvement and their potential to drive systemic change were especially valued. At the same time, several challenges and suggestions for improvement were noted, including:

- The need for a more flexible approach tailored to different academic fields
- Providing clearer definitions for key terms like "Universal Design"
- Strengthening the focus on digital accessibility and international standards such as WCAG
- Ensuring adequate financial and human resources for implementation
- Promoting hands-on learning and direct interaction with people with disabilities

Overall, the recommendations were well-received, with respondents highlighting their clarity, inclusiveness, and potential impact. To ensure successful implementation, it will be important to address identified challenges, provide necessary resources, and continue fostering collaboration among stakeholders.

Missing recommendations

The feedback on missing recommendations for integrating accessibility and Universal Design into higher education curricula varied by country. While many respondents supported the existing recommendations, additional ideas and specific improvements were suggested to ensure comprehensive implementation.

In **Austria**, the recommendations were generally supported, but there was a call for stronger efforts to embed accessibility into curricula, possibly through legislative measures. It was emphasized that accessibility should not only be seen as a learning requirement but also as a competency goal in terms of diversity. Some respondents suggested providing clearer explanations of terms such as "Universal Design." Additionally, a more holistic approach to integrate accessibility was encouraged, with the idea that accessibility should be understood and applied at all levels.

In **Belgium**, the overall feedback was positive, but some suggestions for improvement were made. It was recommended to include specific recommendations for fostering collaboration across different industries and sectors, to determine which accessibility skills should be included in curricula. It was also suggested to ensure that people with disabilities are involved in every stage of the creation of materials and training. Furthermore, the need for an integrated policy and resources to identify and remove structural barriers was emphasized. This policy should provide clear mandates for staff and resources to ensure its implementation. The importance of an inclusive staffing policy was also underlined, to ensure that university staff reflects

societal diversity and does not perpetuate stigma or inequality based on background characteristics. Additionally, creating a safe environment that fosters a diversity-sensitive learning atmosphere was considered crucial, supported by a clear code of conduct that addresses discrimination.

In **Cyprus**, the focus was on the role of the Cyprus Quality Assurance Agency (CYQAA), which should not only issue guidelines but also work actively with universities to promote the integration of accessibility and Universal Design. Other recommendations included expanding the scope of the recommendations to include fields such as law, business, and arts, which are inherently related to accessibility, albeit from different perspectives. The use of modern assistive technologies in teaching, such as Large Language Models (LLMs), generative Artificial Intelligence (AI), text-to-speech tools, and Natural Language Processing (NLP) applications, was also suggested as an area to be explicitly addressed. Additionally, it was proposed to involve students with disabilities in the development and evaluation of accessibility initiatives to ensure their effectiveness. Further recommendations included establishing dedicated positions such as Digital Accessibility Coordinators or Assistive Technology Advisors within universities to oversee the implementation of standards and provide ongoing support. The creation of research and development labs to promote innovation in accessibility was also recommended, ensuring that curricula are regularly updated with the latest developments.

In **Czechia**, the emphasis was on the need for better inclusive education and improved support systems for students with disabilities. It was suggested to introduce simulation exercises as a learning method to sensitize future teachers to the challenges faced by students with disabilities. Such an approach could help foster tolerance and cooperation between the majority population and people with disabilities.

In **Spain**, suggestions included referencing the Catalan universities' inclusion plans to further enrich the recommendations. It was also recommended to focus more on the internship phase, particularly in health sciences, where students face significant challenges related to accessibility and Universal Design.

In **conclusion**, the existing recommendations were mostly positively received, but gaps and areas for expansion were identified. Special attention was given to the inclusion of assistive technologies, the expansion of relevant fields, and the involvement of students with disabilities. It was emphasized that accessibility and Universal Design should not be seen as an add-on but as an integral part of all aspects of university life, including curricula, student support services, campus infrastructure, and recruitment. A comprehensive, collaborative, and well-resourced approach was seen as essential for the success of these initiatives.

Suggestions for improving the recommendations

In **Austria**, suggestions for improving the recommendations include formulating learning outcomes as transversal learning outcomes, taking a more inclusive approach by involving different stakeholders in dialogue, providing good practice guidelines, and creating a toolbox with concrete examples for different subject areas to highlight potential problem areas. It was also emphasized that the accessibility of digital documents for all students should be ensured, and gender and diversity issues should be integrated into teaching. Raising awareness about accessibility and Universal Design was also recommended.

In **Belgium**, the respondents suggested several improvements for the recommendations. Suggestions included emphasizing the need for including persons with disabilities in every step of implementing accessibility strategies. Clear guidance on how to engage and incorporate their insights should also be included to ensure their perspectives and needs are fully considered in what and how is being taught. Another suggestion was to include a recommendation for ongoing evaluation and adjustments, as accessibility is an iterative process requiring continuous improvement across all sectors. For educational leaders, it was proposed to add recommendations related to the promotion and tenure process to increase the stakes for faculty and motivate them to prioritize teaching accessibility, while also rewarding or recognizing their efforts. Additionally, it was suggested to include other higher education disciplines, such as Design, Writing, Marketing, and Human Resources.

Further feedback emphasized the importance of developing interconnected recommendations for various stakeholders, creating a domino effect throughout the framework. The approach was seen as particularly impressive, noting that the alignment of recommendations for different organizational divisions enables a sense of responsibility across the institution.

It was proposed to take this approach a step further by assigning budgets and responsible parties to each recommendation. When the top leadership of a higher education institution embeds Universal Design into its vision and values, it creates a ripple effect throughout the organization. By allocating responsibilities to divisions such as Human Resources, communication, research, and quality assurance, institutions can inspire and foster innovative dynamics within their departments. These efforts could be further reinforced through the integration of strategic plans.

In **Cyprus**, several suggestions had a focus on enhancing the applicability, effectiveness, and evaluation of the ATHENA recommendations. One suggestion was to distinguish between running and new programs in terms of implementing the recommendations. For new programs, suggestions were straightforward to ensuring that at least one learning outcome related to Universal Design and accessibility is

included, following the principle of "accessibility by design." For existing programs, clarification is needed on whether changes to learning outcomes at the program level will take effect immediately or during the next re-accreditation process for each university.

The respondents also proposed refining the program-level learning outcomes (LOs) by making them more precise and measurable. For example, suggested learning outcomes could include:

- Students will be able to explain the needs of diverse users.
- Students will be able to identify solutions based on accessibility and Universal Design principles.
- Students will be able to produce accessible digital documents.

Additionally, the respondents recommended explicitly referencing existing accessibility guidelines, frameworks, and directives such as the Web Content Accessibility Guidelines (WCAG), the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), the European Accessibility Act, and the Universal Design for Learning (UDL) framework. This would raise awareness and enhance the practical application of these guidelines, helping Higher Education Institutions (HEIs) align with international best practices.

Further suggestions included using a variety of teaching methods to accommodate different learning styles, providing clear instructions and expectations, and leveraging assistive technology to support students with disabilities, as a teaching by example approach. To improve integration, key terms like "Universal Design" and "accessibility" should be clearly defined for both physical and digital environments. Recognizing intersectionality—such as disability, gender, race, and socio-economic status—ensures that accessibility meets diverse student needs. Technology, including assistive tools and AI, was also recommended to enhance learning for all students.

Faculty development was highlighted as an essential element for fostering inclusive pedagogy, with both technical accessibility training and training in diverse teaching practices. Involving students, particularly those with disabilities, in the design and evaluation of accessibility practices ensures their needs are adequately addressed. Collaborating with external partners, such as disability advocacy groups, was also suggested to enhance resources and expertise.

The establishment of frameworks for monitoring and improving accessibility efforts, alongside inclusive assessment practices (e.g., alternative formats and extended time), was recommended to ensure continuous progress. Accessibility should be considered an institutional priority to foster a university-wide culture of inclusivity.

Clear resources for curriculum integration and regular feedback from students and faculty will help ensure accessibility efforts remain responsive and dynamic.

Finally, it was suggested that funding for accessibility should be included as a standard component in proposals and budgets. This would ensure sustainability and foster comprehensive integration of accessibility initiatives. Establishing accessibility specialists and focal points within institutions was recommended to monitor compliance and provide technical expertise, ensuring consistent and sustainable implementation. Incentives for institutions and educators, such as grants, distinctions, and subsidized training fees, would encourage prioritization of accessibility initiatives, and hence motivate instructors to consider accessibility in their curricula content and activities/assignments given to students. Lastly, involving students, especially those with disabilities, in validating and co-developing accessibility-focused educational outcomes ensures that the programs and solutions are relevant, practical, inclusive, and impactful.

For **Czechia**, it would be beneficial to include a paragraph outlining local specifics. This could cover what the law mandates, the requirements that primary and secondary schools already must meet, and how inclusion is implemented in practice. For example, the Czech Education Act mandates equal access to education and provides a framework for supportive measures such as individual education plans and teaching assistants. It would also be valuable to explain how schools collaborate with school counselling centres and other specialized services to ensure inclusive education. This context could serve as a foundation for understanding the broader challenges and opportunities within the Czech system.

In **Spain**, the development of recommendations for clinical internships was proposed, to ensure that accessibility and Universal Design are integrated into practical, real-world learning environments such as internships.

Overall, the responses to the suggestions for improving the list of recommendations highlight a common desire for practical, actionable strategies to enhance the integration of accessibility and Universal Design in higher education. Several respondents emphasized the importance of making learning outcomes more specific and transversal, ensuring that they apply to diverse disciplines and learning contexts. There is a need for ongoing evaluation and adaptation, as accessibility is seen as an iterative process that requires continuous improvement. Additionally, many respondents stressed the value of involving key stakeholders, particularly persons with disabilities, throughout the implementation process to ensure that their perspectives are considered.

Further suggestions included the need for concrete examples, tools, and good practice guidelines tailored to specific subject areas, as well as a focus on integrating

gender, diversity, and intersectionality into teaching. A recurring topic was the importance of clear definitions and references to established frameworks, such as the Web Content Accessibility Guidelines (WCAG), the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), and the Universal Design for Learning (UDL) framework, to strengthen the practical application of accessibility principles.

Faculty development emerged as an important factor for fostering inclusive teaching practices, with recommendations for integrating both technical accessibility training and inclusive pedagogy into higher education curricula. Additionally, respondents suggested creating institutional focal points for accessibility, providing funding for accessibility initiatives, and offering incentives for institutions and educators to prioritize accessibility. Involving students, particularly those with disabilities, in the validation and development of accessibility-focused educational outcomes was also seen as vital for ensuring that programs remain relevant and impactful.

In **conclusion**, the suggestions presented underline the need for a more structured, inclusive, and sustainable approach to integrate accessibility and Universal Design in higher education. By addressing these points, the ATHENA recommendations could be further refined to foster a more inclusive and accessible academic environment for all students.

The feedback from different countries provides a comprehensive set of actions to support and implement the recommendations for integrating accessibility and Universal Design into higher education curricula.

Possible actions by the macro-level bodies to promote and implement the recommendations

In **Austria**, several actions to guide the implementation process were suggested, including engaging national Bologna Follow-Up Groups (BOFUGs) and umbrella organizations such as the Austrian University Conference (UNIKO) and the Austrian University of Applied Science Conference (FHK). Involving the rectorate and university management is seen as essential for successful implementation. A catalogue of criteria could help, and raising awareness through teacher training programs is emphasized. At institutions like Johannes Kepler University (JKU), raising awareness in gender studies courses and possibly engaging with the Institute for Women's and Gender Studies or Study Commission could also support the cause. Publicizing the importance of the project is also seen as crucial.

In **Belgium**, several strategies for effective implementation were highlighted, including aligning the recommendations with indicators for the social dimension of higher education. They suggest creating educational resources like templates and pamphlets to help institutions implement these recommendations, as well as

engaging with higher education institutions to gather feedback. They also propose fostering support communities, developing a representative cohort from different sectors (education, industry, government, disability organizations), and ensuring that accessibility is made a mandatory part of program approval processes. Building a sense of community and increasing student and work field involvement in confirming good practices are also key points. In addition, allocating budgets and securing rector and academic staff support is seen as essential for the success of the initiatives.

In **Cyprus**, multiple actions for the effective promotion and implementation of the recommendations were suggested. A detailed stakeholder mapping process is proposed, with the goal of identifying relevant stakeholders in different disciplines and curricula early in the design phase. This approach would ensure a holistic and inclusive curriculum design. Additionally, the establishment of policies and mechanisms to enforce the recommendations is emphasized, along with involving students and staff with disabilities in the implementation process. Cyprus also suggests setting up a system to audit universities' progress and awarding badges or ratings for fulfilling the recommendations. Ensuring a sustainable approach by establishing dedicated staff for accessibility matters is also considered vital. Training programs, strategic partnerships with disability-focused organizations, and offering a variety of assessment formats are seen as essential steps. Furthermore, the proposal includes embedding accessibility into funding models, establishing accessibility specialists, and creating cross-disciplinary committees to implement recommendations effectively.

In **Czechia**, the promotion of internships and practical experiences were identified as essential actions. Partnering with organizations supporting individuals with disabilities for internships would provide valuable real-world exposure for students. Additionally, the creation of simulation centres where students can experience challenges related to inclusive education and accessibility would be beneficial. Encouraging students to focus on topics related to inclusion and accessibility in their theses and practicums is another suggested action, fostering both awareness and research in these critical areas.

In **Spain**, the Department of Universities in the Government of Catalonia should take responsibility for guiding universities in implementing the recommendations. Raising awareness and providing training for health professionals and educators, as well as adapting internship positions to meet accessibility standards, are also seen as necessary actions for effective implementation.

In **conclusion**, the responses suggest a strong commitment across countries to implement the recommendations by involving diverse stakeholders, providing clear guidelines, and fostering continuous dialogue. Several recurring themes include the importance of institutional leadership, the need for dedicated staff and resources, and

the integration of accessibility into curricula, both in terms of policy and practice. Key actions also include raising awareness, providing training, ensuring funding for accessibility initiatives, and encouraging collaboration with external experts and organizations.

Necessary resources and tools to promote and implement the recommendations

To successfully implement the recommendations for integrating accessibility and Universal Design into higher education curricula, various resources and measures are required, which are assessed differently in each country.

In **Austria**, the need to integrate accessibility into statutes and study regulations and to obtain approval from the senate or rectorate is emphasized. A legal framework that mandates the inclusion of accessibility in curricula could be checked during accreditations. Furthermore, the sensitization of teaching staff is seen as an important step. Financial and human resources, along with professional expertise, are essential. Support from rectorates and department chairs is necessary to ensure the widespread implementation of accessibility.

In **Belgium**, a benchmark for how quality agencies incorporate accessibility into their methodologies and standards is considered useful. A stronger legislative framework is needed to enforce accessibility. Moreover, fostering a sense of commitment within institutions is crucial. Existing resources, such as Teach Access courses and materials, could be used to help implement the recommendations.

In **Cyprus**, training for staff is seen as a critical first step to raise awareness and integrate the recommendations within higher education institutions. Financial resources are necessary for organizing seminars, workshops, and conferences focusing on best practices for integrating accessibility and Universal Design. The commitment of leadership and the involvement of experts in Universal Design and accessibility are key to success. Additionally, technological resources such as assistive technologies and digital tools to create accessible learning materials and measure accessibility are needed.

In **Czechia**, integrating accessibility into mandatory teacher training practicums is considered a highly effective approach. This would ensure that future educators gain hands-on experience with inclusive practices. Supporting people with disabilities as ambassadors is also seen as a valuable step, as they can serve as communication bridges, offering insights and fostering mutual understanding among teachers, assistants, and other professionals.

In **Spain**, specialized technical support, training for teaching staff, and for specialized administrative and technical staff are highlighted as essential. Financial resources and organizational measures are necessary to implement the recommendations effectively.

In **conclusion**, to advance the integration of accessibility and Universal Design into higher education curricula across Europe, substantial resources are required. These include legal and financial frameworks, the training and sensitization of teaching staff, and support through technological tools and assistive technologies. Strong engagement from leadership, experts, and students, along with structured funding models and professional training platforms, is crucial for ensuring the sustainable implementation of the recommendations.

Possible challenges in promoting and implementing the recommendations and solutions according to the bodies

In **Austria**, one of the major challenges in promoting and implementing the recommendations is linking them to transversal competencies within the National Qualification Framework (NQF). This requires the support of the Senate/Rectorate and cooperation among various stakeholders to create voluntary guidelines and promote a culture of Universal Design. However, resistance from faculty members who value their autonomy in teaching may impede progress. Additionally, there is a lack of expertise in assessing and effectively implementing the recommendations. Furthermore, there is fatigue and a lack of understanding among many people due to the repeated focus on similar issues over the years. A possible solution is to keep the recommendations general and provide sector-specific examples, with clear goals and step-by-step actions. However, resistance from department heads who are not fully aware of the importance of these issues in business programs may still pose a challenge.

In **Belgium**, one challenge arises from the fact that very few quality assurance agencies have the authority to review curricula content, as institutions are generally self-accrediting. As such, the role of these agencies in providing guidance is limited. Embedding accessibility into the curriculum is a large undertaking and requires a change management approach. Resistance to change, lack of leadership support, unclear objectives, and insufficient resources may hinder the implementation of the recommendations. A solution proposed is the creation of an advisory group or steering committee made up of all stakeholders to facilitate the process.

In **Cyprus**, a major challenge is that members of academic staff may not be familiar with the concepts of accessibility and Universal Design, leading to resistance and reluctance to adopt new practices. Specialized training and the development of a

clear framework with definitions and guidelines are essential to overcome this. Additionally, the involvement of people with disabilities must be meaningful rather than superficial and should be implemented in the design of different disciplines curricula as well. Another challenge is convincing strategic stakeholders about the importance of prioritizing accessibility as a key aspect of quality assurance in higher education. Solutions include embedding accessibility as a criterion in research funding bodies and quality assurance departments. Furthermore, managing the time and effort required from stakeholders, as well as addressing the recommendations at different levels (module, course, program, and institutional), are challenges that can be mitigated through dedicated staff and a multi-level approach. The sustainability of the recommendations can be ensured through mandatory staff training and periodic reviews. Resistance from faculty and the need for accessible technology can be addressed by mandatory accessibility training and investment in technology, to develop and accessibility culture themselves to be more effective in teaching relevant concepts and skills to their students. Additionally, resource constraints and challenges can be managed through securing dedicated funding, phased approaches, and collaboration with external experts.

In **Czechia**, a recurring issue is the lack of understanding from institutional management about the value of initiatives that may appear to benefit only a small group of people. However, these initiatives can have a positive impact on the institution's public image and foster a sense of reciprocity. Additionally, higher education institutions often fail to create synergies with lower levels of education, which could be addressed by leveraging university students for voluntary activities in secondary schools.

In **Spain**, resistance from lecturers and financial implications are the main challenges. Addressing these concerns requires emphasizing existing policies and regulatory frameworks to ensure compliance. Public policies must also play a critical role in securing the necessary resources to implement the recommendations effectively. It is also suggested that the recommendations can be shared across all Catalan universities to standardize implementation.

In **conclusion**, the successful promotion and implementation of the recommendations for integrating accessibility and Universal Design into curricula face several challenges across countries. These include resistance to change, lack of expertise, financial constraints, and the need for clear leadership support. Solutions proposed involve providing specialized training, creating advisory committees, securing funding, and ensuring sustainability through mandatory training and periodic reviews. Additionally, fostering collaboration and developing clear guidelines can help overcome these challenges and facilitate the integration of accessibility into higher education.

Conclusions

The implementation of the recommendations to integrate accessibility and Universal Design in higher education curricula faces several common challenges, most notably resistance to change. Many academic staff members are hesitant to adopt new teaching methods or integrate Universal Design into their curricula, primarily due to concerns about limiting academic freedom and adding extra workload. Additionally, the lack of expertise in accessibility and Universal Design among faculty and institutional management hinders the assessment of the feasibility and effectiveness of these recommendations. This lack of expertise is particularly problematic when it comes to understanding how to integrate these concepts into existing programs.

Another significant challenge is the scarcity of resources, both financial and human, which makes it difficult for institutions to implement the recommendations effectively. Institutions often struggle to allocate sufficient funds for training programs, technological support, and curriculum adjustments. Moreover, without adequate leadership support and a clear commitment from higher management, the integration of accessibility and Universal Design remains a low priority within many institutions. This lack of institutional prioritization impedes the successful integration of these concepts.

The complexity and long-term nature of embedding these recommendations also pose challenges. The integration process is seen as multi-faceted, requiring attention at the module, course, program, and institutional levels, which can make the process overwhelming. Many institutions may lack the infrastructure or organizational capacity to address these challenges in a systematic and comprehensive way.

To overcome these challenges, several solutions have been proposed. Training and awareness-raising initiatives for academic staff and institutional management are seen as crucial to increasing understanding of accessibility and Universal Design and reducing resistance to change. These training efforts can help bridge the knowledge gap and foster greater buy-in from faculty members.

Gaining support from leadership is another essential step. Embedding accessibility and Universal Design into strategic planning processes and quality assurance frameworks is seen to secure the necessary institutional commitment. Furthermore, integrating these themes into research funding criteria and quality standards for educational programs could increase their importance at the institutional level.

Addressing the resource constraints is another key aspect. Securing external funding, such as through grants or partnerships, can help ease the financial burden on institutions. Additionally, aligning financial models to reduce cost barriers and

using shared resources across institutions may help make the implementation process more manageable.

Furthermore, assigning specific responsibilities to different divisions – such as Human Resources, communication, research, and quality assurance – can help create a ripple effect across the institution, fostering ownership and innovation. Linking budgets and responsible parties to each recommendation ensures accountability and institutional commitment. When Universal Design is embedded into the institution's vision and values, it can drive systemic change across departments, supported by strategic plans.

A phased implementation approach, involving pilot programs and continuous evaluation, is recommended to manage the complexity of the process. This approach allows for gradual adjustments and fine-tuning as the recommendations are integrated across different levels of the higher education institutions.

Finally, fostering a culture of Universal Design within the institution is seen as a long-term solution. This involves not only focusing on curriculum adjustments but also training students and staff in Universal Design principles and ensuring that accessibility is integrated into all aspects of the institution's infrastructure and educational practices.

In conclusion, while the implementation of accessibility and Universal Design recommendations in higher education curricula faces several significant challenges, there are clear strategies to address them. By focusing on training, leadership support, resource mobilization, and gradual implementation, institutions can successfully integrate these principles into their educational frameworks and ensure that higher education becomes more inclusive and accessible for all students.

Appendix

Representatives of the following macro-level bodies participated in the survey on the recommendations about the integration of accessibility and Universal Design in higher education curricula:

- **AEQES - l'Agence pour l'Evaluation de la Qualité de l'Enseignement Supérieur, en Fédération Wallonie-Bruxelles (Belgium)**

AEQES is an independent public sector agency, practising formative evaluation based on a dialogue between all stakeholders within the Wallonia-Brussels Federation. Fully embedded in the European context, the Agency is responsible for assessing the quality of higher education and working for its continuous improvement.

- **Accreditation Manager at JKU Business School (Austria)**

The accreditation manager ensures programmes and the Business School meet quality standards. She manages the accreditation process and ensure the Business School meet requirements. The main tasks are quality assurance, accreditation process and quality management.

- **ACQUIN - Accreditation, Certification, and Quality Assurance Institute (Austria)**

ACQUIN is an accreditation agency for higher education institutions across various disciplines. Its role is to ensure the quality and international comparability of study programs, support institutions in aligning with professional standards, and enhance the overall attractiveness of universities.

- **AQ Austria - Agency for Quality Assurance and Accreditation Austria**

AQ Austria is the national accreditation agency responsible for ensuring quality in higher education. It conducts accreditations and evaluates compliance with national regulations.

- **Bologna Follow Up Group: National Experts for the European Higher Education Area (EHEA) (Austria)**

In Austria, the implementation of the EHEA objectives is ensured by the national Bologna Follow-Up Group. This group coordinates co-operation with stakeholders from higher education, politics and relevant institutions to implement the European objectives at national level. The EHEA experts are responsible for the further development of European higher education policy, advising on Bologna initiatives and promoting transnational cooperation, while

also ensuring academic freedom and the social dimension in higher education.

- **Community and Social Engagement Commission of the University of Barcelona and of the University Ramon Llull (Spain)**

The Community and Social Engagement Commission is an advisory body, often found in universities, that focuses on promoting social responsibility and community involvement. Its main roles include developing strategies for inclusion, sustainability, and equality, fostering connections with the community through cultural and educational projects, and ensuring accessibility and diversity in institutional activities. It aligns with broader goals like the Sustainable Development Goals (SDGs) to create a positive social impact.

- **Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) (Cyprus)**

The CYQAA is the competent independent Authority responsible for ensuring the quality and standards of higher education in Cyprus and for the support, through the procedures provided by the relevant legislation and the principles underlying the establishment of the European Higher Education Area, the continuous improvement and upgrading of higher education institutions and their programs of study, in order to comply with the Standards and guidelines for quality assurance in the European Higher Education Area (ESG) and the European policy for mobility and mutual qualification recognition. It also aims at promoting quality culture within the higher education institutions in Cyprus.

- **Cyprus Pedagogical Institute (CyPI) (Cyprus)**

The Cyprus Pedagogical Institute is responsible for the in-service training and the professional development of teachers at all levels and all posts. It organizes and delivers in-service training for all subjects and cross-subject areas, educational technology, educational research, and school-based development.

- **Cyprus Rectors' Conference (CyRC) (Cyprus)**

The objectives of Cyprus Rector's Conference are to stimulate Cypriot scientific, educational, cultural, and economic development; synergies among higher education institutions and international and European networking; as well as collaboration with governmental authorities and EU bodies. Members of the CyRC are the three public and five private Universities currently operating in the Republic of Cyprus. Also, CyRC is a member of the European University Association.

- **ENQA - Organisation of quality assurance agencies (Belgium)**

ENQA was first established in 2000 as the European Network for Quality Assurance in Higher Education to promote European cooperation in the field of quality assurance in higher education. In 2004, it became the European Association for Quality Assurance in Higher Education with the aim to contribute to the maintenance and enhancement of the quality of European higher education, and to act as a major driving force for the development of quality assurance across all the Bologna Process signatory countries. Under ENQA's umbrella, the community of agencies drive innovation in quality assurance and refines quality assurance processes.

ENQA has three main goals:

1. Representing interests of quality assurance agencies
2. Providing services to members and other stakeholders
3. Driving the development of external quality assurance

- **NVAO - The Accreditation Organisation of the Netherlands and Flanders (Belgium)**

NVAO is a quality assurance agency that safeguards the quality of higher education in the Netherlands and Flanders, in an expert and independent manner, and that fosters the quality culture pursued within the higher education institutions in the Netherlands and Flanders. It accredits existing and new programmes and assesses the quality assurance of higher education institutions.

- **National Pedagogical Institute (Czechia)**

The National Pedagogical Institute of the Czech Republic (NPI ČR) is an organization directly managed by the Ministry of Education, Youth, and Sports. It facilitates the transfer of educational innovations from the central conceptual level into school practice across regions. NPI ČR develops framework educational programs for preschool, primary, primary art, and secondary education. It provides methodological support to schools and teachers, as well as targeted training for educational staff. The institute's regional offices play a key role in supporting schools at the local level. All NPI ČR activities aim at providing support for the development of general, vocational, art and linguistic education, continuing teachers' education and the area of pedagogical-psychological, educational and career counselling in the Czech Republic.

- **Rectors' Conference of Austrian University Colleges of Teacher Education (Teaching Forum) (Austria)**

The Rectors' Conference of Pedagogical Universities coordinates curriculum development and quality assurance for teacher education programs across Austria. It ensures that future educators are trained in inclusive practices, and that accessibility is integrated into the teacher education curricula.

- **Senate of Johannes Kepler University Linz (JKU) (Austria)**

The JKU Senate is the highest academic decision-making body at JKU. It makes decisions about curricula, examination regulations and the strategic direction of the university. The JKU Senate's Curricular Examination Board is responsible for the concrete design of the programme content. It ensures that the programmes meet current requirements and are of high quality. The JKU Senate's Teaching 2030 Forum is a working group that deals with the further development of teaching at the Johannes Kepler University Linz. The goal is to improve the quality of teaching and make the university fit for the challenges of the future.

- **Teach Access organisation (USA)**

Teach Access is a non-profit working to bridge the accessibility skills gap between education and industry. Teach Access supports educators to teach and students to learn about digital accessibility. Teach Access by Design is a facilitated online course that introduces educators and administrators to basic concepts related to disability, accessibility, and Universal Design for Learning (UDL).