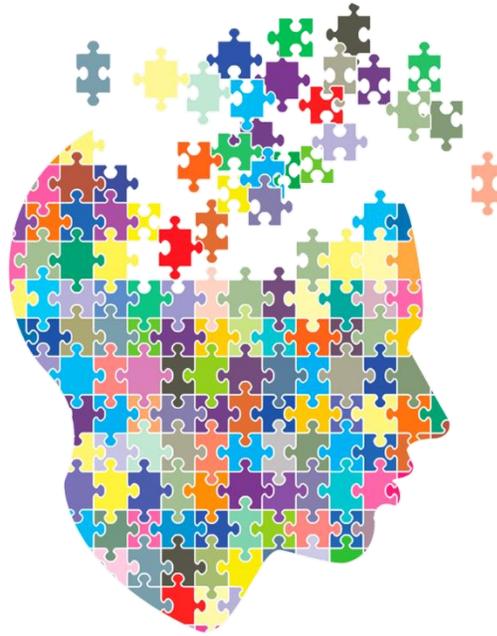




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TUT4IND

Training University Teachers for the Inclusion of People with Intellectual Disabilities

ANALYSIS REPORT: INTELECTUAL DISABILITY IN EUROPE

January, 2021



POLIBIENESTAR
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UNIVERSITÀ
DELLA CALABRIA





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Introduction

This document gathers the results of the framework analysis of the project Training University Teachers for the Inclusion of People with Intellectual Disabilities (TUT4IND) carried out from 2019 to 2022.

To this end, five European countries analysed how intellectual disability is present in the higher education level in this continent through a bibliographic review and a questionnaire titled "Formative needs of university teachers about educational resources for students with intellectual disabilities". This questionnaire was created and distributed within first step of project TUT4IND in order to gather the professional's perceptions about what skills they consider important to know for teaching people with intellectual disability. Thus, the members of the project collected 1.009 responses in the five countries involved: Belgium, Italy, Portugal, Serbia and Spain



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Intellectual disabilities in Europe

Belgium

Intellectual disabilities in Flemish education

In the pursuit of inclusive education, Flanders is not lagging behind. This is partly due to the fact that Belgium has ratified various treaties, including the Salamanca Declaration, UN Convention on the Rights of the Child, and UN convention on the Rights of Persons with Disabilities. Not only did this lead to the creation of the M-decree in primary and secondary education in 2014, this also led to the development of the Codex for Higher Education in 2013 and the Support model for Higher Education in 2017.

Primary and secondary education:

The M-decree in primary and secondary education came into force in 2014, from which the starting point is: as much as possible in mainstream education (Onderwijs Vlaanderen, z.d.). It is the right of students with disabilities to enrol in mainstream education and, when necessary, appropriate support must be provided, or an individual programme can be created. Only when these possibilities and support in regular education are insufficient, the option remains to enrol in special education.

In special education, students are divided into different types according to their needs:

- Type 'basic offer': combination of children with mild intellectual disabilities and children with serious learning disabilities.
- Type 2: for children with a moderate or severe intellectual disability.
- Type 3: pupils with severe emotional and/or behavioural problems.
- Type 4: Children with physical disabilities, including the motor disabled.
- Type 5: for sick children who are hospitalised or stay on medical grounds in a prevention centre.
- Type 6: for visually impaired pupils.
- Type 7: Children with an auditory disability or a speech or language disorder.
- Type 9: Children with autism spectrum disorder

An important condition here is that schools must be able to demonstrate that they have always provided the maximum amount of care and support. In order to have access to special education, a report is required from the Centre for Student Counselling (CLB) after multidisciplinary examination.

Higher education:

The Support Model for Higher Education clearly states that it is the responsibility of the universities and colleges of higher education to ensure that students with disabilities can be included in higher education and that they can organise the necessary support for these students. The codex for Higher Education defines SWD as "students with long-term physical, mental or sensory impairments that may interact with various thresholds to prevent them from participating fully, effectively and on equal terms with other students in higher education" (Art. II.276 §3). In addition, the Codex mentions the importance of treating students with disability the same as students without disabilities. However, in case a SWD needs additional support, they should be able to get this adequate support under the term of 'reasonable accommodations' in order to have the same educational opportunities as their peers. An adjustment is defined as "a concrete measure, of material or immaterial nature, that neutralizes the limiting influence of an inappropriate environment on the participation of a person with a disability. The adjustment that does not impose a disproportionate burden is considered to be a reasonable adjustment" (Art. II.276., §3). It is the responsibility of the student to take necessary steps and contact with student points of the higher education institution, in order to obtain the necessary support and possible reasonable accommodations (*Codex Hoger Onderwijs*, z.d.). Sadly, research revealed that too often procedures in order to obtain reasonable accommodations and necessary support are still too complex, non-transparent and require a great deal of effort on behalf of the students (Emmers et al., 2015).

As a consequence of this trend towards higher inclusive education, the number of SWD in Flemish higher education is increasing (Cnockaert et al., 2010; Emmers et al., 2015). However, when we focus on the group of students with intellectual disabilities, they are hardly to almost not present in higher education (Cnockaert et al., 2010; Emmers et al., 2015). In fact, they struggle even more than other students. A first possible explanation can be the fact that a clear difference exists in the legal framework to include students with intellectual disabilities in primary, secondary and higher education. Whereas for primary and secondary education, guidelines and opportunities exist in both regular and special education for students with ID, hardly any guidelines are present in higher education for this group of students. This becomes clear when looking at the categories used by the Flemish Education Council to categorise SWD: Motor disability, auditory disability, visual disability, learning disability, chronic disease, psychiatric disability, other and multiple disabilities (VLOR, z.d.). When taking a closer look at these categories, it is striking that students with intellectual disabilities are not included and thus it is not illogical that these students are hardly not present in higher education. Not only is the absence of an inclusive policy and practices for students with ID in conflict with



the objectives of Flanders to achieve inclusive education at all educational levels, this also limits possibilities for the students themselves. After all, several studies have shown the importance and positive effects of post-secondary programmes for students with ID such as social and personal development (Hughson et al., 2006) and even employment opportunities (Migliore et al., 2009).

Special needs and teacher education

To become a teacher, one can follow courses at either graduate, bachelor or master level, which then provides you with the opportunity to teach in several educational settings:

- Educational graduate course to teach in secondary education
- Educational bachelor's programme to teach in pre-primary education (basic programme or shortened course)
- Educational bachelor's programme to teach in primary education (basic programme or shortened pathway)
- Educational bachelor's programme to teach in secondary education for 2 subjects (basic programme or shortened pathway)
- Educational master's programme (basic programme or shortened pathway)
- Educational master's degree programme for art subjects (basic programme or shortened pathway)

After completing this teacher course, a higher education diploma (graduate, bachelor or master) is obtained on the basis of which one is allowed to teach. These degrees have a specific level in the framework of the Flemish Qualification Structure (VKS). Qualifications describe what you need to know (knowledge) and be able (capabilities) to do in order to exercise a profession, start a training course or participate in society. In the Flemish qualification structure, the qualifications are grouped at 8 levels, from primary education to university.

We note that this overview of educational studies does not yet contain an explicit reference to teaching students with disabilities. In order to specialise in this area, an additional programme can be followed (bachelor after bachelor): ba-na-ba in special needs education or a ba-na-ba in broadening care and remedial learning. With this programme, participants opt for a specialisation as a teacher, coach or supporter of pupils with specific needs in special and regular education.

Teaching in Flemish higher education does not necessarily require a teacher's degree. However, a bachelor's degree (university colleges) or master's degree (university) must have been obtained. In addition, university colleges and universities are free to decide on a number of matters when recruiting teaching staff, for

example: they can ask for a pedagogical certificate of competence, a number of years of professional experience or additional specialisations. However, since higher education teachers do not necessarily need to have obtained a degree in order to be able to teach, it is therefore not unimaginable that they may feel inadequately prepared to teach students with disabilities. Indeed, studies showed that teachers often do not feel prepared or capable enough (low self-efficacy) to support SWD and they often do not know what kind of support the students need (Alquraini, 2012; Hart, 2006) . This is regrettable, as it may create a barrier to the inclusion of students with disabilities. Another consequence of not having to obtain an educational degree is that the group of higher education teachers is very diverse. Teachers have different profiles and therefore different knowledge, skills and competences. It is therefore necessary to provide this diverse group of teachers with the same knowledge and skills with regard to (teaching) students with disabilities, in order to promote the inclusion of students with disabilities.

Results of the questionnaires in Belgium (Flanders)

In Flanders, a total of 128 responses was received. Descriptive characteristics with regard to having contact with people with ID, specific training to teach people with ID, having experience in teaching people with ID and the Educational level, an overview can be found in table 1.

	Contact		Specific training		Teaching experience		Educational level			
	Yes	No	Yes	No	Yes	No	Graduate	Bachelor	Master	PhD
n	53	72	12	116	28	100	1	18	92	17
%	41,5	58,6	9,4	90,6	21,9	78,1	0,8	14,1	71,9	13,3

Table 1. Characteristics of the Flemish respondents, related to the variables contact, specific training, teaching experience and educational level.

In order to assess whether the importance of transversal training, inclusive methodologies and didactics, specific training and satisfaction with one's own skills and personal training is related to having contact with people with ID, specific training to teach people with ID, having experience in teaching people with ID and the Educational level one has, four one-factor ANOVA's were conducted per independent variable. The level of significance was set at $p \leq .05$.

Four one-way ANOVA's were conducted to compare the importance of transversal training, the importance of inclusive didactics and methodologies, the importance of specific training and the satisfaction with one's own skills and personal



training between people depending on the fact that they **previously had contact** with people with intellectual disabilities (Yes or no). Only one significant difference existed between groups, with regard to **satisfaction** with one's own skills and personal training ($F(1,126) = 11.974, p = 0.001$). People who reported having contact with people with intellectual disabilities before, showed greater satisfaction with one's own skills and personal training.

Four one-way ANOVA's were conducted to compare the importance of transversal training, the importance of inclusive didactics and methodologies, the importance of specific training and the satisfaction with one's own skills and personal training between people depending on the fact that they **received a specific training to teach** people with intellectual disabilities (Yes or no). Only one significant difference existed between groups, with regard to **satisfaction** with one's own skills and personal training ($F(1,126) = 6.192, p = 0.014$). People who reported having received specific training to teach people with ID, showed greater satisfaction with one's own skills and personal training.

Four one-way ANOVA's were conducted to compare the importance of transversal training, the importance of inclusive didactics and methodologies, the importance of specific training and the satisfaction with one's own skills and personal training between people depending on the fact that they have **experience in teaching students with ID** (Yes or no). Only one significant difference existed between groups, with regard to **satisfaction** with one's own skills and personal training ($F(1,126) = 7.629, p = 0.007$). People who reported having taught to students with ID, showed greater satisfaction with one's own skills and personal training.

Four one-way ANOVA's were conducted to compare the importance of transversal training, the importance of inclusive didactics and methodologies, the importance of specific training and the satisfaction with one's own skills and personal training between people depending on the **educational level** respondents have obtained (graduate, bachelor, master, PhD). **No significant differences** between different groups were found.



Italy

Legislation on Intellectual Disability in Higher Education and Universities

In addition to what has already been said in the April 2020 report, the main regulatory measures in favor of students with disabilities in the university environment are as specified in laws 104/92 and 17/99. Furthermore, the law 170/2010 must be added: it is relating to specific learning disorders in schools.

More specifically, disabled students, enrolled in the university, could benefit from specific technical and teaching aids, as well as from the support of specific specialized tutoring services, set up by the universities.

Furthermore, Institutions and public universities can independently provide for the granting of total or partial exemptions from the registration fee and university contributions.

The University of Urbino is organizing a Training Course for interpreters of the Italian Sign Language and one course on inclusive teaching for Tutors, as well as other initiatives deriving from this research project (TUT4IND).

Furthermore, two study rooms have been equipped with specific tools for the study and digitization of textbooks for students with various disabilities.

Training courses for students and teachers related to Intellectual Disability

Italian law states that enrolment in university courses is allowed to all students with a five-year high school diploma. For students with ID in higher education, one of the following two paths can be followed in relation to their competences:

- *Personalized*, which aims at following the didactic planning of the class with some personalization, so that the student with ID can achieve a basic level (with minimum objectives) of the program. The final evaluation is carried out with the same tests as the other students or with equivalent tests. In this case, the student acquires the diploma that allows the enrolment in the University;

- *Differentiated*, where the student with ID follows a completely different educational path, compared with that one followed by his peers, with completely different objectives and with different checks. In this case, he gains a certificate that does not allow enrolment in the University.

Therefore, not all students with ID can enrol in the University and for those students who get to, there are no special courses, but only some aids are thought to let them to attend the University like all other students.

This particular situation in Italy derives from the choice, at all levels - from kindergarten to university - to organise a path for students with disabilities in the mainstream classes as their typically developing peers.

In light of the above mentioned situation, the students with ID enrolled in the university is smaller and smaller, compared to students attending higher education. Furthermore, there are some evidences about an inadequate training of university teachers to address the needs of students with ID, as regards the knowledge of their learning habits, the strategies to be adopted to facilitate it and the most appropriate approach towards them in order to establish meaningful communications.

University teachers are poorly prepared to deal with these situations and do not appear very willing to modify their teaching to meet the needs of students with ID. It is thought that, once you enter the University, everyone must learn in the same way. For this reason, it is important to prepare a training course and specific guidelines that can give support whatever the discipline is taught.

In addition, to ensure that the student's university experience is meaningful, it is necessary to prepare the entire academic organization in order to foreseen particular measures regarding the reception arrangements and the student's future stay in an academic environment. It is a question of removing barriers or at least mitigating their impact and implementing facilitation actions that increase the accessibility and usability of academic courses.

The training of tutor students should also be provided. These tutors will be in close contact with ID students (for exam preparation, notes management, concept maps, daily study and relationship life, etc.).

A parallel path for assessing the skills of students with ID and specific training for a career orientation must also be built, so that any interruption of the university path before graduation can still lead to the possibility of taking on a job role after having performed a period of inclusive life at the University.



Profile of teachers attending the course

As written in the previous point, it is necessary to train Italian teachers to help them achieve specific personal and professional expertise with the goal to promote the profile of an inclusive teacher according to the guide lines of the European commission (European Agency for Development in Special Needs Education, 2012, *Profile of Inclusive Teachers*. <https://www.european-agency.org/projects/te4i/profile-inclusive-teachers>).

From the personal point of view, it is necessary to pursue the following objectives:

- Teachers will gain the ability to evaluate student diversity and consider this diversity as resource and richness;
- Teachers will gain the ability to support students, while maintaining high expectations for the academic success of each student;
- Teachers will gain expertise in establishing fruitful collaborations with other colleagues, specialists and tutors;
- Teachers will improve their ability to positively face and solve problems, as well as make relevant decisions (*problem solving* and *decision making*);
- Teachers will increase their ability to maintain self-control when facing potentially stressful situations while keeping high the quality of their interactions with other people.

From the professional point of view, it is necessary to pursue the following objectives:

- Teachers will gain knowledge and use of evidence-based strategies to foster learning with students with ID. Among these, the strategies worth mentioning are those of cognitive-behavioral derivation, based on a guided modeling with decomposition in gradual steps and frequent feedback, focused on relevant information and free from distracting elements. Also, the collaborative strategies as cooperative learning and peer tutoring and metacognitive strategies and strengthening of the study method are important. The usefulness of more traditional strategies as the direct teaching should also be highlighted. The traditional strategy includes an explicit and systematic teaching from the teacher, based on planned lessons, frequent evaluations and targeted feedback;
- Teachers will learn to adapt the subject to meet the particular needs of students with ID. It is about dividing the course into well-defined parts with formative evaluations at the end of each one; provide the students with



content in advance so that they can organize their comprehensive processes; adapt and organize the contents according the UDL principles.

Among the activities that can be foreseen to pursue the training objectives indicated above, there are:

- Realization of video lessons in which the specific learning difficulties encountered by students are dealt with ID;
- Collection of texts with biographies of people with ID that also highlight the affective-emotional conditions related to the period of adolescence.
- Collection of examples of the use of strategies to facilitate learning available online;
- Collection of video conferences on personal skills, which can also have an impact on the professional competence of high school and university teachers. This consists on the ability to deal with problems and make relevant decisions, improve self-control, face potentially stressful contexts while maintaining high quality of relationships.

In this experimental phase, it is expected that the attendance of the following teachers will be favored:

- Structured and contract university professors who teach different courses, especially humanistic courses, because students with ID mostly attend humanistic degree;
- Teachers who take care of the laboratory activities related to the various university courses;
- Teachers who follow the training of university students at professional institutions.

Results of the questionnaire

Sample

The study sample consists of 253 Italian university teachers (M years 50.4 SD= 9.83) 47, 82% males, 51,38% females and 2 (0,8%) unspecified, average age of experience in university teaching 17, 28 years (SD= 9.09). As for the academic role, 60% of the respondents are full and associate professors, 33% are assistant professors, 2% contract professors, 3% PhD students and 2% research fellow. Of them, 46% teach technical scientific disciplines and 54% humanistic-social disciplines. Most of them (98%) teach in a public university, while 2% in a private one; 14% of the participants teach in a university of the Northern Italy, 47% of the Southern Italy and 39% of the Central Italy.

Results

Examining the answers provided in the first section of the questionnaire, "General information", we observe that 83% of the sample declares they have never received specific training to teach students with intellectual disabilities. Of the remaining 17%, 3% received the specific training from their university, 9% from a public institution and 5% from a private institution. However, to the question "Have you ever taught to people with intellectual disability?", 50% of the sample reported an affirmative answer. Of these, 41% report of having taught people with intellectual disabilities in the university setting, 7% in the non-university setting and 2% in both the university and non-university setting. Also, to the question "Are you used to treat with people with intellectual disability?" 42% answered "no", 5% "Yes, in family environment", 25% "Yes, in work environment", 14% "Yes, in work and in other environment", 2% "Yes, in work and in family environment"; 1% "Yes, in work, in family and in other environment", 11% "Yes, in other environment". Regarding the question "Does your institution (university) include supports (formation, counselling) for teachers with students with intellectual disabilities?" 39% answered "I don't know", 29% "no" and 32% "yes". Furthermore, most of the sample (91%) say that training on intellectual disabilities could be important for improving their teaching activity ("Do you think this kind of training is important for your professionalism?"). Regarding the question "Does your institution (university) include any kind of service of attendance to people with intellectual disabilities?" 76% answered "yes", 5% "no" and 19% "don't know". To the question "Do you think people with ID can attend university degree level courses with little support?" 91% replied "yes". This result is confirmed in the item "Do you think it could be useful to establish an ad hoc university course for people with ID?", where 65% answered "yes".

Regarding the second part of the questionnaire, "Cross training formation" (Figure 1), most of the sample recognizes the importance of the contents of this section in the training of university teachers on intellectual disabilities (ID), the average scores are, in fact, between 4.31 and 3.88:

- Item 1 "Knowledge about ID (evolutive development, specific characteristics, etc.)" (M= 4.16 DS= 0.95);
- Item 2 "Special conditions and information about ID learning process" (M= 4.31 SD= 0.93);
- Item 3 "Special conditions and information about ID learning process" (M= 3.88 SD= 1.18);
- Item 4 "Tools and technics of motivation" (M=4.09 SD=1.06);
- Item 5 "Risky conducts intervention skills" (M=3.95 SD=1.12);
- Item 6 "Diversity management" (M=3.81 SD= 1.13);



- Item 7 “Principles for Inclusive Education” (M=4.10 SD=1.08);
- Item 8 “Existential projects to enhance quality of life of people with ID” (M= 4.13 SD= 1.05).

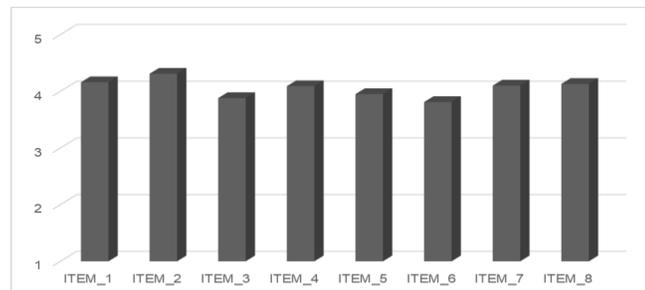


Figure 1. Average of responses “Cross-training formation”.

Analysing the answers provided in the questionnaire section “**Inclusive methodology and didactics**”, a common response emerges on the importance of receiving training on the different inclusive teaching strategies.

- Item 9 “Curricular adaptations and scheduling” (M=3.70 SD= 1.24);
- Item 10 “Types of support (number of teachers, services, tools, technics, etc)” (M= 4.21 SD=0.95);
- Item 11 “Universal Design for Learning (UDL)” (M= 3.75 SD=1.13);
- Item 12 “Cooperative learning” (M= 3.90 SD=1.04);
- Item 13 “Based project learning” (M= 3.83 SD= 1.05);
- Item 14 “Study of cases” (M= 3.76 SD=1.11);
- Item 15 “Based problems learning” (M=3.92 SD= 1.09);
- Item 16 “Gamification and other actives methodologies” (M=3.67 SD=1.13);
- Item 17 “Tools and technics of augmentative and alternative communication” (M= 3.92 SD=1.03);
- Item 18 “Tools and technics of communication (speaking/writing)” (M=4.08 SD= 0.94);
- Item 19 “Tools and technics of support and enhancement” (M= 3.90 SD=1.03);
- Item 20 “Tools and technics of groups management and dynamization” (M=3.85 SD=1.12);
- Item 21 “Technology apps as teaching resources (blogs, forums, social networks, virtual spaces, etc...)” (M=3.68 SD=1.13);
- Item 22 “Interaction with families and professionals related with the students” (M= 3.92 SD=1.13).



Even for the Items of the "Specific formation" section, most teachers recognize the importance of the contents indicated in the training of teaching staff. Below are reported the Items of this part and their average score:

- Item 23 "Emotional intelligence" (M=3.97 SD=1.04);
- Item 24 "Vocational orientation" (M=3.98 SD=0.99);
- Item 25 "Development of social abilities" (M=4.21 SD=0.92);
- Item 26 "Basic economy (management of personal profits and resources)" (M=3.53 SD=1.17);
- Item 27 "Conflicts resolution in daily life" (M=3.89 SD=1.11);
- Item 28 "Active citizenship" (M= 3.89 SD=1.17);
- Item 29 "Computing (skills on digital tools)" (M=4.11 SD=0.97);
- Item 30 "Study strategies (specially for students with ID)" (M=4.32 SD=0.87).

In the analysis of the answers provided in the last section of the questionnaire, "Competences and personal formation", in which the subject indicates his degree of agreement / satisfaction (from 1=not at all to 5=very much) with his current situation, we observe that to the question "Do you think your current training is adequate for the special educational needs encountered?" 60.1% give a score between 1 and 2, 24.1% have a score of 3, 10.7% a score of 4 and 5.1% a score of 5 (M=2.32 SD= 1.15). Regarding the question "Do you have time enough to train your inclusive education skills for people with intellectual disabilities?" 15% provide a score of 1, 30.4% have a score of 2, 33.6% a score of 3 and 20.9% a score between 4 and 5 (M=2.66 SD=1.08). In the question evaluating inclusion in the university setting "Do you know how is present the inclusion in the national and university laws?" 41.5% give a score between 1 and 2, 23.3% a score of 3 and 17% a score of 4 and 18.2% a score of 5 (M=2.91 SD=1.39).

Moreover, regarding the skills necessary to teach people with disabilities, to the question "Do you have knowledge and specific skills enough to teach people with intellectual disabilities?" 51.4% attribute a score between 1 and 2, 26.1% a score of 3, 16.6% a score of 4 and 5.9% a score of 5 (M=2.54 SD=1.19). These data are confirmed in Item 36 "Do you think you are able to adapt the materials and facilities for people with intellectual disabilities?" (45.08% score between 1 and 2, 28% score equal to 3, 15.4% a score of 4, 10.7% a score of 5, M= 2.68 SD= 1.27) and 37 "Do you have knowledge enough about learning methodologies and strategies to adapt to people with intellectual disabilities?" (54.9% score between 1 and 2, 23.3% a score of 3, 14.2% a score of 4 and 7.5% a score of 5, M= 2.49 SD=1.22). Analysing the answers provided to the question "Do you have communication skills enough to



teach people with intellectual disabilities??” 38.7% reported a score between 1 and 2, 27.7% a score of 3, 22.5% a score of 4 and 11.1% a score of 5 (M=2.92 SD=1.21).

QUESTION		M	DS
31.	Do you think your current training is adequate for the special educational needs encountered?	2,32	1,15
32.	Do you have time enough to train your inclusive education skills for people with intellectual disabilities?	2,66	1,08
33.	Do you know how is present the inclusion in the national and university laws?	2,91	1,39
34.	Do you have knowledge and specific skills enough to teach people with intellectual disabilities?	2,54	1,19
35.	Do you have communication skills enough to teach people with intellectual disabilities?	2,92	1,21
36.	Do you think you are able to adapt the materials and facilities for people with intellectual disabilities?	2,68	1,27
37.	Do you have knowledge enough about learning methodologies and strategies to adapt to people with intellectual disabilities?	2,49	1,22

Table 2. Competences and personal formation.

Portugal

[Law context for Inclusive Education in Portugal in higher education + survey data analysis](#)

Between 1974 and 1986, education faced in Portugal great challenges because of political and social instability resulting from the post-1974 regime transition. Regarding the education system, the first Framework Law, law 48/86 of October 14 (hereinafter referred to as LBSE) aimed to establish the general structure of the Portuguese education system. Article 2 states that all Portuguese have the right to education and culture, in accordance with the Constitution of the Portuguese Republic and it is the State's responsibility "to promote the democratization of education, guaranteeing the right to a fair and effective equal opportunity in school access and success"¹ (ME, 1986, p. 3068).

As such, the LBSE established a legal framework covering different angles, as Article 16 referred to the various modalities of school education, namely: "a) Special education; (b) vocational training; (c) recurrent adult education; (d) distance learning; e) Teaching Portuguese abroad" (ME, 1986, p. 3068). In line with this Article, Article 17 clarified the scope of the special teaching modality drawing attention to "the socio-educational recovery and integration of individuals with specific educational needs due to physical and mental disabilities" (ME, 1986, p. 3068).

Special education was, therefore, from the onset, a political and legislative concern which substantiated the idea of seeking to build a more inclusive school, much in accordance with LBSE tenets. Decree-Law No. 319/91 of August 23 represented, therefore, for a long time, the major guideline for schools. Its principles envisioned, at the time, the need for a school for everyone.

Later, resulting from the UNESCO Salamanca Statement in 1994, the Government approves decree Law No. 3/2008 of 7 January. Its preamble underlined the political will to "plan a flexible educational system, defined by a global integrating policy to improve the quality of teaching" (ME, 2008, p. 154). Besides aiming at improving the quality of education it would also stress the importance of granting equal opportunities to all students with different conditions and needs in a democratic and inclusive school. It therefore advocated the inclusion of people with disabilities at all school levels of the Education System, from pre-school education to higher education, thus ensuring the same possibilities for educational

¹ All quotes are translated by the authors.

opportunities offered to non-disabled people, whether in the school access or results.

In the present, the Decree-Law No. 54/2018 of July 6 has a more overarching scope. Safeguarding the ideas of plurality, equity and social cohesion, it defends an inclusive school where all students should be given equal opportunities, accommodating their requirements and expectations, and facilitating their training and learning “within the framework of a common and plural educational project (...)” (ME, 2018, p. 2918).

This proposal introduces a universal model for learning centering on a multilevel approach to curriculum access. This approach is based on flexible curricular models, systematic monitoring and different intervention levels, dialogue between teachers, parents and students, always taking into account the students' different needs. It also rejects the concept of categorisation (ME, 2018, p. 2918).

It was thus vital to create a “Profile of Students leaving compulsory schooling” (Martins, Gomes, Brocardo, Pedroso, Acosta Carrillo, Ucha, ... & Rodrigues, 2017), based on the humanist approach to provide education for all children, young people and adults.

Bearing in mind this assumption, it is urgent to include students with special health needs (SHN) at all levels of education so that they become more enlightened and responsible citizens, able to make informed decisions, and more qualified with a chance of finding a job that suits their needs. Inclusive education is a universal right, and, subsequently, including students with SHN in higher education must also be promoted to safeguard their full citizenship.

The inclusion of students with SHN in higher education: legislation and practices

In recent decades, there has been a considerable increase in students with SHN in Higher education (HE). Despite the absence of mandatory national regulation in this field, Higher Education institutions in Portugal have tried to adjust to these demands creating their own internal regulations. Following the Salamanca Statement Framework for Action, the Higher Education General Board created a Special Contingent for candidates with physical or sensory disabilities, enforced in the 1990s. This created a quota access system, enabling students with SHN to enter higher education.

In 2012, Decree no. 195/2012 of June 21, Art. 29, was published by the Ministry of Education and Science, which deals with the instruction of the application

process for vacancies for students with physical or sensory disabilities, which has better cleared the application process.

Decree 197-B/2015 established a special quota of access to higher education for students with physical or sensory disabilities of 2%, meaning 2 vacancies for each institution/degree. Now, a special contingent was created with 4% of the vacancies fixed for the first phase of the national application period and 2% for the second phase, as one can read on the official site of the Higher education General Board.

In the HE application regulations, a person with a disability is considered to be one who, due to loss or anomaly, congenital or acquired, of body functions or structures, including psychological functions, presents specific difficulties susceptible to, in conjunction with the factors of the environment, limit or hinder the activity and participation on equal terms with other people (as can be read in the Regulation of the National Contest for Admissions to Public Higher Education, and Enrollment in the academic year 2020-2021, Decree No. 180-B / 2020, of 3 August DGES, 2020).

This framework includes people with (i) physical, congenital or acquired permanent motor disabilities, (ii) people with sensory disabilities (visual, with marked difficulties in reading and writing communication, in learning and applying knowledge, severe or profound bilateral degree hearing impairment and (iii) people with significant limitations in terms of activities and participation, in one or more domains of life, resulting from permanent functional and structural changes, with continued difficulties, namely in the areas of learning and application of knowledge, oral and written communication, receiving information, mobility, autonomy in activities of daily living and interpersonal relationships and social participation." Students with intellectual disabilities fit in in this last category.

According to the General Board of Statistics for Education and Science (2019, pp.1-2), the number of students with special health needs enrolled in Portuguese higher education institutions in the academic year 2018/19 was 1 978 students. Of these, 86% attended public education (1,700) and 14% in private education (278). Comparing to the number of pupils enrolled in 2017/18 (1 644), there was an overall increase of 16.9%, in public education of 11.5% (from 1 504 to 1 700 students) and in private education of 49.6% (from 140 to 278 students).

In the 2017/18 academic year, 526 students with intellectual disabilities completed different training in higher education institutions, 85% in the state system, and 14,3% (75) in the private one. Of the 526 students in 2018, 13,3% completed higher professional technical courses, 65,8% (346) graduated (BA), 10,6% (56) did a MA or an integrated MA (9,5% (50)), and 0,76% (4) are now holders of a PhD.



Although Law No. 37/2003 of 22 August, which establishes the bases for financing higher education, stated that "specific support to be granted to students with disabilities" should be considered (cf. §4, Article 20.º), there is still no legislation that explicitly indicates the obligation to provide reasonable adaptations to these students. This evidence is confirmed by data from the aforementioned survey by DGEEC, which reveals that in the total of higher education institutions that responded (111), only 65 (58.8%) indicate that they have some type of regulation for students with special health needs. In 25 of these institutions (22.5%) there are specific provisions, in 42 (37.8%) there are regulations or statutes specific to these students and 15 (13.5%) reveal that they enforce other types of regulation.

Nonetheless, Decree-Law n. 54/2018 of 6 July is very clear about the inclusion process of students with special health needs, higher education included, as it states the need for every school to acknowledge students' diversity and needs, finding ways of dealing with difference and providing for the right support to students so they can learn and become active citizens.

This may lead to greater accountability of Higher Education Institutions (HEIs) and their professionals, acknowledging the need for better training, as an active part of educational teams in defining strategies and monitoring curriculum diversification, so that they elevate the quality standards of the different education and training offers. This decree is essential to promote and support access to training, higher education and integration into post-school life (Art. 13 (b)). In addition, it opens doors for the reorganization of Higher Education Institutions in order to receive students with SHN, where students with intellectual disabilities are included.

However, the entry of students with SHN in higher education must be supported by specific regulations, but at the same time an effective support for these students. Coming to a different, unknown environment, with new colleagues, an academic environment that is not very stimulating or excessively demanding, does not favour their inclusion (Abreu & Antunes, 2011, Fernandes & Almeida, 2007). For this reason, HE institutions must organise themselves in order to enable the best integration and insertion of these students in a collaborative and welcoming environment.

[Course for students with intellectual disabilities \(ID\) in Portugal](#)

In Portugal, a higher education institution opened in the 2018-19 academic year a two-year training course on inclusive education, aimed at students with ID equal to or greater than 60%. It is called Digital Literacy for the Labour Market and is the 1st of this type in Portugal. This is a course that does not grant any degree, but



students will receive a certificate that will qualify them to become environmental guides, tutors of monuments and storytellers, gardeners, employees in ecotourism and eco camping companies or in social institutions and companies, among others. In this way, it minimizes the lack of adapted professional training, with which families of young people with intellectual disabilities are faced. This course was not preceded by ministerial approval, but responds to the recommendation of the National education, as well as the guidelines of the Minister of Science, Technology and Higher Education, responding to the need to expand the training offer of higher education to new audiences. It also aims to promote personal development, well-being and social and labour inclusion from the higher education environment. This course has undergone a process of training of non-teaching staff and the establishment of a group of volunteer teachers to teach the course units of the curriculum of this course. The entire structure and contents of the course have been adapted. The main objective is to promote independence and self-esteem for people with ID, so that they become more autonomous and active citizens.

Survey Data Analysis

Despite the legislation promoted to enforce provision of education for everyone, accommodating all students regardless of their physical or intellectual (and other) conditions, higher education institutions do not have a common guiding regulation framework or common procedures. Notwithstanding the efforts over the last years to implement more inclusive policies, there is still a lot to be done in this specific area, involving all stakeholders. Therefore, survey data in Portugal related to how confident teachers feel when teaching students with ID pinpoint meaningful results. We shall analyse them next.

Characterization of respondents on gender and academic degree

Of the 317 responses obtained, as explained in figure 2, ninety-three (93) were given by female teachers, one hundred and twenty-one (121) by male teachers and three (3) preferred not to respond.

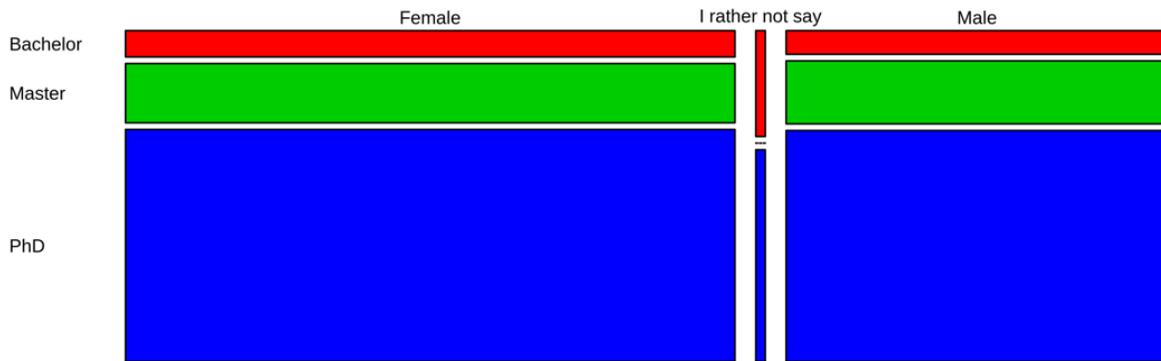


Figure 2. Characterization of respondents on gender and academic degree.

Regarding the academic training of respondents, twenty-six (26) have a bachelor's degree (BA), of which sixteen are women, nine (9) are men and one (1) chose not to mention it. About holding a master's degree (MA), sixty (60) answers were obtained, being thirty-six (36) women and twenty-four (24) men. Of a total of two hundred and thirty-one (231) holding a PhD degree, one hundred and forty-one (141) are women, eighty-eight (88) are men and two preferred not to give that information.

According to the survey results shown in figure 3, as regards competences and personal training in the scope of specific teaching with intellectually disabled students, the majority of the respondents consider their training inadequate.

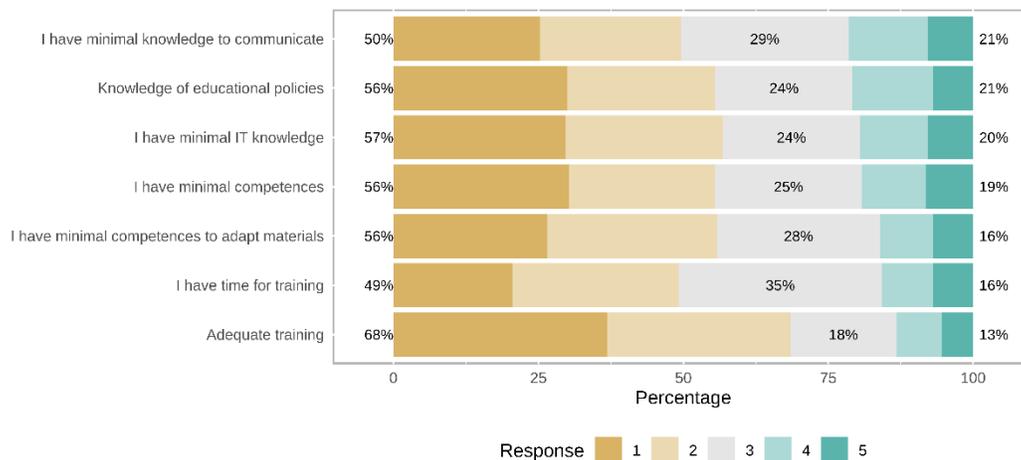


Figure 3. Teachers' competences for working with students with ID.

Between 58% to 60% of the respondents state they have neither adequate training nor conceptual and didactic knowledge on inclusion and intellectual disabilities. Regarding the topic of inclusion in national educational policies and in higher education, 56% of the respondents indicate that they have no knowledge on the subject, whereas 21% of the respondents have a clear idea of such policies. 24% of the respondents have some knowledge about this issue. As regards the specificity of knowledge on the topic, 50% of the teachers participating in this study agree on the fact that they do not have enough knowledge to communicate with students with ID, while 29% have sufficient knowledge and 21% consider themselves skilled to teach students with ID. About the knowledge on specific or adapted methodologies to ID students, 57% of the respondents consider not having those skills, whereas 24% are knowledgeable enough. 20% of the respondents feel confident in their use of these methodologies.

Focusing on didactic knowledge, 56% of the respondents do not feel confident about developing or adjusting pedagogical material to ID students contrasting with 16% of those who indicate having knowledge on this issue. Regarding time availability for training in this particular subject, only 16% are available to do so. 35% of the respondents show some interest in getting training whereas the majority, 46%, are not available.

Overall, when it comes to the use of inclusive methodologies and didactics for inclusion, in figure 4, it appears that the majority of the respondents gives much importance to teaching students with ID, in higher education. As such, the responses reached levels 4 and 5, according to the different possibilities and methodologies towards inclusion (from 66 to 83%).

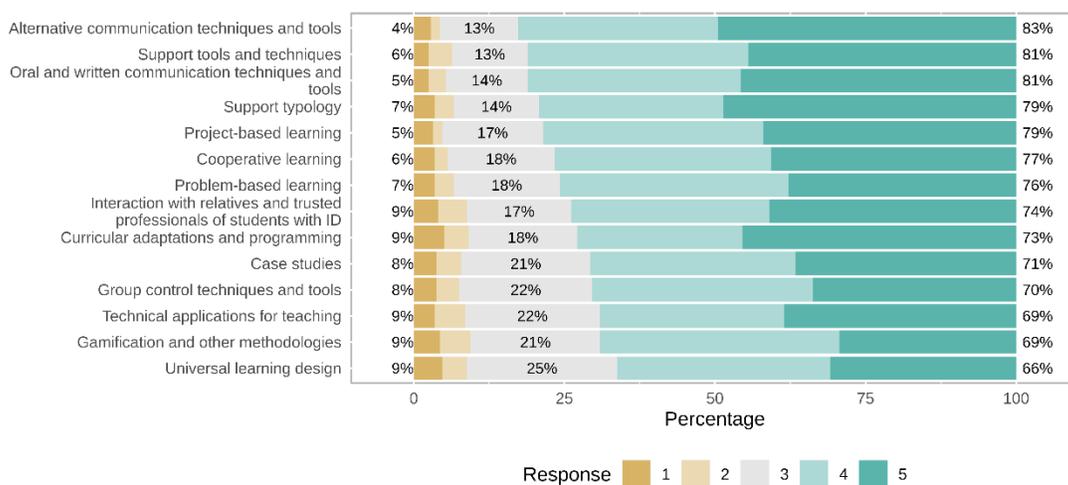


Figure 4. Training contents in Didactics and inclusive methodologies for inclusion.



On questions about training contents for higher education lecturers, specifically as far as didactics and inclusive methodologies ~~for inclusion~~ are concerned (figure 4), the majority of the respondents seems to agree on the importance of teacher training in higher education, reaching levels 4 and 5 (from 66 to 83%).

In figure 4, the item “alternative communication techniques and tools” was selected by the majority of the respondents, which seems to indicate how important training in this area might mean for them. 81% of the respondents seem to consider that training on “Oral and written communication techniques and tools” and “Support tools and techniques” enhances inclusion in a wider and more effective way. In addition, more than 70% of the respondents seem to agree on the idea that this specific training to teach students with ID should focus on teaching-learning strategies such as: project-based learning (79%), cooperative learning (77%), problem-based learning (76%), interaction with relatives and trusted professionals of students with intellectual disabilities (74%), curricular adaptations and programming (73%), case studies (71%), and group control techniques and tools. Even if less focused on, gamification and other methodologies (69%) and Universal Learning Design (66%) were singled out as necessary methodologies to the teaching work. These numbers might be associated with the weak implementation they still have in higher education. However, the majority of the respondents (79%) revealed that training in the type of supports for intellectual disabilities would be relevant, as well as the relationship among students, services, tools, techniques, only to name a few.

Next, we shall focus on figure 5, which gives us data on training contents for higher education, concentrating on the subgroup “specific training”. Data analysis allows us to understand which specific training topics are most valued in the training to work with students with ID. A global analysis seems to convey the idea that the respondents consider all the items crucial for the training of higher education lecturers. Percentages vary from 65% to 82%, reaching thus levels 4 and 5.

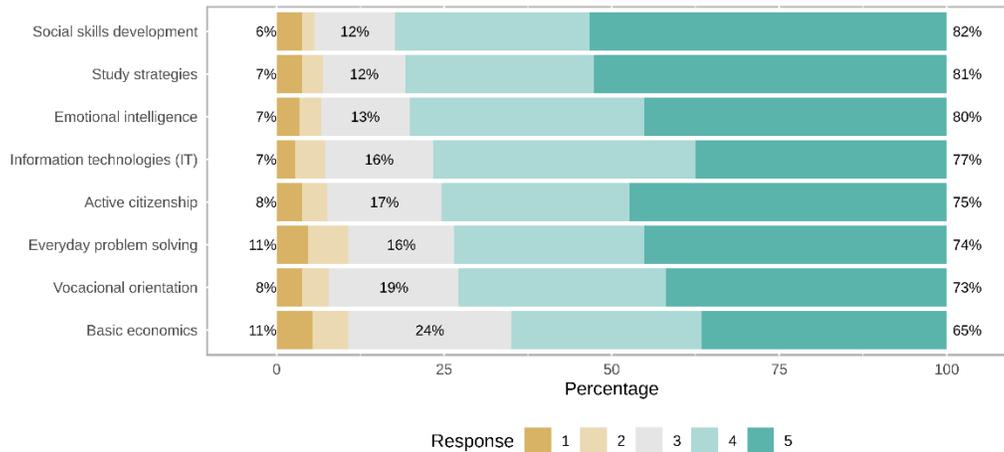


Figure 5. Specific Area Training Contents.

Data in figure 5 seem to confirm the consensual idea that in order to be able to teach students with ID, lecturers must have specific training to develop social skills (82%), study strategies (81%), emotional intelligence (80%), Information Technologies (IT) (77%), active citizenship, Everyday problem solving (74%), vocational orientation (73%), and Basic economics (65%). Only 6% to 11% of the respondents seem not to give much importance to the specific training in the aforementioned areas.

About the group “Training Contents, and the transversal training subgroup, data in figure 6 seem to indicate that the majority of the respondents acknowledges the importance of this type of training to teach students with ID. All 8 items attained percentages as high as 73% and 80%, reaching levels 4 and 5.

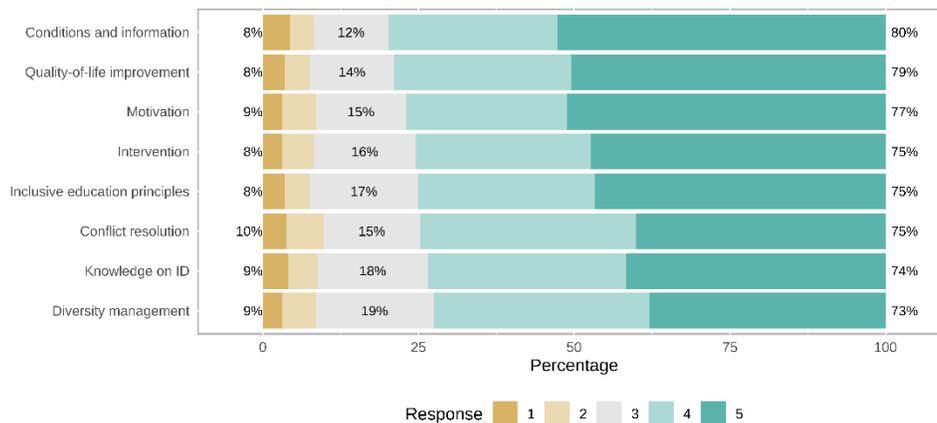


Figure 6. Transversal Training Contents.



It is also important to highlight that the items “Conditions associated with ID” and “Data on the learning process” got the highest rates (80%), followed by “Projects to improve quality of life of people with ID” (79%). Considering the evolutionary development and specific features of people with ID, as well as diversity management, the following items were also considered important for the teacher training: “Motivation techniques and tools”; “Techniques and tools for (behaviour) problem solving”; “Inclusive education principles”; “Problem solving”; “Knowledge on ID”. It is also worthy of notice the important role all these items seem to have in the provision of technical and practical support for teachers in higher education.

Overall, the survey data seem to indicate the need to foster more training to tackle the problems of inclusion of students with ID. That is why working on this area is paramount nowadays.

Serbia

State of the art about intellectual disabilities

In the beginning of the XXI century Serbia adopted numerous strategic documents that regulate inclusive practices, and after 2009 inclusive education became a part of the state policy (Galović et al., 2009). Nevertheless, pupils with intellectual disabilities (ID) could attend either mainstream or special schools. In Serbian special schools more than 80% of pupils have developmental disabilities (Ipsos et al., 2016), and most of them are certainly those with ID. Existing laws and bylaws regulate education of students with ID in primary and secondary schools. They are not mentioned at all in the legal acts related to higher education.

In the Republic of Serbia access to higher education is open to every person who graduates from a four year secondary school, but specific admission procedures are individually regulated by each institution. There are four types of higher education institutions: universities, colleges of applied studies, colleges of academic studies and academies of applied studies (EU, 2017). University education in Serbia is regulated by the Law on Higher Education (RS, 2017) and its amendments.

In this law, students with disabilities are usually mentioned in the context of affirmative action and adaptations. Higher education institutions implement an affirmative action in the enrolment of students with disabilities. The tuition fee in public higher institutions could significantly vary from one faculty to another, but individuals with disabilities are not subject to tuition fees. Higher education institution may organize studies in sign language. Students with disabilities have the right to take the exam in a manner adapted to their condition. Higher education teachers are implicitly expected to adopt their teaching methods and study conditions to students with disabilities, although there are no specific programmes for the initial education of future academic staff that are expected to work with students with diverse abilities and support needs.

Therefore, the training should include a wide range of the university teachers, mainly those working in state institutions. In the initial stages of the course realization the trainees should be highly motivated individuals working in the field of social sciences and humanities, medical and natural sciences.



Results of the questionnaire

The Serbian sample consists of 160 participants, 64 (40%) males and 96 (60%) females, aged from 24 to 67 years ($M = 43.84$; $SD = 9.32$). Most of them have a PhD (138 or 86.3%), while the others hold a master degree (22 or 13.8%). The participants work as assistants, assistant professors, associate professors or full professors at four state universities and one private university.

More than half of the participants (90 or 56.2%) had some contacts with people with ID, either in work or non-work environment. Only four (2.5%) participants had contacts with people with ID in family environment, while the rest of them have never had any chance to contact with these people (66 or 41.3%). Majority of the participants have neither been instructed to teach (138 or 86.3%), nor they ever thought (108 or 67.5%) to students with ID. Universities do not provide specific support for teachers working with students with ID, but almost three-quarters of the university teachers claim they need it. More than 60% of our participants think that people with ID can attend university courses with some support, while almost 80% of them think it would be useful to establish ad hoc courses for them.

The participants were asked to grade from 1 to 5 cross-training training proposals, inclusive methodologies, and didactics and specific formation needs.

Items	M	SD
Special conditions and information about ID learning process	4,37	0,998
Tools and techniques of motivation	4,28	0,997
Knowledge about ID	4,24	0,983
Risky conducts intervention skills	4,22	1,046
Principles of inclusive education	4,08	1,034
Existential projects to improve quality of life for people with ID	4,22	1,056
Tools and techniques of conflict negotiation	4,13	1,111
Diversity management	4,12	0,987

Table 3. Training contents (cross-training formation).

The participants were very satisfied with proposed training contents as indicated by high scores on each item.



Items	M	SD
Types of support (number of teachers, services, tools, technics, etc.)	4,15	1,029
Tools and techniques of communication (speaking/writing)	4,16	1,015
Tools and techniques of support and enhancement	4,21	1,024
Tools and techniques of augmentative and alternative communication	4,06	1,074
Cooperative learning	3,99	1,031
Interaction with families and professionals related with students	4,09	1,112
Problems-based learning	4,04	1,048
Curricular adaptations and scheduling	4,24	1,043
Tools and techniques of group management and dynamization	3,94	1,083
Universal design for learning	3,79	1,122
Gamification	3,77	1,094
Case studies	4,13	1,020
Technology apps as teaching resources	3,78	1,142

Table 4. Inclusive methodologies and didactics.

High scores on a Likert scale indicate that the university teachers consider inclusive methodologies and didactics as very important for the trainees. The most valued items relate to curricular adaptations, supporting and communication tools.

Items	M	SD
Development of social abilities	4,34	0,944
Study strategies	4,31	0,911
Emotional intelligence	4,26	0,981
Conflicts resolution in daily life	4,21	0,980
Vocational orientation	4,07	1,047
Active citizenship	4,20	0,983
Computing	4,11	0,978
Basic economy	3,86	1,104

Table 5. Specific formation.

With regard to specific formation the result show that participants consider basic economy (i.e. management of personal profits and resources) as the least important, and development of social abilities as the most important need.

Spain

Inclusion of former students with intellectual disabilities in Spanish universities

In the Spanish context, there are not many studies on the presence of people with intellectual disabilities (ID) in higher education, as stated by Verdugo et al. (2018) and Rodríguez and Álvarez (2014), unlike in previous stages, although there is outstanding research that has focused on access to university studies, attitudes towards university students with disabilities, university support services and programmes, the attitude of teaching staff, accessibility and universal design.

Likewise, it has also been possible to verify that there is a lot of research which focuses on disability in general, where the main role is played by physical, visual, sensory and hearing disabilities (Tapia and Manosalva, 2012).

Of the few students with ID who arrive at university, the majority encounter difficulties and problems, given that teachers do not have sufficient training and knowledge to deal with the needs they pose, taking into account that inclusion requires a series of academic, economic, material, technological, psychological and self-management supports and services that allow full participation in academic life, a situation for which very few universities are prepared (Peredo, 2016).

Not all universities offer the same opportunities and provide the same support services. Specifically, in Spanish universities the percentages of students with intellectual disabilities are as follows, as can be seen in Table 6:

STUDENTS WITH INTELLECTUAL DISABILITIES

	UNDERGRADUATE 1ST AND 2ND CYCLE	POSTGRADUATE AND MASTER	PhD
MEN	9,0%	4,9%	3,3%
WOMEN	5,8%	2,8%	5,7%
Total	14,8%	7,7%	9,0%

Table 6. Percentage of enrolment of undergraduate, master and postgraduate students and doctorates with DI in Spanish universities

Note:

Basic data on the Spanish university system for the academic year 2015-2016 from the Ministry of Education, Culture and Sport. Own elaboration.



Studies carried out by the Universia Foundation (2018) and the State Observatory on Disability (2018) show that the total number of students with disabilities enrolled in university studies is barely 1.5% of the national total of university students.

Since 2017 Spain has implemented a programme which facilitates access to people with intellectual disabilities in more than 25 universities, financed by the ONCE Foundation (De la Fuente and Cuesta, 2017).

Legislative situation in Spain

Royal Decree 1/2013, which approves the Revised Text of the General Law on the Rights of Persons with Disabilities and their Social Inclusion, of 29 November 2013, in line with the International Convention on the Rights of Persons with Disabilities (UN, 2006), places emphasis on the environment as an element that can favour or condition the development possibilities of a person with a disability. Full and effective participation means that the person is included in society, and this is a key element that allows their development and quality of life.

On the other hand, the National Association of Universities and Higher Education Institutions, ANUIES (2002), points out that the term "people with disabilities" should not condition their participation in the community.

Article 27 of the Spanish Constitution of 29 December 1978 recognises, in paragraphs 1 and 2, the right to education of all citizens and this right shall have as its objective the full development of the human personality in respect for the democratic principles of coexistence and fundamental rights and freedoms.

In relation to university studies, Royal Decree 1/2013, which approves the Revised Text of the General Law on the Rights of Persons with Disabilities and their Social Inclusion, of 29 November 2013, in its article 20 refers to the adaptation of the university system to persons with disabilities, where it specifies that persons who are studying at university whose disability seriously hinders adaptation to the system of calls established in general terms, may request and the university may grant an extension of the calls to compensate for their difficulty, the tests being adapted to the individual characteristics presented by these persons with disabilities.

In higher education, a controversy has begun to arise, due to the fact that many young people who have been supported by a team of professionals specialised in DI during their time in primary or secondary education, arrive at an arid educational system where there are no distinctions or support to adapt to

the system, which is already complex, and even less to adapt to a different educational environment (Estay et al., 2019, p. 123).

Likewise, the Royal Legislative Decree 1/2013 (Second Final Provision) has established an obligation on training curricula and regulates the inclusion of training in "design for all" in the training curriculum on universal accessibility and training of professionals.

All of this is fundamental so that these students can arrive at university in the same conditions as others, taking into account their needs, but other areas are also necessary. For this reason, the University Statutes and Royal Decree 1791/2010, of 30 December 2010, which approved the University Student Statute, establish systems and procedures that universities must include to guarantee the rights of students with specific educational needs, derived from the condition of disability. Some statutes establish the setting up of units to care for students with disabilities or specific services for this group. The reservation of places for students with disabilities is also regulated, providing for the reservation of 5% of available places and establishing national and international mobility for students with disabilities. Universities must promote the participation of these students in national and international mobility programmes.

Currently, the Organic Law 8/2013, of 9 December 2013, for the Improvement of Educational Quality, in its article 38, section 3, establishes that "The procedures for admission to university must be carried out in conditions of accessibility for students with disabilities".

University teaching staff and intellectual disability

Various studies that give voice to students with disabilities indicate that teachers are key to inclusion processes: "The training and preparation of teachers to attend to students with disabilities in their classes is considered one of the main factors favouring educational integration" (Bilbao and Martínez, 2009, p.56).

Teachers, when including students with ID in their classrooms, must take into account the learning rhythms of each one and, for this reason, it is essential that they develop different teaching strategies, and that the programmes are adapted to individual needs. For this reason, it is essential that they have the skills to provide an adequate response (Moriña et al., 2019).

In the study conducted by Angenscheidt and Navarrete (2017, p.239) on teachers' attitudes towards inclusive education, half of the respondents agreed that all students benefit academically from being in regular classrooms.



Teachers must carry out a series of actions to ensure that students with disabilities remain in university, since most of them leave early and do not finish their studies. Some of the actions are the following, according to the study carried out by Galán (2015, p.93): academic guidance and monitoring, personal/vital counselling, study techniques and support, curricular flexibility, development of social skills, support network and collaboration between peers.

There are also other services and supports essential to the permanence of these students such as the development of self-determination skills, the development of self-management skills, the exploration of ICT and other grade-related experiences. These skills help them to have a smooth path through university, allowing them to adapt and stay there (Evans and Colleen, 2008).

A recent consult to Spanish university teachers related to the importance of different point about training formation of teacher in high education level, counted on 170 participants. The results showed that they considered very important all the fields of knowledge and their own formation no matter what their formation is.

		N	M	SD
Cross sectional training	PhD	102	4,08	0,93
	Máster	26	3,81	1,04
	Graduated	42	3,96	1,10
Inclusive didactics and methodologies	PhD	102	3,96	0,79
	Máster	26	3,79	1,03
	Graduated	42	4,02	1,04
Specific training	PhD	102	3,99	0,87
	Máster	26	3,96	0,75
	Graduated	42	4,13	0,95
Self-competence perception	PhD	102	3,41	0,96
	Máster	26	3,16	0,94
	Graduated	42	3,51	0,92

Table 7. Scores obtained according to specific training received.



Among the people we consulted, there were a lot of them that had already professional experience teaching people with ID in university context. Those were a very important part of the sample to be heard. As expected, they showed greater values in all the topics about the importance of the topic to bear in mind, but also in their own capabilities. In this case, the difference is even greater with those who never taught to people with ID.

		n	M	SD
Cross sectional training	Yes	137	4,11	0,93
	No	33	3,60	1,13
Inclusive didactics and methodologies	Yes	137	4,05	0,82
	No	33	3,51	1,04
Specific training	Yes	137	4,10	0,84
	No	33	3,69	0,92
Self-competence perception	Yes	137	3,58	0,87
	No	33	2,65	0,92

Table 8. Scores obtained according to specific training received.

Finally, we took in consideration the answers of people who had had contact with people with ID, not only in a professional way, but also in other context. Thus, we could not observe differences depending on the type of context, but we noticed higher values of importance about the topic and also about their self-competence in those who had spent time with people with ID.

		FAMILY CONTEXT			WORK CONTEXT			OTHER CONTEXT		
		N	M	SD	N	M	SD	N	M	SD
Cross sectional training	Yes	34	4,26	0,79	108	4,13	0,93	47	4,12	0,77
	No	136	3,95	1,03	62	3,80	1,06	123	3,97	1,06
Inclusive didactics and methodologies	Yes	34	4,15	0,75	108	4,08	0,80	47	3,95	0,72
	No	136	3,89	0,92	62	3,71	0,99	123	3,94	0,95
Specific training	Yes	34	4,10	0,82	108	4,13	0,86	47	4,07	0,77
	No	136	4,00	0,88	62	3,82	0,86	123	4,00	0,91
Self-competence perception	Yes	34	3,65	0,83	108	3,64	0,84	47	3,58	0,86
	No	136	3,34	0,97	62	2,97	0,98	123	3,33	0,98

Table 9. Scores obtained according to the context shared with people with intellectual disabilities.



In summary, Spanish results suggested that interested population are aware of the benefits that a specific training about ID is recommendable and useful for defending people with ID rights about education opportunities. Also, we can tell that those who had some experience with this collective, both in a personal and professional context, remark the importance of the topics that we suggested in our survey, so we can consider it as a current hotspot for educational development in our country but also in our continent.

General results in Europe

An ad hoc questionnaire was conducted on the perceptions and importance of different aspects of education for people with intellectual disabilities, and on the perception of self-competence of educational skills. The first version of the questionnaire was in Spanish and was validated by five experts who reformulated some descriptions to improve clarity to know the relative data of the university teaching staff in the member countries of the consortium and thus be able to frame the project within the European context and provide solutions to the problems that arise regarding the needs of training in the field of European university education. The sample consisted of 1,009 university professors from Portugal, Italy, Belgium and Spain, of which 59.7% are women.

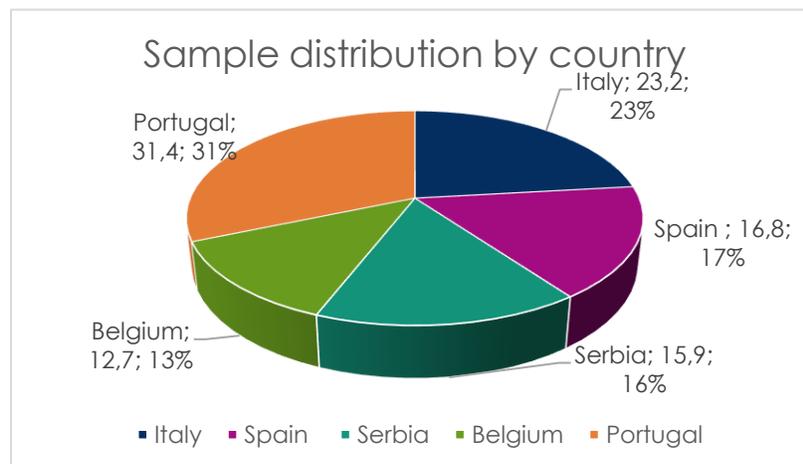


Figure 7. Distribution of samples by country.

In the European results on the need for cross-training and specific training, it is especially relevant that specific content on the learning process of people with disabilities as well as on motivational techniques be carried out and reinforced, as we can see in the collection of data.



CROSS-TRAINING FORMATION	
Special conditions and information about ID learning process	4,23
Tools and technics of motivation	4,12
Knowledge about ID (evolutive development, specific characteristics, etc.)	4,09
SPECIFIC FORMATION	
Development of social abilities	4,21
Study strategies (specially for students with ID)	4,15
Emotional intelligence	4,09

Table 10. Score obtained on the importance of the proposed aspects.

In the analyzes carried out later, statistically significant differences were obtained in those professionals who had been in contact with people with disabilities, who scored higher in the importance of transversal training, the importance of didactics and inclusive methodologies and in satisfaction with personal skills and personal training.

Regarding the importance that teachers give to transversal training, inclusive methodologies and didactics, specific training and satisfaction with their own skills and personal training, according to Bonferroni's Post-hoc comparisons, graduates were more satisfied than people with a doctorate ($p = .008$).

Regarding the needs of the media and materials of the sessions rather than the content to be taught, the participants consider that there is a need for technical and human support.

INCLUSIVE METHODOLOGIES AND DIDACTICS	
Types of support (number of teachers, services, tools, technics, etc)	4,11
Tools and technics of communication (speaking / writing)	4,04
Tools and technics of support and enhancement	4,02
Tools and technics of augmentative and alternative communication	4,00

Table 11. Score obtained on the importance of the proposed aspects.



It is striking that the participants attribute average values to their own abilities to teach people with intellectual disabilities, so we can consider these results as a point to be strengthened within the university teaching staff. This theory has been reinforced in subsequent statistical analyzes where significant differences have been found for in those professionals who had received specific training to teach people with intellectual disabilities, statistically significant differences were also obtained in satisfaction with personal skills and personal training in those professionals who had previously taught people with intellectual disabilities. ($p \leq 0.05$)

Therefore, we can infer that both the training in disability and the previous training experience of people with disabilities improve the perception of teaching skills.

Likewise, significant differences were found again between teachers who consider specific training in disability important and those who consider it necessary to provide access to the university to people with intellectual disabilities through minor aid or through the design of specific studies ($p < 0.05$).

Ítem	
Do you think your current training is adequate for the special educational needs encountered?	2,37
Do you know how is present the inclusion in the national and university laws?	2,44
Do you have time enough to train your inclusive education skills for people with intellectual disabilities?	2,47
Do you have knowledge enough about learning methodologies and strategies to adapt to people with intellectual disabilities?	2,47
Do you have knowledge and specific skills enough to teach people with intellectual disabilities?	2,59
Do you think you are able to adapt the materials and facilities for people with intellectual disabilities?	2,69
Do you have communication skills enough to teach people with intellectual disabilities?	2,88

Table 12. Score obtained on the importance of the proposed aspects.



Final considerations

Although the presence of people with ID is rare in Europe, most of the participants in our work consider important to prepare university teachers for that. It is still soon to concrete the preference needs, but there is consensus on the three pillars that we proposed consulting expert on this field. Those are:

- Cross-training formation: specially when it comes to knowledge about ID and motivational technics.
- Inclusive methodologies and didactics: alluding types and tools of support and communication technics
- Specific formation: headed principally to develop social skills, study strategies, emotional intelligence and conflicts resolution.

Despite the fact that ID collective has been worked mostly in Europe, there is a long way to go. That is what our survey about self-perception of university teachers showed. It is important to remember that the sample we used for this survey were teachers with experience enough to understand the university level teaching. Although this may be not very relevant, inasmuch self-perception cannot be related to reality, it is striking to note that the participants attribute medium values to their own skills to teach people with intellectual disability (Table 13). Thus, we can consider these results as other motivation point to be carried out.

Item							
Do you think your current training is adequate for the special educational needs encountered?	1,96	2,38	2,12	2,01	3,40	2,37	
Do you know how is present the inclusion in the national and university laws?	1,97	2,96	2,41	2,18	3,18	2,44	
Do you have time enough to train your inclusive education skills for people with intellectual disabilities?	1,88	2,67	2,52	2,44	3,04	2,47	
Do you have knowledge enough about learning methodologies and strategies to adapt to people with intellectual disabilities?	2,04	2,54	2,40	2,07	3,38	2,47	
Do you have knowledge and specific skills enough to teach people with intellectual disabilities?	2,27	2,58	2,41	2,01	3,66	2,59	
Do you think you are able to adapt the materials and facilities for people with intellectual disabilities?	2,16	2,73	2,40	2,73	3,47	2,69	
Do you have communication skills enough to teach people with intellectual disabilities?	2,66	2,97	2,54	2,66	3,65	2,88	

Table 13. Punctuations about teacher's self-perception.

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