



# Needs analysis of the faculty members concerning inclusive student-centred pedagogies/ i-SCP

As developed within the Coaching Academics as Learners for Inclusive Teaching Optimal Networks - COALITION Project -





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#### Introduction

In the light of adapting to students' requirements while at the same time contribute to the shaping of a newer perspective on higher education institution's role in today's society, academics ought to adapt their teaching and their curricula, listening at the same time to voices that may have been underestimated, like those of students.

The Coaching Academics as Learners for Inclusive Teaching Optimal Networks – COALITION project, funded by the European Union under the Cooperation Partnerships in Higher Education theme of the Erasmus+ program (KA220-HED), aims at becoming a Community of Practice for developing higher education pedagogies based on Inclusive Student-Centred Teaching Practices (i-SCP).

Inclusive student-centred pedagogies (I-SCP) incorporating needs, plans and ambitions of all students, regardless of identity, can address such discrepancy in a context where everyone's voice can be heard through all available means and students are viewed as equal partners.

Academics' role needs to adapt as they need to become responsible for cultivating an inclusive and equity-driven learning environment where all students can succeed academically (Whittaker & Montgomery, 2014) and improving i-SCP teaching practices & faculty development (FD) interventions in Higher Education become imperative. Inclusive student-centred pedagogies (I-SCP) in higher education are defined as the proactive and intentional teaching and learning activities, course design, curricula and assessment which foster equity during carefully designed learner-centred opportunities for student engagement, self-awareness, self-regulation, and learner autonomy for all stakeholders in higher education (Katsampoxaki-Hodgetts, 2022).

The first intellectual output of COALITION project consists of **c**harting **f**aculty members' ICP competences. The main objectives square around the following actions:

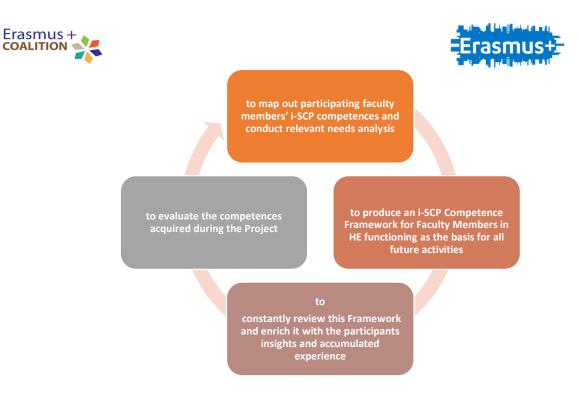


Figure 1 Intellectual output of COALITION project

All in all, the aim of this present needs analysis is to at map participants' experiences, competences, and pedagogical needs, and evaluating faculty development processes which foster inclusion within a learning-centered environment so that we can design follow up interventions that meet recurring needs.





### 1. Research Methodology

### 1.1. Research aim

The aim of this study is to map and analyses faculty members' needs and competences for incorporating i-SCP teaching in higher education in order to have a clear picture of faculty members' needs in order to address the challenges the i-SCP creates in everyday teaching practice. Moreover, we investigated student's opinion on their teachers' level of incorporating the I-SCP teaching strategies into their daily teaching activities.

### 1.2. Methods

This needs analysis of the faculty members concerning i-SCP was conducted during January till March 2023 as the first activity of the COLAITION Project. Basically, the needs analysis consists of research that compares six universities across different European countries (Greece, Latvia, Spain, Netherlands, Sweden, Romania) This study was descriptive research with quantitative and qualitative approaches. In terms of qualitative data, two questionnaires (see Annex 1) and interview discussion (see Annex 2) methods were used for primary data collection. Regarding the quantitative data total of 264 of university teachers and a number of 548 of students expressed their willingness to become respondents by answering the questionnaires. Descriptive analysis approach method is used in this study (Kemp, et al., 2018). The survey took into consideration the institutional context and individual perspectives. The survey consisted of 46 statements, and participants rated them on a 5-point Likert scale, where 1 indicated "strongly agree," 2 indicated "agree," 3 indicated "neutral," 4 indicated "disagree," and 5 indicated "strongly disagree".

The questionnaires for both university teachers and students focused on 4 main topics such as: (1) Accessibility and resources that universities have in order to facilitate inclusion; (2) University teachers' willingness to support the inclusive pedagogy centred approach; (3) Curricular adjustments to support the inclusive pedagogy centred approach (Curricular design and methodology and Assessment); and (4) University teachers' attitude, ability and concerns in order to facilitate active learning with diverse audiences. This survey instrument was used to identify any expected competencies among faculty members involved in ISCP, as well as their faculty development needs across various teaching, learning, and assessment methods.



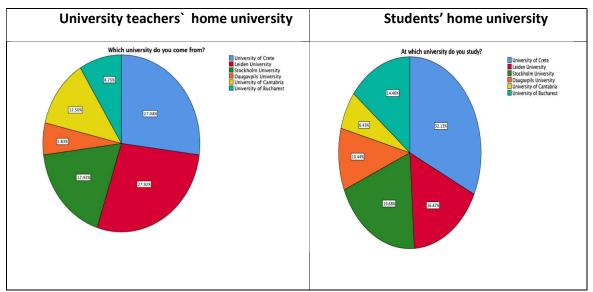


Following the survey, semi-structured interviews were conducted to further analyse the themes that emerged. These interviews shed light on academics' active engagement potential and their expectations regarding both typical and atypical faculty development approaches. Participation in the study was voluntary, and the research protocol was approved by the institutional review board to ensure the protection of human subjects.

For qualitative data, content analysis method was used to analyse the qualitative data obtained from the interviews the purpose of the content analysis is to summarize a large amount of data in such a way as to achieve well-supported and interpreted results (DeWalt & DeWalt, 2011). The data was coded and the then categorized the results under common themes.

### 1.3. Participants

### 1.3.1. Respondents Profile



#### Table 1 Respondents' profile

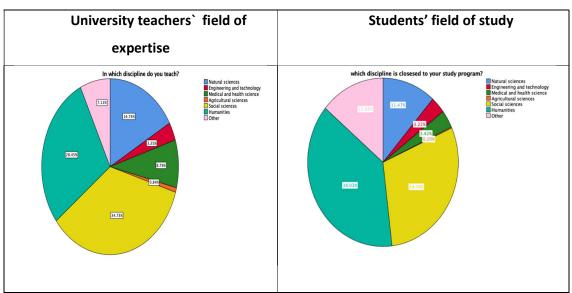
When it comes to university teachers, 27.92% of the professors who responded to the questionnaire were from Leiden University, 27.08% from the University of Crete, and 17.92% were affiliated to Stockholm University. Also, 12.50% of the responding professors teach at the University of Cantabria, 8.75% at the University of Bucharest, and 5.83% of them come from Daugavpils University. On the other hand, 32.13% of the participating students are affiliated to the University of Crete, 19.68% to the University of Stockholm, 16.87% students





come from Leiden University, while 14.46% of the participating students are affiliated to the University of Bucharest, 10.44% to the University of Daugavpils and 6.43% to the University of Cantabria.

After finning the questionnaire, university teachers were asked to say whether they agreed to further be involved in this research by participating in semi-structure interviews. A number of five participants per country (total number of n=30) were selected and participated in the process. To ensure the anonymity of the date the respondents were coded by numbers (e.g., 11 to 15) and only using their country initials, as follows Greece- GR; Latvia- LV; Spain- ES, Netherlands- NL, Sweden- SE, Romania- RO. The interviews were all recorded and transcribed and the recordings were sent for feedback to the respective respondents.



### 1.3.2. Respondents`field of expertise/study

Figure 2 Respondents` field of expertise/study

The university teachers filed of expertise spreads across different curricular areas, with the majority of 34.78% of the teachers who participated in the survey teach in the social sciences, 28.45% in the humanities, and less in the natural sciences (16.74%). Also, 8.79% of the responding teachers teach in the medical and health-related sciences, 7.11% teach other subjects, and 3.35% teach engineering and technology. When it comes to student's field of study, we can see a similarity proportion of students from the same fields with 38.03% of the





participating students answered humanities, 29.78% social sciences, 13.88% other, 11.47% natural sciences, 3.42% medical and health sciences, 3.22% engineering and technology, and 0.20% of the students chose agricultural sciences.

### 1.3.3. University teachers experience in Higher Education

The teachers who responded to this survey are both early career teachers, but also middle and seniors' teachers as shown in the figure below where is stated that 20.17% of the teachers have been teaching for 11-15 years, 18.91% have been teaching for more than 26 years, 14.29% have been teaching for 16-20 years. In addition, 14.29% have been teaching for 0-5 years, and 13.03% have been teaching for 6-10 years.

### 1.3.4. Students' year of study

When it comes to students' years of study, we could also see that the survey managed to cover all areas, where 13.59% of the students participating in the study are in their first year of undergraduate studies, 18.86% are in their second year of undergraduate studies, and 36.51% of the students are in their third year of undergraduate studies. Also, 25.15% of the participating students are master students and 5.88% are doctoral students.

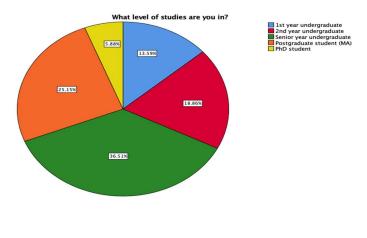


Figure 3 Students' year of study

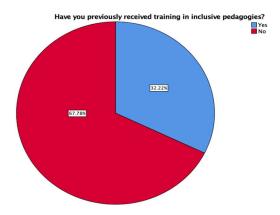




### 2. Results

One major question that stays at the bottom of the COLAITION project is the assumption that a considerable number of faculty members in the EU countries (and to a great extent at international level as well) tend to adopt didactic approaches that are not always tailored to their own student needs (Shah et al. 2017; Singh and Phoon 2021). In such environments, faculty i-SCP competences and student academic competence-building is often neglected (Dewsbury, 2017; O'Leary, Shapiro, Toma, S. et al., 2020).

To address these issues, academics' role needs to adapt as they need to become responsible for cultivating an inclusive and equity-driven learning environment where all students can succeed academically (Whittaker & Montgomery, 2014), but this study shows higher education institutions have to make major steps in order to fulfil this need. *This assumption is sustained by this study results that states that approximately 67.78% of the teachers answered that they did not receive any training in the field of inclusive education, whereas only 32.22% have previously been involved in some kind of training regarding inclusive practices in the higher education system.* 









2.1. Accessibility and resources that universities have in order to

facilitate inclusion during face-to face activities

The equipment and technological support that are/aren't adapted to the needs of the student.

Concerning the equipment and the technological support, half of the students and almost half of the teachers agree that facilities which enhance inclusion are indeed available. The students are slightly more positive since 9,04% disagree and 16,28% strongly agree compared to the teachers among which 14,35% disagree and 7,66% strongly agree. This difference is affirmed also in the interviews since the teachers highlighted the problem there, too. Almost in all countries the teachers identified the lack in technological resources: *"Sufficient resources are not allocated for the training of lecturers working in higher education"* (I1- LV), *"Well, access to technology is crucial for students to participate fully in academic and social activities. However, not all students have access to the necessary technological resources, such as laptops or high-speed internet, which can create barriers to inclusivity" (I4- RO), "Then you have the technical equipment of course like speakers, microphones, projectors, everything. That's the problem that could be problematic" (I2- SE).* 

uni act	he statements bel versities have in c ivities. Please indi apply to you Th	ow concern a order to facil icate to what	extent t and tech	lity and reso usion during he following nological su	face-to face statements	uni act	The statements bel iversities have in o tivities. Please ind apply to you. – Th	order to facili icate to what	accessibi itate incl extent t and tech	usion during he following mological su	face-to fac statements
		Frequency	Percent	Valid Percent	Cumulative Percent	-		Frequency	Percent	Valid Percent	Cumulative Percent
			ALCONTRACTOR .			Valid	Strongly disagree	6	2.3	2.9	2.9
Valid	Strongly disagree	11	2.0	2.8	2.8		Disagree	30	11.4	14.4	17.2
	Disagree	35	6.4	9.0	11.9		Neither agree nor disagree	64	24.2	30.6	47.8
	Neither agree nor disagree	84	15.3	21.7	33.6		Agree	93	35.2	44.5	92.3
	Agree	194	35.4	50.1	83.7		Strongly agree	16	6.1	7.7	100.0
	Strongly agree	63	11.5	16.3	100.0		Total	209	79.2	100.0	
	Total	387	70.6	100.0		Missing	System	55	20.8		
		161	29.4	10010		Total		264	100.0		
Missina	System										

Table 2 The equipment and technological support that are/aren't adapted to the needs of the student

I was also mentioned the need of financial support "Also here, resources I tell you, at the University of Sardinia they had people going to the auditorium, but they had laptops to help them, they had digital cassette recorders to record. We need these things. So, the financial thing is an issue" (I4- GR), "One of the main challenges is changing public attitudes and reducing stereotypes [...]The second aspect is the aforementioned lack of financial support" (I2- LV).

The teachers in the interviews also emphasised specific groups that need technological support such as students with visual impairment or the minority groups "Other missing resources are: the lack of a tactile rug for blind students because at our university, at my department of special education we always have visual impaired students. But we also





need some sound amplifiers for our students who have problems with hearing" (I3- RO), "I have had 60 students this year, some have arrived a month and a half after starting the class and some, I mean, in the order of zero to ten. You have to get them into working groups quickly and there are things that don't work, of course, but I don't think it has as much to do with the inclusion that I think, which is a socio- educational, social inclusion that has to do with minorities being able to find themselves in institutionalized spaces of power" (I4- ES).

Available learning resources that are/aren't adapted to the social, cultural, cognitive development needs of students

		STUD	ENTS	5		TEACHERS							
uni act	he statements bel iversities have in o tivities. Please indi ipply to you Ava social, cult	rder to facili cate to what ilable learnin	tate incl extent t ng resou	usion during he following	face-to face statements pted to my	uni act	he statements bel versities have in c ivities. Please indi pply to you. – Ava social, cultural, c	rder to facil cate to what ilable learni	itate incl extent t ng resou	usion during he following rces are ada	face-to face statements pted to the		
		, ,			Cumulative	Valid	Strongly disagree	3	1.1	1.5	1.5		
		Frequency	Percent	Valid Percent	Percent		Disagree	38	14.4	18.4	19.9		
Valid	Strongly disagree	9	1.6	2.3	2.3		Neither agree nor	74	28.0	35.9	55.8		
	Disagree	38	6.9	9.9	12.2		disagree						
	Neither agree nor	83	15.1	21.6	33.8		Agree	75	28.4	36.4	92.2		
	disagree	_					Strongly agree	16	6.1	7.8	100.0		
	Agree	189	34.5	49.1	82.9		Total	206	78.0	100.0			
			12.0	17.1	100.0	Missing	System	58	22.0				
	Strongly agree	66	12.0										
	Strongly agree Total	66 385	70.3	100.0		Total		264	100.0				
Missing						Total		264	100.0				

Table 3 Available learning resources that are/aren't adapted to students needs

On the statement "The available learning resources are adapted to the social, cultural, cognitive development needs of the students" the majority of the students agree that the material is indeed adapted. The percentage of teacher is also high (36,41%). As it concerns the available learning sources in the neither agree or disagree option, the teachers' percentage is greater than 35,92, while the student is 21,56%. Regarding the strongly agree option, students have a percentage of 17,14%, while teachers' percentage was much lower (7,77%). Such gap was not evident in the strong disagreement option. Nevertheless, students' percentage is greater (2,34%) than the teachers (1,46%). In the case of the strong disagreement, the students 'answers reached 9,87%, while teachers' responses were rated at almost the double of (18,45%). Generally, there are different answers in this question, maybe because teachers, probably due to their role feel a greater need for better learning resources.

The questionnaires showed a variety of different option and perspectives, both negative and positive. As it concerns the positive aspect some teachers use <u>pictures</u>, <u>videos</u> and <u>well edited material</u> "There are lots of pictures in those three different places. Better copy good, than create badly. I also shamelessly, borrow YouTube videos where things are explained well. There really are resources on YouTube where teachers explain certain topics in a good way with pictures attached or visuals that move. That's often better than if I explain something with a still picture, so I add that. So yes, in that way I do try to offer things in different approaches and also during my lectures" (I2- NL). There is also an <u>abundancy</u> of





educational material "Well, apart from the textbook I have, I am quite good in terms of resources because the material I already have at home, both in books and on the internet, I see that I have easy access to" (I2- ES). The teachers also added that there is special material for some cases "First of all, the visually impaired, hearing impaired are supported by the methodical material" (I3-LV).

On the other hand, the responses also indicated some fewer positive responses. The teachers also underlined that there is appropriate material, but they also highlighted two serious problems: a) <u>the level of teachers</u> <u>awareness</u> ("Most important challenge. Well, I think first of all awareness for many teachers. I think a lot of people just resist irrationally, while I think: why? I really understand very little of that. Why is it so difficult to realise that we are a public institution and so you want to help everyone? And that it should not be about things that have absolutely nothing to do with content" (I5- NL) and b) the lack of time "Sometimes you are given the materials, you are given the way of teaching and you have given a certain amount of time that you have to finish everything and you much be flexible enough, but the situation is not that flexible for you to make it adjustable to the needs of the classroom, then that might cause some exclusion" Not really, I don't think so. Maybe I lack time, the resource time because it requires a lot of dedication. In terms of instruments, digital and non-digital tools... we have plenty of them. Come on, I don't think I take advantage of all of them, even. I don't have the time to make the most of them or to give them all the performance they can have (I3- ES).

The teachers also mention that in many cases they construct the educational material themselves. "again, for our own courses, we design the educational material .We choose the articles, the exercises ..." (I1- GR), while the teachers also have problems in finding the proper material, since there are "insufficient resources are invested in improving the study environment, motivating teaching staff and attracting additional employees. (I1-LT). Despite some teachers' attempt to construct custom made educational material, there are cases where lack of materials for specific groups is evident: "It was difficult for me to find Braille materials, but I focused more on audio materials and accessibility software, although these are also poorly accessible in the university environment" (I5-RO). Another barrier that the teacher in this question mention is -while there are sources- the language barrier always exists ".... I can understand the [students'] assignment but the English is not perfect and that is fine, and I take it into account when I grade in the sense that I will never dock point for language mistakes for instance, but you also have to recognize that because philosophy is a very language heavy discipline and nuancing your language is quite important. Even if you don't dock points for language mistakes it can still be that you have to try to read between the lines, did they actually understand it or not? That can be a bit of a difficulty" (I1-NL) In this reply, the language barrier is not limited to language per se but students' skills and knowledge that allow them to engage with epistemological issues prevalent in their discourse community.





Architectural facilities (e.g., wheelchair access, lifts, modular desk, etc.) that allow or not to adopt inclusive pedagogies.

Generally, the teachers and the students in this question seem to be on a par, since 14,84% of the students and 12,50 of the teachers strongly agree, 37,76% of the students and 34,13 of the teachers agree. This means that generally there are not many problems in terms of the architectural facilities, therefore the neither agree – disagree percentage is high for both students (28,13%) and teachers (25%). Regarding architectural facilities, 13,02% of teachers disagree, while student percentage disagreeing is much higher (22,60%). Additionally, the percentage of teachers 22,60% that disagrees with the architectural facilities is higher than the students. Besides, the percentage of students who strongly disagree is slightly higher than that of the teachers.

		STUD	ENT	S				TEAC	HER	S	
uni act app	he statements bel versities have in c ivities. Please indi ly to you Archit dular desk, etc.) a	order to facili icate to what ectural facili	tate incl extent t ties (e.g.	usion during he following , wheelchair	face-to face statements access, lifts,	un ac	he statements bel iversities have in c tivities. Please indi Ily to you Archit modular desk, etc	order to facili icate to what ectural facili	tate incl extent t ties (e.g.	usion during he following , wheelchair	face-to face statements access, lifts,
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	24	4.4	6.3	6.3	Valid	Strongly disagree	12	4.5	5.8	5.8
	Disagree	50	9.1	13.0	19.3		Disagree	47	17.8	22.6	28.4
	Neither agree nor disagree	108	19.7	28.1	47.4		Neither agree nor disagree	52	19.7	25.0	53.4
	Agree	145	26.5	37.8	85.2		Agree	71	26.9	34.1	87.5
	Strongly agree	57	10.4	14.8	100.0		Strongly agree	26	9.8	12.5	100.0
	Total	384	70.1	100.0			Total	208	78.8	100.0	
Missing	System	164	29.9			Missing	System	56	21.2		
		548	100.0			Total		264	100.0		

Table 4 Architectural facilities (e.g., wheelchair access, lifts, modular desk, etc.) that allow or not to adopt inclusive pedagogies

The follow up teacher interviews showed diverse and complementary perspectives. There were cases that the facilities provided for wheelchairs access, enhanced mobility and respected sensitive cases such as prayer room and gender-natural toilets; *"for example, it comes very specifically to a prayer room in our building or when it comes to form to address someone, where do you have gender-neutral toilets, yes, those are the things that come to my mind just now, where otherwise I haven't really experienced very big problems yet"* (I4- NL).

The elevators are an important element in the architectural facilities. Even though in some cases physical accessibility issues have been already addressed ("Of course, physical accessibility, when we were in the previous location, we didn't have an elevator, so it is impossible for students who have physical disabilities to get into their classrooms. We don't have any problem here" (I2- SE), there are still cases that the elevators are needed since there are ... students who have difficulties with mobility and access within the buildings. It seems that the elevators are mostly for the teaching rooms, but not for the teachers' offices; "in our department she cannot go up to the second floor. We don't have a lift to go from the first to the second floor to well... to talk to a professor of hers" (I3-Gr); "I think one of the main issues actually is just like the building. Even here in my office it is not very wheel chair accessible and I am not sure if that is in general most of the classrooms don't necessarily seem that well equipped for people in wheelchairs for instance that's obviously an issue" (I2-SE). These issues





seem to be more prominent in older buildings and thus more intense, as except from the elevator, they might also have other problems such as the small doors. "In some old university buildings, we do not have an elevator and I think some classes have a smaller entrance door that will not enable a student in a wheel chair to enter" (I3- RO).

Additionally, teachers have also identified other cases of lack of architectural facilities, such as for example the <u>furniture arrangement</u>. Architectural facilities are also connected with learning activities as pedagogically enhancing or limiting spaces; as mentioned by teachers "there are not enough rooms for different types of activities for students" (I2-Ro) or that "Second one is of course how our lecturer rooms are built. As the architecture is, it is also a hinder or a precondition for how we can organize our course. I think when you have this opportunity to, to, to experiment with the, with the classroom" (I5-SE).

It is also mentioned in the interviews that even though there is accessibility this does not mean that there is inclusivity, since the students with special needs in many cases are in the same room, but might be excluded, because they stay in specific places far away from their peers. 'Definitely space...when I teach in amphitheatres that do not have modular desks is a huge problem. I used to have student in a wheelchair, and she had to stay just in from of the first desk. It was so uncomfortable for her because she wanted to stay next to her colleagues" (I3-RO).

### The classroom space does/doesn't favour group work

Despite the previous responses, classroom group work seems to be somehow facilitated by the architecture or design of learning space; it seems that the students are more positive as it concerns classroom space for group work compared to teachers, since the 11,72% strongly agree that {what?}, while the teachers strongly agree in 8,78%. The 34,9% of the students agree, while the 25,37% agree, which is approximately 10% lower than the students' percentage. The percentage of those who neither agree or disagree between the teachers and the students is very close, for the teachers is 23,90% and for the students 21,09%. It seems that the teachers are more negative compared to students, since the students disagree in 24,48 and strongly disagree in 7,81%, while the teachers disagree in 29,76% and strongly disagree in percentage 12,20%.

		STUD	ENT	S		TEAC	HERS				
uni	he statements bel versities have in o tivities. Please ind	order to facili	itate incl extent t	usion during he following	face-to face statements	uni	he statements bel versities have in o tivities. Please ind apply to you	order to facili icate to what	tate incl extent t	usion during he following	face-to face statements
	apply to you		L		Cumulative			Frequency	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	Valid Percent	Percent	Valid	Strongly disagree	25	9.5	12.2	12.2
Valid	Strongly disagree	30	5.5	7.8	7.8	Vanu	Disagree	61	23.1	29.8	42.0
	Disagree	94	17.2	24.5	32.3		Neither agree nor disagree	49	18.6	23.9	65.9
	Neither agree nor disagree	81	14.8	21.1	53.4		Agree	52	19.7	25.4	91.2
	Agree	134	24.5	34.9	88.3		Strongly agree	18	6.8	8.8	100.0
	Strongly agree	45	8.2	11.7	100.0		Total	205	77.7	100.0	
	Total	384	70.1	100.0	100.0	Missing	System	59	22.3		
Missing		164	29.9	100.0		Total		264	100.0		
Missing	System										
Total		548	100.0								

Table 5 The classroom space does/doesn't favour group work





The teachers' disagreement is affirmed in the teachers' interviews, in which the teachers identify the reasons that affect working in groups. It seems that <u>the large number of students</u> is one of the problems. *"Because we teach quite small groups in subject didactics.* The biggest group I ever had was with 23 students. But that was really by far my biggest group and there are usually smaller groups. But of course, it's different if you're lecturing to 100 students, then you can't get to know all your students personally well. So that's even more of a challenge (I1-NL).

Another problem mentioned in the interviews, it is that the classroom itself might hinder group working "*It was so uncomfortable for her, because she wanted to stay next to her colleagues*" (I3-RO).

## The environment does/doesn't allow to encourage students to collaborate as equal partners

It seems that both teachers and students are generally positive in feeling as equal partners in the classroom, since approximately 60% seems to strongly agree or agree. These percentages are for the students 41,67 (agree) and 21,48 (strongly agree) while 45,93% of teachers agree and 15,79% strongly agree. The students are slightly more positive 21,88% to strongly agree compared to teachers (15,79%), while the percentage of teachers (45,93%) who agree is slightly higher than the students' (41,67%). A fifth of the respondents neither agree or disagree agree nor disagree with the teachers' percentage being 3,1% higher than the students. Also, in the negative responses of ,disagree' or ,strongly disagree' we see a clustering around 14%.with the students disagreeing slightly higher, at 13,54%, while the teachers are lower at 11,96%. The teachers` percentage in strongly disagree is slightly higher 2,38% than the students.

		STUDENTS TEACHERS									
uni act	he statements bel versities have in c ivities. Please indi ply to you. – I fee	order to facili	tate incl extent t to colla	usion during he following	face-to face statements	uni act	he statements be versities have in civities. Please ind apply to you. – M students	order to facili icate to what	itate incl extent t nt allows	usion during he following me to encou	face-to face statements
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	1.5	2.1	2.1	Valid	Strongly disagree	5	1.9	2.4	2.4
	Disagree	52	9.5	13.5	15.6		Disagree	25	9.5	12.0	14.4
	Neither agree nor disagree	80	14.6	20.8	36.5		Neither agree nor disagree	50	18.9	23.9	38.3
	Agree	160	29.2	41.7	78.1		Agree	96	36.4	45.9	84.2
	Strongly agree	84	15.3	21.9	100.0		Strongly agree	33	12.5	15.8	100.0
	Total	384	70.1	100.0			Total	209	79.2	100.0	
	Sustam	164	29.9			Missing	System	55	20.8		
Missing	System							264	100.0		

Table 6 The environment does/doesn't allow to encourage students to collaborate as equal partners

The teachers' interviews seem to affirm their disagreement or strongly disagreement, since the teachers are underlining real problems that students are confronting in the classrooms such as the case in which the students neglect the space for the student who needs it "Healthy students forget to leave space in the first bench. Before the seminar I had to





remind them or take care when working in a group that the disabled was integrated into a group. The one with blindness can't move, you can't do dynamic activities etc" (I1-RO).

Additionally, teachers perceive communication, mobility and accessibility issues as obstacles in creating learning environments where students act as equal partners. 'They do not facilitate inclusion, they do not facilitate rapprochement between students, communication, mobility, accessibility that is required in a classroom where learning is taking place. I think that would be the first thing that should be changed" (I5-ES)

The university teacher has/hasn't access to a faculty development centre which provides with pedagogical support

Regarding the statement "I have access to a faculty development centre that provides me with pedagogical support", 35.10% of the teachers who responded to the questionnaire agreed with this statement, 22.12% of them neither agreed nor disagreed, 16.83% strongly agreed, while 16.35% disagreed with the statement and 9.62% strongly disagreed.

uni act	he statements bel versities have in o ivities. Please indi ly to you I have provide	rder to facili cate to what	itate incl extent t faculty d	usion during he following evelopment o	face-to fac statements
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	20	7.6	9.6	9.6
	Disagree	34	12.9	16.3	26.0
	Neither agree nor disagree	46	17.4	22.1	48.1
	Agree	73	27.7	35.1	83.2
	Strongly agree	35	13.3	16.8	100.0
	Total	208	78.8	100.0	
Missing	System	56	21.2		
Total		264	100.0		

Table 7 The university teacher has/hasn't access to a faculty development centre which provides with pedagogical support

The teachers recognize the need of a unit that provides support "Okay, resources, yeah. Resources that we need, look, well, the learning centre let's say. If there was such a thing, there would be human resources and structures" (I4-GR) and this centre should be responsible to train educators, counsellor and support staff. "For me, as an educational specialist, I think is crucial to train educators, counsellors, and support staff who can provide individualized attention and support to students with different learning needs and to have this trained staff in all our university available not only for students but also for staff" (I4-RO).

Beyond this educational support the teachers also underline that this centre should also provide teaching material that allows them to adapt their curriculum. "*The university has an external environment, but there is a lack of teaching materials. The challenge is finding the approach*" (I3\_LV) or even this centre should also help the teachers to adapt the curriculum to the students' needs: "*And I find it really sometimes challenging that I cannot adapt. I know the other way might work better, but this is what I have been requested to do. So yes, sometimes the curriculum itself puts you in a position that you cannot change it, and it's really challenging to change*" (I6-NL).

It was also implied that although the academic development or teaching and learning centres may be available, academics/ teachers may be ignoring or neglecting using their





services; "I have to admit that I don't know what kind of services there are for students with learning difficulties or with disabilities or anything like that at our university. I know that I get told sometimes that this student in your class needs extra time for an exam or something like that, which obviously is no issue" (I1-SE).

Except the centres themselves, pedagogical help might also be provided by other students. In this case students' advisers can help the students who need it by discussing with the professor: "The help is from the student advisers who indicate to me that someone could use help. That's important, because a student who might not want to go into that discussion with a professor" (I3-NL). Also, pedagogical help can be provided by the students who can share their problems with the teachers "If I look at my own teaching, then yes, I mean, you don't know what you don't know, but I think I'm fairly sensitive to that. In the choice of my lesson design my lectures and listening to students I do give a lot of attention to that already and I get that back from the students as well, that it's appreciated. So, I think I'm not completely blank on that. Yes, and what they fight against is that, well, they are here in a programme from a different context, so they still have to get used to that" (I4-NL).

The university teacher has/hasn't access to a unit which provides with technological support

On the statement "I have access to a facility that provides me with technology support", 47.37% of the teachers who responded to the questionnaire agreed with it, 19.14% strongly agreed, and 13.40% neither agreed nor disagreed with the statement. Also, 13.40% of the responding teachers disagreed and 6.70% strongly disagreed.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	14	5.3	6.7	6.7
	Disagree	28	10.6	13.4	20.1
	Neither agree nor disagree	28	10.6	13.4	33.5
	Agree	99	37.5	47.4	80.9
	Strongly agree	40	15.2	19.1	100.0
	Total	209	79.2	100.0	
Missing	System	5 5	20.8		
Total		264	100.0		

The statements below concern accessibility and resources that universities have in order to facilitate inclusion during face-to face activities. Please indicate to what extent the following statements apply to you. - I have access to a unit which provides me with technological support

Table 8 The university teacher has/hasn't access to a unit which provides with technological support

The questionnaire showed that there are centres that support teachers technologically. This was also affirmed by the teachers' interviews, since the teachers when they need help, they ask from the ones that know "and then of course the coordinators the support staff and then that comes back the technology, how is it easy to record? And that's because then again, I'm fairly new here at the university. So, I don't know this software then, that that's all a bit different. The more help, the better (I3-NL).

Although the percentage that indicates agreement (47,37%) and strong agreement (19,14%) adds up to 66,51% altogether, there is also a percentage participant who disagree or strongly disagree. This percentage can also be identified in the interviews, in which the teachers identify their deficits and that they need help from a technological centre *"Of course,"* 





training. I would love to have a lot more information and I would also like to have more training in digital issues...I don't have enough training, sometimes I just play a YouTube video, I just put on my PowerPoint and that's it, because I don't have enough training" (I1-ES).

Additionally, it seems that is some cases there is a need for extra technological support from the University, such as the Braille materials *"It was difficult for me to find Braille materials, but I focused more on audio materials and accessibility software, although these are also poorly accessible in the university environment"* (I5-RO).

### 2.2. Accessibility and resources that universities have in order to

### facilitate inclusion during online activities

Accessibility and resources that universities have in order to facilitate inclusion during <u>online</u> activities according to the following categories:

## <u>Technological infrastructure (e.g., sound quality, video quality, connectivity quality, etc.) does allow to adopt inclusive pedagogies.</u>

Concerning the equipment and the technological support, 10.31% of the teacher respondents strongly agreed with this statement, 41.24% agreed, 34.54% neither agreed nor disagreed, 10.82% disagreed, and 3.09% strongly disagreed. The student respondents were slightly more positive in this respect as 17.70% strongly agreed, 48.67% of student respondents agreed, 21.83% neither agreed nor disagreed, 10.03% disagreed, and 1.77% strongly disagreed.

In many of the interviews the teachers indicated in several ways that the very possibility of online teaching allows for a more inclusive approach. "That's why the courses are both online and face-to-face. So, we don't exclude anybody in that respect, do we?" (I5-GR), "Due to the impact of the pandemic, the main way of reaching students is the opportunities offered by modern technologies" (I1-LV). However, some of the teacher respondents also indicated a lack of support in this respect, "There is no technological support specific to effective online teaching." (I2-RO).

Likewise, some teachers noted that some technological advancements can have benefits, but can also be expected to have disadvantages in relation to inclusivity. For instance, the practice of recording lectures and making the videos available to all students can be viewed as an inclusive practice. However, it can also have the adverse effect of students not coming to campus anymore. "I think for inclusivity that all lectures should actually be recorded nowadays and made available to students with better quality than we do now. Not everyone agrees with that. That's a controversial point, because some lecturers then think that students won't come to the on-campus lectures anymore." (I3-NL). Likewise,





similar concerns were raised with regards to hybrid teaching (i.e., a situation where groups of students are taught on location and online simultaneously).

On the one hand hybrid teaching can accommodate students how are unable to come to the campus (which can clearly be considered as an inclusive approach), but at the same time the mere opportunity of following education online can prevent students from coming to campus or result in groups of students not seeing each other, "We tried to towards the end of the pandemic, but also now, we are trying to wrap our heads around this hybrid thing and it is not really working. I think that might be a question of inclusion. From the student part I think some are older, they have children and Easter break and may not be as easy for them to come here and we can't really not schedule during all of these breaks, sometimes we do. I have done that. I have moved things into zoom because I have understood that there is a break. Nobody has said that they refuse to come in but I understand that we won't have as many come in and that's also a shame I think for the whole group. It's a technical problem but it is also a pedagogical problem having these two groups that don't meet ever. As a teacher you are too busy trying to teach and then you lose all of them online, I think and the worst part is that even if you can manage everything usually you have two students who show up in person and it is just not worth it for them." (I3-SE).

	STUDEN	TS				TEAC	HERS				
act	he statements belo universities have in tivities. Please indic pply to you. – The e und quality, video q	order to fa ate to what equipment a	cilitate i extent t and tech ectivity	nclusion dur ne following nological sup	ing online statements port (e.g.,	act	he statements bel universities have i ivities. Please indi oply to you. – Tech eo quality, connec	n order to fa cate to what nological inf	cilitate i extent t frastruct , etc.) all	nclusion duri he following ure (e.g., sou	ing online statements nd quality,
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	1.1	1.8	1.8	Valid	Strongly disagree	6	2.3	3.1	3.1
	Disagree	34	6.2	10.0	11.8		Disagree	21	8.0	10.8	13.9
	Neither agree nor disagree	74	13.5	21.8	33.6		Neither agree nor disagree	67	25.4	34.5	48.5
	Agree	165	30.1	48.7	82.3		Agree	80	30.3	41.2	89.7
	Agree										
	Strongly agree	60	10.9	17.7	100.0		Strongly agree	20	7.6	10.3	100.0
		60 339	10.9 61.9	17.7 100.0	100.0		Strongly agree	20			100.0
Missing	Strongly agree				100.0	Missing			7.6 73.5 26.5	10.3	100.0

Table 9 Technological infrastructure (e.g., sound quality, video quality, connectivity quality, etc.) does allow to adopt inclusive pedagogies.

### <u>The online learning environment (e.g., MS Teams, Zoom, GSuite, etc.) does favour group work.</u>

Concerning the statement to what extend the online learning environment (e.g., MS Teams, Zoom, GSuite, etc.) favours group work, 8.72% of the teacher respondents strongly agreed with this statement, 41.03% agreed, 26.15% neither agreed nor disagreed, 18.79% disagreed, and 5.13% strongly disagreed. Student respondents were slightly more positive. 17.91% of them strongly agreed, 42.39% agreed, 19.07% responded neither agree nor disagree, , 16.12% disagreed and 3.88% strongly disagreed.

In the interviews, multiple teachers expressed doubt whether small group discussions (e.g., in break-out rooms) are as effective as in a face-to-face setting. For instance, one





teacher reflecting on a break-out session said: "And then sometimes we (red: me and my coteacher) would go around a bit, but of course you couldn't be everywhere at the same time. And then you sometimes notice that things got a bit stiff in a group. And, that then also had to do with inclusiveness. That people didn't feel like including everyone. Well, that is difficult." (I1-NL). The same teacher later suggested that some of this might have to do with the fact that students have less of a connection with each other in an online setting, "So that's really different challenges in that online environment than when you're in a lecture room. And so, it matters whether people already have something in common, or whether they're just random people who don't know each other." In addition, one other teacher noted that, for students working in groups, sometimes students end up not working together at all on a group assignment. Instead, they might simply divide the work and each student just does their part. The online situation might aggravate this particular practice of dividing the workload without connecting or cooperating with each other, "If they do [meet up as a group] it is very goal directed, we are just here to do this and then log off of zoom if they ever meet. I have also heard them complaining about people not having their videos on when students meet. I understand because I have seen it, but I thought they would at least have the video camera on when they meet each other, but they don't even do that so I think it is probably not very forceful" (I1-ES).

Lastly, some teachers mentioned the use of specific methods to facilitate group work in an online environment by having students take on different roles, "When the classes were remote, they could discuss in groups, deciding for themselves who would take the initiative. Six hats method - allows everyone to be leaders and join the group." (I1-LV) Although there was no mention of the efficacy of this particular practice, the problems that were noted by other teachers underline the importance of effective methods and/or instructions for students for how to work together in an inclusive way in an online setting.

act	he statements bel universities have i ivities. Please indi ply to you The c	n order to fa cate to what online classro	extent t	nclusion dur he following	ing online statements	act	he statements bel universities have i ivities. Please indi pply to you The	n order to fa cate to what	cilitate i extent ti ing envir	nclusion dur he following roment (e.g.	ing online statements
		group w	Percent	Valid Percent	Cumulative			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	13	2.4	3.9	3.9	Valid	Strongly disagree	10	3.8	5.1	5.1
valiu		54	9.9	16.1	20.0	Valid	Disagree	37	14.0	19.0	24.1
	Disagree Neither agree nor disagree	66	12.0	10.1	39.7		Neither agree nor disagree	51	19.3	26.2	50.3
	Agree	142	25.9	42.4	82.1		Agree	80	30.3	41.0	91.3
	Strongly agree	60	10.9	42.4	100.0		Strongly agree	17	6.4	8.7	100.0
	Total	335	61.1	100.0	100.0		Total	195	73.9	100.0	
Missing	System	213	38.9	100.0		Missing	System	69	26.1		
	System	548	100.0			Total		264	100.0		

Table 10 The online learning environment (e.g., MS Teams, Zoom, GSuite, etc.) does favour group work.





The equipment and technological support are adapted to online teaching and learning.

Concerning the statement regarding the adaptation of technological equipment and support to online teaching and learning", 7.69% of teachers strongly agreed, 36.92% agreed, 34.87% neither agreed nor disagreed, 18.46% disagreed, and 2.05% strongly disagreed. Student respondents were slightly more positive. 14.46% of the student respondents strongly agreed, 40.96% agreed, 30.42% of them responded with neither agree nor disagree, 10.54% disagreed, and 3.61% strongly disagreed.

In the interviews it was suggested that one of the potential problems is that some students don't have access to certain facilitates. In that case, an interviewer agreed that: `as a teacher you are supposed to be familiar with many other alternative tools to provide a workaround, " There are children [students] who have finished university and no longer have mail. So, what are we going to do? They can't get into Teams, what do we say now? They don't have easy access. There you are obliged as a teacher to know too many tools. That's what inclusive learning is all about, okay? It's about that, because you can't throw out people who don't have academic mail or don't have easy access to Teams.` (IO4\_RO)

	STUDEN	TS				TEACH	IERS				
act	The statements belo universities have i tivities. Please indi pply to you. – In m upported with rega	n order to fa cate to what y online class	extent t s I notice ing and	nclusion dur he following ed that my te	ng online statements acher was	act	he statements bel universities have i ivities. Please indi apply to you Th adapted	in order to fa icate to what	cilitate i extent t and tech	nclusion dur he following mological su	ing online statements
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	2.2	3.6	3.6	Valid	Strongly disagree	4	1.5	2.1	2.1
	Disagree	35	6.4	10.5	14.2	Valid	Disagree	36	13.6	18.5	20.5
	Neither agree nor disagree	101	18.4	30.4	44.6		Neither agree nor disagree	68	25.8	34.9	55.4
	Agree	136	24.8	41.0	85.5		Agree	72	27.3	36.9	92.3
	Strongly agree	48	8.8	14.5	100.0		Strongly agree	15	5.7	7.7	100.0
	Total	332	60.6	100.0			Total	195	73.9	100.0	
	System	216	39.4			Missing	System	69	26.1	100.0	
Missing			100.0			Missing	System	09	20.1		

Table 11 The equipment and technological support are adapted to online teaching and learning.

### <u>Available online learning resources are adapted to the social, cultural, cognitive development</u> of students.

Concerning the statement whether the available learning resources are adapted to the social, cultural, cognitive development needs of the students, 7.77% of teacher respondents strongly agreed, 36.41% agreed, 35.92% neither agreed nor disagreed, 18.45% disagreed, and 1.46% strongly disagreed. The student respondents were more positive, 18.45% strongly agreed, 46.13% agreed, 20.24% neither agreed nor disagreed, 12.80% disagreed with the statement, and 2.38% strongly disagreed.

In one of the interviews, it was noted that one way of using learning resources in [online] teaching was the use of multiple modalities and materials in a flipped classroom setting, "So, I very much like the flipped classroom model, up taking theory on your own which can be done at home, but then I combine that with short web lectures, so very short bit of a lecture with assignments and a bit of reading from the book. And it's actually about the same





material. There are lots of pictures in those three different places. Better copy good, than create badly. I also shamelessly, borrow YouTube videos where things are explained well. There really are resources on YouTube where teachers explain certain topics in a good way with pictures attached or visuals that move. That's often better than if I explain something with a still picture, so I add that. So yes, in that way I do try to offer things in different approaches and also during my lectures, that it's not just listening and watching. It's also getting started and doing assignments yourself. This is offering the same substances in different ways. Especially with students nowadays with their attention spans no more than 3 quarters of an hour, and even that is often impossible. Especially now students don't have a long attention span, so I do adapt it to that." (I2-NL) In short, it seems that (borrowing from) open educational resources available online can help teachers to offer a more diversified range of resources to their students.

Lastly, one other particular issue that came up a number of times in the interviews is the issue of giving feedback to students in an online environment. Some teachers note that they experience difficulties giving feedback when teaching is mostly online, "Unfortunately, getting feedback in class is difficult when we work remotely." (I1-LV). At the same time, other teachers have embraced certain tools and/or technology that can help them give (more personalized) feedback in different modalities. For instance, one teacher noted that he found the use of video in addition to written feedback very useful, "Here's a way that you don't have to be in the office nor do you have to dedicate infinite hours. With a video! Which you send it, you choose a text, let's say of a student that you consider - it's always anonymous of course, right? - but which has the key points that you want to give to your students and you send it . Here's the personalized! Why is it personalized? Why when you've corrected 50 papers and you've seen that the problems are 3 ,say in all of them, personalized isn't it? Isn't it inclusive? Do you understand?" (I5-GR). In short, even though the online teaching setting provides challenges in this respect, the modern technologies also provide tools to give personalized feedback in a diverse way using different modalities like video and/or audio.

act	he statements bel universities have i tivities. Please indi ply to you Avail my social, cu	n order to fa cate to what able online I	cilitate i extent t earning	nclusion duri he following resources ar	ing online statements e adapted to	act	he statements bel universities have i ivities. Please indi ply to you Avai the social, culto	in order to fa icate to what lable online I	cilitate in extent the earning	nclusion duri he following resources ar	ing online statements e adapted to
		Frequency	Percent	Valid Percent	Cumulative Percent						Cumulative
Vallid	Strongly disagree	8	1.5	2.4	2.4			Frequency	Percent	Valid Percent	Percent
	Disagree	43	7.8	12.8	15.2	Valid	Strongly disagree	7	2.7	3.6	3.6
	Neither agree nor disagree	68	12.4	20.2	35.4		Disagree	36	13.6	18.5	22.1
	Agree	155	28.3	46.1	81.5		Neither agree nor disagree	86	32.6	44.1	66.2
	Strongly agree	62	11.3	18.5	100.0			57	21.6	29.2	95.4
	Total	336	61.3	100.0			Agree				
Missing	System	212	38.7				Strongly agree	9	3.4	4.6	100.0
Total		548	100.0				Total	195	73.9	100.0	
						Missing	System	69	26.1		
						Total		264	100.0		

Table 12 Available online learning resources are adapted to the social, cultural, cognitive development of students.





The online learning environment allows for encouraging students to collaborate as equal partners in learning

Concerning the statement about whether the online learning environment allows for the encouragement of students to collaborate as equal partners in learning, 9.79% of teacher respondents strongly agreed, 33.51% agreed, 38.66% neither agreed nor disagreed, 14.95% disagreed, and 3.09% strongly disagreed. Student respondents appeared to be slightly more positive. 21.26% strongly agreed, 37.43% agreed, 23.95% neither agreed nor disagreed, 11.98% disagreed, and 5.39% strongly disagreed.

It has already been discussed that the online setting can sometimes be detrimental for students working in groups. Naturally, the lack of a connection that on-campus teaching can more readily provide, this can also have a negative impact in being able to work together as equal partners. For instance, in one of the interviews a teacher reflected on a specific incident where a student used an example from practice in an online lecture where they had overheard a racist joke. The retelling of the joke, although related to the lecture, subsequently resulted in an uncomfortable situation where one of the other students took offense. The teacher noted that it was difficult to diffuse the situation, because it was all online and also because the students had never seen each other in real life. "But that was all in that online environment back then, wasn't it? So that is also really more difficult to interpret all signals properly and of course, because those students, I now realise, had never seen each other live, so they only knew each other from the screen. And yes, that does matter, doesn't it? In when someone says something and how to interpret it. Can come in much louder than have when it's with a group of people you've known for longer. And even then, hear, you may just find it a really unpleasant comment and you'll have the conversation about that. Yes, that online environment also made it more complicated than, say, when you are with a group of students at university in the building and have that interaction." (I1-NL). It seems that the online teaching situation can create more distance between students and difficult situations like the one described by the teacher can be difficult to deal with or defuse.

TUC	DENTS					TEAC	CHERS				
act	he statements bel universities have i tivities. Please indi oly to you I feel	n order to fa cate to what	cilitate i extent t to collab	nclusion dur he following	ing online statements	act	The statements bel universities have i tivities. Please indi apply to you. – Th encourage my st	n order to fa icate to what e online lear	extent t ning env	nclusion dur he following ironment alle	ing online statements ows me to
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	18	3.3	5.4	5.4	Valid	Strongly disagree	6	2.3	3.1	3.1
	Disagree	40	7.3	12.0	17.4		Disagree	29	11.0	14.9	18.0
	Neither agree nor disagree	80	14.6	24.0	41.3		Neither agree nor disagree	75	28.4	38.7	56.7
	Agree	125	22.8	37.4	78.7		Agree	65	24.6	33.5	90.2
	Strongly agree	71	13.0	21.3	100.0		Strongly agree	19	7.2	9.8	100.0
	Total	334	60.9	100.0			Total	194	73.5	100.0	
	System	214	39.1			Missing	System	70	26.5	20010	
Missing		548	100.0			instituty	-,	264	100.0		

Table 13 The online learning environment allows for encouraging students to collaborate as equal partners in learning





<u>The University teachers have access to a faculty development centre which provides</u> pedagogical support specific to online teaching

Concerning the statement about having access to a faculty development centre that provides pedagogical support specific to online teaching, 8.25% strongly agreed, 42.27% of the responding teachers agreed with this statement, 20.10% neither agreed nor disagreed, 17.01% disagreed, and 12.37% strongly disagreed.

act app	he statements bel universities have i ivities. Please indi ly to you I have ovides me with pe	n order to fa cate to what access to a f	cilitate i extent t faculty d	nclusion dur he following evelopment	ing online statements centre which
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	24	9.1	12.4	12.4
	Disagree	33	12.5	17.0	29.4
	Neither agree nor disagree	39	14.8	20.1	49.5
	Agree	82	31.1	42.3	91.8
	Strongly agree	16	6.1	8.2	100.0
	Total	194	73.5	100.0	
Missing	System	70	26.5		
Total		264	100.0		

Table 14 The University teachers have access to a faculty development centre which provides pedagogical support specific to online teaching

In the interviews, there was little spontaneous discourse about a faculty development centre which provides pedagogical support specific to online teaching. Interestingly, specific to online teaching, it was noted that peer learning (i.e., teachers sharing best practices and/or discussing the ins and outs of online teaching) could play an important role in supporting each other in this respect, "During the pandemic we had three times per semester sharing good practice when everyone had to tech on zoom and we had to learn from each other. I arranged those workshops and that I think you can also do to have more at the department, and not X courses necessarily. We had one in January with a visiting teacher from X who has been teaching online for many years and the focus was on online teaching and that was divided into two half days. I think within the department you can do these kinds of small workshops where teachers are forced to discuss what they do and just to talk about it usually gives you some ideas because you start to think about "what am I doing?" and hear what other people are doing." (I2-SW).

### The university teachers have access to a unit which provides technological support specific to online teaching

Concerning the statement about having access to a facility that provides technological support specific to online teaching, 11.79% of the teacher respondents strongly agreed, 45.64% agreed, 20% neither agreed nor disagreed, 13.33% disagreed, and 9.23% strongly disagreed. Like was already noted, some teacher indicated that no technological support was available at their faculty/university, "There is no technological support specific to effective online teaching." (I2-RO). Please note that this particular question was asked to teachers only. However, interestingly, in some of the other interviews a number of teacher respondents expressed the importance of students having access to technology to be able to participate in online education. It was suggested that the university should have programs in place to help students who do not have access to the necessary equipment, "Well, access to technology is crucial for students to participate fully in academic and social activities.





However, not all students have access to the necessary technological resources, such as laptops or high-speed internet, which can create barriers to inclusivity. We do have some nice programs to help student get a laptop." (I3-RO).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	18	6.8	9.2	9.2
	Disagree	26	9.8	13.3	22.6
	Neither agree nor disagree	39	14.8	20.0	42.6
	Agree	89	33.7	45.6	88.2
	Strongly agree	23	8.7	11.8	100.0
	Total	195	73.9	100.0	
Missing	System	69	26.1		
Total		264	100.0		

The statements below concern accessibility and resources that universities have in order to facilitate inclusion during online activities. Please indicate to what extent the following statements apply to you. - I have access to a unit which provides me with technological support specific to online teaching

Table 15 The university teachers have access to a unit which provides technological support specific to online teaching

### 2.3. University teachers' beliefs regarding support of inclusive pedagogy

#### approaches

Teachers' beliefs in relation to inclusive pedagogy has been acknowledged as an important factor in developing not merely a favourable attitude to inclusive education but also in practicing inclusive teaching. Florian (2014) notes that teachers mindfully employing instructional approaches that are advantageous to all learners and fostering a sense of community is vital for inclusive education. Without an effective process for instructors to reflect on their knowledge, understanding, and ways of engaging in developing proposed inclusive approaches, there is no foundation for inclusion (Loreman, 2017).

In the quantitative data regarding the support of inclusive pedagogies, teachers' and students' perceptions differ to some degree in relation to four different aspects, i.e., whether teachers show proof that it is important to develop awareness about students' learning needs, to adapt to students' different ways of learning, to encourage perspective taking in the classroom and finally whether it is important to embrace diversity in the classroom. The discrepancies between teacher and students' perspectives are shown below together with comments and examples from the teacher interviews.

When the teachers were asked in the interviews how they define inclusive pedagogies (RQ1) the responses range from a strategy or mindset to involve and activate all students, "no student left behind", and considering the needs of students with special needs to having a pedagogical plan with a set of activities to be used during a course. The teachers also mention avoiding racist or sexist comments. The teachers refer to students with learning difficulties, disabilities and foreign language background as well as students with a different world view. One teacher points at the need to make a distinction between on the one had students' various learning needs and on the other hand various backgrounds. Regardless, including





everyone means according to the teachers that all students should have equal access in a safe learning environment. However, not only access, they should have equal opportunities to flourish and bloom and education should be meaningful to all. Some teachers also point not only to providing education to students but bearing in mind what the students can contribute with as they are sharing their experiences and bringing their backgrounds into academia.

One teacher problematizes the competitive part of higher education, that some programs and courses only have students who represent some kind of elite whereas some students will not have a chance due to the massive numbers who apply. These groups will be more homogenous and by default exclusive in a sense.

At the question if inclusive teaching fits into higher education (RQ2), teachers generally are very determined that it does. One answer given is that not only does it fit; it is a necessity. However, some teachers mention that inclusive education implies a new mindset since higher education traditionally has been rather exclusive. Some teachers hint that universities may not necessarily be ready for it and it therefore may take time, but still claiming that inclusive education is the future. Moreover, a teacher points out that it is absolutely necessary since we are fostering people to be part of a democratic society and all should be equipped to take part and have the right to get the skills needed, even more so today when there are fake news and a need to train your critical thinking skills.

#### It is important to develop awareness about students' learning needs.

In the survey 52.06% of the responding teachers strongly agreed that it is important to develop an awareness about the students' learning needs and 40.72% agreed. Only 15.2% of the students strongly agreed that their teachers develop awareness of the students' learning needs, however 45.76% of the students agreed. A majority of the students, 61% can thereby be said to agree, although to a lesser extent than the teachers, where 93% did. Nearly every fourth student, 23.3%, neither agreed or disagreed which may indicate that the students are uncertain how teachers' awareness of their students' learning needs is expressed. Having an awareness is one thing, but it could be expected that an awareness also is shown in practice.

nive	rsity teach	ers				University students						
sup	statements below pport of inclusive p int the following st to develop aw	pedagogy ap atements ap	proache ply to yo	s. Please indi ou. – I think i	tea	The statements bel achers' beliefs reg icate to what exter teachers develo	arding inclus	ive peda ng state	gogy approa ments apply	to you M g needs		
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Strongly disagree	1	.4	.5	.5	Valid	Strongly disagree	19	3.5	5.8	5.8	
	Disagree	3	1.1	1.5	2.1		Disagree	33	6.0	10.0	15.8	
	Neither agree nor disagree	10	3.8	5.2	7.2		Neither agree nor disagree	77	14.1	23.3	39.1	
	Agree	79	29.9	40.7	47.9		Agree	151	27.6	45.8	84.8	
	Strongly agree	101	38.3	52.1	100.0		Strongly agree	50	9.1	15.2	100.0	
	Total	194	73.5	100.0			Total	330	60.2	100.0		
	System	70	26.5			Missing	System	218	39.8			
Missing		264	100.0			Total		548	100.0			

Table 16 It is important to develop awareness about students' learning needs





In the interviews (RQ3) teachers give examples of interactive course design as a way to meet student needs and one example involves asking the students in the beginning of a course if there is something they think the teacher should know about them from the start. Another aspect pointed out by a teacher is that not all students like to read and it may be good to have lectures recorded for those who struggle with the reading. Assessment is mentioned as a critical element where students with dyslexia for instance may need other ways of presenting their knowledge than in writing a paper and pencil test. Teachers mention having a dialogue with students with special needs as regards options in assessment format and procedure. One teacher explains that teachers need to have a sensitivity so they recognize when they meet students with certain needs and can adapt when they do. Along those lines one teacher mentions being sensitive and inclusive in relation to religion, by avoiding having people eat food in front of a student during a fasting period (Ramadan), or being mindful of how binary students want to be addressed, in relation to gender.

### It is important to adapt to students' different ways of learning.

A similar pattern as seen above in relation to teachers' awareness of students' learning needs can be seen in response to the question about teachers' willingness to adapt to different ways of learning. However, student responses are more negative than previously, expressing a slight dissatisfaction with how much teachers adapt the learning activities to suit their different needs. 45.13% of the teachers strongly agreed that they do, and 47.18% agreed, resulting in 92% of all teachers. 15.15% of the students strongly agreed and 31.53% responded that they agree, a total of 47%. 25.76% neither agreed or disagreed, similarly to the previous question on teachers' perceived awareness, but the rest, nearly 28% either disagreed or strongly disagreed. This means that more than every fourth student believes that teachers do not adapt the learning activities to student needs.

nive	rsity teach	ners				University students							
sup	statements below oport of inclusive nt the following s to adapt to	pedagogy ap	proache ply to yo	s. Please indi ou. – I think i	cate to what t's important ng	tei ind	'he statements bel achers' beliefs reg icate to what exter teachers adapt the	arding inclus nt the follow learning act	ive peda ng state ivities to	gogy approa ments apply	to you My		
		Frequency	Percent	Valid Percent	Cumulative Percent			learni	ng		Cumulative		
Valid	Strongly disagree	3	1.1	1.5	1.5			Frequency	Percent	Valid Percent	Percent		
	Disagree	2	.8	1.0	2.6	Valid	Strongly disagree	33	6.0	10.0	10.0		
	Neither agree nor	10	3.8	5.1	7.7		Disagree	58	10.6	17.6	27.6		
	disagree						Neither agree nor	85	15.5	25.8	53.3		
	Agree	92	34.8	47.2	54.9		disagree						
	Strongly agree	88	33.3	45.1	100.0		Agree	104	19.0	31.5	84.8		
	Total	195	73.9	100.0			Strongly agree	50	9.1	15.2	100.0		
	System	69	26.1				Total	330	60.2	100.0			
Missing						Missing	System	218	39.8				
Missing Total	system	264	100.0										

Table 17 It is important to adapt to students' different ways of learning.

When teachers mention activities, they develop in class (RQ3), they mention interactive activities as mentioned above, but it is interesting to note that some teachers also mention challenges in relation to this and how the same requirements and evaluation criteria should be used for all or else this may cause resentment in other students. Some teachers also share examples of situations when students wanted special accommodations with a risk of altering the course goals and the skills the course sets out to develop, thereby risking the





validity in a course. One of the teachers explicitly says that there has to be an awareness of when accommodation can be done and not, when a physical disability for instance is a real hindrance to perform certain activities and the accommodation actually means doing a different task.

In the interviews teacher are asked in what ways they empower students to take the initiative (RQ4), and a general comment is by using interactive teaching strategies so students engage in classroom discussions. Another way to activate students mentioned by the teachers is the flipped classroom approach. Group work and having the students do small research projects are mentioned as well as the role of feedback to empower students to take charge of their own learning. Giving students clear instructions and information of what is required also contributes to empowerment and inclusive education according to a teacher. Keeping high expectations on the students, that they are there to learn and do their readings before the seminars, never thinking about lowering the bar. It is the think-pair-share principle, according to a teacher, which means informing the students to think before they come to class, sitting in pairs, or smaller groups, where they all get to share.

### It is important to encourage perspective taking in the classroom based on nonjudgmental approaches to discussing cultural, social or other types of differences.

When it comes to non-judgmental perspective taking in the classroom when discussing differences, 62.1% of the teachers strongly agree and 27.2% agree that they do. The total, 89% is marginally lower than the proportion of teachers agreeing to the two previous questions. The proportion of teachers who neither agree nor disagree is also slightly higher, 8.2% compared to the previous two questions. 2% of the teachers disagree, stating that they do not encourage perspective taking. In the student survey 27.5% strongly agree that teachers encourage perspective taking and 45.3% agree that they do, meaning that nearly 73% of students agree to a bigger or lesser extent. This means that this is the question out of the four where students are most in favour of their teachers' inclusive approach, with only nearly 8% disagreeing that teachers fail to encourage perspective taking in the classroom. This result shows that a majority of the students as well as the teachers think perspective taking happens in the classroom.

sup exte to	statements below oport of inclusive p nt the following st encourage perspe gmental approach	pedagogy ap tatements ap ective taking	proaches ply to yo in the cl sing cult	s. Please indi ou. – I think i assroom bas	cate to what t's important ed on non-	tea indi tea	The statements bel achers' beliefs reg icate to what exten achers encourage n-judgmental app	arding inclus nt the followi perspective t	ive peda ng stater aking in iscussing	gogy approa ments apply the classroo	ches. Please to you My m based on
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	.4	.5	.5	Valid	Strongly disagree	7	1.3	2.1	2.1
	Disagree	4	1.5	2.1	2.6		Disagree	19	3.5	5.7	7.9
	Neither agree nor disagree	16	6.1	8.2	10.8		Neither agree nor disagree	64	11.7	19.3	27.2
	Agree	53	20.1	27.2	37.9		Agree	150	27.4	45.3	72.5
	Strongly agree	121	45.8	62.1	100.0		Strongly agree	91	16.6	27.5	100.0
	Total	195	73.9	100.0			Total	331	60.4	100.0	
Missing	System	69	26.1			Missing	System	217	39.6		
Total		264	100.0			Total		548	100.0		

Table 18 It is important to encourage perspective taking in the classroom based on non-judgmental approaches to discussing cultural, social or other types of differences





In the interviews the teachers mention that inclusive teaching means taking various backgrounds into account. One teacher talks about using a perspective-based approach to let different views be presented, allowing all perspective to have their proper value without favouring any of them. Instead, an example is given how students of different backgrounds can be used almost as a living encyclopaedia by using an approach where students of certain backgrounds can explain themselves how to tackle a sensitive subject in their view. The student is included when asked. Differences enriches us, as one teacher stated, although teachers also testify of challenges at stake when not all students appreciate the taking of different perspectives, and having to deal with that.

One way of empowering students (RQ4) is to create an atmosphere where it is okey to question and where students feel welcome to be who they are and be treated with respect. One teacher mentions to not focus on individuals or subgroups but rather on the whole group as one unit and this means being inclusive, not making difference the focus but unity.

### It is important to embrace diversity in the classroom

The teachers' responses about the importance to embrace diversity in the classroom is similar to their responses in the previous question on perspective taking. 62.89% of the teachers strongly agree that it is important and 28.35% agree that it is important, thus representing a total of about 91%. A small proportion, 7.22% neither agree nor disagree. The question is how the teachers' beliefs can be seen and noticed in practice by the students.

Embracing diversity in the classroom follows a similar pattern compared to the previous questions in relation to the students. A large proportion neither agree nor disagree, nearly 23% which means almost every fourth student who responded. If indeed the teachers' perceived importance of diversity is expressed in pedagogy and practice, it is not as obvious to the students. However, a majority of the student did express fairly positive views, meaning that every fourth student, 25.08% strongly agree and 45.32% agree, a total of 70% who have positive views on their teachers' ability and or willingness to embrace diversity.

nive	ersity teach	ners				Unive	ersity stud	ents			
sup	statements below port of inclusive p nt the following st to embr	edagogy ap	proache ply to yo	s. Please indi ou. – I think i	cate to what	tea	The statements be achers' beliefs reg icate to what exte teachers e	arding inclus	ive peda	gogy approa ments apply	to you My
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	.8	1.0	1.0	Valid	Strongly disagree	3	.5	.9	.9
	Disagree	1	.4	.5	1.5		Disagree	19	3.5	5.7	6.6
	Neither agree nor disagree	14	5.3	7.2	8.8		Neither agree nor disagree	76	13.9	23.0	29.6
	Agree	55	20.8	28.4	37.1		Agree	150	27.4	45.3	74.9
	Strongly agree	122	46.2	62.9	100.0		Strongly agree	83	15.1	25.1	100.0
	Total	194	73.5	100.0			Total	331	60.4	100.0	
Missing	System	70	26.5			Missing	System	217	39.6		
missing		264	100.0			Total		548	100.0		

Table 19 It is important to embrace diversity in the classroom

In the interviews teachers are asked how they reach to all of their students (RQ5). The question makes some teachers ask themselves if they do, or if it is even possible, even though





this is the goal. Teachers mention that smaller groups of students obviously make it easier. The responses how to reach all students cover several aspects, including communication technology and email, having regular contact with students during office hours or making themselves available by staying a little after class, but also to focus on various learning strategies and classroom activities to reach students with different needs.

In summary it can be noted that a lot of inclusive teaching seems to already happen according to teachers and students alike, but there is yet work to be done to have students experience that their needs are being met to the same extent as the teachers believe they are. Another option is for teacher to be more explicit about what is being done, without pinpointing students or making them feel stigmatized but rather explaining how the inclusive approaches are used and is the rule for everyone.

### 2.4. Curricular and assessment adjustments to support the inclusive

### pedagogy approach

### 2.4.1. Curricular design and methodology

Nowadays, there is a growing awareness of the role of designing curricula and applying as many different approaches and methods as practicable, meanwhile making learning more engaging and accessible to all students without exception (students of different cultures, genders, races, socioeconomic levels, and differently abled or special-needs learners), without focusing on any particular differences or disabilities: "Conceptually, the approach is predicated on a shift in pedagogical thinking away from conventional approaches that work for most learners existing alongside something additional or different for those (some) who experience difficulties, towards one that involves providing rich learning opportunities that are sufficiently made available for everyone, so that all learners are able to participate in classroom life` (Florian, 2015). Educators may find it daunting and overwhelming to strive for inclusivity among students who exhibit diversity across multiple intersecting dimensions. "Being deliberately inclusive in the classroom takes work, and not all faculty have a clear sense of where to start or expand their efforts in this area `(Sanger, 2020). In order to identify the main difficulties in designing curricula and selecting study methods within the framework of inclusive education, it is crucial to consider the views of both teachers and students with regard to various situations and feasible problems. The data from the student and teacher surveys are presented below in a comparative perspective, which is best explained by the views expressed by the teachers in the interviews on the advantages and problems of curriculum design and the application of the inclusive approach.

Adaptation of the learning objectives of the courses to the needs of an inclusive pedagogical approach

The views of students and teachers on the implementation of the inclusive pedagogy approach in the curriculum are very similar, with both students and academics





pointing to the need for this approach. On the statement "My teachers adapt the learning objectives of the courses to the needs of an inclusive pedagogical approach", 42.12% of the surveyed agreed that their teachers do adapt the learning objectives so that they meet their needs. Moreover, 15.07% strongly agreed showing that adapting learning objectives to suit an inclusive pedagogical approach helps ensure that all students, regardless of their abilities or backgrounds, can access and benefit from the educational content. This approach aims to create an environment where everyone can participate, engage, and learn effectively.

On the other hand, 10.96% disagreed and 2.05% strongly disagreed with the fact that their teachers adapt the learning objectives which implies that there is still room for advocacy so that all teachers are equipped with the necessary competences and pedagogical skills to face the challenges of building an inclusive education system.

The survey question with regard to the statement "I adapt my course learning objectives to inclusive pedagogical approaches" revealed that 49.27% of the responding teachers agreed, 35.08% neither agreed nor disagreed, 12.04% strongly agreed, 9.95% disagreed, while 3.66% strongly disagreed.

TUC	DENTS					TEA	CHERS				
	Curricular design earning objectives		ses to the	needs of an		Cur	ricular design and of the course				
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	1.1	2.1	2.1	Valid	Strongly disagree	7	2.7	3.7	3.7
	Disagree	32	5.8	11.0	13.0		Disagree	19	7.2	9.9	13.6
	Neither agree nor disagree	87	15.9	29.8	42.8		Neither agree nor disagree	67	25.4	35.1	48.7
	Agree	123	22.4	42.1	84.9		Agree	75	28.4	39.3	88.0
	Strongly agree	44	8.0	15.1	100.0		Strongly agree	23	8.7	12.0	100.0
	Total	292	53.3	100.0			Total	191	72.3	100.0	
Missing	System	256	46.7			Missing	System	73	27.7		
Total		548	100.0			Total		264	100.0		

Table 20 Adaptation of the learning objectives of the courses to the needs of an inclusive pedagogical approach

Students' views showed slightly different as 37.67% of the students agreed with the statement "My teachers include learning activities related to inclusive pedagogy approach", 27.40% responded neither agree nor disagree, and 16.44% disagreed. 16.10% of the students responded with strongly agree to the statement and 2.40% strongly disagreed.

### STUDENTS





### Curricular design and methodology - My teachers include learning activities related to inclusive pedagogy approach

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	1.3	2.4	2.4
	Disagree	48	8.8	16.4	18.8
	Neither agree nor disagree	80	14.6	27.4	46.2
	Agree	110	20.1	37.7	83.9
	Strongly agree	47	8.6	16.1	100.0
	Total	292	53.3	100.0	
Missing	System	256	46.7		
Total		548	100.0		

Table 21 Student's opinion wheatear their teachers include learning activities related to inclusive pedagogy approach

The respondents acknowledged that, in general, the term "inclusive" has a very broad meaning: "The word "inclusion" is very big, so I would include other elements that were not only inclusion in terms of issues of people with different cognitive abilities, but I would include other kinds of elements: more ethnic... and racial issues, which is one of the big problems we are facing in the future and which is very much linked to other kinds of differences; gender, of course, very important; also, very important, linked to the social stratum." (I1 - SP) In order to implement the principles of inclusive education in each group, it is necessary to use diverse methods that allow different students to successfully learn and develop, since one group can comprise both students with special needs and students of different genders, nationalities and religious backgrounds with different social statuses.

Preparing teachers for inclusive education practices involves providing them with training, resources, and support to effectively cater to diverse student needs. This includes understanding various learning styles, adapting curriculum and assessments, fostering a positive classroom environment, and using assistive technologies when necessary. This statement is best presented in the interview by one respondent who agreed that: *"I would support increasing the emphasis on analysing students' needs and developing skills to adapt teaching style and materials according to these identified needs, while maintaining academic rigor in the field of study"* (I5-RO).

Moreover, university teachers must embrace change in order to provide students with adequate learning experiences, just as presented by a respondent who believes that: "Well, I would certainly make some changes. maybe some simpler exercises to be able to reach this scope as a step to achieve before reaching the other step that most pupils can already achieve, but in a very discreet way. I think that a student with certain needs may even feel embarrassed, so I wouldn't want him/her to... feel embarrassed" (I2 - SP).

At the same time, when introducing the principles of inclusive education, one should not forget about the fact that at the end of any study course the students must acquire a certain content and present their knowledge and skills in tests, provided that there are equal





requirements for all students. One respondent formulated this idea as follows: "It is really important to focus on the course's intended learning outcome and make sure that this is what is achieved with the examinations. I am afraid we are way too narrowminded." (I5 - SW)

Teachers acknowledged that implementing the principles of inclusive education and at the same time achieving successful learning outcomes can be a very complex process that requires from the teachers both specific knowledge and skills and the ability to adapt and consider the learners' individual traits and needs. Mastery of working in a group with special needs students can be achieved through practice and learning: "And then maybe it requires practicing, but to learn how to distribute the power among everyone." (I6– NL)

### Adaptation of teaching to meet the needs of diverse students

Regarding the statement "I adapt my teaching to meet the needs of diverse students", 59.69% of the surveyed teachers agreed with this statement, 18.85% neither agreed nor disagreed, with 17.80% strongly agreed. Noteworthy, 2.09% of the responding teachers answered with either disagreement or strong disagreement.

To the statement "My teachers adapt the way they present new information to meet the diverse needs of students", 37.59% of students agreed, 23.79% of them responded neither agree nor disagree, 17.93% disagreed with the statement, 15.86% of them responded strongly agree, and 4.83% strongly disagree.

Ci	urricular design ar they present new					Cu	rricular design and for	d methodolo diverse stud			ning to cate
		Frequency	Percent	Valid Percent	Cumulative Percent		101	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	14	2.6	4.8	4.8						
	Disagree	52	9.5	17.9	22.8	Valid	Strongly disagree	3	1.1	1.6	1.6
	Neither agree nor disagree	69	12.6	23.8	46.6	-	Disagree Neither agree nor	4	1.5 13.6	2.1	3.7
	Agree	109	19.9	37.6	84.1		disagree	30	15.0	10.0	22.5
	Strongly agree	46	8.4	15.9	100.0		Agree	114	43.2	59.7	82.2
	Total	290	52.9	100.0			Strongly agree	34	12.9	17.8	100.0
Missing	System	258	47.1				Total	191	72.3	100.0	
Total		548	100.0			Missing	System	73	27.7		
						Total		264	100.0		

Table 22 Adaptation of teaching to meet the needs of diverse students

The teachers pointed out that in order to successfully adapt teaching to meet the needs of diverse students, diversity is very important both in the choice of study methods and in the choice of methods for assessing students' knowledge. Both individual and group work methods can be used to test students' knowledge both on-site and remotely with the use of various digital tools: *"I think variation is key, to use seminars for examination as well as individual examinations, take home assignments and groups assignments or maybe a blog* 





that they may be writing together. Optimally, varied forms and methods should be used to be able to assess students." (I3 - SW)

When working on a regular basis, it is necessary to check one's initial assumptions about a student or situation, because sometimes one's initial notions can be misleading: "*That* [checking assumptions] is the most important thing to do as an activity in inclusive sessions." (I6 - NL) This view confirmed the previously explored question, i.e., inclusive education is a highly systematic activity provided that a life-long and professional application of inclusive education methods can lead to positive results thus helping students to acquire knowledge and skills, as well as shape their attitudes towards studies, people and life processes.

When implementing the principles of inclusive education at all stages of studies – both in the study process itself and during examinations – it is important not to forget about people with special needs, i.e., physical access to the audience must be provided for these people to implement the studies and examinations. One of the respondents pointed out that this is still a problem, especially during exams when the exam is scheduled in the auditorium inaccessible for people with physical disabilities: *"Examinations are often scheduled for you and that has to be on that day which facilities are available for people with physical disabilities. I have little influence on that. Of course, I can bring that up with the institute and the faculty, but that is a much longer process and at other universities, for example, that is really arranged by other people and teachers don't really have to do anything about it. At our university, I haven't seen that yet, so that might be something that needs to be improved." (12 – NL)* 

Academics who want to successfully apply the principles of inclusive education in their work must be endowed with a number of qualities, namely, they must systematically learn, and improve their knowledge and skills, as well as it is significant to be sensitive and endowed with emotional intelligence: "Well, work training, of course, so empathy, sensitivity and knowledge of the difficulties that students with a certain diversity may have. Training on what kind of feelings they are having, thoughts, and to what extent I can contribute to soften that or to remove that barrier, that of course, and then techniques to contribute to participation while respecting whatever it is, right?" (I3 - SP)

The lecturers admitted that it is not easy to reach every student, and sometimes it does not work out right away, however, one always has to look for different ways to meet the diverse needs of their students: *"I don't always manage to reach everyone. In some cases, it is somehow easier to understand why they don't get involved - for example, in the case of optional, elective subjects (where they come with different expectations or, somehow, they arrive by chance - to be with their peers, etc.) or those who are not in their major (for example - the third year Defectology subject, Psychology. There is little interest in visual disabilities etc. in the case of those who want a career in military psychology etc.). In the case of those who get very involved and give me top marks in teacher evaluations I was constantly told as strengths- lots of examples, practical activities, simulation of "professional life" situations-conflicts with parents, children's refusal to get involved in tasks etc. and the open approach, appropriate communication." (I1 – RO)* 





### Design of learning activities that take into account learning differences in different ways

The opinions between students and faculty vary as to the circulation of information about the curriculum during the study process.

On the statement "Design learning activities that take into account learning differences in different ways (e.g., oral, written, online, face-to-face)", 53.58% of the responding teachers chose agreed, 26.32% strongly agreed, and 13.68% neither agreed nor disagreed. In addition, 5.79% disagreed and 0.53% strongly disagreed.

Considering the statement "My teachers design learning activities that take into account learning differences in different ways (e.g., oral, written, online, face-to-face, etc.)", 46.92% of students responded that they agreed, 21.23% strongly agreed, while 14.04% neither agreed nor disagreed. Moreover, 13.36% of the respondents answered disagree and 4.45% strongly disagree.

	rricular design an ctivities that take modes (e.g., or	into account	learning	differences	in various		urricular design a at take into accoun oral, v		fferences	s in various i	
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
/alid	Strongly disagree	13	2.4	4.5	4.5			Frequency			
	Disagree	39	7.1	13.4	17.8	Valid	Strongly disagree	1	.4	.5	.5
	Neither agree nor	41	7.5	14.0	31.8		Disagree	11	4.2	5.8	6.3
	disagree	137	25.0	46.9	78.8		Neither agree nor disagree	26	9.8	13.7	20.0
	Strongly agree	62	11.3	21.2	100.0			103	20.0		
	Total	292	53.3	100.0	100.0		Agree	102	38.6	53.7	73.7
41 m a 1 m a			46.7	100.0			Strongly agree	50	18.9	26.3	100.0
Aissing	System	256					Total	190	72.0	100.0	
otal		548	100.0			Missing	System	74	28.0		
						Total		264	100.0		

Table 23 Design of learning activities that take into account learning differences in different ways

The use of different approaches in the study process not only diversifies the studies and makes them more interesting, hence also improves the quality of studies, and promotes students' persistent interest in content, thus encouraging independent learning. The lecturers were happy to share their experiences of how they design learning activities that take into account learning differences in different ways which can be illustrated with the following quotation: *"I offer different approaches. So, I very much like the flipped classroom model, up taking theory on your own which can be done at home, but then I combine that with short web lectures, so very short bit of a lecture with assignments and a bit of reading from the book. And it's actually about the same material. There are lots of pictures in those three different places. Better copy good, than create badly. I also shamelessly, borrow YouTube videos where things are explained well. There really are resources on YouTube where teachers explain certain topics in a good way with pictures attached or visuals that move." (I2-NL)* 

To understand the needs, features and abilities of each student, one has to pay attention to each individual: "I think it's also important that you offer some attention in your teaching, specifically about diversity." (I4 – NL) Evidently, in large groups it can be cumbersome or complicated, however, respondents indicated that it is not always necessary





to give individual attention constantly, sometimes it is enough to provide some practical or psychological support once in a while: "Sometimes you have people who need something for a while. That could just be mental support or support that you are not alone or just very simply an A3 printer or something." (I5 - NL) "I actually think it's better for this and this reason that you work with those for a while and you work with those others.... you have to help a little bit sometimes... You spot who's who more quickly already. Who is timid or a bit weaker or could use some encouragement? Yes, you can pay attention quite a bit and it's not very difficult actually." (I5 - NL)

One of the options that can help academics to realize the principles of inclusive education, devoting individual attention to each student, maybe the engagement of additional support staff. In general education schools, teacher assistants working individually with a few children are a common practice, but it is not so common in universities yet, however, the demand for research is growing. One lecturer pointed out the need for support staff in higher education institutions: "*Maybe it would be good if there was an assistant or someone who knows the needs of these people better, helps them navigate.*" As a second key option, the said respondent referred to the allocation of additional financial resources to students whenever it is required, as well as general support: "*Maybe financial resources, support to help them study.*" (I3 – LV)

The academics explained that they pay special attention to the students who need additional individual support, and try to choose such forms of study which the respective student can fulfil in their particular case. One of the interviewed lecturers mentioned the cases when, due to their physical condition, students were unable to participate in long seminars, he also explained how he solved the problem: "Because what I try to do is to differentiate between people who learn in a different way or need some extra time or feedback, for example. And that is then not inclusive in the sense of male-female, cultural and I don't know, but didactic it is inclusive. And well, then I thought, I like that too, inclusive education. I don't know if it really follows that definition, but there are often students with a practicum (ed: laboratory teaching) who cannot participate properly because of their personal problems. We also have refugee students, students who are breastfeeding, etc." (I2- NL)

One of the most relevant solutions offered by modern technology is the recording of lessons. The teachers pointed out that the recording of lectures allows for solving students' various perception problems. However, the question remains whether each lesson should be recorded. To add more, one of the lecturers in his interview expressed contradictory views. At one point he stated that *"for inclusivity\_all lectures should actually be recorded nowadays and made available to students with better quality than we do now."* (I3 – NL) In the next passage, sharing his experience, the aforementioned lecturer explained that he does not consider it necessary to record each of his lectures. He does this only when necessary, when there are students in the group who need it in order to successfully perceive the content: *"I don't know beforehand what the classes are like, so you try to do something with that to the best of your ability. But it is limited, there are exceptions, for example, this year I had one lecture, a subject, and halfway through it was actually indicated that someone was having trouble keeping up. And then we recorded everything for those persons, whereas in the master* 





program recordings are not standard, so then you can just easily adjust of course. But it's not that I say to the students in advance, which of you do I have to record this for? Because if I do, then of course they all say yes. So, the answer is no. But if something happens during a course, I do try my best to adjust." (I3 – NL)

### Group learning activities that allow to collaborate in an inclusive learning community

The university teachers' perspectives on the issue of learning activities varied, as 48.69% of teacher respondents agreed, 23.04% strongly agreed, and almost the same percentage 20.94% neither agreed nor disagreed, 6.3% and 1% disagreed and strongly disagreed, respectively, with the affirmation "I create group learning activities that allow students to collaborate in an inclusive learning community (e.g., peer-to-peer feedback activities, challenging assumptions and self-values".

In students' opinion regarding the same affirmation "My teachers create group learning activities that allow us to collaborate in an inclusive learning community (e.g., peer-to-peer feedback activities, challenging assumptions/values)", 40.21% respondents agreed, 22.68% strongly agreed, 20.62% neither agreed nor disagreed, while 13.75% expressed disagreement and 2.75% strong disagreement.

	Curricular design a learning activities ommunity of learni the taking	that allow us	s to colla feedbad	borate in an k activities,	inclusive challenging		Curricular design activities that all mmunity of learni the taking fi	ow students ng (e.g., peer	to collab feedbac	orate in an in	nclusive challenging
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	1.5	2.7	2.7	Valid	Strongly disagree	2	.8	1.0	1.0
	Disagree	40	7.3	13.7	16.5		Disagree	12	4.5	6.3	7.3
	Neither agree nor disagree	60	10.9	20.6	37.1		Neither agree nor disagree	40	15.2	20.9	28.3
	Agree	117	21.4	40.2	77.3		Agree	93	35.2	48.7	77.0
	Strongly agree	66	12.0	22.7	100.0		Strongly agree	44	16.7	23.0	100.0
	Total	291	53.1	100.0			Total	191	72.3	100.0	
Missing	System	257	46.9			Missing	System	73	27.7		
Total		548	100.0			Total		264	100.0		

Table 24 Group learning activities that allow to collaborate in an inclusive learning community

The interviewed lecturers acknowledged that group activities are important not only in the study process, they can also be successfully used when evaluating students' knowledge, for example, using a group assessment approach, which can be implemented both in person physically being in the auditorium, as well as using various digital tools and platforms.

One of the interviewed lecturers in detail shared his experience in managing group work, pointing out that it provides for a better understanding of the personalities and needs of students, but at the same time it requires special effort from the lecturer: "We divided the students into small groups and we really knew their needs, their personality. Now, here, I always have to think in specific ways. Well, one way is that voluntarily and even though our schedule, the timetable does not provide for it, I always ask and they always allocate me an





extra two hours in the schedule and I divide the students into groups. In the last few years two groups is enough. Usually 50-60 students enrol, maybe 40 attends. So that's what I do...During the activities I am always around and ask how their work is going with a particular task , if they have questions. (...) So I go and see how each small group is working and I give feedback and then what I gather afterward, I also report back to the class so that everyone can communicate to everyone. That's what I do...' (I1-GR)

To ensure successful communication in a group, it is necessary to teach students to accept diversity and recognize the peculiarities and special needs of another person. It is not enough that only the lecturers themselves are able to recognize the special needs of students and are able to offer different teaching approaches. The lecturers must lead the work of the group in such a way that students also understand each other's special needs. Thus, the lecturers indirectly teach students emotional intelligence. Following the respondent: *"In terms of learning activities universities can encourage students to explore and analyse the intersectionality of different identities to understand how they interact with each other and shape unique experiences."* (I4-RO)

The teachers pointed out that in many high schools, the auditoriums are still traditionally designed, with a seat for the teachers in the front and students facing each other, with tables and staircase fixed in one particular place. It is common sense that such audiences do not welcome inclusive education. The lecturers expressed their belief that it is important to arrange the classrooms in such a way as to facilitate communication between students and equal communication with the teacher. Some teachers suggested that the first necessary step toward making the transition to inclusive education is to change the architecture of the classroom: *"The first change I would make would be physical changes in the classrooms; there is the furniture already designed to facilitate inclusion through conversation; the possibility of modifying to change movement spaces, a different classroom layout."* (I5 - SP)

One of the respondents also pointed out that group work is a successful approach, creating a dialogue with students and opening for their self-expression. It is not always possible to communicate with each student individually, in which case there must be a response group that communicates the student's wishes to the teacher or other persons (e.g., the university management): "A response group where people can make their voices heard, where they can call attention to their specific situation. … You don't have to be able to deliver everything, you can't promise everything either, but listening already makes more than half the difference, seeing students as partners in teaching and in the design of teaching and giving them a voice" (I4- NL)

# It is important to encourage student progressive autonomy in terms of planning and learning

As justified by the data provided below, the opinions of the surveyed academics and students with regard to the affirmation "My teachers encourage our progressive autonomy in terms of planning and outcomes of student work" show no discrepancy: 43.99% of the surveyed students responded that they agree with the statement, 24.40% strongly agree, and





21.65% neither agree nor disagree, while 7.56% of the students responded that they disagree and 2.41% strongly disagree.

The statement "I encourage progressive student autonomy for planning and learning", revealed the following results: 48.17% of the responding teachers agreed, 29.84% strongly agreed, 20.94% neither agreed nor disagreed, and 1.05% disagreed.

TUD	ENTS					TEAC	HERS				
	irricular design an gressive autonom		planning				Curricular design progressive				
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	1.3	2.4	2.4	Valid	Disagree	2	.8	1.0	1.0
	Disagree	22	4.0	7.6	10.0		Neither agree nor	40	15.2	20.9	22.0
	Neither agree nor	63	11.5	21.6	31.6		disagree				
	disagree	_					Agree	92	34.8	48.2	70.2
	Agree	128	23.4	44.0	75.6		Strongly agree	57	21.6	29.8	100.0
	Strongly agree	71	13.0	24.4	100.0		Total	191	72.3	100.0	
	Total	291	53.1	100.0						100.0	
Missing	System	257	46.9			Missing	System	73	27.7		
Total		548	100.0			Total		264	100.0		

Table 25 It is important to encourage student progressive autonomy in terms of planning and learning

The faculty believe that the ability to learn independently is very important nowadays. According to numerous studies, it is one of the key skills of a future human in a rapidly changing world. This ability also enables students to achieve better results. In encouraging students' ability to study independently, students' personalities must always be considered, as this is the only way to ensure quality studies. However, it is essential for the tutor to have a full picture of students' individual characteristics in order to evaluate the appropriate approaches. As it reads in one interview: *"Uh… I wanted to see, to be able to connect the, maybe someone's personal background to their performance to be able to understand, to recognize the problem. That is, ancestry with performance, gender, sexual orientation with performance, er... social background, er... or different kinds of ...or psychological issues that someone, some portion of the world may have with performance so that I can understand where the problem is; so that I can change something, intervene." (I2-GR) To function efficiently in a modern world, and to recognize the individual characteristics of the students, academics must be open, with concern for their students, thus promoting students' desire to study independently, which is the cornerstone of progressive autonomy.* 

In the course of promoting the progressive autonomy of students, it is crucial to pay special attention to motivating students to study in diverse ways and to promote active involvement in the study process. In the choice of motivational tools, apparently, an individual approach is a key point, since what motivates one student for independent study may not necessarily motivate another student. One lecturer aptly described this process as follows: *"I give feedback, express expectations about our way of working, integrate small group and pair work sequences. If I am concerned about lack of activism, I offer to host the student for consultations and offer the consultation schedule to everyone. Talk about the Counselling* 





Centre. If it still doesn't work (and sometimes it doesn't) I bring up the importance of the assumed career and the profession that includes it (I'm even writing about it now), the possibility of profile changes." (I1-RO)

The teacher is the one who runs and organizes the study process and who is able to promote the progressive autonomy of the students. The teacher plays a very significant role, especially in implementing the principles of inclusive education. The respondents indicated that it is important to learn certain content and acquire knowledge in studies. This is the first level, the entry level, but it is essential. The creation of progressive autonomy in students is mostly not at the level of knowledge acquisition, it is at the level of attitude formation. One cannot develop it in one lesson or even in one semester, it is a complex and long process as illustrated further, *"So we are talking about knowledge, knowledge, but we are also talking about attitude. Attitude will be formed gradually, it cannot be done, it is not "oh, now I will change my attitude", it doesn't work like that because it is a very long process and long term, right?"* (I5-GR)

### Opportunities to reflect and gain a better understanding of the learning

In response to the statement "My teachers give us opportunities to reflect and gain a better understanding of our own learning", 42.27% of students agreed, while 22.34% expressed neutrality. A further 22.34% expressed strong agreement. On the other hand, 11% of the students who participated in the survey disagreed, and 3.78% expressed strong disagreement.

Regarding the statement "I provide students with opportunities to reflect on their own learning", 51.58% of the teachers participating in the survey agreed with this statement, 32.11% strongly agreed, 13.16% neither agreed nor disagreed, and 3.16% disagreed.

TUD	ENTS					TEAG	CHERS				
ор	Curricular design portunities for us		and gain	n a better un		c	urricular design an students	nd methodol to reflect on			tunities for
					Cumulative			Frequency	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	Valid Percent	Percent	Valid	Disagree	6	2.3	3.2	3.2
Valid	Strongly disagree	11	2.0	3.8	3.8		Neither agree nor	25	9.5	13.2	16.3
	Disagree	32	5.8	11.0	14.8		disagree				
	Neither agree nor	60	10.9	20.6	35.4		Agree	98	37.1	51.6	67.9
	disagree						Strongly agree	61	23.1	32.1	100.0
	Agree	123	22.4	42.3	77.7		Total	190	72.0	100.0	
	Strongly agree	65	11.9	22.3	100.0	Missing	System	74	28.0		
	Total	291	53.1	100.0		Total		264	100.0		
Missing	System	257	46.9								
Total		548	100.0								

Table 26 Opportunities to reflect and gain a better understanding of the learning

The possibility of asking questions ensures students' positive communication with the lecturer, creates a more relaxed atmosphere and promotes students' interest in studies, which in turn develops skills and the desire to study and learn independently. By asking and commenting, students get the opportunity to actively participate in the study process, offering to change approaches or pay special attention to certain topics. Thus, it can be





concluded that the different methods of the inclusive approach are interrelated. Consequently, the lecturers often mentioned several methods in the framework of one single interview and emphasized the role of active cooperation with students: "To try to get the feeling of that it's okay to, to ask questions, that the questions are very good and, and to sort of try to, to create an environment where it's okay to, to raise questions. And, but when I have smaller groups, of course it's easier to create feedback in different ways." (I1-SW)

Accessibility is cited by one teacher as one of the three most important requirements for inclusive education. One can see it as a cornerstone of inclusive education.) It is of utmost importance that students can express their wishes and the teachers try to understand and listen to them: "To be approachable as much as possible so the students can articulate their needs, their additional learning needs, or maybe the things that are important." (I6– NL)

Listening to students' opinions helps to improve the study process and also teaches students to be attentive to each other, to accept other people's opinions and otherness: "One of the rules I always say is that never judge each other in a classroom. We come across some ground rules. And I also ask the students if they think there is something they care about and they want it to be part of the rules of the classroom. If it is logical and manageable and we can do it in the classroom, if it is practical, we will add it to the rules. If not, we will discuss it. Why it is not practical and we cannot include it." (I6-NL)

To promote students' initiative, lecturers use a variety of methods, such as face-toface discussions and the use of various digital tools. Lecturers were happy to share their experiences, and the methods they apply to facilitate students' activity: *"To facilitate initiative, I usually start free discussions on various topics after ensuring that I have created a safe space in which they can express themselves freely, and I invite everyone to express their views on the respective topic. This often becomes the starting point for the course topic. Another activity I constantly do is integrating the Photovoice methodology into courses on various topics, which transfers "power into their hands," giving students the opportunity to structure their own vision of the subject."(I5-RO)* 

Active participation of students in the study process is also promoted by various additional information from the lecturer, which is not directly related to the particular group, but characterizes previous experience, different participants in the study process, etc.: *"…maybe give some guidelines on how many students, how many people have participated in doing the work you are marking, to what extent student profiles are crossed, to what extent they are participating in teams, to what extent they self-evaluate, correct each other, collaborate with each other, help each other to understand... which I think is one of the ways, not only for them to better understand objectives, etc., but also to develop empathy among them in diversity, to make them participants in the learning of all." (I3 - SP)* 

When working in small groups, by all means, it is easier to have an active dialogue with students, give them a voice, and listen to their opinions, but it may not be so easy. Some lecturers shared their experience as to the way they promote the active involvement of students in the lesson as it reads here: "Usually working with smaller groups makes it easier to empower students to take initiative and engage in a conversation because they feel the





group pressure. But this does not happen all the time or during courses where I also want to hear my students' voices and ideas regarding the discussed topic. Something that I see works is to always make sure that after some student intervene, I provide some short feedback so that other feel confident enough to speak as well." (I3-RO)

# Development of teachers' professional skills in teaching in an inclusive way

Teachers are generally more interested in self-development than students think, hence the views are similar. The obtained data indicate that professional development is important in improving one's skills, abilities and attitudes.

With regard to the statement "My teachers need training to develop their repertoire for teaching in an inclusive way", 34.83% of the surveyed students responded neither agree nor disagree, 31.72% agreed, and 19.31% strongly agreed. Moreover, 10.69% of students disagreed with the statement, and 3.45% strongly disagreed.

In relation to the affirmation "I need to develop my professional skills about teaching in an inclusive way", 50.79% of the responding teachers responded with agreement, 25.13% with neither agree nor disagree, 18.32% with strong agreement, while 4.71% responded with disagreement and 1.05% with strong disagreement.

Cu	rricular design an develop their re						Curricular design professional comp				
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	1.8	3.4	3.4	Valid	Strongly disagree	2	.8	1.0	1.0
	Disagree	31	5.7	10.7	14.1		Disagree	9	3.4	4.7	5.8
	Neither agree nor disagree	101	18.4	34.8	49.0		Neither agree nor disagree	48	18.2	25.1	30.9
	Agree	92	16.8	31.7	80.7		Agree	97	36.7	50.8	81.7
	Strongly agree	56	10.2	19.3	100.0		Strongly agree	35	13.3	18.3	100.0
	Total	290	52.9	100.0			Total	191	72.3	100.0	
Missing	System	258	47.1			Missing	System	73	27.7		
Total		548	100.0			Total		264	100.0		

Table 27 Development of teachers' professional skills in teaching in an inclusive way

The academics believe that they would need training not merely to develop their competences in inclusive education but also to gain new information about modern approaches and methods. It is often the case that university lecturers mastered teaching methods and approaches only during their studies, acquiring the profession of a teacher. However, it is necessary to systematically upgrade one's knowledge and increase competence during the training and seminars that are intended specifically for university lecturers. The lecturers pointed out that they commonly learn either from each other or by working in a practical way, but they lack systematic professional development training. One lecturer was highly emotional when speaking about this: *"Because as I said we are not trained to teach,* 





everybody carries their own experiences and their own attitudes into the classroom and then they become tomorrow's teacher, I need ...somebody to tell me how I will approach different problems that I will face in the classroom, some problems that will relate to inclusion, say, that we talked about earlier. Because at the moment I am acting on my own, that is, what I have experienced, what I am listening to from the world around me, without having been trained while being a professional teacher, right? [laughter]" (Q9, Greece, I2)

As one of the opportunities to develop their competences in inclusive education, the lecturers proposed to conduct small workshops where lecturers can share their experience: "I think within the department you can do these kinds of small workshops where teachers are forced to discuss what they do and just to talk about it usually gives you some ideas because you start to think about "what am I doing?" and hear what other people are doing. That is the most rewarding in attending these workshops I think." (I2 - SW) At the same time, the lecturers pointed out the need for regular, professional development courses: Maybe also require that you do, like in the military, that you do a "remand" [rep month], when you go back and have brush ups every five years or something. That might be a good idea to also learn a little about the technical tools that are available and now with CHAT GPT and everything we have to think about how to deal with." (I2 - SW)

Based on the discussions in the interviews, it is evident that academics are in need of concrete examples and clear guidelines to handle various situations effectively. Affiliated to different countries and institutions, many lecturers encounter similar challenges. It is common sense that each educator should not start from scratch, but rather, can leverage existing knowledge, practices, and models: "But I also think there is a need to take part of the principles of inclusive teaching across disciplines, to keep record of good principles. I think it is good to receive examples on how to build a good structure in the LMS environment that is clear and communicative, or this is how to build a clear lesson design. Get very concrete examples of how to do this in order to be inclusive, presenting an overview to pick ideas from to use in your own teaching and learning context. [Like a handbook almost?] Well, more like having an awareness of the basic guidelines and then you must read more scientific research, but also be given an opportunity to see how you can work with this in very concrete terms through good examples, you don't have to reinvent the wheel yourself if you can see how other teacher do, what they use in the classroom next door or in another university." (I5-SW)

Overall, there is a great need for academics to acquire additional knowledge and skills to ensure that they are able to implement the principles of inclusive education more effectively. They mention a whole range of ways in which they could improve their professional competence - from small workshops and one-to-one discussions with their closest colleagues to reading theoretical literature and watching videos, to lectures by professional experts and tips and guidelines compiled in a single open-access material. To improve the situation, it is necessary to work not merely with the teachers themselves but also to promote dialogue with policy-makers to bring about legislative changes that will contribute to better implementation of the principles of inclusive education in higher education.





#### 2.4.2. Assessment

Using different means to communicate assessments such as oral, written, online, onsite, etc. which consider learning differences amongst students exemplify the appropriate support students need to understand their progress when it comes to course learning objectives. In this sense, teachers' and students' perspectives on this issue are similar in some respects, as both groups strongly agree in similar percentages - 16.67% and 16.04% respectively - that different types of assessment are designed to accommodate students' needs.

However, in general terms it could be said that students have a more critical view on this issue than the group of teachers, disagreeing to a greater extent than the teachers on the use of assessment methods adapted to learner needs.

This generalized student criticism does not quite correspond with the statements obtained in the teacher interviews, in which most of them state that they use different platforms, techniques or resources when providing feedback or assessment to their students: "...we do this feedback in different ways. It is about providing them with constant information about what they are doing through different strategies or different resources so that they know how they can improve it and even make it easier for them to make proposals to improve their own work" (I5-SP).

This use of different means of assessment is, as mentioned above, shared by several teachers interviewed and, in some interviews, it is suggested that the assessment resources used by each teacher could be related not so much to inclusion but to personal ways of understanding the relationship established when assessing or providing feedback between students and teachers or among students. For example, one teacher states: "I don't give feedback to a particular student in front of other students" (I3-SWED), while another comments: "I ask them to give feedback and I give individual feedback, when appropriate and in a way that does not hurt as much as possible" (I1-RO).

These are examples of how different teachers understand the moments dedicated to evaluation in different ways, since, although it is evident that all of them try to respect the student, for some it is something that only concerns teacher and student, while others consider these moments as learning opportunities for all students and even involve the whole group in the evaluation activity or let them be the ones who self-evaluate: "...in the classroom, feedback is also given by the students [...]. So, when I'm doing this assignment for the evaluation, the evaluation is given for the students. So, there's what we call the mutual teaching" (I5-GR).



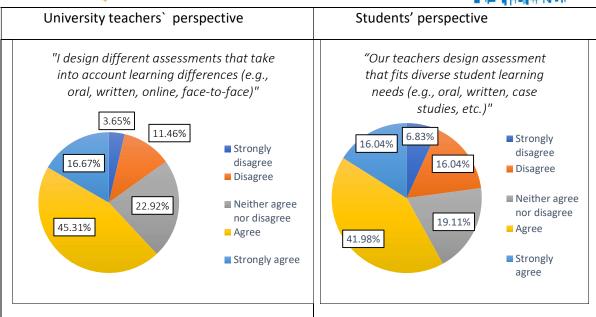


Figure 5 Designing different assessments that take into account learning differences (e.g., oral, written, online, face-toface)"

As previously stated, using online and/or on-site assessments to encompass students' different learning needs entails the support needed to the course learning objectives' progress. That said, when it comes to online assessments, university teachers' perspectives on this topic are varied, and 26,56% strongly agreed or agreed with the affirmation "I believe online assessments meet the inclusion needs of students", almost the same percentage (29,96%) strongly disagreed or disagreed, while 43,75% of them neither agreed nor disagreed.

Some of the negative outcomes of online assessment perceived by interviewed teachers are related not so much to the evaluation moment itself (that can be via many platforms), but to those moments when the feedback must be given in a remote lesson context where online interaction is not an option, but an obligation: "...that online environment also made it more complicated than, say, when you are with a group of students at university in the building and have that interaction." (I1-NETH); "Unfortunately, getting feedback in class is difficult when we work remotely." (I1-LAT). On the other side, when there are options about the context chosen for the evaluation, both teachers and students may perceive it as something positive: "In the classroom I try to give direct feedback, the same via email, if I have time I try to respond right away, and student appreciate that." (I4-SWED).

When it comes to students' perspectives, they have a more positive perception about the uses of different assessment techniques, as more than half of the ones polled strongly agree or agree with the statement "Our teachers use different assessment techniques (online, face-to-face) to suit the needs of different students" while only 15,02% and 7,85% disagree and strongly disagree respectively.

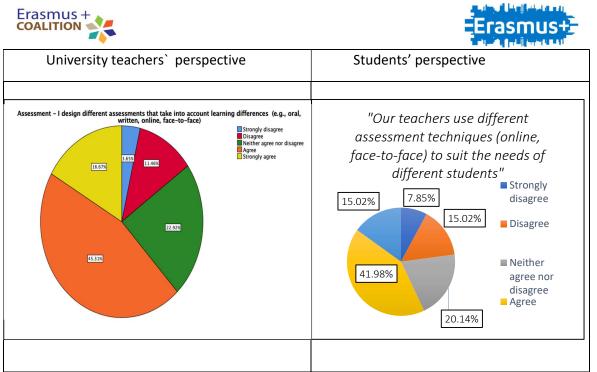


Figure 6 The use of different assessment techniques (online, face-to-face) to suit the needs of different students

There is no doubt that the implementation and improvement of inclusive assessment techniques is a challenge for university teachers, especially those who are not familiar with this type of practice, and some of them may feel that they need training in this regard either if they want to implement them or to enrich the ones they already use. Thus, according to the results obtained, most of the teachers surveyed agree or strongly agree with the statement "I think I need professional development activities to design inclusive assessment techniques in different ways" by 47.12% and 17.80% respectively. Even though no specific references to training needs were found in the teacher interviews, concerns about how to give feedback were expressed, implying the need for professional training on this topic: "... there is a great danger that you adjust your feedback based on the assumptions you make about a person, which is why I find it difficult. On the one hand, you must do that because everyone is different. But you also have to be careful because it's also easy to underestimate people. And so yes, I do it, but I always really hope that I also keep my assumptions, which of course you have, out of the way a bit." (I5-NETH); "... we give feedback, but actually that same concern of paying attention to your words is of course actually important in other activities as well, so not only when someone shows something from the work placement practice, but also discussions you have about all the different topics, but of course that can also be at any time it can come up." (I1-NETH).

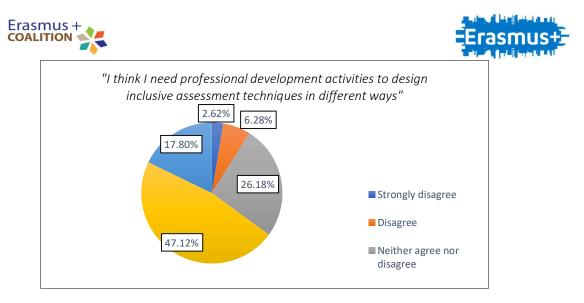


Figure 7 University teachers' perspective whether they need professional development activities to design inclusive assessment techniques in different ways

Different learning styles require not only different assessment techniques, but also the ability to increase time flexibility when it comes to give students the adequate feedback. When teachers were asked about this topic, more than 70% either agreed or strongly agreed with the statement "In my courses, assessment time can be adapted to the needs of the students", while only 2,63% and 4,21% strongly disagreed or disagreed respectively. This means most teachers think they are aware of their students' needs when it comes to feedback during lessons, even though students' perspectives about this time flexibility in assessment may vary from their teachers', as a higher percentage (14,38%) disagreed with the statement "In my courses, the assessment time can be adapted to our needs" and a 6,52% strongly disagreed with it. On the other hand, the number of teachers and students that strongly agreed with these statements were similar – 16,84% and 16,78% respectively –. In this sense, textual references to time flexibility were not present on the interviews.

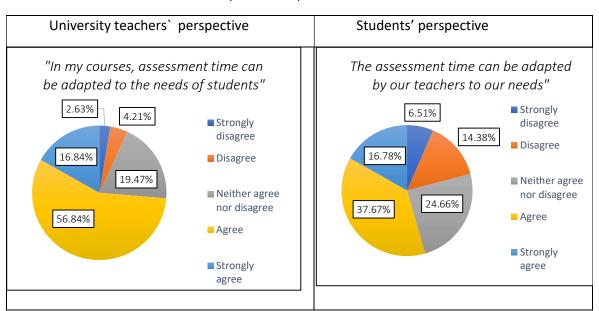


Figure 8 Assessment time can be adapted to the needs of students





### 2.5. The facilitation of active learning and engagement of all students

Facilitating discussions among students so that different perspectives are shared is an important key aspect when it comes to creating a rich learning environment that supports active learning and engagement of all students. Looking from both teachers and student's perspective we can see that there is a correlation between their answers, approximately 45.99% of teacher respondents agreed that they encourage and facilitate discussions between students, while 49.45% of the student respondents also agreed that they feel stimulated to participate and engage into discussions with their peers. Overall looking at the data we could say that student's perspective towards the use of meaningful discussion to strengthen collaboration and input between students is more positively seen by students than by teachers who have a more critical opinion on their frequency of using discussions among students as a way of supporting students to gain different perspectives across a subject or an idea that is being put into discussion. This critical opinion about their skills was spotted also during the interviews with university professors that attested that in order to support others into their development, first it is important for them to excel on it `if we mean these soft skills that we expect to have and cultivate in students, we must first of all have them ourselves, be open, be flexible, be adaptable` (I1 - Greece).

Moreover, the rich discussions that are an important part of the class activity, also play an important role in developing a critical thinking perspective, a key element that university teachers target with their students as stated by a Spanish teacher who agrees that *critical thinking is not measured in competences, critical thinking is holistic and has the analysis of socio-economic inequality as a fundamental pillar of any start of applicability* (I4 – Spain)

act	e statements belo tive learning and e hat extent the foll cussion among stu	engagement owing stater	of all stu nents ap	dents. Please ply to you -	e indicate to I facilitate	ac wh	e statements belo tive learning and e at extent the follo cilitate discussion	engagement wing stateme	of all stu ents appl that dif	dents. Please y to you C	e indicate t Our teacher
		Frequency	Percent	Valid Percent	Cumulative Percent				Percent	Valid Percent	Cumulative Percent
/alid	Strongly disagree	2	.8	1.1	1.1	11.11.1	<b>6</b>	Frequency			
	Disagree	4	1.5	2.1	3.2	Valid	Strongly disagree	4	.7	1.4	1
	Neither agree nor disagree	9	3.4	4.8	8.0		Disagree Neither agree nor	21	3.8	7.6	9.1
	Agree	86	32.6	46.0	54.0		disagree				
	Strongly agree	86	32.6	46.0	100.0		Agree	137	25.0	49.6	70.
	Total	187	70.8	100.0			Strongly agree	81	14.8	29.3	100.
	System	77	29.2				Total	276	50.4	100.0	
Missing		264	100.0			Missing	System	272	49.6		
Missing Total						Total		548	100.0		





When it comes to providing feedback in a variety of modes (e.g., oral, written, online, face-to-face) 47.59% of teachers who responded to the questionnaire agreed with this statement, 33.16% strongly agreed, 13.37% neither agreed nor disagreed with the statement, while 5.35% of participants disagreed and 0.53% strongly disagreed. At the same time, 44% of the students that responded agree that their teachers use feedback, approximately 23.27% strongly agreed, 12.36% neither agreed nor disagreed, 15.27% disagreed, and 5.09% strongly disagreed.

As presented in the literature (Judah, C., Macfarlane-Dick, D., Matthew, B., Nicol, D., Ross, D., & Smith, B., 2004; Zierer, K., & Hattie, J., 2020) the importance of feedback into the learning process is one of the major factors that can contribute to students learning achievements, so teachers must be aware of the responsibility to nurture student's learning and to provide feedback in such a manner that the student does not leave the classroom feeling defeated. In this study, a tendency towards oral feedback has been particularly spotter teachers tending to address this kind of feedback due to its performance, a statement spotted during the conducted interviews: `in oral feedback you have a discussion. It's a reflection together about certain choices and why did you do like that and could have thought about that. And that was, you know, when it comes to written feedback, it's on paper and it's very, you know, you cannot discuss around it and guess that discussion around is actually what is fruitful for learning` (11- Sweden). On the same terms, another university teacher agrees to the fact that using feedback is crucial, but still opts for oral feedback more often using different patterns such as: `. from short interventions of appreciation after the student spoke that will make him and his colleagues more confident to intervene to using some one-to -one feedback when I really want to express my point to that student regarding his contribution to class, eighter is something I really appreciate or is it something I want to clarify with her/him. I also use at the end of the course some emoji that express my feeling about our work, especially when we work during a seminar ... the emoji can be a happy face that states my gratitude for the effort they have put on the work. Written feedback is not very common for me and I tend only to use it after an evaluation period` (I3- RO)





ac	e statements belo tive learning and e what extent the fol edback in a variety	engagement lowing state of modes (e	of all stu ments aj .g., oral,	dents. Please	e indicate to I provide	ac	e statements belo tive learning and at extent the follo ovide feedback in	engagement wing stateme	of all stu ents appl nodes (e	dents. Please y to you C	e indicate t Our teacher
		face) Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	.4	.5	.5	Valid	Strongly disagree	14	2.6	5.1	5.3
	Disagree	10	3.8	5.3	5.9		Disagree	43	7.8	15.6	20.
	Neither agree nor disagree	25	9.5	13.4	19.3		Neither agree nor disagree	34	6.2	12.3	33.0
	Agree	89	33.7	47.6	66.8		Agree	121	22.1	43.8	76.
	Strongly agree	62	23.5	33.2	100.0		Strongly agree	64	11.7	23.2	100.
	Total	187	70.8	100.0			Total	276	50.4	100.0	
	System	77	29.2			Missing	System	272	49.6		
Missing		264	100.0			Total	-,	548	100.0		

Table 29 Providing feedback in a variety of modes (e.g., oral, written, online, face-to-face)

Another key aspect that can hinder students learning are the barriers that students can face. It is important to recognize and address these barriers from an early stage in order to create inclusive learning environments that promote student participation and engagement. Being questioned about this topic, 54.55% of the teachers who responded to the questionnaire agreed with this statement, 21.39% strongly agreed, 19.79% neither agreed nor disagreed, and 4.28% disagreed. Students' perspective on this topic is similar to that of their teachers, 36% of the students responded positively to the statement related to their teachers` ability to recognize barriers to participation and engagement during classes. But, at the same time we could not neglect the percentage of students, of 14.18% who consider that their teachers rarely can spot their struggles, where 5.09% of them see their teachers as unable to care or to spot any challenges or barriers that can hinder their learning process.

activ	statements below	ngagement	of all stu	dents. Please	indicate to	act	e statements belo tive learning and e at extent the follo cognize the barrie	engagement wing stateme	of all stu ents appl	dents. Please y to you C	e indicate to Our teachers
what	extent the follow barriers to st							Frequency	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	Valid Percent	Cumulative Percent	Valid	Strongly disagree	14	2.6	5.1	5.1
Valid	Disagree			4.3	4.3		Disagree	40	7.3	14.5	19.6
-	Disagree Neither agree nor disagree	8	3.0 14.0	4.3	24.1		Neither agree nor disagree	73	13.3	26.4	46.0
		102	20.0		70.0		Agree	99	18.1	35.9	81.9
	Agree	102	38.6	54.5	78.6		Strongly agree	50	9.1	18.1	100.0
	Strongly agree	40	15.2	21.4	100.0		Total	276	50.4	100.0	
	Total	187	70.8	100.0		Missing	System	272	49.6		
Missing	System	77	29.2			Total		548	100.0		
Total		264	100.0								

Table 30 The importance of recognizing and addressing barriers from an early stage in order to create inclusive learning environments





Being able to respond proactively to students learning needs and identify potential and real barriers to learning means that university teachers must develop such abilities in order to be able to support their learners. As can be spotted above a representative number of teachers agree that they do not manage to recognize all the barriers their students face. At the same time, students are aware of this aspect, with a percentage of approximately 15% of students agreeing that their teachers do rarely or never manage to help them address the possible barriers that may encounter during their studies. This being said, this study focused on identifying university teachers' opinion towards the need for training in order to learn to use a variety of learning activities in classroom. A percentage of 40.64% of the responding teachers agreed with the statement that they need training in order to face all the challenges a student may encounter. 16.04% of teachers really feel the pressure to be able to meet their students' challenges and declare themselves ready to enrol in courses that will enable them to develop further skills that will make them more confident in responding and addressing, in a professional way, their students need. This statement goes hand in hand with the suggestion received form a head of department that's stated that: 'I would recommend that all university professors should go through continuing professional development into inclusive education. Sometimes it is not their fault that they do not know how to reach to differ situation, they may feel overwhelmed. I think is our responsibility (teachers for special education department) to provide peer to peer courses that target the development of a more well training teaching staff. It is not only important to be a good researcher or a teacher that know well its subject` (12-Romania). Another key element that triggers our attention is the need to provide teachers with courses that will enhance their pedagogical skills, the assets of working with this students in terms of the psychology of adulthood learning characteristics, as pinpointed by one of the university teachers that accepted to be part of the interviews: `Improvement of professional competence in programs designed to provide knowledge about the basic principles and methods of implementation of inclusive education, as well as the acquisition of pedagogic skills for working with young people with special needs (for example, with autism, etc.) and young people representing other social and cultural experiences. There is a need for exchange tips that focus on learning direct and practical methods for the implementation of inclusive education (I2- Latvia).

1	training to learn to	o use a varie	ty of leai	rning activiti	es in class
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	2.3	3.2	3.2
	Disagree	19	7.2	10.2	13.4
	Neither agree nor disagree	56	21.2	29.9	43.3
	Agree	76	28.8	40.6	84.0
	Strongly agree	30	11.4	16.0	100.0
	Total	187	70.8	100.0	
Missing	System	77	29.2		
Total		264	100.0		

The statements below concern issues related to the facilitation of active learning and engagement of all students. Please indicate to what extent the following statements apply to you - I belief I need training to learn to use a variety of learning activities in class

Table 31 University teachers needs regarding training in order to learn to use a variety of learning activities in classroom





### Create opportunities for peer learning and interaction among diverse learners

The university teacher is responsible for creating an inclusive environment for all students where students can collaborate, share ideas, and engage in meaningful discussions. Interacting with diverse peers exposes students to different viewpoints and life experiences, promoting understanding and empathy. For students this means that they can experience fruitful discussions and interactions among their peers, helping them to break down stereotypes and biases, engaging in discussions and collaborative activities with peers from different backgrounds challenges students to think critically, consider multiple perspectives, and develop innovative solutions to problems. These assumptions are shared with the university teachers present in this study that agree in a higher percentage of 49.73% that they take into consideration these variable when designing a learning activity, while 26.02% strongly agree and 0.72% strongly disagree with the importance of including activities with a high engagement towards creating opportunities for peer learning and interaction among diverse learners that can cultivate an inclusive and enriching learning environment that prepares students for the complexities of a diverse world.

When it comes to students' perspective, a similarity is spotted, with a high number to students (41.09%) that agree with the fact that teachers create learning opportunities filled with rich discussions that foster interaction, either by assigning them in diverse groupings or partners for activities to ensure that all of them can interact with peers from different backgrounds.

ι	<b>University</b>	teacher	s` pe	erspecti	ve		Students'	perspe	ctive		
act	e statements belo ive learning and e what extent the fo pportunities for p	engagement llowing state	of all stu ments a	dents. Pleas pply to you	e indicate to - I create	ac wh	e statements belo tive learning and at extent the follo ate opportunities	engagement wing statem	of all stu ents appl ning and	dents. Please y to you C	e indicate to Our teachers
	rr	learne						Frequency	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	Valid Percent	Cumulative Percent	Valid	Strongly disagree	7	1.3	2.5	2.5
Valid	Cananah , diasana a	1 requercy	.4	.5	.5		Disagree	33	6.0	12.0	14.5
valio	Strongly disagree Disagree	7	2.7	.5	4.3		Neither agree nor disagree	55	10.0	19.9	34.4
	Neither agree nor	37	14.0	19.8	24.1		Agree	114	20.8	41.3	75.7
	disagree						Strongly agree	67	12.2	24.3	100.0
	Agree	93	35.2	49.7	73.8		Total	276	50.4	100.0	
	Strongly agree	49	18.6	26.2	100.0	Missing	System	272	49.6		
	Total	187	70.8	100.0		Total		548	100.0		
Missina	System	77	29.2								
wiissing		264	100.0								

Table 32 University teachers create opportunities for peer learning





Mentor students during their learning process so that they can take charge of their

### <u>own learning</u>

Helping students define their learning goals and objectives by encouraging them to set specific, measurable, achievable, relevant, and time-bound goals has a positive impact on them by staying focused and motivated throughout the learning process. That is why is important to see the student and university teacher perspective on this topic. As a result, we can conclude that 44.93% of the students responded that they feel mentored by their teaches, whereas a slightly high percentage of teachers (48,92%) consider that they offer mentorship for their students. This slightly more positive perspective is kept among all university teachers that participated in this study and it may be so because they are aware of their actions regarding encouraging students to ask questions and explore topics that interest them, helping them find resources, such as books, articles, websites, or experts in the field, to further their knowledge as explained in the interview process where a professor hared the fact that he is `keen on provide opportunities for students to make choices about their learning and by this I mean I encourage them to select their own topics for research papers, choosing from a variety of project options, or selecting the format for a presentation` (I4-RO).

act	e statements belo tive learning and vhat extent the fo dents during their	engagement llowing state	of all stu ments ap cess so	idents. Please oply to you - that they can	indicate to I mentor	act	e statements belo ive learning and e at extent the follo ntor students duri own lea	engagement of wing stateme	of all stu ents appl ing proc	dents. Please y to you C ess to take cl	indicate to Our teachers
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	.4	.5	.5	Valid	Strongly disagree	10	1.8	3.6	3.6
	Disagree	8	3.0	4.3	4.8		Disagree	23	4.2	8.3	11.9
	Neither agree nor disagree	34	12.9	18.3	23.1		Neither agree nor disagree	56	10.2	20.2	32.1
	Agree	91	34.5	48.9	72.0		Agree	124	22.6	44.8	76.9
	Strongly agree	52	19.7	28.0	100.0		Strongly agree	64	11.7	23.1	100.0
	Total	186	70.5	100.0			Total	277	50.5	100.0	
Missing	System	78	29.5			Missing	System	271	49.5		
		264	100.0			Total		548	100.0		

Table 33 Mentor students during their learning process so that they can take charge of their own learning

# Actively support students who require communicative technologies (e.g., braille, sign language, online readers)

Communicative technologies are essential when working with students with visual or hearing impairment. Some students may need braille displays or embossers, while others may require sign language interpreters or online readers and teachers must be able to handle these situations. Unfortunately, the situation is not in favour of using these types of technology, both teachers and students agreeing to a certain extend that they are not familiar





with these technological developments. These findings are in line with other research results that show that higher education institutions should provide adequate and sustainable funding for assistive technology to ensure that students with visual impairment benefit from the education they get. Furthermore, students with visual impairment need encouragement to make use of the modern assistive technology devices available and learn how to use them to ease their sense of exclusion and dependence on sighted students (Bhardwaj, 2018; Kisanga & Kisanga, 2022).

	University	/ teache	ers` p	perspec	tive		Students	s' persp	ectiv	е	
act	e statements belov tive learning and e vhat extent the fol pport students wh	ingagement of lowing states	of all stu ments ap	dents. Please oply to you -	indicate to I actively	ac wh	e statements belo tive learning and at extent the follo ively support the (e.g., Brail	engagement wing stateme	of all stu ents appl quire con	dents. Please y to you C nmunicative	e indicate to Our teachers
	Braille,	sign languag	je, onlin	e readers)	Cumulative			Frequency	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	Valid Percent	Percent	Valid	Strongly disagree	26	4.7	9.5	9.5
Valid	Strongly disagree	17	6.4	9.2	9.2		Disagree	27	4.9	9.9	19.3
	Disagree	33	12.5	17.8	27.0		Neither agree nor disagree	134	24.5	48.9	68.2
	Neither agree nor disagree	79	29.9	42.7	69.7		Agree	55	10.0	20.1	88.3
	Agree	38	14.4	20.5	90.3		Strongly agree	32	5.8	11.7	100.0
	Strongly agree	18	6.8	9.7	100.0		Total	274	50.0	100.0	
	Total	185	70.1	100.0	2000-000	Missing	System	274	50.0		
	System	79	29.9			Total		548	100.0		
Missing		264	100.0			1					

Table 34 Actively support students who require communicative technologies (e.g., braille, sign language, online readers)

# Identify whether is concerned that the workload will increase if he/she uses inclusive pedagogical approaches

Even though it may be true that implementing inclusive pedagogical approaches may require additional effort and planning initially, the long-term benefits and positive impact on student learning outweigh the increased workload. As presented in this study,32.97% of teacher respondents agreed with this fact, 28.11% neither agreed nor disagreed, 19.46% disagreed, 10.27% strongly agreed and 9.19% strongly disagreed. This shows a real concern about their workload, but what is important is that the workload associated with implementing inclusive pedagogical approaches can be managed by prioritizing tasks, seeking support, and gradually implementing changes. The ultimate goal is to create an inclusive learning environment where all students can succeed and take ownership of their learning (Chao, C. Sze, et al, 2017) and this can be achieved while using the working time in an efficient way by using technology, as some interview replied: `*the help of technology, because technology is accessible, so some quizzes or* ... *I think that these are accessible in general, we can* ... *also think here about differentiated teaching, that has a role to play and* ... *and here in inclusion because basically this is, we differentiate our material, our* ...*our organization, activities to achieve inclusion. Yeah, that's, kind of generally*` (IO1-GR).





#### The statements below concern issues related to the facilitation of active learning and engagement of all students. Please indicate to what extent the following statements apply to you - I am concerned that my workload will increase if I use inclusive pedagogical approaches

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	17	6.4	9.2	9.2
	Disagree	36	13.6	19.5	28.6
	Neither agree nor disagree	52	19.7	28.1	56.8
	Agree	61	23.1	33.0	89.7
	Strongly agree	19	7.2	10.3	100.0
	Total	185	70.1	100.0	
Missing	System	79	29.9		
Total		264	100.0		

Table 35 Identify whether is concerned that the workload will increase if he/she uses inclusive pedagogical approaches

# Identify whether is concerned that it will be difficult to give attention to all students in an inclusive environment

The basis of inclusive environments lays on the idea of Universal Design for Learning. This is an approach that aims to provide multiple means of representation, expression, and engagement by presenting the information in different formats, offer varied ways for students to demonstrate their understanding, and provide opportunities for active participation (Baroni & Lazzari, 2022). Still, in the situation where university teacher feels somehow unprepared to face inclusion in their classrooms (McCrimmon, 2015) there is a concern amongst university teachers that they are concerned that it will be difficult to pay attention to all students in an inclusive environment. I other words approximately 41.08% of the teachers who participated in the survey agreed with having this concern, while 12.97% strongly agreed. On the other hand, some teachers are already involved in the development of inclusive environments and see lots of positive aspects that can arose from working in an inclusive setting: `I have been studying non-traditional students, for example, which has to do with aspects of class where people are not feeling that universities are inclusive in their way of feeling at home, so to speak, or people with other ethnic backgrounds in the Swedish higher education system that could both see universities as this and that. So, I quess I can quess both these aspects are of importance to understand how we are handling higher education practices or pedagogies in practice` (IO1-SE).





The statements below concern issues related to the facilitation of active learning and engagement of all students. Please indicate to what extent the following statements apply to you - I am concerned that it will be difficult to give attention to all students in an inclusive environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	11	4.2	5.9	5.9
	Disagree	28	10.6	15.1	21.1
	Neither agree nor disagree	46	17.4	24.9	45.9
	Agree	76	28.8	41.1	87.0
	Strongly agree	24	9.1	13.0	100.0
	Total	185	70.1	100.0	
Missing	System	79	29.9		
Total		264	100.0		

Table 36 Identify whether is concerned that it will be difficult to give attention to all students in an inclusive environment

# Identify whether is concerned that students labelled as having additional needs will not be included by their peers

It is unfortunate that some students labelled as having additional needs may face challenges when it comes to inclusion by their peer. Regarding the possibility that students be labelled as having additional needs and not be included by their peers, university teachers, in a percentage of 23.78% of them agree having this concern, whereas 8.65% strongly agreed. This assumption is present in the literature as well, where several authors (Farrell, 2001; Pill, & Frostad, 2010) present the fact that a student who is labelled as having a special need may be ridiculed or singled out and, in the future, this may lead to difficulties with peers and cause the student to withdraw and become isolated. Labelling may also contribute to low self-esteem and feelings of helplessness due to a student's inability to compete in the classroom setting (Alsaad, 2023)

On the other hand, there is a considerate number of teachers who do not agree with this statement and see this labelling as an opportunity. 23% of the teachers disagree while 12% strongly disagree with the fact that labelling may negatively affect students when it comes to their special needs. This can be sustained by some assumptions already presented in the literature that show that labelling can have a positive impact by improving awareness among typical students and faculty could ease the transition, reduce social isolation, and improve retention (Gómez-Marí, Pastor-Cerezuela, Lacruz-Pérez & Tárraga-Mínguez, R..., 2023). In fact, administrative, professional and academic efforts to describe special educational needs accurately, has resulted in new labels for needs rather than new thinking about how to meet the needs (O' Shaughnessy, 2008).





The statements below concern issues related to the facilitation of active learning and engagement of all students. Please indicate to what extent the following statements apply to you – I am concerned that students labelled as having additional needs will not be included by their peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	23	8.7	12.4	12.4
	Disagree	43	16.3	23.2	35.7
	Neither agree nor disagree	59	22.3	31.9	67.6
	Agree	44	16.7	23.8	91.4
	Strongly agree	16	6.1	8.6	100.0
	Total	185	70.1	100.0	
Missing	System	79	29.9		
Total		264	100.0		

Table 37 Identify whether is concerned that students labelled as having additional needs will not be included by their peers

# Identify whether is concerned that she/he will not have knowledge and skills required to teach in an inclusive environment

Teachers' perspective towards their ability to teach in an inclusive setting is somehow divided.

Half of the participants feel ready to teach in inclusive environments and to foster inclusive learning settings, just as an interview pinpointed: 'I try to create an environment for people to be able to share their different opinions with each other in smaller groups. I work a lot with, with case-based learning and problem-based learning and, and, and these are, I guess, activities for empowering students. But I also work individually with trying to, to empower certain students that probably have a little bit need a little bit more strength to take their lead in in classrooms and also work a lot with different kinds of seminars. Sometimes they can plan them and sometimes they cannot. So, I try to always make them push themselves a little bit more because I think that is what you have to do. `(IO3-SE). Another statement that sustains the fact that teachers feel ready for adopting inclusive pedagogies comes from a teacher in Holland that shares his view on offering students' different approaches towards their leaning material: 'I very much like the flipped classroom model, up taking theory on your own which can be done at home, but then I combine that with short web lectures, so very short bit of a lecture with assignments and a bit of reading from the book. And it's actually about the same material. There are lots of pictures in those three different places. (IO1- NL)

The other half feel unprepared to teach in an inclusive environment and agree that becoming an inclusive teacher involves a continuous learning process and a commitment to meeting the diverse needs of students. But the insecurity does not come only from the lack of ability to adapt the teaching methods, materials, and assessments to accommodate different learning styles and abilities, but mostly from the fact that university teachers must become reflective teachers not only regarding their attitudes and abilities, but most important their own vales, as presented by one Romania teacher who states that: `*I* must





learn to examine my own beliefs, values, and biases that may influence my interactions with my students, I have to allow myself to reflect on any unconscious biases I may have and work towards addressing and challenging them [...] I think this self-reflection is crucial for creating an inclusive mindset and them be able to share and spread these value to others, such as students who we work with, or even colleague`(IO3-RO)

The statements below concern issues related to the facilitation of active learning and engagement of all students. Please indicate to what extent the following statements apply to you - I am concerned that I do not have knowledge and skills required to teach in an inclusive environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	3.8	5.4	5.4
	Disagree	39	14.8	21.1	26.5
	Neither agree nor disagree	59	22.3	31.9	58.4
	Agree	60	22.7	32.4	90.8
	Strongly agree	17	6.4	9.2	100.0
	Total	185	70.1	100.0	
Missing	System	79	29.9		
Total		264	100.0		

Table 38 Identify whether is concerned that she/he will not have knowledge and skills required to teach in an inclusive environment





# 3. Conclusions

In recent years, there has been an increasing recognition of the significance of inclusive pedagogy in higher education. This approach aims to create a learning environment that caters to the diverse needs and abilities of all students. To achieve this, universities have implemented a range of accessibility measures and resources, both in face-to-face and online settings. Additionally, understanding and addressing teacher beliefs is crucial in ensuring the effective implementation of inclusive pedagogy.

The COALITION project aims at delving into the various facets of accessibility, resources, and teacher beliefs, focusing on their impact on inclusive pedagogy.

When it comes to accessibility and resources in face-to-face activities this study focuses on several good practices put into practice by universities such as investing in accessible infrastructure, including ramps, elevators, and wheelchair-friendly facilities to ensure that all students can navigate the campus environment with ease. Also, specialized classrooms equipped with adjustable furniture, hearing aids, and other assistive technologies are seen as an important way to cater to student's needs. Regarding inclusive classroom design a need for flexible seating arrangements, ergonomic furniture, and adaptable layouts states out in order to create an inclusive physical learning space that accommodates various learning styles and mobility needs. Also, assistive technologies are a must and universities tend to offer a range of assistive technologies, such as screen readers, speech-to-text software, and adaptive keyboards, to enhance accessibility for students with disabilities.

Due to the fact that online teaching environment was part of our academic life during COVID pandemic, COALITION aimed at identifying several inclusive online teaching practices and they all start from the premises of a proper training on designing online courses that are inclusive and accessible, including providing alternative formats for materials. Another good practice targets the need to work with interactive and collaborative tools that are utilized to facilitate discussions and engagement among students from diverse backgrounds and learning styles.

An important issue being evaluated study is the university teachers' belief on inclusive pedagogy approaches. The first focus was on curricular and assessment adjustments and the data reveals a positive shift in teacher beliefs, with a majority recognizing the importance of making curricular and assessment adjustments to support inclusive pedagogy approaches. Moreover, teachers demonstrate a willingness to adapt curricular design and methodology to cater to diverse learning needs, indicating a proactive approach towards inclusive education. Also, when it comes to assessment design for learning differences several efforts are made to design assessments that take into account learning differences, ensuring that all students have an equal opportunity to demonstrate their understanding and skills.





A key interest was put on university teacher's willingness to encourage students to engage in discussions and sharing their perspectives creating a rich learning environment and there is a large recognition amongst university teachers in order to provide feedback in a variety of modes, catering to different learning styles and preferences.

When discussing their own beliefs and concerns, university teachers are committed to identifying barriers to students' participation and engagement, taking steps to address them proactively, promoting collaboration and mutual understanding while being devoted to mentoring students during their learning process, and empowering them to take charge of their own learning journey.

Not at least, teachers tend to actively support students who require communicative technologies, such as Braille, sign language, and online readers, to ensure they have equal access to educational materials and resources with the support of specialised centres that provide specialised help.

In conclusion, universities have made significant strides in providing accessibility and resources to support inclusion in both face-to-face and online activities. Furthermore, teacher beliefs play a crucial role in the successful implementation of inclusive pedagogy. The willingness of faculty to make curricular and assessment adjustments, adapt teaching methods, and actively support diverse learners contributes to creating an inclusive educational environment. Continued efforts in this direction will undoubtedly lead to a more inclusive and equitable higher education experience for all students.