Digital Tools and Monitoring

A guide for the INGENIUM universities on the aforementioned topics to fulfil the three Action Plans of INGENIUM and with a focus on inclusivity.

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Chapter 1 - Digital Tools

Subchapter 1 - Use of Digital Tools for INGENIUM Policy on Multilingualism and Intercultural Understanding

1. Promoting student-centered multilingual access

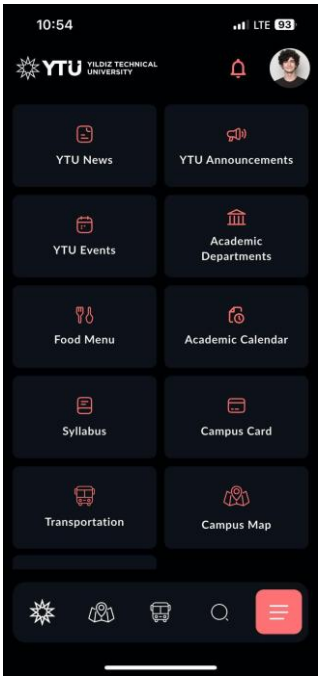
INGENIUM universities should ensure that digital services, platforms, and learning resources are accessible in multiple languages, especially those of their students across diverse language backgrounds.

Actions:

• University portals and applications in multiple languages,

• Onboarding and mobility processes (registration, accommodation, food…) available in multiple languages,

• Online language and cultural adaptation modules,



Img. 1 - Yildiz Technical University's mobile application, "YTU Mobile", provides access to services such as food, transportation, and news in both English and Turkish.

2. Improving peer-to-peer multilingual & digital engagement

INGENIUM universities should encourage students to interact with each other through online platforms that promote connection, cultural recognition, and informal learning.

Actions:

• Student-led podcasts and vlogs,

• International online forums,

3. Integrating AI tools into academic life

Following the recent capabilities and development of AI tools, INGENIUM universities should foster the use of these tools for multilingual inclusion, respecting academic ethics.

Actions:

• Public recordings/lectures should be made available with multilingual captions as well as transcripts (University of Melbourne introduced these functionalities with guides[1])

• Real-time subtitle plugins and multilingual AI chatbots for live lectures[2],

4. Standardizing digital multilingual navigation

INGENIUM universities should support foreign students through consistent communication procedures across the campus.

Actions:

• Use QR codes in multiple languages for welcoming and other guides,

• Bilingual/multilingual signs, info panels, digital maps, and schedules.

[1] University of Melbourne. (n.d.). Video captioning. https://www.unimelb.edu.au/accessibility/video-captioning
[2] INGENIUM. (2024). Policy on multilingualism and intercultural understanding (Chapter 2.2, Course: English Proficiency for Administrative Staff).

5. Active use of multilingual social media

INGENIUM universities are advised to use social media actively and bilingually with posts that encourage student engagement.

Actions:

• Asking for weekly photo dumps from students,

• Interactive quizzes and polls for feedback.

Subchapter 2: INGENIUM Action Plan for Equity and Inclusion

1. Challenges/Barriers to Gender Inclusion

- Goal: Raising institutional awareness on the gender problems across the digitalization process among the INGENIUM university members.
- Proposal: Adding a bullet point like this one on section 1.3 acknowledging the relevance that technological tools are getting in the students' daily lives.[3]

Gender gap in digital skills and digitalization

Digitalization offers valuable opportunities for learning, information access, and employability. However, a gender digital divide persists: men often have greater access, confidence, and training in advanced digital tools. According to UNESCO (2021)[4], women and girls remain underrepresented in digital skills development, particularly in areas like AI, coding, and data science. As a result, they benefit less from technology in both education and employment. Male students, for instance, are more likely to receive informal support in mastering software used to organize academic tasks, enhance presentations, or prepare effectively for job interviews. This disparity impacts not only confidence and career prospects but also academic performance, especially in systems that rely on digital assessments like online tests, multimedia submissions, or digital portfolios. Unequal preparedness in digital tools can lead to grade differences rooted in access rather than ability. Bridging this gap is essential to ensure equitable evaluation standards (UNESCO, 2021).

[3] INGENIUM Alliance. (2024). D9.1 INGENIUM Action Plan for Equity and Inclusion.

[4] Bello, A.; Blowers, T.; Schneegans, S. and T. Straza (2021) To be smart, the digital revolution will need to be inclusive. In UNESCO Science Report: the Race Against Time for Smarter Development. Schneegans, S.; Straza, T. and J. Lewis (eds). UNESCO Publishing: Paris

Guidelines on Gender Training

- Goal: Allowing differently constructed individuals, students, and staff of the INGENIUM universities, to better adopt the knowledge and conscience on gender in their capacities and through online training.
- Proposal: Adding the following suggestion on the part "Physical and/or online training/courses" below the section 1.4.1 regarding Gender training.

Suggesting the implementation and development of chatbots and/or training on inclusivity matters and INGENIUM policies, an AI assistant to personalize the training and allow individuals to learn from each other on gender, considering their own previous experiences or knowledge. The privacy of personal information and postures must be ensured for all INGENIUM students and staff taking part in these conscientization activities, and consent policies regarding the interaction with these tools must be developed by each university of the alliance.

Promotion of learning platforms on Gender and university policies

- Goal: Engage all the students of INGENIUM in the Gender equality cause and ensure their commitment in the long term to foster the efforts for achieving gender equality in the labor environment later.
- Proposal: Reinforce the effectiveness of the learning platforms that the INGENIUM universities may implement on the matter and amplify its impact by explicitly adding to section 1.4.2 of Policy making, and below the section Marketing and website, specific ways of doing this work and keeping the training materials updated, as stated.

Launch targeted promotion campaigns on Gender Training.

The platform should regularly offer new and varied content—not limited to static modules—including curated reading lists, updates on international news and legislation related to gender equality in all its dimensions, and events such as discussion forums or book clubs around key texts. A genuine effort should be made to improve student engagement by establishing clear quantitative targets (e.g., number of comments, post views, or forum activity). To support this, adequate funding should be dedicated to content development and outreach. The use of microlearning techniques could also be explored to increase accessibility and sustained attention.

Policy on the Digitalization of Assessments

- Goal: Ensure the fairness of the evaluation processes of all INGENIUM students and recognize the educator role that universities have in the digitalization of all their students.
- Proposition: Adding the following item to the Policy Development section below section 2.6 of Suggested Actions on the Disability and Age Action Plan.

Digitalization Policy in Academic Assessment

The universities should develop a clear policy on the digitalization of academic assessments. This policy must define which digital tools are permitted and formally recognized as part of the curriculum, and which are not considered essential or acceptable for evaluative purposes. To ensure equitable access and digital readiness, the institution should provide official tutorials and support materials for each tool deemed universal, indispensable, or formally integrated into the curriculum. These resources must be accessible to all students prior to their use in assessments, helping reduce disparities in digital proficiency and fostering transparency and fairness in evaluation practices.

Focus Gender Training

- Goal: Impulsing lasting learning on gender and the long-term impact of the training given to INGENIUM students and staff, specifically on the private lives of the participants.
- Proposal: Adding this suggestion on the part of Gender Training below section 1.5 of Suggested Actions on the Gender and Equity Action Plan.

Focus on Gender Training for students and staff.

Two distinct gender training programmes should be developed to address specific needs within the university community. First, an obligatory online gender training for students, with a particular focus on male students, should be implemented to raise awareness about microaggressions in informal settings. This training will help students identify and reflect on subtle, often normalized forms of gender-based disrespect in social interactions, friendships, and extracurricular activities. Through realistic scenarios and guided reflection, the training aims to foster empathy and accountability among peers.

Second, an optional online training for university staff should be offered on building inclusive families and raising children with a gender equality perspective. Developed in collaboration with psychologists, child development experts, and gender specialists, the training will provide practical recommendations and promote critical reflection on parenting roles, communication, and unconscious bias. Though voluntary, this programme should be actively promoted and easily accessible, recognizing its relevance for staff who are parents or involved in student wellbeing.

Digital gap on SES

- Goal: Visualizing the differentiated access to technology existing in early stages of education and acknowledging its influence on the digitalization skills of all admitted students at the INGENIUM institutions.

- Proposal: Adding this article to section 4.2 of Challenges and Barriers that SES students may face in their secondary education.

Digital gap due to unequal early education and limited access to technology – students from low-income backgrounds may lack prior exposure to digital tools and stable internet access, which can limit their ability to fully engage with online learning and academic platforms.

Action Plan for Equity on Digitalization

- Goal: Reducing the digital gap present in universities via access and promotion of the digitalization of the study processes carried out by each student individually.
- Proposal: Add the following two points respectively on two new rows of the Table Low SES Action Plan, named respectively Policies Making and Digitalization Training, containing each of them the following suggestions.

Policy making

Universities must develop policies to ensure equity in digitalization, recognizing that many students are unaware of their digital skill levels or the tools widely used by others. Institutions should actively communicate available digital resources, detect inequities through regular monitoring, and provide accessible support and targeted measures.

Concrete actions must also be taken to reduce digital disparities—for example, offering licenses for tools like ChatGPT Premium to all students. Each university should define how digital tools are integrated into teaching, setting clear rules for academic staff that consider student consent, inclusion, and the diversity of digital backgrounds. These policies must be guided and updated through continuous student feedback.

Digitalization Training

To complement these policies, universities should offer well-promoted online courses that teach students how to use educational technologies to support their studies. Topics could include using AI to generate practice questions, organizing tasks with platforms like Notion, or finding ways to save time and study more efficiently.

These trainings should be accessible to all students, regardless of prior experience, and presented in an inclusive, user-friendly format. The selection of platforms and tools for which universities provide training or licenses must be regularly updated based on structured student feedback to ensure they meet evolving academic needs.

Subchapter 3 - Use of Digital Tools for INGENIUM for a Healthy Campus: Preliminary Guidelines and Recommendations

1. Fostering a culture of digital and mental wellbeing

INGENIUM should encourage mindful use of technology and support mental wellbeing through interactive workshops, accessible digital tools, and open student feedback.

Actions:
• Providing structured programs (e.g., reconnected workshop in Munster Technology University, which focuses on encouraging students and staff to reflect on their digital technology use and its impact on well-being),

• Offering 24/7 access to self-help tools (like Silver Clouds by MTU), fostering independent mental health care and continuous support,
• Creating a feedback loop between students and university leadership about health priorities,
• Creating applications about digital detox campaigns during exam periods.

2. Strengthening the community through digital connection and peer support

INGENIUM universities should build a supportive campus by promoting shared digital resources and peer-led wellbeing conversations.
Actions:

• Providing open access to a scalable online library of mental health and well-being resources (such as podcast videos, webinars, online conferences),

• Encouraging peer-to-peer learning and open conversation about well-being by creating applications.

3. Developing a collaborative wellbeing knowledge platform

INGENIUM universities are advised to have a space where students and staff can access, share, and co-create wellbeing content.

Actions:

• Building a digital platform where students and staff can access, share, and even contribute to health-related content (e.g., “How can I deal with depression”)
• Encouraging co-creation: student-led podcasts, TED-style videos, etc.
• Launching a student blog platform focused on mental health and lived experiences.

4. Digitize access to campus services
INGENIUM universities should make it easier for students to access the school systems for health.

Actions:
• By making the school medical system online (Like Metu)
• Creating an application where students can receive online therapies.

Chapter 2 - Monitoring

Subchapter 1 - Monitoring practices using student initiative and input

1. Monitoring of Student Activities by Peer Delegates

INGENIUM universities should involve their students in the process of monitoring student activities.

Actions:
• Gathering feedback on inclusive practices in class by letting a member of the student council join a class they do not usually attend in order to observe and report their observations through answering a standardized set of questions
• Appointing a responsible student for each dorm to provide a connection between the campus administration and the students currently living there
• Creating a mentorship system in order to connect freshly enrolled students with their more experienced peers and provide guidance and assistance

2. Fostering trust through educator transparency

INGENIUM universities should ensure that their faculty is educated on inclusive practices and build trust by letting the students know about their teachers’ formation in this field.

Actions:

• Grant students access to teachers' educational backgrounds and training in inclusivity, and allow them to choose their courses accordingly

3. Continually gathering student feedback

In order to address the evolving needs of students, INGENIUM universities are advised to implement ways of collecting student feedback throughout the entire year.

Actions:

• Implement feedback forms letting the students grade their class, the quality of the facilities and tools provided, add further comments, etc., for the classes of the current semester, mandatory to open during the exam period

• Complementary to the Formal complaints and reporting system[5], expanding the aforementioned system onto a universal one, instead of targeting gender discrimination only

• Implement a three-stage feedback process, gathering data about student expectations and whether they were fulfilled at the beginning of the year, mid-term, and at the end

• Establish suggestion boxes for student improvement ideas—one on campus and one in the dormitory—to be reviewed every three months, with initial monitoring to adjust the frequency based on submission volume.

Subchapter 2 - Monitoring practices implemented by the administration of each university

1. Overseeing student well-being and safety

The campuses of INGENIUM universities should offer a safe space for students to develop their skills and grow.

Actions:

[5] As mentioned in the INGENIUM Action Plan for Equity and Inclusion, Chapter 1.4.3. Monitoring system and statistics

• Implement monitoring of extracurricular activities by having a supervising teacher review participant surveys before and after events to ensure alignment with event plans
• Establish on-campus psychological support by appointing a psychologist to offer individual services and facilitate monitored discussion groups, providing a safe space for individuals facing mental health challenges

2. Ensuring that all processes are proceeding as intended

INGENIUM universities are advised to make sure of the successful execution of the planned goals and adapt accordingly.

Actions:

• Complementary to the progress monitoring matrix provided in the INGENIUM documents[6], create an extension in order to add further notes throughout the timeline of the goal, commenting on the alignment of reality with expected results and the cause of diversion
• Review student results semesterly and initiate further investigation in the case of repeated high numbers of failing grades

[6] Refer to INGENIUM Action Plan for a Healthy Campus, Annex 2