EDIDESK

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OPEN ACCESS CONTENTS ON DESIGN FOR EQUALITY, DIVERSITY AND INCLUSION FOR HIGHER EDUCATION PROGRAMMES

D 2.1.1.   Research and analysis of teaching contents on Design and EDI

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1. Introduction and Main Goals

This report was developed within the framework of WP2 – "Research and analysis of teaching contents on Design and EDI". WP2 aims to define existing practices and tools used in Design studies within the higher education sector for developing content on Design for Equality, Diversity, and Inclusion (EDI), along with investigating inclusive teaching models and appropriate technologies for fostering inclusive learning environments.

The initial phase of WP2 involved researching best practices for teaching EDI within Design programs (A 2.1). This included compiling a database of institutions offering the most comprehensive teaching content on Design for EDI within undergraduate (UG) and postgraduate (PG) programs.

The objective of this task is to map the landscape of EDI teaching in Design and related fields (e.g., Architecture) at both UG and PG levels in participating countries (Italy, Poland, Slovakia, and Spain). A complementary investigation is performed at the global level through the involvement of Cumulus who run an analysis within its network (comprising over 60 countries) to facilitate a comprehensive analysis. Module coordinators will be engaged to gather syllabuses and extract teaching materials such as themed content on Design for EDI, reference lists, and details on teaching approaches.

An outline of the A 2.3. activities and their implications within the EDIDesK project is shown below.

Framework for A.2.1. in the WP2	
Effect	Researching best practices for teaching EDI within Design and Design-related programs.
Quantitative indicators (as per KPI, see D.1.1.2.)	Quantitative indicators: • N. 30 UG and PG modules/contents in Design and Design-related fields gathered, that deliver EDI contents, in its wider notion • N. 10 UG and PG modules/contents that can be considered as best practices.
Efficacy	Identification of qualitative elements characterizing teaching modules on Design and/or for EDI and virtuosity of teaching practices on EDI.
Expected Results	Map of EDI modules in four European countries.
Links with Activities (As of WP2)	Foundation elements for the progression of work, phenomenological description of EDI in Desin, and knowledge transfer in the field (inclusive teaching and methodologies used by scholars).
Impacts	Data developed in A 2.1. will be used to continue the work for A 2.3. and A 2.4.

2. Structure of the Research and Chosen Methods

The research, comprising data collection, was segmented into three complementary stages aimed at gathering information about EDI-related educational content and identifying best practices, along with associated features of considered modules encompassing contents and teaching methodologies (Figure 1 and Table 1).

The following sections show the structure of the research and a description of chosen methods for the investigations. Specifically, the work followed the following structure:

- Desk research of modules on Design and Design-related fields that deliver EDI, performed in four countries: Poland, Italy, Slovakia, and Spain (see 2.1.).

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- Interviews with selected group of academics running high-quality modules on Design and/for EDI (see 2.2.).
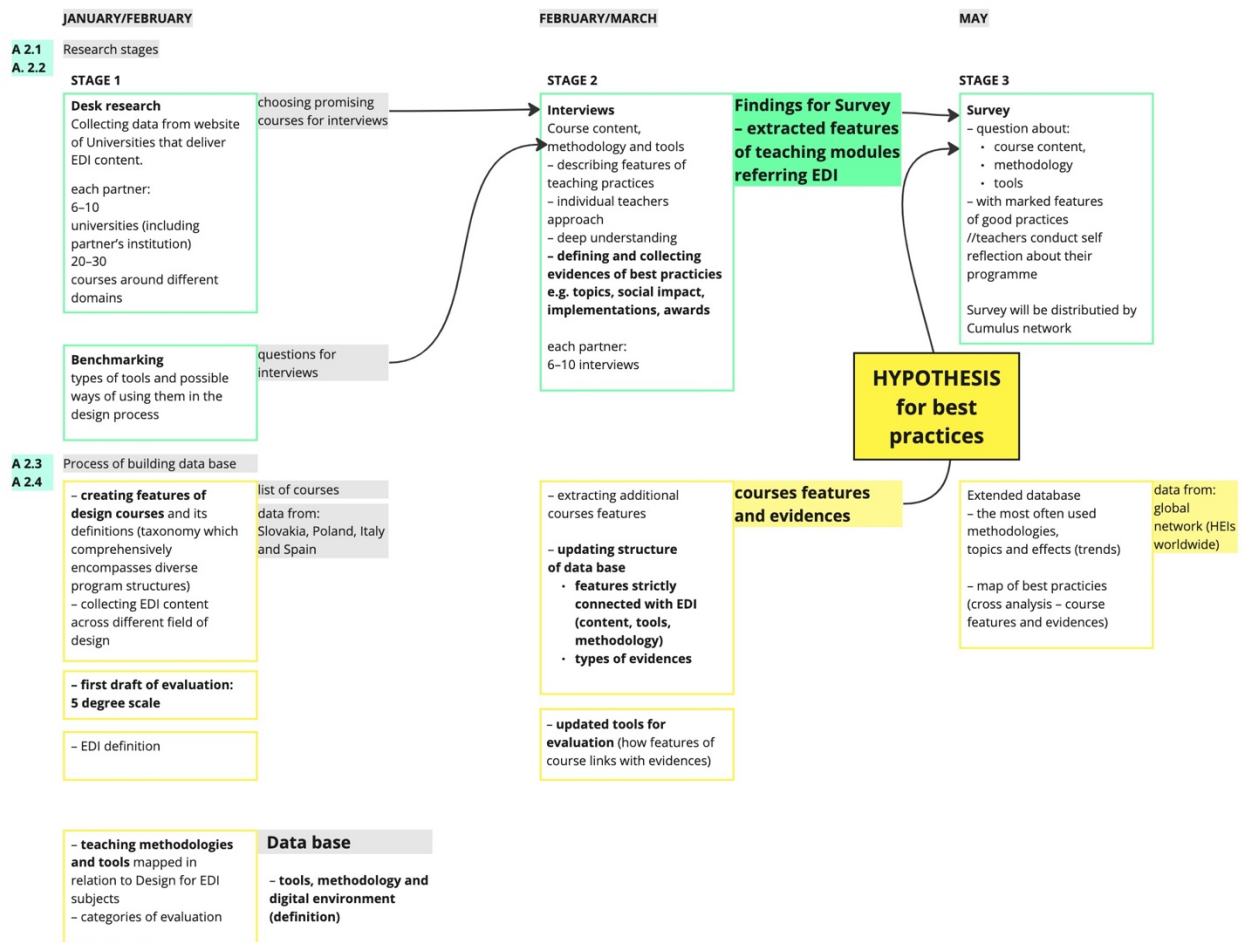- Worldwide survey (complementary data analysis).

Figure 1 – Research structure

Table 1 – Research work schedule

Methods	Aims	Effect	Partners
Desk research	Modules/contents in Design and Design-related fields that deliver EDI contents gathered.	**Database** List of modules/universities described in different categories identifying different areas of EDI in design education (Poland, Italy, Slovakia, and Spain).	ASP UNICH STU ELISAVA
Interviews (6–10 each partner)	Deep understanding of the selected course.	**Interviews** 10 modules/contents (UG and PG) that can be considered as best practices. Hypotheses – features of good practices. Findings of the survey.	ASP UNICH STU ELISAVA
Survey	Gathering data from HEIs worldwide.	**Extended database** The most used methodologies, topics, and effects.	ASP CUMULUS

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2.1. Desk Research of Modules on Design and Design-related Fields that Deliver EDI

A thorough desk research was conducted on academic modules (UG and PG level) that incorporate Equality, Diversity, and Inclusion (EDI) contents. This entailed an analysis of the available contents on university websites from Poland, Italy, Slovakia, and Spain.

Each module was gathered and described using various types of information, then categorized to build a database illustrating different information such as types of modules, EDI content delivered, the level in the Higher Education system (re UG/PG), its integration into academic curricula, and the specific field of design covered (see Appendix 1).

Additionally, an evaluation was performed on each module, scaling the number of EDI-related contents and the outcomes included. This process facilitated the creation of a map illustrating how EDI is integrated into Design and Design-related education and aided in the selection of modules for further investigation (i.e., planned interviews with academics).

The database comprised five categories synthetically described below and extensively in the next sub-sections:

- Basic information (unique information that identifies the module within the educational offer).
- Characteristics of the programme, which considered the type of studies and its positioning within the teaching curriculum.
- Specific contents associated to the module.
- Additional information (optional) regarding specific/unique information about the module.
- Module evaluation on the basis of EDI contents covered.

All gathered information allowed to choose those modules that, better than others, represent the best teaching practices for further investigations.

2.1.1. Basic Information

Items included in the section "basic information" were:
- Name of the course/module.
- Name of the programme.
- Academic institution/department/faculty.
- Country
- Name of teaching staff (or module leader).
- Staff's email address.
- Links.

2.1.2. Characteristics of Module

Items included in the section "characteristics of the programme" were:
- ECTS and/or Credits (also known as CFU) of the module and/or of whole programme.
- Form of the study programme (e.g., bachelor degree, master degree, etc.).
- Type of subject, selected from list comprising: 'basics of design', 'design studio', 'diploma studio / diploma seminar', 'supporting / supplementary subject', 'theoretical subject', 'student activities outside the curriculum'.

To ensure an unbiased comprehension of the type of subject across all partners, Table 2 shows a comprehensive description of above-mentioned type of subjects.

Table 2 – Definition of types of subjects.

Type of Subject	Description
Basics of Design	A foundational course that introduces students to fundamental principles, theories, and skills that are essential for creative expression and problem-solving in the field of Design. This subject typically covers core elements such as composition, color theory, typography, spatial relationships, and conceptual thinking. Students explore these fundamental aspects through both theoretical study and hands-on projects, fostering a solid understanding of design principles that serve as a cornerstone for their further exploration and development within the broader field of design.
Design Studio	In a design studio module, students engage in the execution of complex design projects. These projects vary in levels of complexity, but the curriculum mandates the development of solutions for specific needs. Throughout the module, students actively participate in hands-on design works by applying their creativity and skills to address real-world challenges and produce practical solutions following specified requirements.
Diploma Studio / Diploma Seminar	A module where students work on their graduation project, concurrently developing a written thesis that meticulously documents the entire process, with a particular focus on research aspects. Throughout this subject, students engage in comprehensive exploration, design, and implementation phases, culminating in the creation of their final graduation project. The written thesis serves as a detailed record, providing insights into the research methodology, decision-making processes, and the overall evolution of the project, showcasing the depth of understanding and critical thinking acquired during the module/course.
Supporting / Supplementary Subject	A practical subject not strictly related to a design studio activity. Students do some practical tasks like learning how to use color in design, how to conduct research, learn about technology and do construction, exercise interpersonal communication, etc.
Theoretical Subject	It may refer to a subject that is more focused on theoretical concepts and principles rather than practical applications. Generally, the objective of teaching and learning of theoretical subjects is focused on transferring theories to students, which usually can be underlined for application in design practical subjects.
Student Activities Outside the Curriculum	Any other form of teaching and learning content that programmes may offer in order to enrich the cultural and technical skills of learners, such as visits to companies, informal workshops with stakeholders, guest lectures, student-led projects (e.g., competitions), etc.

2.1.3. Specific Contents Associated to Modules

Items included in the section "specific contents associated to the module" were:
- Main domain considering EDI values (from a selected list agreed by partners and including 'Accessibility', 'Designing for people with disability', 'Diversity', and 'Inclusion').
- Design field of the whole programme (selected from the list: 'product design', 'digital product', 'service design', 'interior design', 'design for public space', 'architecture', 'interior design', 'visual communication', 'research').
- Design field of the module (selected from the list: 'product design', 'digital product', 'service design', 'interior design', 'design for public space', 'architecture', 'interior design', 'visual communication', 'research')
- Keywords of the module that describe EDI contents (individually listed/stated by each module leader).

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2.1.4. Additional Information (optional)

Items included in the section "additional information" were:
- Evidence of external cooperation (name of partner) or involvement of external stakeholders.
- Content: quotes from the syllabus.
- Examples of student's work: title of a selected number of projects carried out by students in the area of Design and/for EDI.
- Links (if available).
- Additional comments.

2.1.5. Module Evaluation on the Basis of EDI Contents Covered

The evaluation of selected modules was conducted using a 5-level assessment scale comprising:

Level 1. The module only covers selected issues about EDI.

Level 2. The module covers selected issues about EDI, and some student works show elements concerning EDI issues.

Level 3. The module covers selected issues about EDI, and most of student work shows elements concerning EDI issues.

Level 4. The module covers selected EDI issues, most student works include elements concerning EDI issues, and a cooperation with an external partner in the area of EDI is carried out.

Level 5. The module is entirely/fully focused on EDI issues, and all student works properly address EDI issues.

2.2. Interviews with Selected Academic Running Modules on Design and/for EDI

The method of interviews with academics was chosen to obtain first-hand and in-depth insights from people directly exposed, or clearly committed, with teaching practices on EDI-related education, either at UG and PG level. Through this method, data on various aspects such as module content, teaching methodologies, and evaluation tools were collected. This approach allowed a detailed examination of teaching practices, including the approaches adopted by teachers into pedagogical environments. It also facilitated a profound understanding of the subject matter, while also aiding in the identification and collection of evidence about best practices.

Modules chosen for interviews were selected from the database prepared in first stage (see section 2.1.). Each partner involved proposed about 6-10 modules that covered different design domains, levels of education, and types of subjects.

The structure of the interview is based on seven groups of questions:
1. Basic information (based on the database that was collected before).
2. EDI approach (information on how teaching staff understands EDI and EDI-related concepts).
3. Experience (information about teaching staff's experience with EDI in the manner of their professional design practice, research practice, or/and didactic practice).
4. Module content (information about topics, issues, type of assignments, competences gained by students, and the outcome of the module).
5. Verification of competences acquired in the area of EDI (information about methods used to verify student's competences after the end of the module).

6. Teaching tools, methods, and teaching aids used (information about specific didactic tools, techniques, simulators, and digital tools used by teaching staff in the module).
7. Links to the curriculum (information on how the module is incorporated in the study programme, within the field of study).

Before the interview, participants were provided a document containing EDI definitions. Such definitions were prepared by project staff to provide a common ground of information on which to discuss the topics of the interview. Participants were also asked to prepare a list of recommended literature on EDI, extracted from their modules and used to teach the different subjects. These steps ensured clarity and preparedness, facilitating more productive discussions during the interviews.

After the interview, the collection of examples of student work was initiated. Teachers were requested to send 2-3 projects showcasing the most significant impact of EDI into education (i.e., best projects made by students in a recent academic year). This included a description of projects, student names, stage of realization, any awards received, and publication in the media. Visual materials and representations (.jpg or .pdf formats) and were also requested to accompany the descriptions.

Each project partner was recommended to record the interview and transcribe relevant aspects into pre-defined classification categories; to do this, research staff utilized a prepared document divided into categories of answers. Each category was intended to be filled in with approximately 500 characters (see Appendix 2).

Analysis of outcomes from interviews became the basis for formulating hypotheses about the features of best practices on EDI and provided insights for structuring the survey planned for the next stages.

2.3. Worldwide Survey

Based on data and insights collected from desk research and interviews, the structure of an online survey was prepared (see Appendix 4). The survey included questions regarding module contents, teaching methodologies, and tools, with an emphasis on the identification of features about good practices. Additionally, teaching staff was prompted to conduct self-reflection on their programs. The survey was distributed within the Cumulus network (over 350 academic institutions working in Design studies) and resulted in an extended database containing information on the most frequently used methodologies, topics, and effects (trends). Through cross-analysis of course features and evidence, a map of best practices was generated.

3. Results

This section contains quantitative and statistical records evinced from the research activity performed by project partners in A 2.1. and portrays the main findings of this analytical task.

3.1. Desk Research

3.1.1. Data from Countries Considered

Through desk research processes, 112 modules from 20 universities were identified as addressing a form of education related to EDI topics, and this included both UG and PG levels of education.

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Specifically, it was possible to identify 64 modules from undergraduate studies, 52 modules from postgraduate studies, and 3 modules from other forms of studies. The collected data indicate that EDI is present in most Design and Design-related programs offered in Poland, Italy, Slovakia, and Spain, as shown in Table 3 and Figures 2-4.

Table 3 –Summary of identified universities, educational modules in the context of study levels, and countries.

Country	Number of universities surveyed	Total number of modules identified	UG modules	PG Modules	Other modules
Italy (including Republic of San Marino)	6	28	10	18	0
Poland*	7	52	32	26	1
Slovakia	3	10	5	5	0
Spain	4	22	17	3	2
TOTAL	**20**	**112**	**64**	**52**	**3**

*Some of the modules are offered at both the undergraduate and postgraduate levels.
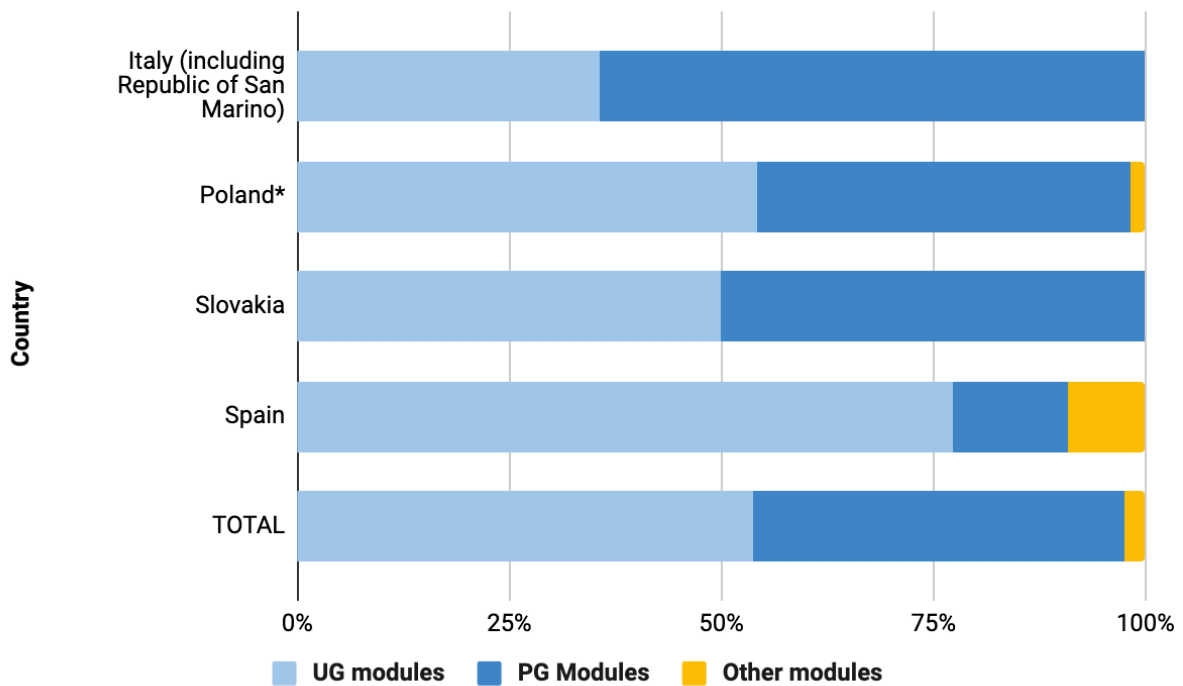
Figure 2 – Chart displaying educational modules in the context of study levels, and countries

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Figure 3 – Database of collected courses prepared in "AirTable" – grid view

Figure 4 – Database of collected courses prepared in "AirTable" – cards view

The collected data (modules) were analyzed for their characteristics, diverse in terms of type, design field, and scope against topics covered by EDI content. They are presented in tabular summaries (Tables 4, 5, 6) to provide better phenomenological description.

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The evaluation of programs was conducted using a scale ranging from 1 to 5, indicating the extent to which they addressed EDI topics and issues (Table 4 and Figure 5). The collected data revealed the following distribution of modules:

- EDI potential **4-5**: 32 modules identified.
- EDI potential **3**: 40 modules identified.
- EDI potential **2**: 24 modules identified.

These data illustrate the varying levels of EDI integration across the considered modules, ranging from those with minimal coverage to those with extensive focus and external collaboration. The research also indicates that EDI is present within design programs, though at different levels of depth and engagement, as evidenced by the covered data.

Table 4 – Calibrated distribution of identified modules according to scopes of content related to EDI.

Type of information	Italy	Poland	Slovakia	Spain	TOTAL
EDI potential 4–5	6	17	4	5	**32**
EDI potential 3	14	20	/	6	**40**
EDI potential 2	2	14	1	7	**24**
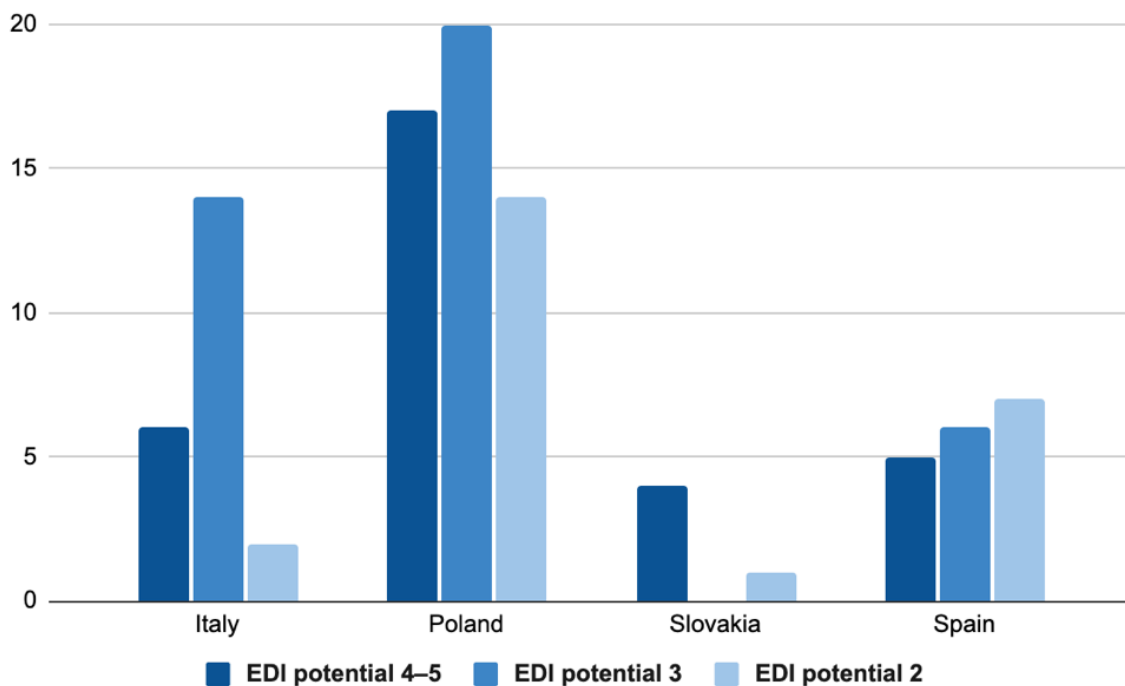
Figure 5 – Chart displaying identified modules according to scopes of content related to EDI

The database also encompasses various types of modules corresponding to program structure. EDI content is incorporated into every identified type of module (Table 5 and Figure 6), representing different stages of education and approaches (i.e., practical or theoretical). The emphasis (number of

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identified modules) varies in each country. Furthermore, the database covers different design domains – we identified modules in 19 domains (Table 6). Some are broad, like design, while others are highly specific, such as interior design or digital product design. These findings also underscore the diversity of approaches in design education across countries (Figure 7).

Overall, the collected database was sufficiently diverse to proceed with the further investigation (interviews with academic teachers) and comprehend different approaches toward various types of modules and design domains.

Table 5 – Numerical compilation of identified modules in terms of types.

TYPE OF MODULES					
Type of information	**Italy**	**Poland**	**Slovakia**	**Spain**	**TOTAL**
Covers the entire degree	/	/	/	3	**3**
Basics of design	20	4	1	2	**27**
Design studio	2	3	1	2	**8**
Diploma studio / diploma seminar	1	3	/	/	**4**
Design studio and diploma studio / diploma seminar	/	35	/	/	**35**
Supporting / supplementary subject	3	4	7	8	**22**
Theoretical subject	2	3	1	7	**13**
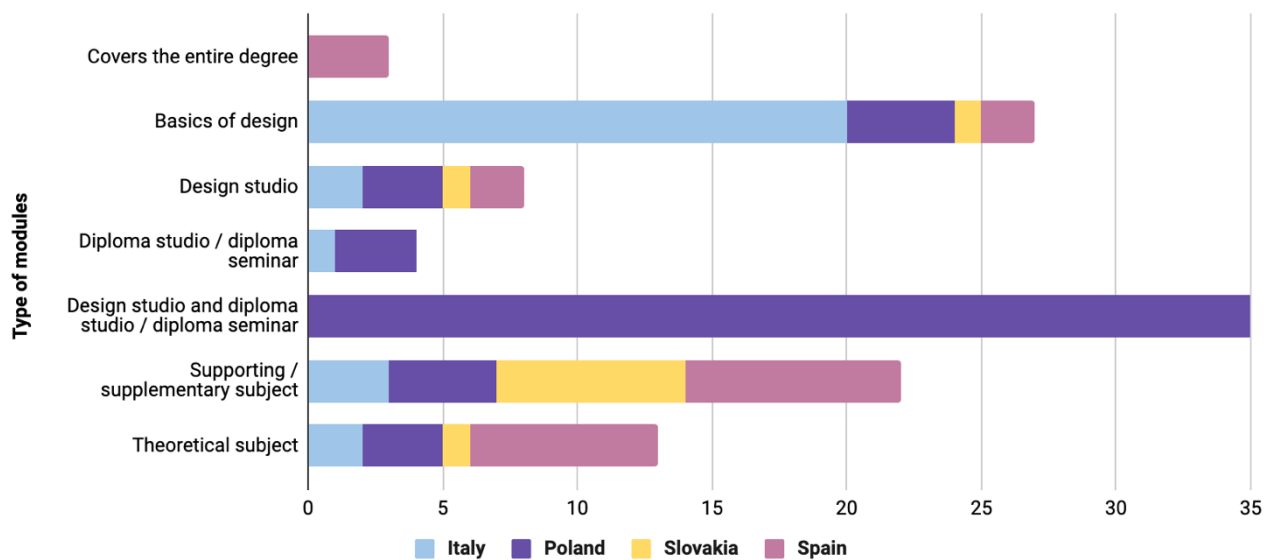
Figure 6 – Chart displaying the numerical compilation of identified modules by type

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Table 6 – Numerical compilation of identified modules in terms of the design fields.

	DESIGN FIELDS				
Type of information	**Italy**	**Poland**	**Slovakia**	**Spain**	**TOTAL**
Design	-	-	-	11	**11**
Product design	11	37	3	7	**58**
Interior design	3	3	2	1	**9**
Industrial design	-	-	-	2	**2**
Architecture	3	-	5	1	**9**
Design for public spaces	4	4	2	-	**10**
Research	-	4	3	-	**7**
Service design	4	6	1	-	**11**
Digital product	9	1	1	-	**11**
Social design	1	3	-	-	**4**
Visual communication	7	7	-	-	**14**
Furniture design	-	1	-	-	**1**
Fashion design	1	1	-	-	**2**
Commercial design	-	1	-	-	**1**
Theory of design	-	1	-	-	**1**
Communication design	1	-	-	-	**1**
Art and design	1	-	-	-	**1**
Product system service design	1	-	-	-	**1**
General psychology	1	-	-	-	**1**

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Figure 7 – WordCloud created from the list of keywords that describe the program modules (created using: https://www.jasondavies.com/wordcloud/)

3.1.2. Modules Selected for Interviews

The criteria for selecting modules for interviews were based on two factors:
- The extent of EDI content within the module
- The aim to cover diverse domains and types of subjects.

Therefore, each partner proposed between 6 to 12 module suggestions. However, the final number of interviews conducted (35) differed from the proposals due to some academic teachers being unreachable. Details about selected modules for interviews are shown in Table 7.

Table 7 – List of modules selected for interviews, and their characteristics.

Country	Modules	Academics	Type of subject	Design field (programme)	Design field (module)	UG/PG	Scale
Italy (1)	**Inclusive Digital Technologies**	F.E. Guida M. Matera	Theoretical subject	Module delivered in different programs	Digital product	PG	3
Italy (2)	**Inclusive Product Design Studio**	G. Di Bucchianico	Basics of design	Module delivered in different programs	Product Design	PG	5

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Italy (3)	**System Design for Inclusion Studio (Design for All)**	G. Di Bucchianico	Basics of design	Module delivered in different programs	Product Design	PG	5
Italy (4)	**Innovation Design Studio**	E. Rossi	Basics of design	Module delivered in different programs	Product Design	UG	5
Italy (5)	**System Design for Inclusion Studio (Digital and Interaction Inclusive Design)**	E. Rossi	Basics of design	Module delivered in different programs	Digital product, Visual communicatio n	PG	5
Italy (6)	**User Centered Design**	E. Attaianese	Basics of design	Module delivered in different programs	Digital product, Architecture,P roduct Design	PG	3
Italy (7)	**Applied Ergonomics**	E. Attaianese	Basics of design	Module delivered in different programs	Product Design	PG	1
Italy (8)	**Social Design**	R. Veneziano	Basics of design	Module delivered in different programs	Digital product, Visual communicatio n	PG	3
Italy (9)	**Ergonomics and Human Centered Design**	L. Botti	Basics of design	Product design	Product Design, Interior design	UG	2
Poland (1)	**Socially Responsible Design Studio**	J. Krokosz M. Mach	Design studio Diploma studio/diploma seminar	Design	Service design, Social design, Product Design	PG	5
Poland (2)	**Qualitative UX Evaluation**	A. Sieroń	Supporting / supplementary subject	Digital product, service design	Research	UG	5
Poland (3)	**Multisensory Design Studio**	O. Kiedrowicz-Świtalska	Design studio Diploma studio/diploma seminar	Product design	Product Design	UG	4
Poland (4)	**Ergonomic Design Studio**	C. Freilich	Diploma studio/diploma seminar	Design	Product Design	UG + PG	4
Poland (5)	**Social Design Studio**	M. Stefanowski	Design studio Diploma studio/diploma	Design	Service design,Produc t Design	UG + PG	4

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			seminar				
Poland (6)	Universal Interior Design Studio	R. Szrajber	Design studio	Interior design	Interior design	PG	3
Poland (7)	Product Design Studio 1	M. Grenda	Design studio Diploma studio/diploma seminar	Design	Product Design	UG	3
Poland (8)	Interdisciplinary Design Studio	M. Filipiak	Design studio Diploma studio/diploma seminar	Design	Product Design	PG	3
Poland (9)	Illustration	J. Szklarczyk-Lauer	Design studio Diploma studio/diploma seminar	graphic design	Visual communication	PG	3
Poland (10)	Typography Studio	T. Bierkowski	Design studio Diploma studio/diploma seminar	graphic design	Visual communication	PG	3
Poland (11)	Tutorial: Commercial Design	P. Rudnicka	Theoretical subject	Design	Commercial design	PG	3
Poland (12)	Social Design Studio	J. Kucharczyk	Design studio Diploma studio/diploma seminar	Design	Service design,Design for public space,Research,Visual communication	PG	5
Poland (13)	Ergonomic Design Studio	A. Sobaś	Design studio Diploma studio/diploma seminar	Design	Product Design	UG	5
Poland (14)	Design Drawing Techniques	M. Latko	Basics of design	Design	Product Design	UG	3
Slovakia (1)	Universal Design	Z. Čerešňová	Supporting / supplementary subject	Architecture	Design for public space,Architecture	UG	5
Slovakia (2)	Humanization of Microenvironment	V. Kotradyová	Supporting / supplementary subject	Interior design	Design for public space,Research,Interior design	PG	4

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Slovakia (3)	**Body Conscious Design**	V. Kotradyová	Supporting / supplementary subject	Product design	Research,Product Design,Interior design	PG	4
Slovakia (4)	**Interdisciplinary Contexts of Design 2 (Ergonomics and Universal Design)**	M. Šimková	Supporting / supplementary subject	Product design	Product Design,Interior design	UG	5
Slovakia (5)	**Humanity in Design**	R. Baďura	Supporting / supplementary subject	Product Design Interior Design	Interior Design Product Design	PG	2
Slovakia (6)	**Ergonomic Design**	P. Wohlfahrt	Supporting / supplementary subject	Architecture	Architecture	PG	1
Spain (1)	**Design, Health and Wellbeing**	L. Macau A. Conejos	Supporting / supplementary subject	Design	Design	UG	3
Spain (2)	**Inclusive Design**	P. González Martínez M. Vidaurre Arbizu	Supporting / Supplementary subject	Design	Design	UG	4
Spain (3)	**Social Design: Care and Common Good**	L. García Diaz	Design studio	Design	Design	PG	4
Spain (4)	**Design for One Health (Master)**	A.M. del Corral	Entire degree	Design	Design	PG	4
Spain (5)	**Design for Diversity (Short Course)**	N. Bueno	Entire degree	Design	Design	Short Course	5
Spain (6)	**Inclusive Design**	J. Gual Ortí	Supporting / Supplementary subject	Industrial design	Product Design	UG	5

3.2. Interviews

3.2.1. Data from Countries Considered

34 interviews with academics were conducted; an example is shown in Table 8. Each partner managed to reach at least 5 academics. Each interview was analyzed, and in addition to preparing a transcription for each interview, ASP also prepared a summary table. This summary was then verified by each partner who provided data. It contains the most important information necessary for formulating hypotheses about the features of best practices for EDI education.

Within each module, the primary focus is on raising students' awareness of how EDI approaches can be implemented in design practice. Some modules emphasize aspects like accessibility or social

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factors such as gender, age, and economic considerations. Certainly, academics argued that the design domain inherently encompasses EDI aspects, and thorough research into people's needs and contexts is sufficient for developing effective solutions.

The diversity of approaches underscores that design education addressing EDI topics and issues is multifaceted, with the utmost importance placed on fostering competences: empathy, the ability to listen (catching real needs), flexibility, the ability to accept feedback, the attitude of not focusing on oneself but on the goal, management and work organization skills, communication both within teams and the users, the ability to building a story about the project – combining conclusions with goals and values from the user's perspective, ability to present the project to various stakeholders.

Table 8 – Example of an interview summary.

CATEGORY	SUMMARY
Module **Tutor**	Tutorial: Commercial P. Rudnicka
Categories of modules	Theory and design research. The module introduces EDI issues; it presents tools and frameworks (dedicated to EDI projects) and its practical use.
Summary including: • **Specific approach towards EDI education** • **Competencies for EDI** • **Place in the curriculum**	Developing critical and ethical thinking among students is the primary focus of the programme, which utilizes dedicated tools and frameworks for an Equality, Diversity, and Inclusion (EDI) approach. Throughout the course, students engage in analyzing various products to discern if they exclude any particular groups and to understand the resulting consequences. The module's curriculum is designed to equip students with the necessary skills to effectively utilize EDI frameworks and tools within their diploma studio projects. They learn not only how to apply these frameworks but also how to evaluate their graduation projects through an EDI lens. As part of their education, students deepen their understanding of the EDI approach and ethics within the design profession. They also develop a heightened awareness of the differences between various social groups. Developing the ability to independently conduct effective desk research, critically analyze statistical data for credibility, and draw valuable insights from existing data for project purposes is a key focus of the program.
Methods of competency verification, e.g.: • **Project evaluation** • **Tests** • **Self-reflection** • **Level of implementation**	Students' competences are verified by two methods: self-reflection, evaluation conducted by other students, and group discussions about the project. This process is engaging and encourages them to reflect on self-development, facilitating the discovery and understanding of the various competences they are acquiring.
Quote	*Some students positively assess the tools presented in the module (tools that support EDI approach) and declare that they use them in other modules, in the design process. Some do not want to use them, and a group exists in between. It greatly depends on what they are involved in. However, those not interested in these tools still haven't recognized how EDI manifests in their design field and do not see the diversity in their user group – often, it involves more artistic domains like animations, illustrations.*

Individual sections presenting information collected through interviews from each country can be found in Appendix 3.

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3.2.2. Summary

Interview analysis was conducted by each partner providing hypotheses about features of best practices in EDI-related design education. A comprehensive overview summarizes the interview data from all countries, highlighting key insights and conclusions grouped into five categories, is presented in Table 9:

Table 9 – Comparison between gathered hypothesis and key insights.

Hypotheses	Key Insights
1. Students' natural predispositions to Design and/or EDI	
The student's natural predisposition (e.g., empathy) and attitude influence the final outcome of the module objectives (student's maturity).	• Student's innate inclination, empathy. • Student's values and cultural context.
In the context of EDI education, it is important that students show a natural willingness to propose solutions without the need for explicit encouragement or suggestion, even outside of the university's teaching and learning environment.	
Do not change someone's belief system unless they are ready. These are ethical issues that everyone interprets individually in accordance with their identity, the cultural circle in which they were brought up, their beliefs and values.	
The student should accept rejections, avoiding focusing on themself when receiving feedback and process it by focusing on the goal and needs of users.	• Students need to learn, to assess situations beyond their initial expectations
Students tend to attach great importance to their own experiences, and in EDI projects it is important that they try to go beyond their own perspective.	
Designing social change requires people involved in the action to break down certain barriers and patterns that require a certain amount of civil courage, perseverance in action and mental resilience – a set of features that not everyone has. Therefore, you cannot evaluate topics for better or worse, thus denying the ideas of EDI.	• In EDI design practice, emotional stability and mental resilience are essential. • Understanding the role of the designer and its limitations is crucial to avoid encountering the barrier of impossibility.
A designer working in the EDI field should be armed with humility, the savior syndrome is extremely common among designers.	
2. Competencies related to EDI	
There are no specific competencies for an EDI specialist; this relates to a specific mindset. Students must be aware that there are no perfect inclusive solutions – including one group can exclude others. Design solutions are based on norms that may not suit everybody. Additionally, the inclusion of solutions can be temporary because the context may change, and new knowledge or technology may emerge. Therefore, constant rethinking and development are necessary.	• Flexibility, openness for changes. • Intersectional thinking. • Transversal competency. • Adapting to different conditions, situations, context.

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Intersectional thinking is needed when designing for EDI. This is not simply designing for disability, but in the broader context of social exclusion and inequality.	
EDI is not a tool it is transversal competency, approach that can be applied in different situations, context, domain.	
The most important competencies for students should be universal knowledge and the ability to adapt to different conditions, enabling them to address problems and areas they have never encountered before.	
A high level of social sensitivity is needed to effectively design solutions in the EDI area – this competence is extremely difficult to verify during university projects.	• Social awareness (reading humans variability). • Capability to identify latent needs. • Objectivity – transcending personal viewpoints. • Discerning causes from effects.
The most important skill is not just solving a problem, but being able to identify it, even if it's not explicitly stated in the brief – it's about surpassing expectations and seeing the potential beyond the given constraints.	
The ability to distinguish between cause and effect is an essential part of the EDI design process and a competency achieved by students.	
The most important outcome of the module should be the competency or predisposition to identify the real need – this is achieved through research, as well as the ability/sensitivity to recognize it.	
Cultural aspects and soft skills are important as much as technical ones. It is important to balance both sides of such learning aspects to provide holistic modalities for consistent learning.	• Balancing soft and hard skills.
When it comes to using the EDI tools or frameworks, the critical approach is essential for a deeper understanding of the issues.	• Critical approach towards standards, tools.
The students should perceive the solution as changing the environment, system, context – not only as a individual product.	• Complex, systematic way of thinking. • Capacity to prioritize, think pragmatically (e.g., the Minimum Viable Product).
In projects dealing with complex issues where the needs must be defined, students should be able to choose the most important ones, propose adequate and implementable solutions that suit the situation, and address the most critical need at that specific moment.	
The student should effectively manage his project by implementing it according to the plan, but at the same time be flexible to returning to earlier stages of the project to verify them.	• Project management skills. • Openness to change.

Students during their education should cultivate the habit of treating people with special needs as equal partners in a project.	• Soft skills, including:
	  o Ability to include users, stakeholders in the process.
	  o Communication and treating users as equal partners.

3. Class arrangements and types of assignments	
Learn students to recognize that EDI is integrated part of the design process rather than being merely one of the approaches – perceiving the humane dimension of design.	• EDI is integrated part of the design process.

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EDI education requires careful consideration about introducing the role of designers – so the students do not feel overwhelmed by the responsibility.	
Simulations cannot be as effective as the direct observations of the users in evaluation of the project. Simulators of paresis, ageing, visual impairment, etc. are supportive tools, increase the empathy, but nobody wears them 24 hours a day, so they only give an illusion of knowledge on the subject.	• The role of simulation lies in deepening empathy but cannot replace evaluation with real users.
Experimenting user disabilities (i.e. simulations and trials led by students that create disabling scenarios to experience) reduces the gap between theories and practical experimentations. In this way, students can experience first-hand difficulties like final users, and they can immediately learn (learning-by-doing).	
Social aspects of EDI need to be introduced with knowledge from anthropology, sociology, environmental psychology, physiology.	• A thorough understanding of social sciences.
EDI is not only about physical disabilities; relational/social and cognitive ones are equally important. Biased knowledge must be avoided.	

The learning environment needs to prioritize fostering engagement and critical thinking by substituting lectures with discussions and diverse activities during classes.	• Engaging modalities for learning including:
	  o Various forms of acquiring knowledge from books and articles.
	  o Practical experience in the field, interacting with real people in real environments.
	  o Providing students with full responsibility for gathering feedback from users and stakeholders.

In terms of methodology, co-design and digital tools are preferred to traditional teaching that uses papers and books. Instead, engaging modalities for learning are much more appreciated.	
Working in the field, with real people and their daily problems, leaves an emotional impact that can change one's understanding of the EDI approach.	
Presenting projects to potential final users and stakeholders is crucial to expand the value of projects. We noticed that there were some interesting experiments made on this matter that provided students consistent feedback - their felt their work valuable and useful,	
Student's reflection about their previous project's diversity or lack of diversity there brings more awareness of EDI in design.	
Including students that may represents vulnerable groups of users into studio activities reduces the barriers between theories and design applications. Other students can learn from their peers.	• A diverse group of students.
4. Competences verification	
The effectiveness of an EDI projects can only be evaluated by the outcome of the tests conducted with the users.	• Assessing the student's project through real-user testing.
The success of the module is measured not only by the final project itself, but also by how the students' perception of the problem has changed and how they have deepened their understanding of it.	• Assessment of problem perception.
Verification of the achieved competences should be carried out through in-depth self-reflection of the student, including an analysis of expectations regarding the achieved results: personal goals, methods of communication, work, and achieved competences.	• Complex self-reflection methods.

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5. EDI's parts in design education	
EDI issues and approaches should be introduced to students in every module, with varying intensity appropriate for the year and the maturity level of the students.	• EDI is introduced gradually, with a focus on developing hard skills, and gradually increasing students' responsibility and independence in conducting their projects.
The EDI issues should be introduced to students gradually from the beginning of their studies. Alongside acquiring hard skills, they should also gain an understanding of the ethical dimensions of the design discipline. And they should also build an understanding that as designers, they are advocates of these values. In the first year, we should provide examples, tools, and methods to facilitate critical observation. In later stages of education, we should provide students with opportunities for their own investigation to identify problems.	
The theoretical knowledge acquired in modules needs to be validated during the following year of study, wherein it is applied practically, with the involvement of the respective teacher from the theoretical module.	• Linking theory and practice.
Triggering awareness on the different aspects of EDI is important as much for teachers as for learners so that it is possible to generate homogenous knowledge that can be shared within whole groups of learners (and this may remain in the future as a best practice to be used).	• Fostering awareness of EDI among students and academic teachers alike.
Projects related to EDI issues are very complex and require a comprehensive approach, so it is important that when working on such projects, students can 'flow' between subjects and laboratories in which a given topic would be implemented. At the same time, considered from many sides.	• Interconnecting modules: students can execute a single project across multiple modules.

3.3. Survey

The survey was completed by 10 academic teachers from 9 countries: Belgium, Ghana, Greece, Italy, Japan, Portugal, Serbia, Spain, and Sweden. Most of the teaching staff that provide an answer have over 21 years of academic experience. Half of the group holds a higher academic degree than a doctorate. Respondents most frequently indicated that they gain experience in EDI through the supervision of student projects. Selected results of the survey on the staff experience and the type of modules taught are shown in Figures 8-11. All results of the survey are included in Appendix 4.
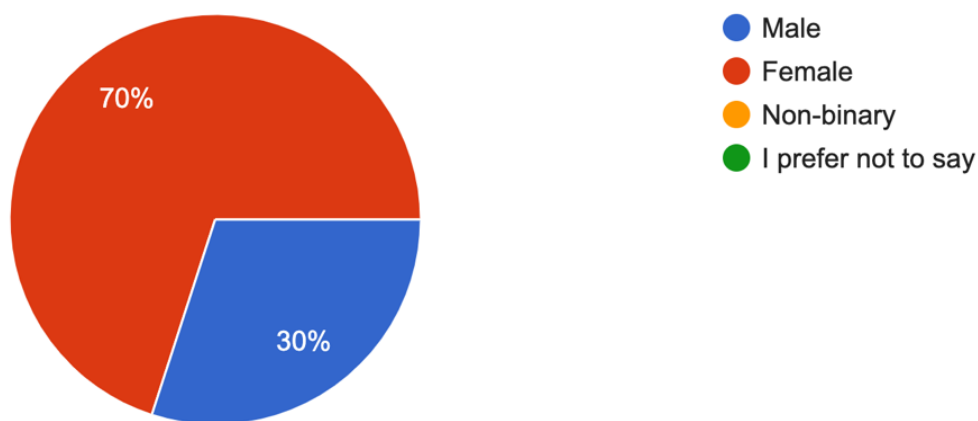

Figure 8 – Gender division among academic teachers participating in the survey
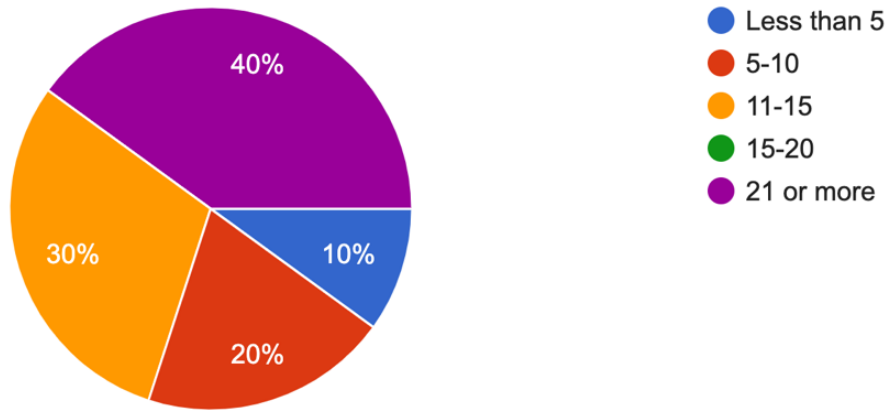**Research and analysis of teaching contents on Design and EDI**

Figure 9 –Years of academic experience among surveyed academic teachers
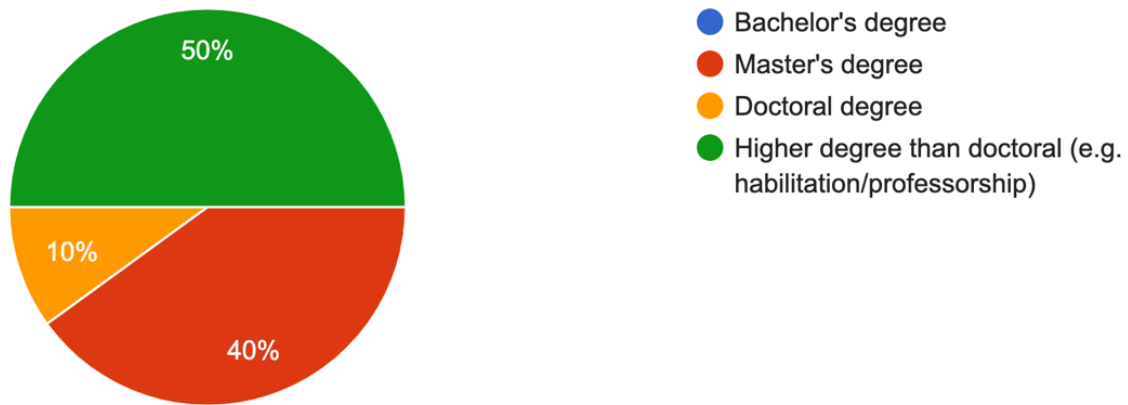

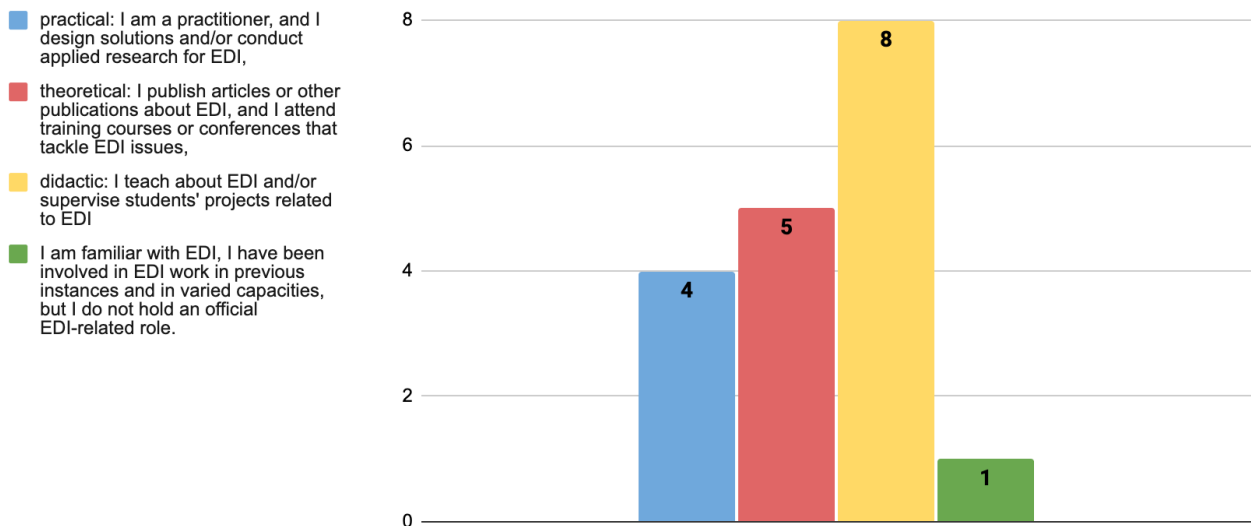**Figure 10** – Academic degree among surveyed academic teachers

Figure 11 – Experience in EDI approach among surveyed academic teachers

Modules delivered mostly cover issues of inclusion and diversity, with equality being less prominent (Figure 12). The areas of design covered by these modules are mostly product design, service design,

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or research (Figure 13). Most of the EDI-related modules are design studios, where the practical approach and the learning by doing are the principal methods used (Figure 14). Students engage in the execution of complex design projects. However, they most frequently indicate theoretical knowledge (e.g., knowledge about EDI, its principles, and methods) as the main EDI competence that students acquire in their modules.

In response to the question about competences, empathy was the most frequently mentioned. The analysis of the answers shows that teaching staff have difficulties when it comes clearly naming competences – answers often addressed elements of the design process, or aspects about types of EDI design.

All respondents agreed with the statement: "In EDI education, empathy may play a crucial role". The most frequently indicated promising methods for creating an EDI-oriented empathetic generation were:

1) Lectures and discussions about diversity.
2) Using simulators that allow students to experience the user's perspective (e.g., disability).

The most frequent answer about the outcome of the module is the project or concept, with competency verification done through project evaluation by the teacher. Most teaching staff indicate that they use students' self-reflection methods.

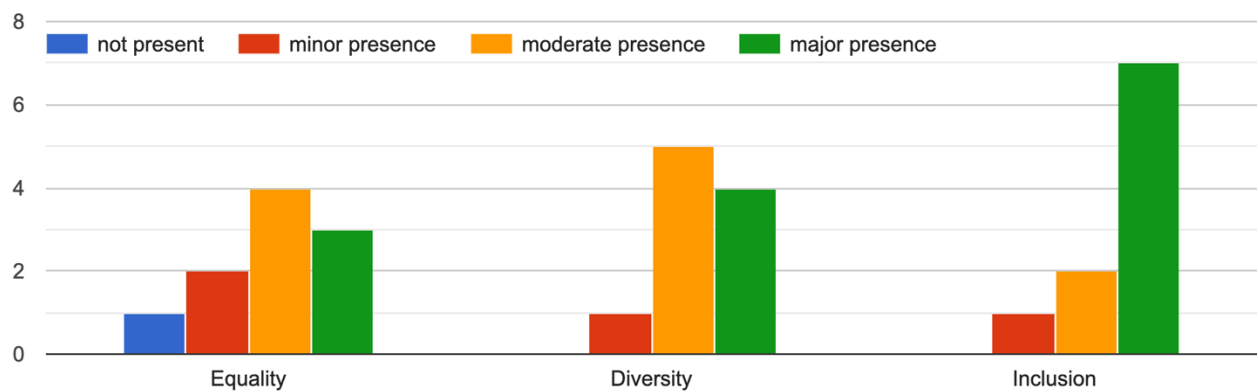## 4.2 How strongly are the following EDI areas present in your module?

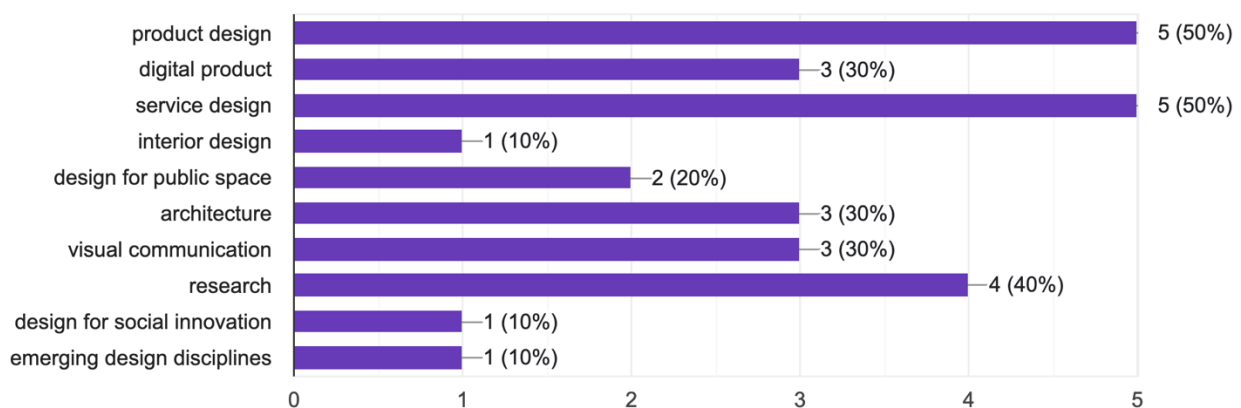**Figure 12** – EDI presence in modules taught by surveyed academic teaching staff.

Figure 13 – Area of design that is covered by the modules taught by surveyed academic teaching staff.

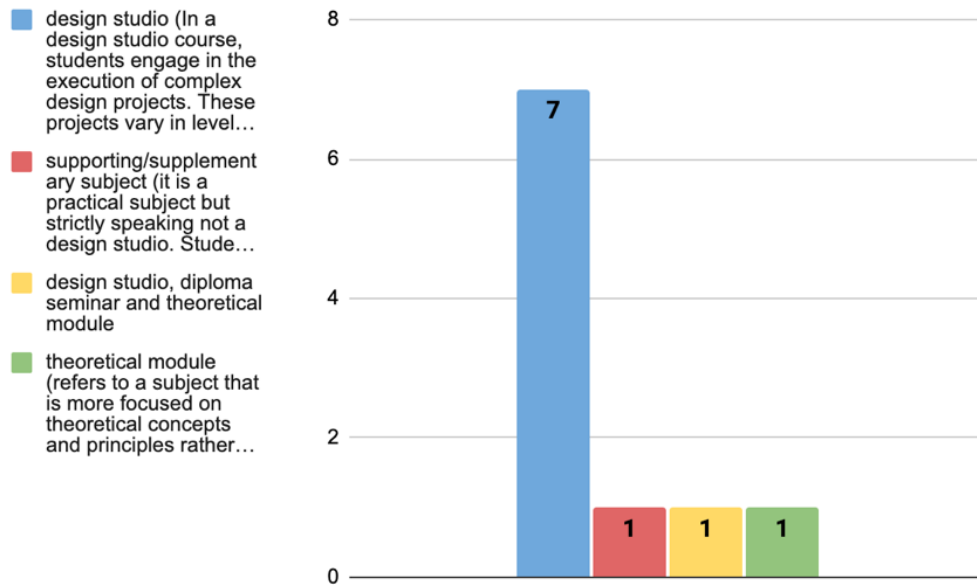**Research and analysis of teaching contents on Design and EDI**

Legend:
- design studio (In a design studio course, students engage in the execution of complex design projects. These projects vary in level…
- supporting/supplement ary subject (it is a practical subject but strictly speaking not a design studio. Stude…
- design studio, diploma seminar and theoretical module
- theoretical module (refers to a subject that is more focused on theoretical concepts and principles rather…

Figure 14 – Type of the modules taught by surveyed academic teachers

4. Summary and conclusion for further research

The research performed in A 2.1. confirms that Equity, Diversity, and Inclusion (EDI) is present in Higher Education sector of Design Studies in Poland, Italy, Spain, and Slovakia. Through extensive data collection and analysis, a good number of examples of educational modules were gathered from these countries. The collected modules encompass a wide range of modules, workshops, and projects that integrate EDI principles into design curricula. Furthermore, the specifics of teaching methods employed within these modules were meticulously examined, including pedagogical strategies, assessment techniques, and student engagement practices.

This comprehensive examination provides a robust foundation for identifying best practices in EDI education within the field of design. By analyzing these diverse examples, educators and curriculum developers can discern which methods and tools are most effective in fostering an inclusive and equitable learning environment. This knowledge will significantly contribute to the development of a cohesive framework for teaching design with a strong emphasis on EDI. Ultimately, these insights will guide the selection of the most effective teaching methods and tools to educate students, equipping them with the skills and knowledge necessary for effective design practice that prioritizes equity, diversity, and inclusion.

Appendix 1 – Database of Collected Modules

Link to EDIDesK Repository Folder for WP2 (public access)

Appendix 2 – Interview Structure

Link to EDIDesK Repository Folder for WP2 (public access)

Appendix 3 – Transcription of Interviews (Poland)

[Link to EDIDesK Repository Folder for WP2 (public access)](#)

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Appendix 4 – Survey Database

[Link to EDIDesK Repository Folder for WP2 (public access)](#)