eduIDT

Application of Inclusive Design Thinking in the Technically-Oriented Subjects at HEI

Implemenation

Best practices

www.eduidt.eu

Co-funded by the European Union

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Introduction

The EDU-IDT – Application of Inclusive Design Thinking in the Technically-Oriented Subjects at HEI, funded by the Erasmus+ Programme (KA220-HED – Cooperation Partnerships in Higher Education), was established to address the growing need for inclusive and sustainable innovation competences among students. The project aimed to integrate Inclusive Design Thinking (IDT) methodologies into higher education through interdisciplinary, challenge-based, and student-led learning approaches.

The project consortium consisted of nine organisations from seven European countries, including universities, experts, and professional institutions. Collectively, the partnership developed and piloted educational tools and materials designed to embed IDT within diverse academic and institutional contexts. The initiative supported pedagogical innovation aligned with the Sustainable Development Goals (SDGs) and promoted inclusive innovation through practical, participatory learning models.
All project outputs have been made publicly available through the official project website, www.eduidt.eu.

Key outputs

Inclusive Design Thinking Cookbook

Available in eight languages: Croatian, German, Estonian, French, Hungarian, Slovak, Spanish, and English.

Templates and tools

In English to support course design, classroom activities, and project-based learning using IDT methodology.

Project at a Glance

Project Title	EDU-IDT – Application of Inclusive Design Thinking in the Technically-Oriented Subjects at HEI
Project Number	KA220-HED-CDED26E6
Programme	Erasmus+ Programme – KA220-HED
Project Duration	1 February 2022 – 31 January 2025
Website	www.eduidt.eu
Coordinator	University of Zilina (UNIZA), Slovakia

Overview of institutions

The EDU-IDT project brings together nine organizations from seven countries. Each partner contributed specific expertise to the co-creation, implementation, and evaluation of Inclusive Design Thinking (IDT) in diverse learning environments.

Institutions

7 Universities
from different countries

1 Enterprise
NGO

TOGETHER

9 Partners
from **7** Countries

Univeristy of Zilina

Organisation ID	Country	Type
E10209360	Slovakia	Higher education institution (tertiary level)

The University of Žilina, originally established as the Railway College in 1953, has evolved into a modern Slovak university offering education at all three levels of higher education (Bachelor's, Master's, and Doctoral). It serves approximately 8,000 students and employs over 1,000 staff members, of whom around 650 are teaching personnel. A key contributor to the EDU-IDT project was the Faculty of Management Science and Informatics (FRI UNIZA), a faculty recognized both nationally and internationally for its excellence in informatics, management, and applied research. With approximately 100 staff and 1,400 students, the faculty is known for the integration of informatics and management in its interdisciplinary study programmes, as well as its strong culture of academic rigor and innovation.

The faculty builds upon a 30-year tradition of educating students in cybernetics, information systems, and applied mathematics. It actively promotes modern management approaches supported by digital tools and has extensive experience with EU-funded projects focused on ICT education, teacher training, and educational innovation.

Relevant Expertise for eduIDT

FRI UNIZA

has significant experience in integrating educational innovation into ICT and management studies, demonstrated through its leadership in national and EU projects such as "IT Academy – Education for the 21st Century", which emphasized partnerships between universities, schools, and IT companies. The faculty has supported curriculum modernization, teacher development, and industry collaboration.

Tallinn University

Organisation ID	Country	Type
E10206614	Estonia	Higher education institution (tertiary level)

Tallinn University (TU) is the third-largest public university in Estonia, formed through the merger of several academic and research institutions in Tallinn. It consists of six schools and serves approximately 7,100 students, of whom 11% are international. The university employs over 800 staff members, including 400 researchers and lecturers. TU is recognized as the fastest growing university in Estonia and places strong emphasis on internationalization and interdisciplinary research.

The university's academic activities focus on five interdisciplinary areas: educational innovation, digital and media culture, cultural competences, healthy and sustainable lifestyles, and society and open governance. It has a strong reputation in the humanities and social sciences, complemented by a growing presence in natural and exact sciences. TU has a long-standing tradition in teacher training and educational research, as well as substantial experience in technology-enhanced learning since 1994.

TU is known for promoting sustainable development, supporting academic partnerships, and fostering public dialogue. It strives to be a key promoter of intelligent lifestyle and self-actualization in Estonia, while adhering to the values of openness, quality, professionalism, and unity.

Relevant Expertise for eduIDT

School of Digital Technlogies

at TU contributed its expertise in technology-enhanced learning, digital innovation, and educational design. It is the only institution in Estonia focusing on soft ICT fields, such as interaction design, workplace learning, open education, and digital learning resources. The school includes specialized labs and the Centre for Educational Technology, and it actively participates in international collaboration, offering multiple joint master's programmes. Its key areas relevant to the EDU-IDT project include open educational resources, digital and media literacy, human-computer interaction, and learning ecosystem development.

Universitat Politècnica de València

Organisation ID	Country	Type
E10208835	Spain	Higher education institution (tertiary level)

The Universitat Politècnica de València (UPV) is a leading Spanish public technological university with over 25,000 students and more than 5,000 staff, including teaching, research, and administrative personnel. UPV is internationally recognized for its excellence in engineering, science, and technology education and research. It consistently ranks as Spain's top technological university in international rankings, including the Shanghai Ranking of World Universities.

UPV offers a wide range of academic programmes, including 36 undergraduate degrees, 21 double degrees, over 80 official Master's degrees (including Erasmus Mundus programmes), and 30 doctoral programmes. In addition, the university provides more than 1,100 lifelong learning courses. UPV is also one of the most active European universities in student exchange, regularly ranking among the top five in Erasmus+ mobility participation. It maintains over 1,000 partnerships in more than 90 countries and has extensive experience in managing European projects under Erasmus+, Horizon 2020, and other EU frameworks.

Relevant Expertise for eduIDT

ETSIT

The project activities at UPV are carried out through the ETSIT (School of Telecommunications Engineering), which has a strong record of involvement in international educational innovation projects such as INNOSOC, TEAMSOC21, and SMARTSOC. ETSIT has contributed to those projects by participating in steering committees, involving students in blended mobilities, and organizing dissemination and promotional events such as multiplier events and workshops for high school students.
In EDU-IDT, ETSIT brings valuable expertise in digital innovation, entrepreneurship, and social inclusion. Its staff and infrastructure also support start-ups and new business initiatives, and the school emphasizes the integration of new pedagogical approaches, including Design Thinking, into engineering education and research.

University of Zagreb

Organisation ID	Country	Type
E10209270	Croatia	Higher education institution (tertiary level)

Founded in 1669, the University of Zagreb is the oldest and largest university in South-Eastern Europe. It comprises 30 faculties, three art academies, and the Centre for Croatian Studies, enrolling over 70,000 undergraduate and postgraduate students. As Croatia's leading academic institution, it offers a wide array of programmes across the arts, engineering, natural sciences, social sciences, and humanities. The university is also the country's most research-intensive institution, producing more than half of Croatia's scientific output.

The EDU-IDT project is implemented through the Faculty of Electrical Engineering and Computing (FER), the largest technical faculty within the university and a national leader in ICT and engineering education. FER maintains a highly active research profile and international cooperation network. It supports over 3,800 students, 200 professors, and more than 370 research and teaching assistants, housed within state-of-the-art facilities including 60+ laboratories, 12 academic departments, and a dedicated congress centre.

FER participates in over 250 ongoing national and EU-funded projects, including Horizon 2020, Erasmus+, COST, and Interreg initiatives. It ranks among the most internationally engaged institutions in Croatia, with strong success rates in competitive research frameworks such as FP7 and Horizon 2020.

Relevant Expertise for eduIDT

FER

Ibrings to the EDU-IDT project deep expertise in inclusive technology development, user-centered design, and interdisciplinary education. Its contributions align closely with project goals of fostering innovation, accessibility, and participatory learning.

Eggztra Innovations s.r.o.

Organisation ID	Country	Type
E10299200	Slovakia	Small and medium-sized enterprise (SME)

Eggztra Innovations is a Slovak service design consultancy specializing in Design Thinking-based projects, training, mentoring, and coaching. The company supports a wide range of industries including banking, insurance, telecommunications, mobility, defense, and leasing. Its core mission is to promote customer- and employee-centric innovation, helping organizations embed human-centered approaches into their strategy and culture.

With experience drawn from over 40 service design projects and 30+ training programmes, Eggztra has trained more than 1,000 professionals and 325 students across Europe, and has contributed to design workshops and conferences in cities like Barcelona, Prague, Lisbon, and Warsaw. The company's founder and team members bring over 20 years of corporate experience in international firms, particularly in telecommunications and petrochemicals, where they implemented Design Thinking as a foundational innovation method.

Relevant Expertise for eduIDT

Eggztra Innovations

direct experience in inclusive design thinking, having led many projects.

Eggztra also teaches the university-level course "Innovation in HR" at the University of Economics in Prague, guiding students through full-cycle customer-centric innovation projects with real industry partners (e.g., Erste Bank, ALZA, Innogy, SAZKA). Since 2021, the company has collaborated with the University of Žilina on entrepreneurship and innovation education.

Eggztra's approach integrates inclusive innovation, employee-centered design, and training of future HR professionals and educators—making them a key contributor to EDU-IDT's mission to empower higher education with human-centered design practices.

University of Debrecen

Organisation ID	Country	Type
E10208981	Hungary	Higher education institution (tertiary level)

The University of Debrecen (UD), with over 450 years of history, is Hungary's oldest continuously operating higher education institution in the same city and one of its largest academic centers. It supports a student body of approximately 30,000 learners and employs more than 1,500 faculty members across 14 faculties. UD offers a broad spectrum of degree programs across medical and health sciences, engineering, agriculture, social sciences, economics, law, education, natural sciences, humanities, and the arts.

As one of Hungary's top research and innovation universities, UD contributes significantly to national strategic goals and is ranked among the top 500 universities worldwide. It maintains strong ties with government, business, and civil society, actively contributing to the development of the Northern Great Plain Region through research, innovation, and professional services. The university is also known for its commitment to lifelong learning, inclusion, and community engagement.

Relevant Expertise for eduIDT

Faculty of Informatics

The project is supported by the Faculty of Informatics, which is deeply engaged in international academic cooperation and prioritizes diversity and inclusion. The faculty runs multiple research initiatives aimed at improving the quality of life for people with disabilities, using emerging ICT technologies for inclusive innovation and social impact.

The University provides an accessible learning environment: lecture halls with hearing loops, websites designed for visually impaired users, and Braille signage in all rooms. UD has the largest international student population in Hungary, thanks to its 82 English-taught programs, and fosters integration across ethnic and social groups.

The Faculty of Informatics also supports students with disabilities in both physical and academic environments, aligning closely with the values of the EDU-IDT project.

IMT Atlantique Bretagne Pays de la Loire

Organisation ID	Country	Type
E10110479	France	Higher education institution (tertiary level)

IMT Atlantique is a leading French technical university, distinguished for its scientific and technical excellence in the fields of digital technologies, energy, and the environment. With multiple campuses across Brest, Nantes, and Rennes, the institution offers cutting-edge education and research across areas such as electronics, IT, automation, environmental systems, and social sciences.

The university fosters a mission to prepare the next generation to face global challenges by training students not only in complex systems and technologies but also as responsible change-makers. Through this approach, it integrates innovation, systems thinking, and socio-economic impact across its education model. IMT Atlantique plays a key role in shaping sectors like health, defense, telecommunications, transport, and sustainable cities through its applied research and academic programmes.

Relevant Expertise for eduIDT

IMT Atlantique

emphasizes learning-by-doing pedagogy, which aligns naturally with the principles of inclusive design thinking. The university has developed diverse educational innovations such as:

- The Pyrat video game project,
- A robot-building team competition, and
- A serious game simulating supply chain dynamics (Ice-cream game).

Its Support and Resource Center for Learning and Teaching (CARÆ) promotes transversal skills, collaborative practices, and pedagogical transformation among faculty, aligning closely with the EDU-IDT project's goals of fostering innovation in higher education.

IMT Atlantique's strong foundation in project-based learning, digital tools, and interdisciplinary teaching positions it as a key contributor to embedding inclusive design methods in both curriculum and institutional practice.

European Institute for Labour and Industrial Relations

Organisation ID	Country	Type
E10059943	Germany	Non-governmental organisation/association

The European Institute for Labour and Industrial Relations (EIAB), based in Germany, is a non-profit organization that evolved from a broader European network founded in 1991 under the initiative for a European University of Employment (UET). Since 2004, EIAB has operated independently, conducting European-level research and development projects focused on social dialogue, sustainable business practices, and vocational education. It continues to collaborate with partner networks like Association Travail, Emploi, Europe – ASTREES.

EIAB is certified as a training institution by a Professional Training Association and has worked closely with trade unions, employer associations, SMEs, and multinational companies. It has around 40 members, including students, managers, academics, and social partners, and plays an active role in fostering inclusive, socially responsible labor practices across Europe.

Relevant Expertise for eduIDT

EIAB

brings practical expertise in designing and delivering inclusive training programs using design thinking methodologies. In a notable ESF-funded initiative, EIAB developed a certified training for Corporate Sustainability Officers in SMEs, tailored to participants of varying ages, educational backgrounds, and professional experience.

The training approach included:

- Co-design of learning materials with trainers,
- Adaptation to diverse learner needs,
- Use of team-based, problem-solving methods.

This experience reflects EIAB's strength in human-centered, flexible educational design, making them a valuable contributor to EDU-IDT's goals of embedding inclusive and user-focused innovation in education and training.

Wilhelm-Büchner University of Applied Sciences

Organisation ID	Country	Type
E10300712	Germany	School/Institute/Educational centre – Adult education

The Wilhelm Büchner Institut für Angewandte Forschung und Gestaltung gGmbH is the affiliated research institute of Wilhelm Büchner Hochschule (WBH), Germany's largest private university for technology-focused distance learning. Located in Darmstadt and part of the Klett Group, WBH supports over 6,900 professional adult learners across the German-speaking region. The university offers more than 50 bachelor's and master's programs, alongside 20 certificate courses, delivered primarily via distance and blended learning formats.

Founded in 2021, the institute represents WBH's commitment to interdisciplinary applied research and design, emphasizing innovation, sustainability, and user-centric approaches. WBH's academic ecosystem includes a permanent scientific staff of 30 and a network of over 350 contract lecturers from diverse professional and academic backgrounds.

Relevant Expertise for eduIDT

WBH

has extensive experience applying Design Thinking principles within adult education, both as a distinct methodology and as integrated elements of innovation, agile development, and technology management. Its educators span various faculties, including Informatics, Engineering, Design, and Technology Management, bringing diverse perspectives to user-oriented and sustainable solution design.

The institution's core strength lies in:

- Developing blended learning methods for heterogeneous, professional audiences,
- Fostering human-centered innovation through design education,
- Embedding participatory and experiential learning practices across curricula.

This interdisciplinary and practice-driven environment makes WBH a strategic contributor to the EDU-IDT project's goal of promoting inclusive design thinking in higher education.

Overview of subjects

To effectively evaluate the integration of Inclusive Design Thinking (IDT) into higher education, it is essential to first understand the range and scope of subjects in which the methodology was applied. This chapter presents a comprehensive overview of the courses selected by participating institutions for IDT implementation.

University of Zilina	Basics of Software Testing
University of Zagreb	Social Networks, Human Factors in Computing
University of Debrecen	3D Printing and Modeling, Descriptive Geometry
Universitat Politecnica de Valencia	Trabajo Fin de Grado (TFG), Design Thinking Applied to Teaching
Wilhelm-Büchner University of Applied Sciences (WBH)	Multiple subjects within distance learning
IMT Atlantique	Innovation Projects, TES Classes, French/ Intercultural Classes
Tallinn University	Multiple subjects

Adjustments to Subject Content and Tasks

The integration of Inclusive Design Thinking (IDT) into higher education curricula required meaningful adaptations to both subject content and student tasks. Across participating institutions, educators restructured traditional teaching approaches to align with IDT principles such as empathy, inclusion, co-creation, and iteration.

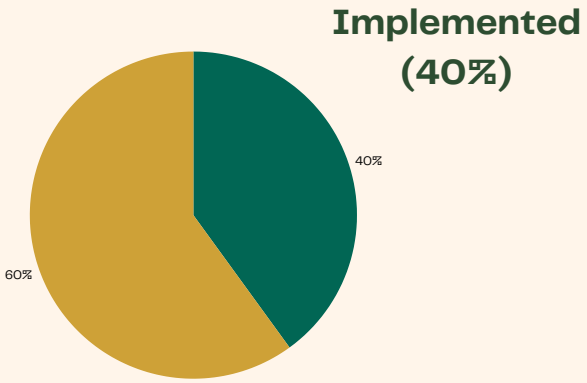
This section presents concrete examples of how subjects were adapted to support IDT methodology. These adjustments often involved transforming standard assignments into open-ended, real-world challenges, introducing new tools and techniques such as personas, user interviews, and prototyping, and encouraging collaboration and user-centered problem-solving.

Educators incorporated IDT both in creative and technical disciplines, demonstrating the methodology's flexibility and relevance across various academic domains. The examples that follow highlight the diversity of approaches taken, the specific phases of IDT that were prioritized, and the instructional innovations introduced to make learning more inclusive, participatory, and impactful.

University of Zilina

Subjects and % of IDT implementation

Basics of Software Testing



Adjusted Content:

- IDT integrated into 2 seminars, focusing on Define and Ideate phases.
- Real-world application: testing and improving their own faculty website.

Modified Tasks:

- Customer interviews and inclusive brainstorming techniques (e.g. Lotus blossom, Heaven & Hell).
- Semester projects reoriented from individual to team-based co-creation.

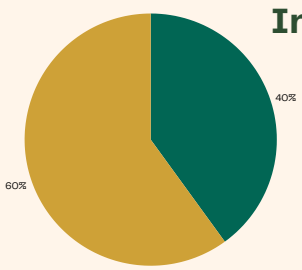
Tools and Methods:

- Use of real client problems, iterative group work, and presentation of solutions.

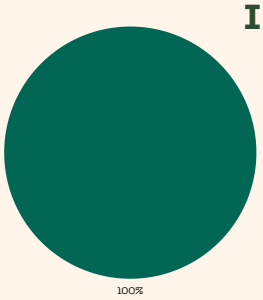
University of Zagreb

Subjects and % of IDT implementation

Social networks



Human Factors in Computing



Adjusted Content:

- **Social Networks**: Practical project redesigned to incorporate IDT phases (especially Empathy & Definition); students created personas and defined user needs.
- **Human Factors:** Integrated full IDT cycle including workshops based on the IDT "cookbook."

Modified Tasks:

- Use of inclusive templates, live presentations, feedback sessions.
- Mini Sprint workshop implemented to simulate iterative prototyping and testing.
- Emphasis on accessibility, Universal Design (UD), and understanding user limitations.

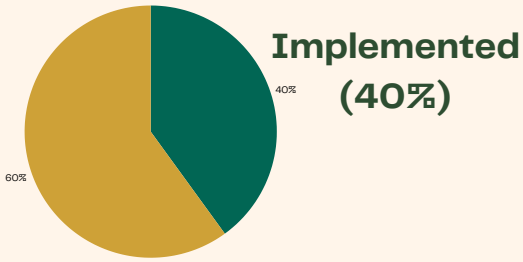
Tools and Methods:

- Presentations on IDT concepts, book resources, structured templates, user testing simulation.

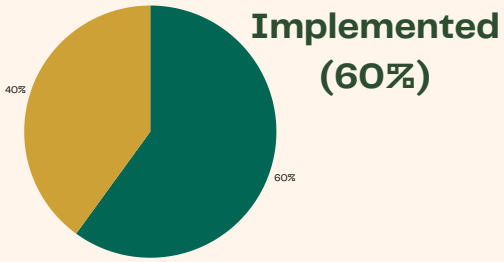
University of Debrecen

Subjects and % of IDT implementation

Descriptive geometry



3D printing and modeling



Adjusted Content:

- Tasks reframed as challenges, focusing on creativity and real-world relevance.
- 3DM: Modeling projects based on local events; DG: Worksheets from real geometric problems.

Modified Tasks:

- Brainstorming and prototyping emphasized.
- Flexible group discussion and home practice added.

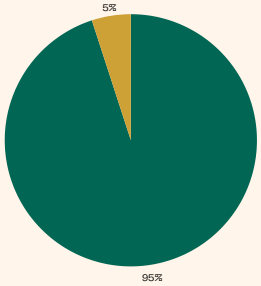
Tools and Methods:

- Personas used in 3DM; group selection of activities; more student voice and choice.

Universitat Politècnica de València

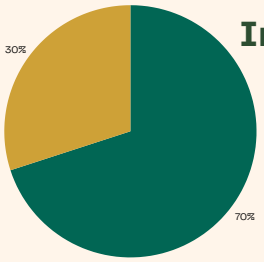
Subjects and % of IDT implementation

Trabajo Fin de Grado (TFG)



Implemented (95%)

Design Thinking Applied to Teaching



Implemented (70%)

Adjusted Content:

- Students used the IDT book; focused on empathy, accessibility, and co-creation with real users.
- IDT methods were central in defining, ideating, and prototyping solutions.

Modified Tasks:

- Projects included surveys, user interviews, and real-world feedback loops.

Tools and Methods:

- Brainstorming, surveys, iterative testing; strong cultural fit with teamwork-oriented methodology.

Wilhelm-Büchner University of Applied Sciences (WBH)

Subjects and the way to study

There **is no classroom teaching**, instead students learn the subject matter through **self-study** (asynchron teaching)

- Readers (study booklets) developed for the distant learning courses
- Web based Trainings
- Additional books, videos, internet links
- Sometimes presentations (on-campus classes, Reps)
- Exames or Sent-in-Excercises

Use of Inclusive Design Cookbook

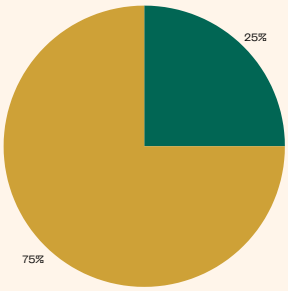
- Reader (Study Booklet)
- Additional provided material

Faculty	Course
Informatics	Management of Digital Transformation (Master)
	User Experience Design (Bachelor)
	Research Methods and Project Management (Master)
	Research project & thesis (Master)
	Thesis (Bachelor)
Industrial engineering and Technology management	Management of Innovation Ideas (Bachelor and Master)
	Innovation Management (Bachelor and Master)
	In-depth aspects of Innovation Management (Master)
Design	Specialization in Social Design and Inclusion (bachelor) - Module 2: Social Design & Inclusion: Methods, Strategies and Tools

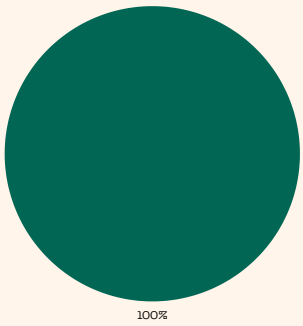
IMT Atlantique

Subjects and % of IDT implementation

Innovation projects Classes, TES classes, French and Intercultural Classes



Implemented (from 25% up to 100%)



Adjusted Content:

- Already IDT-aligned content made more explicit with emphasis on empathy, inclusion, and co-creation.

Modified Tasks:

- Students conducted interviews, engaged in ideation and prototyping with real stakeholders.

Tools and Methods:

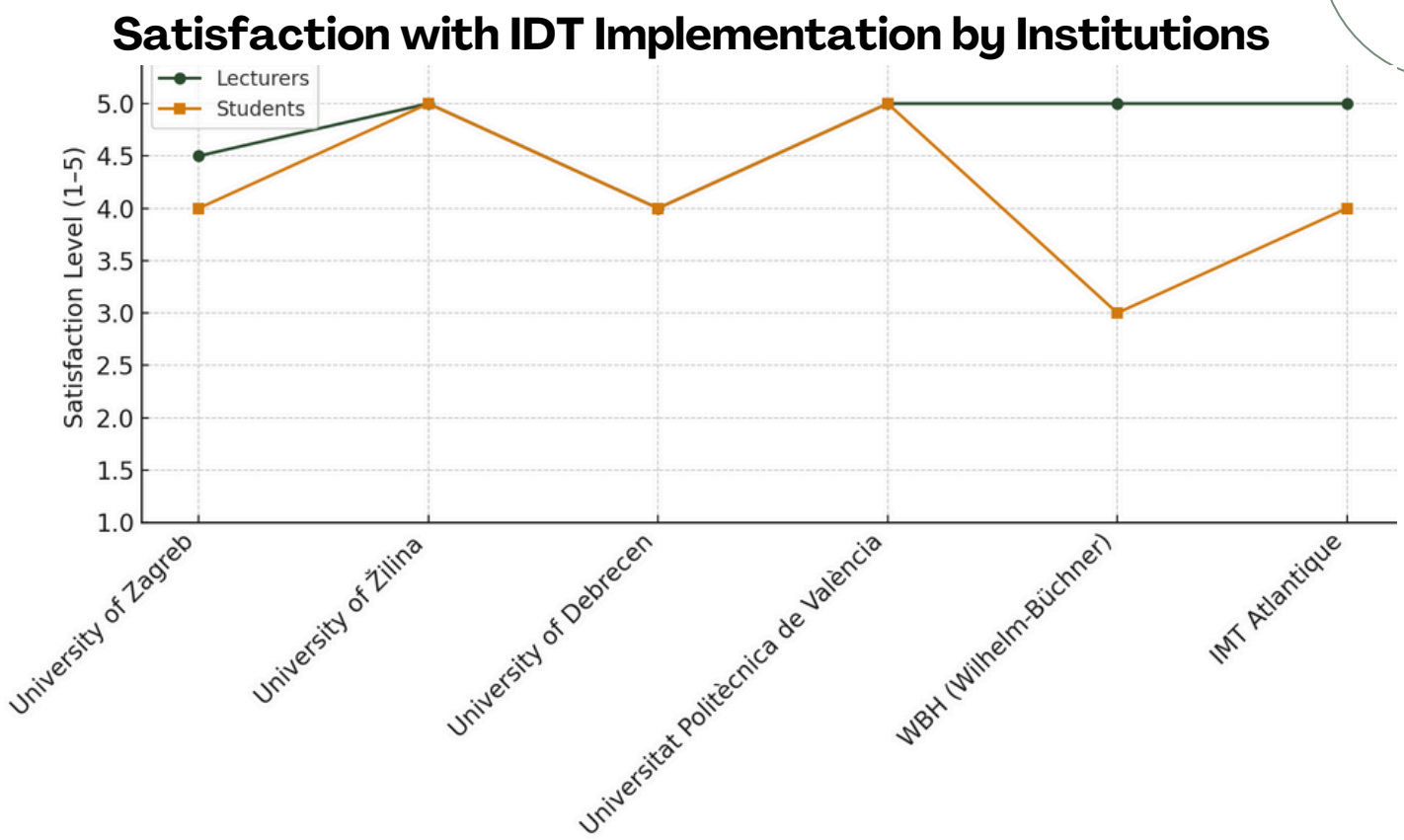
- Use of methods like 6-3-5 Brainwriting, Lotus blossom.
- IDT approach used for intercultural teaching as well.

Satisfaction of Students and Lecturers

Understanding the satisfaction levels of both students and lecturers is essential in evaluating the success and sustainability of Inclusive Design Thinking (IDT) in academic settings. This section presents feedback collected from participants across multiple institutions, highlighting perceived benefits, challenges, and overall impressions of the methodology.

Student responses focus on engagement, creativity, and perceived learning outcomes, while lecturers provide insights into feasibility, teaching experience, and impact on course delivery. Together, these perspectives help assess the effectiveness and adaptability of IDT within diverse learning environments.

Satisfaction of Students and Lecturers



This chart illustrates the satisfaction levels of lecturers and students across participating institutions regarding the implementation of Inclusive Design Thinking (IDT) in their respective subjects.
Satisfaction is rated on a scale from 1 to 5, with the following meanings: 5 – Very satisfied, 4 – Satisfied, 3 – Neither dissatisfied nor satisfied, 2 – Dissatisfied, 1 – Very dissatisfied.

Lecturers generally reported high satisfaction, particularly at institutions where IDT was integrated more fully or aligned well with existing course structures. Student satisfaction also remained consistently positive, especially where real-world application and teamwork were emphasized. Minor challenges such as time constraints and unfamiliarity with templates were noted but did not significantly affect overall impressions.

This visual comparison helps highlight the overall positive reception of IDT among both educators and learners, supporting its potential for broader adoption.

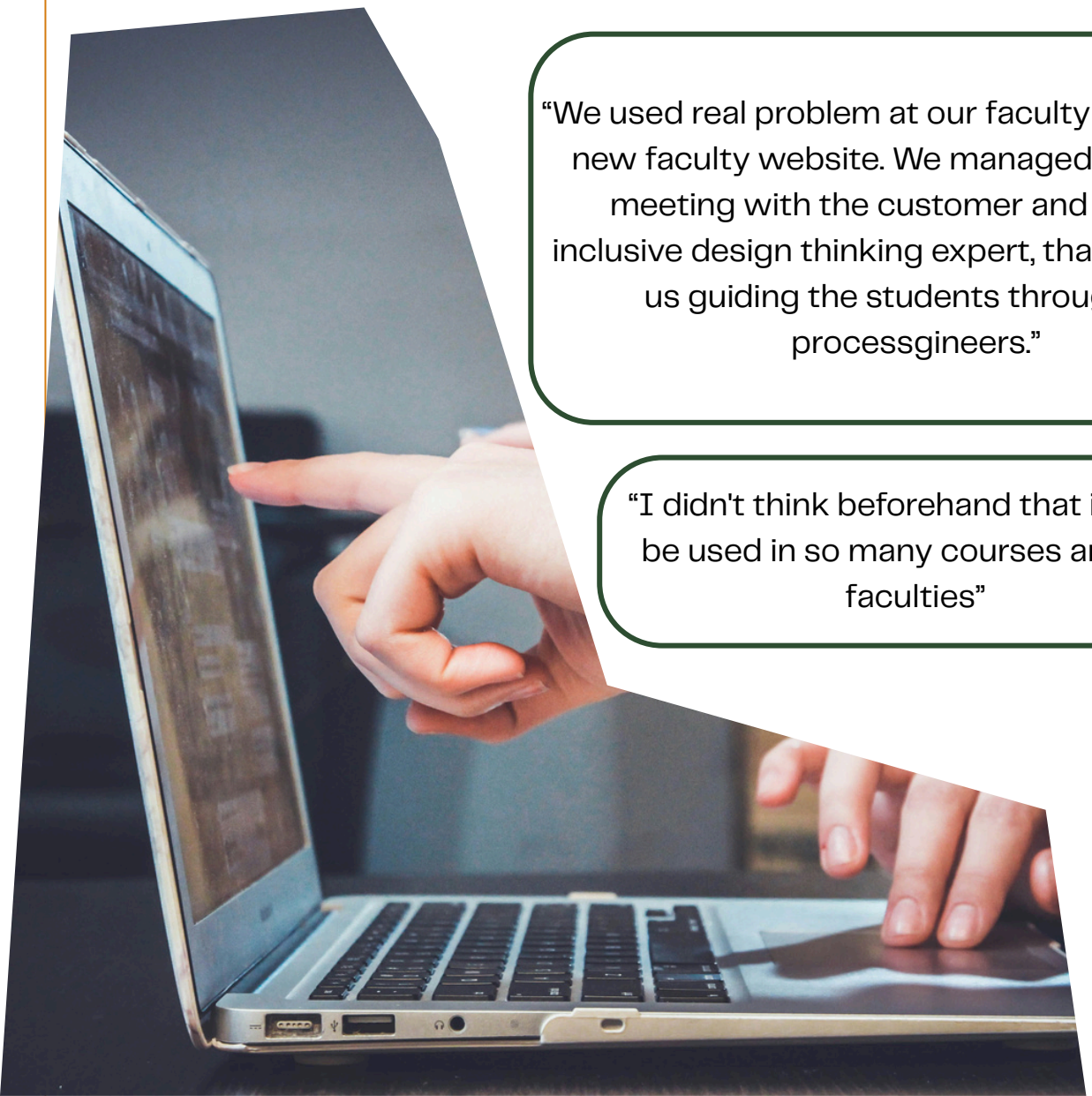
Satisfaction of Students and Lecturers

Feedback from the Lecturers:

"Everything worked well"

"The students like to know their work might be really useful to the final users."

"A good way to how to turn our students into responsible engineers."



"We used real problem at our faculty – testing the new faculty website. We managed to set up a meeting with the customer and with the inclusive design thinking expert, that would help us guiding the students through the processgineers."

"I didn't think beforehand that it could be used in so many courses and in 3 faculties"

Satisfaction of Students and Lecturers

Feedback from the Students:

"(+) very fun, opened my mind to different ideas and perspectives from different clients/people
(–) Time restriction, working in bigger groups"

"(+) working in pairs, meeting new people, listening to other opinions, creative and dynamic
(–) Writing on laptops, not paper templates"

"(+) meeting new colleagues, thinking of solutions on the spot
(–) Many repetitive elements"

"(+) interactivity made it easier to learn, bettering user experience
(–) Better instructions on templates"

"Working in a team allowed us to effectively distribute tasks, exchange knowledge and promptly solve problems that arose. This approach contributed to a more thorough coverage of test scenarios and a better analysis of the results. he knowledge and experience gained from this work are a valuable asset for our future professional practice in the field of software solution development and testing the software."

"The Design Thinking method provided us with an effective framework for identifying user needs and subsequently proposing modifications that will improve the overall impression of using the application. Based on brainstorming, we propose functionalities to improve the user experience. We also proposed color-coding of rows to improve visual orientation. Problems in searching were identified and the proposal contributed to users having faster access to information."

Comparison of Lecturers´ Experience

by Subject Type and Method of Impelentation

This section compares the experiences of lecturers who integrated Inclusive Design Thinking (IDT) into their teaching practices. The comparison is based on two primary factors: the nature of the subject (technical, creative, or human-centered) and the method used to implement IDT (complete methodology versus selected phases or tools). By examining these dimensions, the section identifies patterns in lecturer experience, highlighting both enablers and constraints across different academic contexts.

Comparison of Lecturers´ Experience

Institution	Subject Type	IDT Integration	Lecturer Experience	Key Insights
University of Zagreb	Social sciences, computing	Partial to full cycle (including mini sprints)	Positive; students more critically engaged and inclusive	Practical redesign enhanced user awareness
University of Žilina	Technical (software testing)	Define and Ideate phases	Very positive; teamwork and practical relevance emphasized	Customer interviews and real problems boosted motivation
University of Debrecen	Creative (3D modeling), technical (geometry)	40–60% (challenge-driven)	Satisfied; easier to apply in creative settings	Challenge-based tasks supported hands-on learning
UPV (València)	Final projects, education design	70–95% of IDT cycle	Very positive; methodology aligned well with subject goals	Students embraced empathy and co-creation
WBH (Wilhelm-Büchner)	Various, distance learning	Reference material and thesis application	Very satisfied; found broad applicability	Effective even without direct classroom use
IMT Atlantique	Innovation, intercultural studies	25–100% depending on course	Very positive; IDT principles already embedded in pedagogy	Reinforced co-creation and empathy-driven teaching

Comparison of Lecturers´ Experience

Creative Observations

- Creative and applied subjects provided the most natural context for IDT, with lecturers noting smoother integration and higher student engagement.
- Technical and theoretical subjects required adaptation of traditional tasks but still benefitted significantly from the use of empathy, ideation, and iteration.
- Lecturers who employed real-world scenarios, external stakeholders, or team-based work found IDT especially effective in fostering engagement and deeper learning.
- Even when only partial phases of the IDT process were used (e.g., Define, Ideate), lecturers reported meaningful impacts, particularly in student collaboration and perspective-taking.
- Institutional culture and teaching traditions also played a role—universities with a stronger focus on user-centered learning or teamwork found the transition to IDT methods smoother and more impactful.

Best Practices

Emerging from IDT Implementation

Through the diverse experiences of institutions involved in the EduIDT project, several best practices have emerged that highlight effective strategies for implementing Inclusive Design Thinking (IDT) in higher education. These practices reflect common themes observed across subject types, teaching methods, and institutional settings. They offer valuable guidance for educators seeking to integrate IDT into their own courses in a meaningful and sustainable way.

Identified Best Practices

1. Start with Real- World Probems

- Projects grounded in authentic, user-centered challenges—such as testing faculty websites or addressing community needs—created higher student engagement and motivation.
- Real users and stakeholders (e.g., customers, peers, NGOs) offered valuable feedback, improving learning outcomes and making IDT phases more tangible.

2. Use Mini Sprints and Focused Workshops

- Condensed activities like mini sprints were highly effective for introducing IDT concepts without overwhelming the course structure.
- These formats worked well for both introductory and advanced students and allowed a quick yet meaningful application of all IDT phases.

3. Emphasize Empathy and Inclusion Early

- Starting the design process with empathy-building tasks (e.g., interviews, personas) helped students better understand diverse user needs.
- This fostered deeper engagement and broadened their thinking around accessibility and inclusive design.

4. Integrate IDT Gradually

- In more structured or technical subjects, a gradual approach using selected IDT phases (like Define and Ideate) was more manageable and still highly effective.
- This also reduced resistance from students and allowed instructors to adapt at their own pace.

5. Provide Scaffolding and Tools

- The use of templates, IDT cookbooks, and structured presentation materials supported both students and lecturers in navigating the process.
- Visual and interactive aids were especially helpful in asynchronous or distance learning environments.

6. Foster Teamwork and Co-Creation

- Team-based work, especially when paired with reflective exercises, enabled collaborative problem-solving and peer learning.
- Students reported improved communication skills and appreciated diverse perspectives during group work.

7. Leverage Existing Strengths and Culture

- Institutions that aligned IDT with existing values (e.g., teamwork, user orientation, innovation) experienced smoother implementation.
- A strong cultural or pedagogical match allowed lecturers to embed IDT naturally within their teaching approach.

Recommendations for Future Implementation

of Inclusive Design Thinking

Based on the collective experience of participating institutions, several clear recommendations can be made for the continued and expanded use of Inclusive Design Thinking (IDT) in higher education. These recommendations are intended to support both institutions and individual educators in effectively embedding IDT into teaching and learning practices, ensuring that its principles are applied in sustainable, inclusive, and pedagogically sound ways.

Recommendations

1. Begin with Partial Implementation Where Needed

- Start small. For subjects with tight schedules or complex content, integrating only select IDT phases (such as Empathy and Define) can still deliver meaningful benefits. Gradual adoption encourages confidence and reduces resistance among both faculty and students.

2. Align IDT with Course Objectives

- Successful implementations were those that aligned IDT phases with subject learning goals—especially when the focus was on problem-solving, innovation, or user-centered design. Ensuring relevance to the curriculum supports student motivation and perceived value.

3. Use Real-World Problems and Stakeholder Involvement

- Authentic challenges, such as testing real systems or solving problems from external partners, enrich the learning experience. Involving users or clients as stakeholders helps students better grasp empathy and user needs.

4. Provide Structured Resources and Support

- Offer templates, example projects, and visual guides to support both students and lecturers. Many reported that the IDT cookbook and ready-made materials significantly eased implementation.

5. Encourage Interdisciplinary and Team-Based Projects

- Co-creation and collaboration across subject boundaries can lead to richer outcomes. Consider joint assignments or multi-subject activities that bring together students with varied backgrounds and skillsets.

6. Address Time Constraints with Focused Formats

- Mini sprints, workshops, and modular tasks are practical ways to implement IDT in time-constrained courses. These allow full-cycle application in a compressed format without overwhelming the curriculum.

7. Invest in Capacity Building for Educators

- Training and peer exchange are essential. Many lecturers expressed initial uncertainty but gained confidence through shared practices, training seminars, and mutual support.

8. Continue to Monitor and Evaluate Impact

- Collect ongoing feedback from both students and staff to refine how IDT is used. Consider formal assessments of learning outcomes, student satisfaction, and inclusivity awareness.

Conclusion

The implementation of Inclusive Design Thinking (IDT) across partner institutions in the EduIDT project has demonstrated the value of integrating human-centered, collaborative, and inclusive approaches into higher education. Through diverse applications across disciplines—from software engineering and 3D modeling to intercultural communication and educational design—IDT has proven to be both flexible and transformative.

Lecturers reported a range of positive outcomes, including increased student engagement, enhanced critical thinking, stronger awareness of accessibility and user needs, and the ability to work effectively in teams. While the method presented challenges—most commonly related to time constraints, lack of familiarity with the process, or curricular limitations—these were largely overcome through adaptation, the use of ready-made materials, and institutional support.

A clear finding across the project was the importance of context: IDT was most naturally embedded in creative and project-based subjects, but it also brought value to technical and theoretical courses when adjusted appropriately. The principles of empathy, inclusion, and co-creation resonated with students, particularly when tasks were grounded in real-world challenges or when they had opportunities to interact with actual users or stakeholders.

From this multi-institutional experience, a set of best practices and concrete recommendations has emerged. These provide a foundation for further refinement and expansion of the IDT approach within and beyond the current project framework. Institutions are encouraged to view IDT not just as a set of tools, but as a mindset that promotes inclusivity, reflection, and shared problem-solving.

Looking ahead, the success of EduIDT suggests strong potential for broader adoption of the methodology across curricula. By continuing to develop tailored resources, training opportunities for educators, and support systems for implementation, IDT can become an integral part of pedagogical innovation in European higher education. Ultimately, the goal is to equip students—not only with technical or theoretical knowledge—but with the creative confidence and inclusive mindset needed to address the complex challenges of today's world.