React Creation of a Collaborative Environment in e-classrooms

Co-funded by the Erasmus+ Programme of the European Union

REACT Survey Results - Summary

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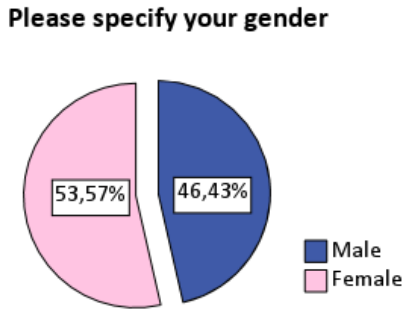
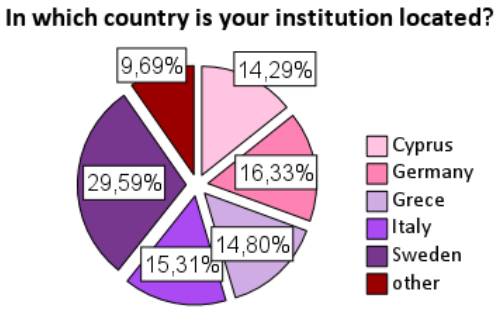
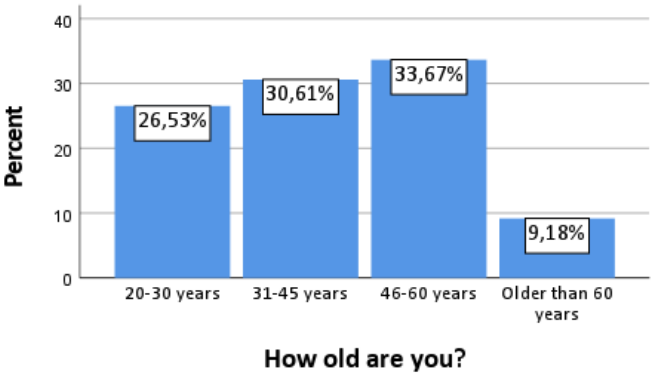
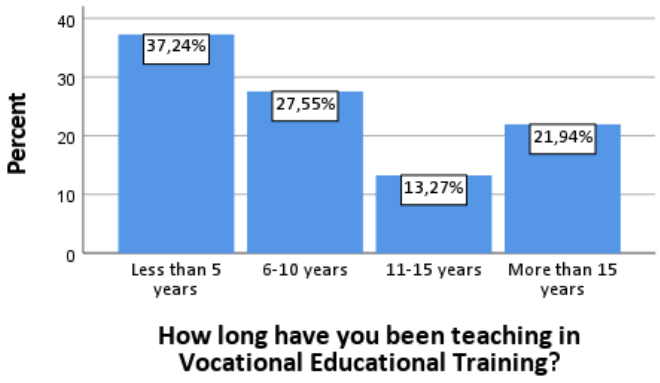
Statistical data of the survey

A total of **196** respondents answered the survey.









Q1 – Major challenges of collaborative online teaching

Categories of the challenges and their typical presentations:

Technical hurdles (18.63 %)

Challenges in connectivity of the Internet; Sound clarity; Not all participants have access to an internet connection; Technical bandwidth of subscribers; Technical problems, such as inability to use

online platforms; software solutions suitable for data protection; Poor network connectivity affects fast availability and response; Screen sharing is slow and lagging behind; Platform constraints on companies (ie technologically limited or high customization requirements); It takes a lot of time to log in to the platform.

Computer illiteracy (7.38 %)

Lack of technical knowledge on how to use gadget; Lack of technical competencies.; Insufficient training of teachers and students on the use of ICT in education.

Availability of technical equipment (3.69 %)

Some students do not have the appropriate facilities to participate in online courses.; Not all participants have access to a laptop / smartphone and internet connection, technology (printer, scanner, computer) at home, especially for larger families.; It is almost impossible for the quality of the internet and the compatibility of the devices to be the same among all participants, leading to interruptions.

Insufficient service, technical support (2,77 %)

Lack of ICT centers; Obstacles caused by internal enterprise IT (software may / may not be installed); Lack of technical equipment for participants, poor digital infrastructure hurdles due to internal company IT (software may/cannot be installed).; Each educational institution has different technical requirements.

Missing interaction, weakened communication, isolation (11.62 %)

Difficulty in communication between teachers and students; It is less communicative, there is no interaction; Weak interpersonal contact; Asynchronous communication with parents; Students do not gain knowledge through the questions asked during the lesson; The teaching activity still remains a solitary activity.; Various issues for understanding students during online activities.; There is less communication, Interactive, group activities are less effective;

Lack of student motivation (4.61 %)

Lack of motivation in online students; There is no enthusiasm; Weak motivation for students, that is, most students like to learn in the presence of other students; It is important to develop students' internal motivation; Students lack guts; Motivation is not the same as in class; My students are poorly motivated and easily distracted.

Passivity, boredom, weak concentration of attention of students (8.67 %)

Students see online platform as boring; Interest declines over time; Difficulty attracting attention; students' distrust in the effectiveness of the online course; Lack of active participation.

Absence, camera and sound shutdown, activity blending and distraction (5.72 %)

Few students who dominate the platform, you can't control what students do on the background; Lack of attention due to various distractions at home; Discipline and ensure that everyone is involved; The temptation for participants to engage in other activities; No eye contact when the camera is turned off; No immediate feedback during my lecture, as I see behavior (facial features, etc.) only to a limited extent through the camera; Closed cameras also leave no room for you to see if participants are watching or doing anything else; Lack of control and discipline; Laziness; Indifference.

Involvement of all, coordination (5.35 %)

The challenge is to create an inclusive and engaging environment; Contact interaction and coordination; Difficulties in creating an online lesson in which all students are involved.; Difficulty finding activities and exercises that involve all students in the online classroom; Inclusion of students with various disabilities; Involve the whole class; It is not easy to pay individual attention to students who need help.; Coaching workshops and pace management of all participants; Student coordination.

Lack of socialization, face to face session, nonverbal communication (6.83 %)

Difficulties in communication between teachers and students; No eye contact; no immediate feedback during my lecture, as I see behavior (facial features, etc.) only to a limited extent through the camera; Absence of nonverbal communication; More individual work, less movement, lack of face-to-face communication; Lack of feedback from colleagues; The relationship between teacher and students is minimal; Limited body language (loss of information by both the trainer and the participants); Social distance; Not to lose the human part of the hour; Lack of real eye contact, which is a powerful tool for communication and connection.

Problematic evaluation, testing, verification of knowledge, insufficient feedback (2.21 %)

Weak supervision of students; Students do not gain knowledge with the questions and questions asked during the lesson; Various issues for students to understand during online activities; Difficulties in measuring students' understanding; Simultaneous monitoring by teachers; Existing assessment criteria that include tests and surveys are not suitable for digital learning; Practical skills cannot be tested; You cannot administer rapid assessment tests; Progress monitoring. various issues for students to understand during online activities; Difficulties in measuring students' understanding; simultaneous monitoring by teachers; Practical skills cannot be tested; Progress monitoring.

The quality of knowledge is declining (1.29 %)

Students do not acquire real, long-term knowledge.

Difficult cooperation (4.43 %)

Group interactions are insufficient; Weakened culture of cooperation and dialogue; Lack of cooperation between pupils and teachers, Loss of creativity and freedom of expression and movement of children; Interactive, group activities are less effective; Students do not communicate with each other, do not deal with each other and do not help each other; The challenge is teamwork in a group, confirmation by the coach's leadership; Cooperation between teachers in schools is not widespread.

Poor teacher readiness, lack of suitable materials; time consuming, fatigue (6.64 %)

Inability to involve all students due to lack of knowledge on how to develop / create a collaborative online classroom; Each colleague has a different way of managing the class; Lack of knowledge and skills on how to develop online courses in which all students could participate; Lack of competencies of different methodologies to keep students focused during online activities; Insufficient training of teachers and students on the use of ICT in education; Lack of time to prepare digital material; As teachers, we have not learned to be effective partners ourselves. Most of us as students have been exposed exclusively to the traditional style of teaching through delivery. There was no other way!; The Internet has radically changed the way we evaluate and process information, and the impact of such a revolution will be fully felt in the coming years; There is a lack of conversion of existing educational materials into materials that can be used in distance education; The role of the teacher needs to change radically, and this is undoubtedly the biggest challenge for most teachers.

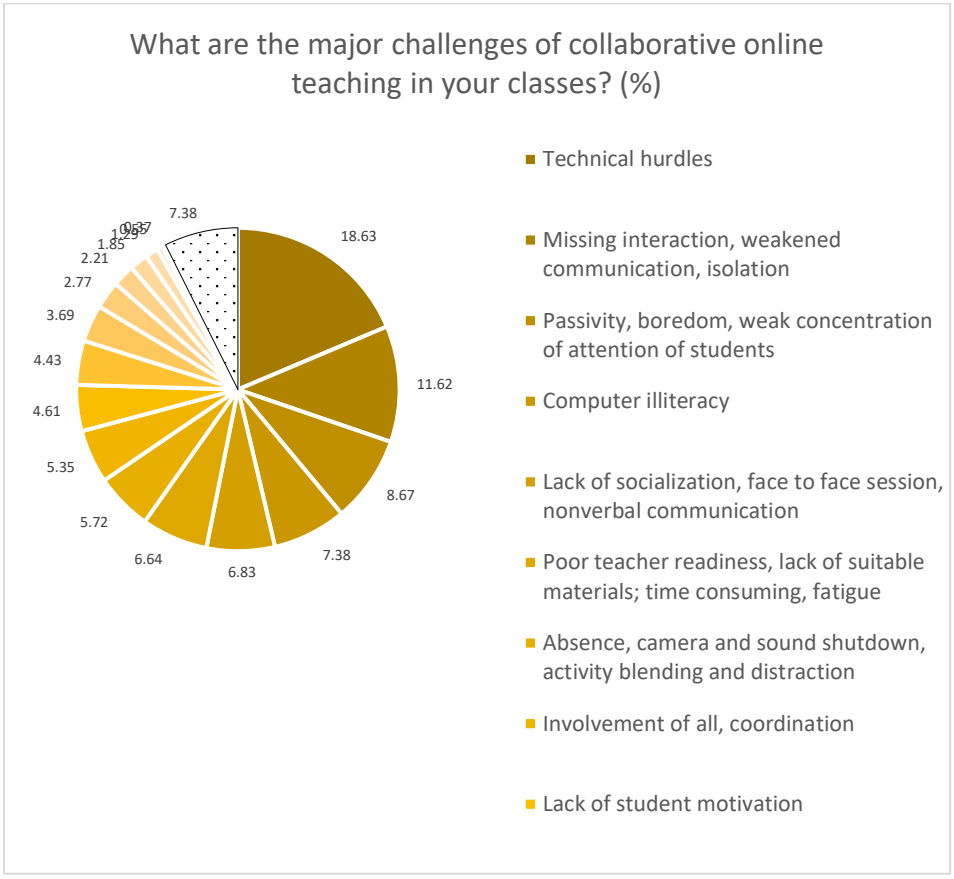
Time management (1.85 %)

Students have trouble managing their own time as a result of online teaching; Student time management affects flexible online lesson scheduling; Bad time management because they do various housework at home; As a result of online learning, students have difficulty managing their own time.

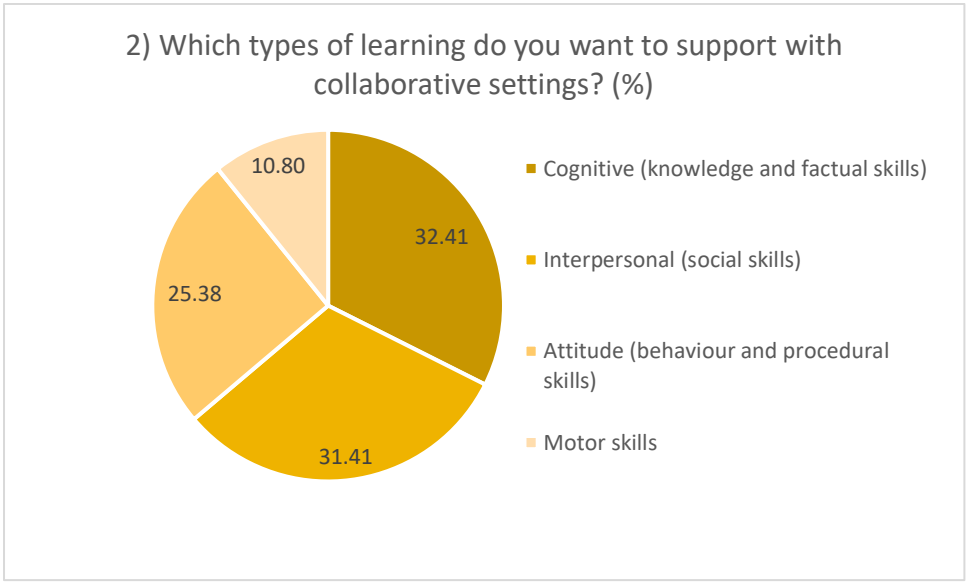
Camouflage of teachers' work (0.55 %)

Some teachers send notes to their students and skip lectures; Some lectures share material for students without teaching it.

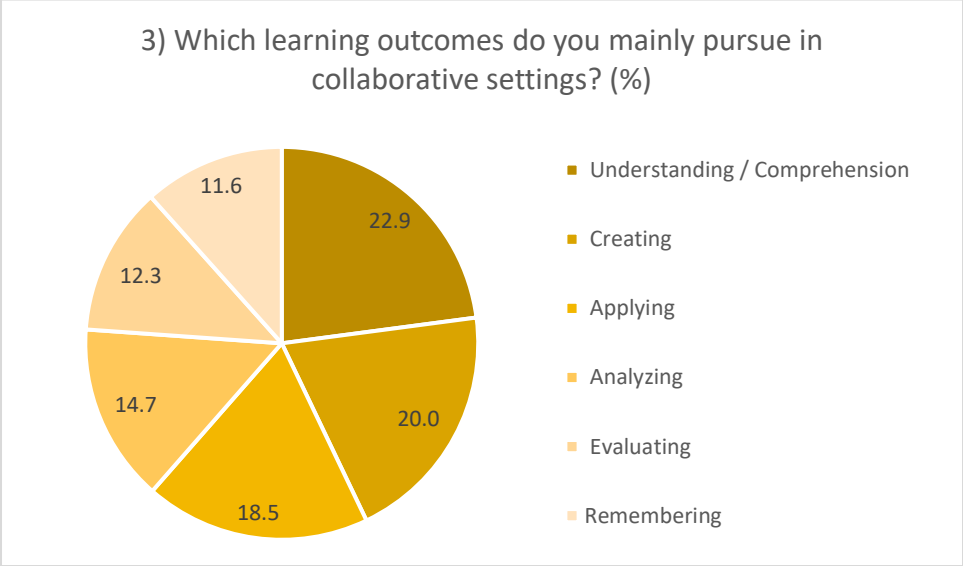
Too numerous groups of students (0.37 %)



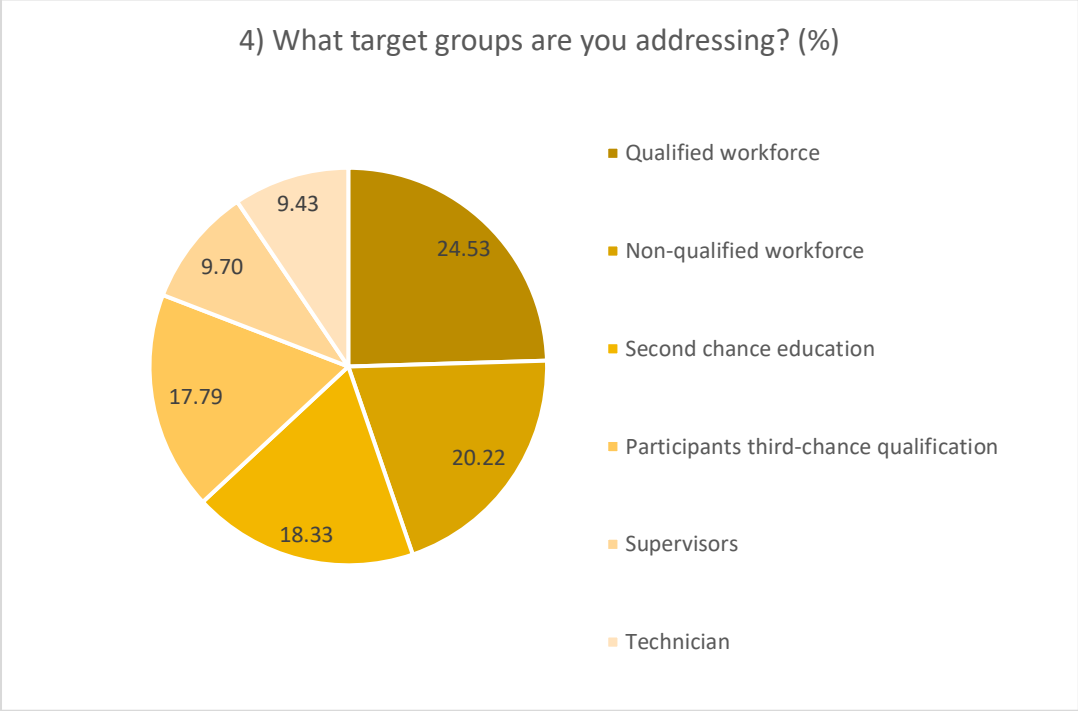
Q2 – Types of learning in collaborative settings



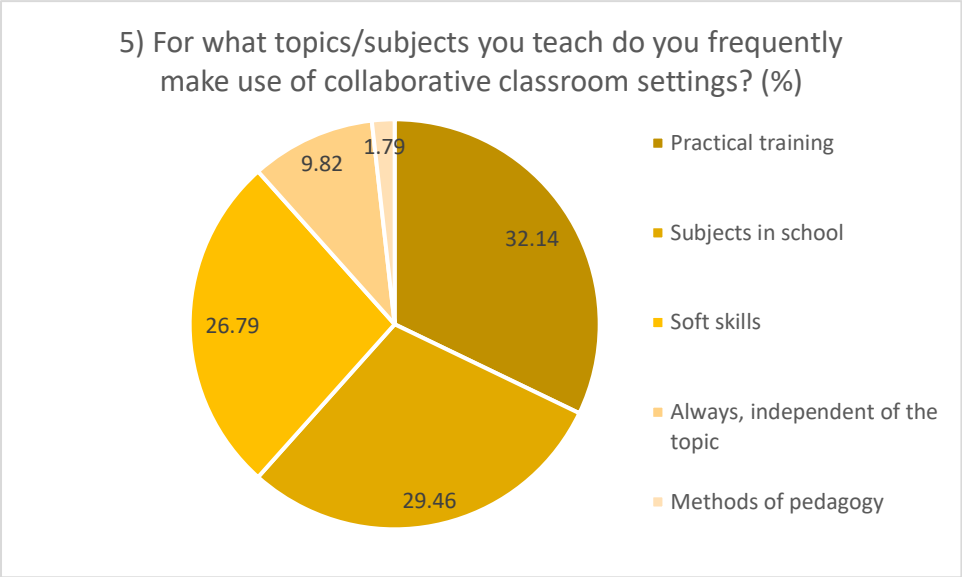
Q3 – Learning outcomes



Q4 – Target groups

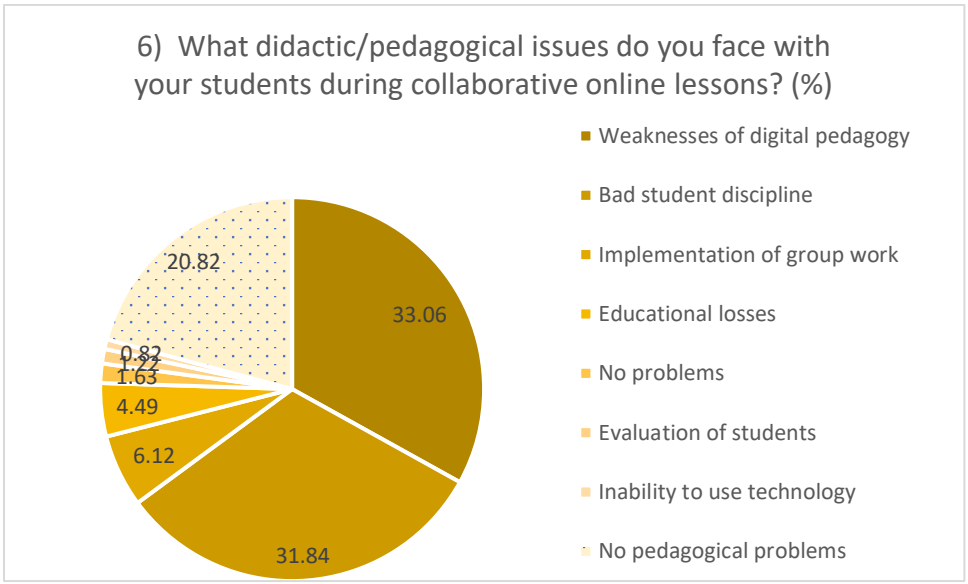


Q5 – Teaching subjects where collaborative methods are applied



Collaborative education is mostly used in practical teaching (32.14%), of which 9% in managerial teaching, 10% in business, marketing and economics teaching and 13% in training in technical occupational skills and qualifications. The second most widespread area is school subjects (29.46%). Of this, science and ICT account for 16.4% and social sciences (such as languages, history, ...) for 13%. The third most numerous is the category of soft skills cultivation (26.79%), of which communication skills 8.1%, social skills 9.3% and sociology, psychology, behavioral sciences, counseling and coaching together also 9.3%. Some respondents (9.82%) stated that they use collaborative classroom settings at every opportunity. A very small proportion of respondents' answers concerned on pedagogy methods.

Q6 – didactic/pedagogical issues during collaborative online lessons



Weaknesses of digital pedagogy
Respondents see the weaknesses of digital pedagogy in - impersonal communication, misunderstandings that also arise from social and cultural differences (8.98%) - problematic motivation of students (11.43%) - demanding teacher training for an online lesson (5.71%) - learning difficulties (2.45%) - limited development of social skills, interrupted interaction, lack of feedback, lack of nonverbal communication (4.49%)

Bad student discipline
The poor attitude of some students towards education is also reflected in this survey. Respondents talk about poor concentration on teaching, passivity and disinterest and about the lack of teacher supervision (13.88%). Distance education allows students to hide behind technical problems, to vote and log in arbitrarily, they forget about the dates of video meetings (12.65%). Students are distracted by irrelevant activities on the Internet such as advertisements, games and the like; sorting information on the Internet is difficult for them (5.31%).

Implementation of group work
Some respondents think that the effect of introducing collaborative education is difficult to estimate and the online form does not (6,12 %).

Educational losses
Respondents belong to this group of answers, who had answer about
- statements on the difficulties of involving all, insufficient inclusion (2.86%)
- unsuitability of online education for practical subjects (0.41%)
- insufficient development of creativity (0.82%)
- knowledge gaps accumulate (1.41%).

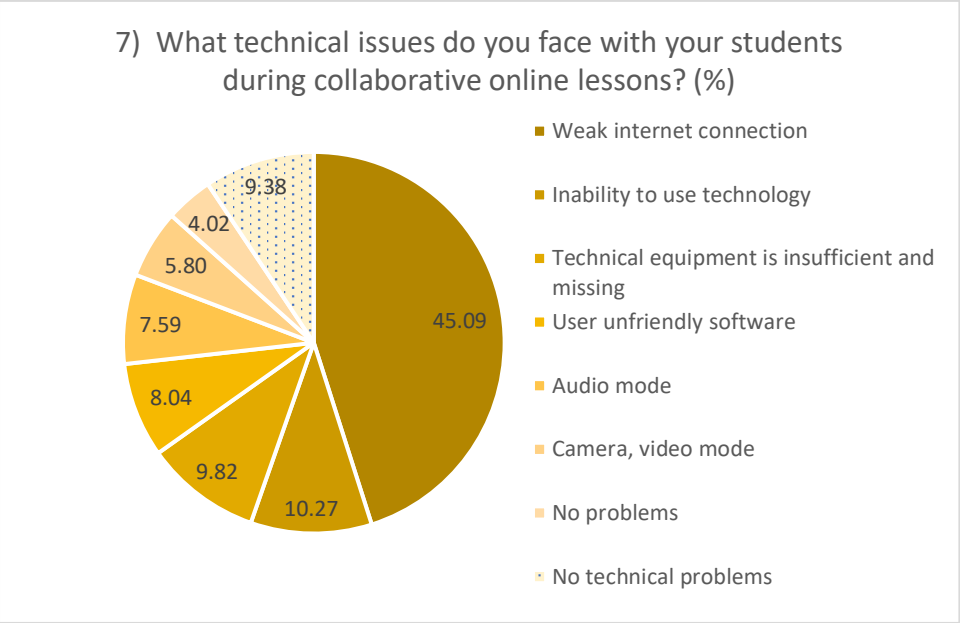
Evaluation of students
Problematic knowledge assessment, testing and the like.

Inability to use technology
It is necessary to train the technically weaker students well in advance on the tools used.

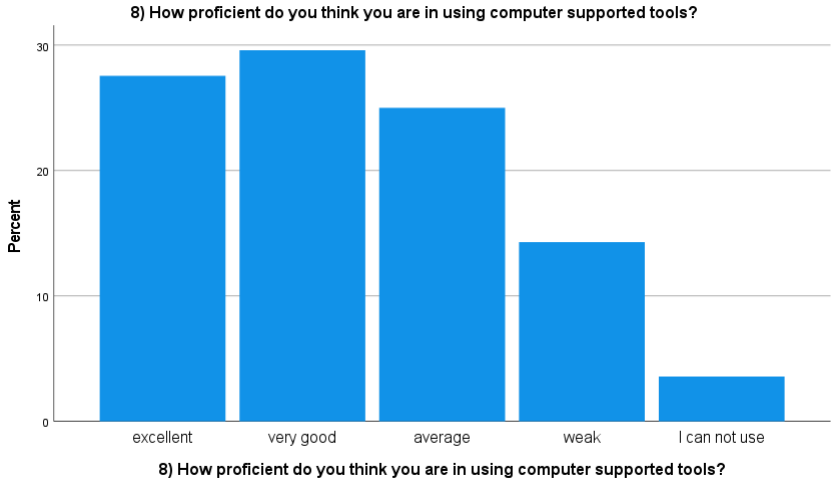
No pedagogical problems

Some respondents swapped the contents of Q6 and Q7, so they also talked about technical issues in Q6.

Q7 – Technical issues during collaborative online lessons



Q8 – Teachers' proficiency in using computer supported tools



8) How proficient do you think you are in using computer supported tools?

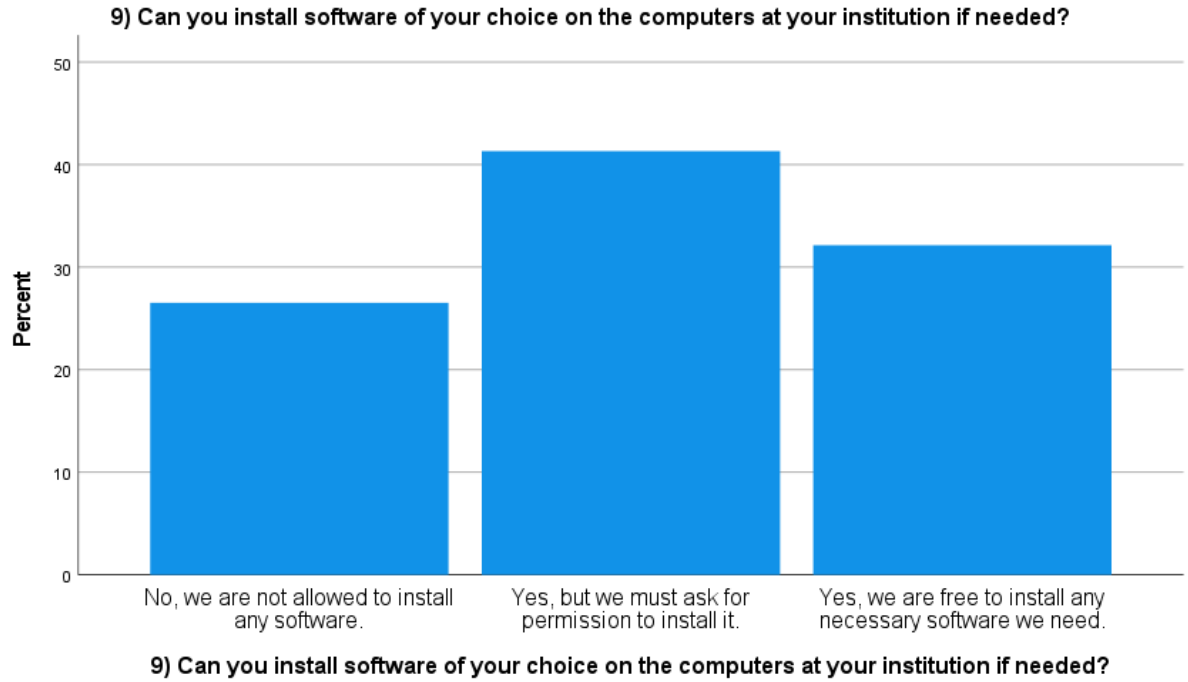
In which country is your institution located?		N	%
Cyprus	excellent	11	39,3%
	very good	7	25,0%
	average	4	14,3%
	weak	4	14,3%
	I can not use	2	7,1%
Germany	excellent	7	21,9%
	very good	15	46,9%
	average	6	18,8%
	weak	4	12,5%
Grece	excellent	5	17,2%
	very good	4	13,8%
	average	14	48,3%
	weak	5	17,2%
	I can not use	1	3,4%
Italy	excellent	2	6,7%
	very good	9	30,0%
	average	12	40,0%
	weak	6	20,0%
	I can not use	1	3,3%
Sweden	excellent	27	46,6%
	very good	12	20,7%
	average	8	13,8%
	weak	9	15,5%
	I can not use	2	3,4%
other	excellent	2	10,5%
	very good	11	57,9%
	average	5	26,3%
	I can not use	1	5,3%

8) How proficient do you think you are in using computer supported tools?

How old are you?		N	%
20-30 years	excellent	14	26,9%
	very good	15	28,8%
	average	13	25,0%
	weak	8	15,4%

	I can not use	2	3,8%
31-45 years	excellent	21	35,0%
	very good	18	30,0%
	average	15	25,0%
	weak	5	8,3%
	I can not use	1	1,7%
46-60 years	excellent	16	24,2%
	very good	18	27,3%
	average	14	21,2%
	weak	14	21,2%
	I can not use	4	6,1%
Older than 60 years	excellent	3	16,7%
	very good	7	38,9%
	average	7	38,9%
	weak	1	5,6%

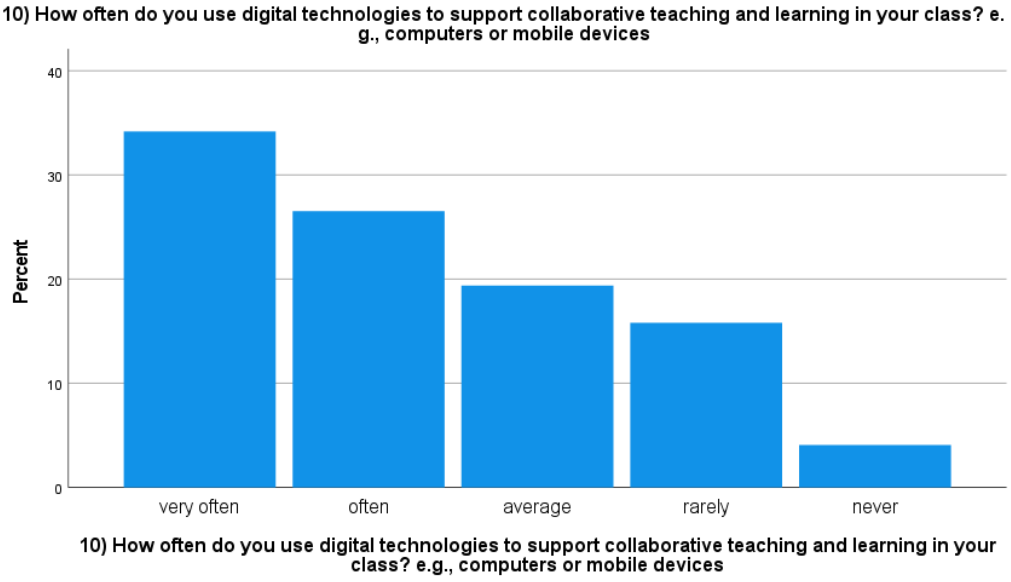
Q9 – Freedom to install software at institutional computers



9) Can you install software of your choice on the computers at your institution if needed?

In which country is your institution located?		N	%
Cyprus	No, we are not allowed to install any software.	3	10,7%
	Yes, but we must ask for permission to install it.	9	32,1%
	Yes, we are free to install any necessary software we need.	16	57,1%
Germany	No, we are not allowed to install any software.	9	28,1%
	Yes, but we must ask for permission to install it.	12	37,5%
	Yes, we are free to install any necessary software we need.	11	34,4%
Grece	No, we are not allowed to install any software.	1	3,4%
	Yes, but we must ask for permission to install it.	7	24,1%
	Yes, we are free to install any necessary software we need.	21	72,4%
Italy	No, we are not allowed to install any software.	10	33,3%
	Yes, but we must ask for permission to install it.	15	50,0%
	Yes, we are free to install any necessary software we need.	5	16,7%
Sweden	No, we are not allowed to install any software.	22	37,9%
	Yes, but we must ask for permission to install it.	32	55,2%
	Yes, we are free to install any necessary software we need.	4	6,9%
other	No, we are not allowed to install any software.	7	36,8%
	Yes, but we must ask for permission to install it.	6	31,6%
	Yes, we are free to install any necessary software we need.	6	31,6%

Q10 – Frequency of use of digital technologies



While in Germany, Cyprus and Sweden, digital technologies are used “very often” or “often” by over 60% of the respondents, in Italy only 53% of teachers state to use them at high frequency, and in Greece only 41%.

Surprisingly, Sweden also has the highest number of respondents indicating that they “rarely” or “never” use digital technologies in their collaborative teaching (28%), followed by Italy (27%) and Cyprus (25%)

The frequency in use of digital technologies for collaborative learning does not seem to be related to age groups of the teachers. But surprisingly, the age group with most answers to use technologies “rarely” or “never” are the 20-30 year old teachers (25%) while for other age groups, less than 20% rarely or never use digital tools for collaborative teaching/learning.

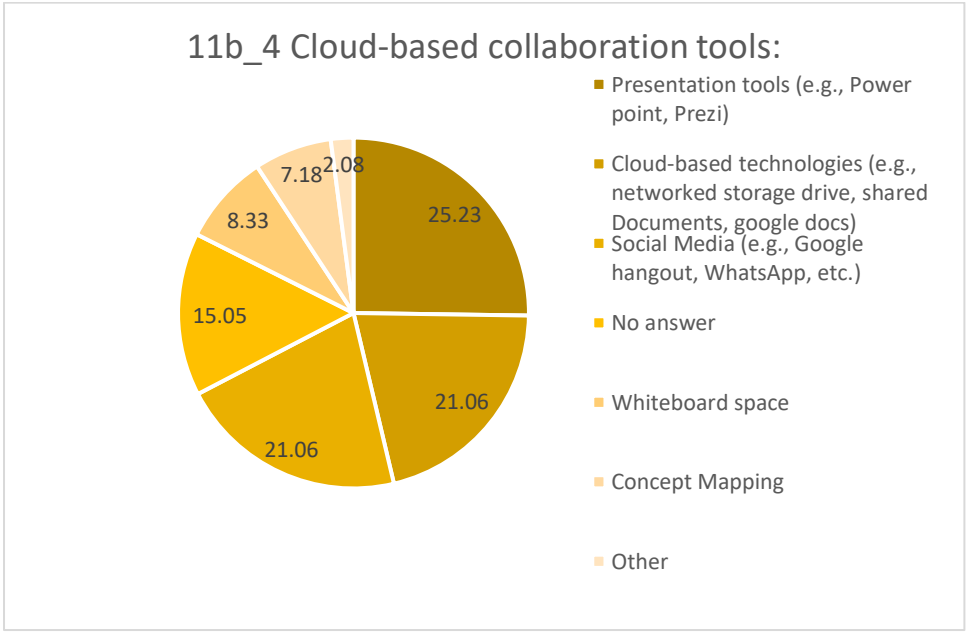
Q11a – Reasons for not using digital technologies in classes of vocational education and training

There were twelve relevant answers.
Respondents were most often concerned about the lack of understanding of how to use digital technologies (8), the nature of the subject is special (4). Respondents also mentioned the need for Face to Face contact, lack of time under the pressure of other tasks, or demanding preparation for teaching.

Q11b – Preferred use of digital technologies for collaborative e-learning

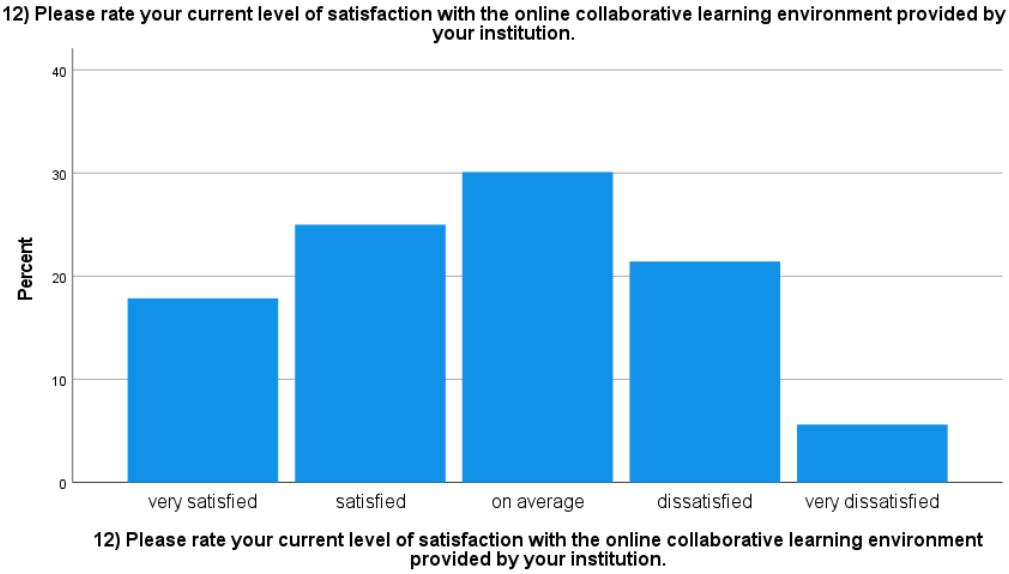
Video Conferencing Systems are used by 65% of the respondents.
56% of the teachers in this survey use either Voice Threads or Mini Audio Presentations, or both technologies.
Among the text-based collaboration tools, text chats/forums, wikis and blogs are the preferred technologies.

Preferred clous-based collaboration tools are presentation tools, shared storage and documents, and Social Media.



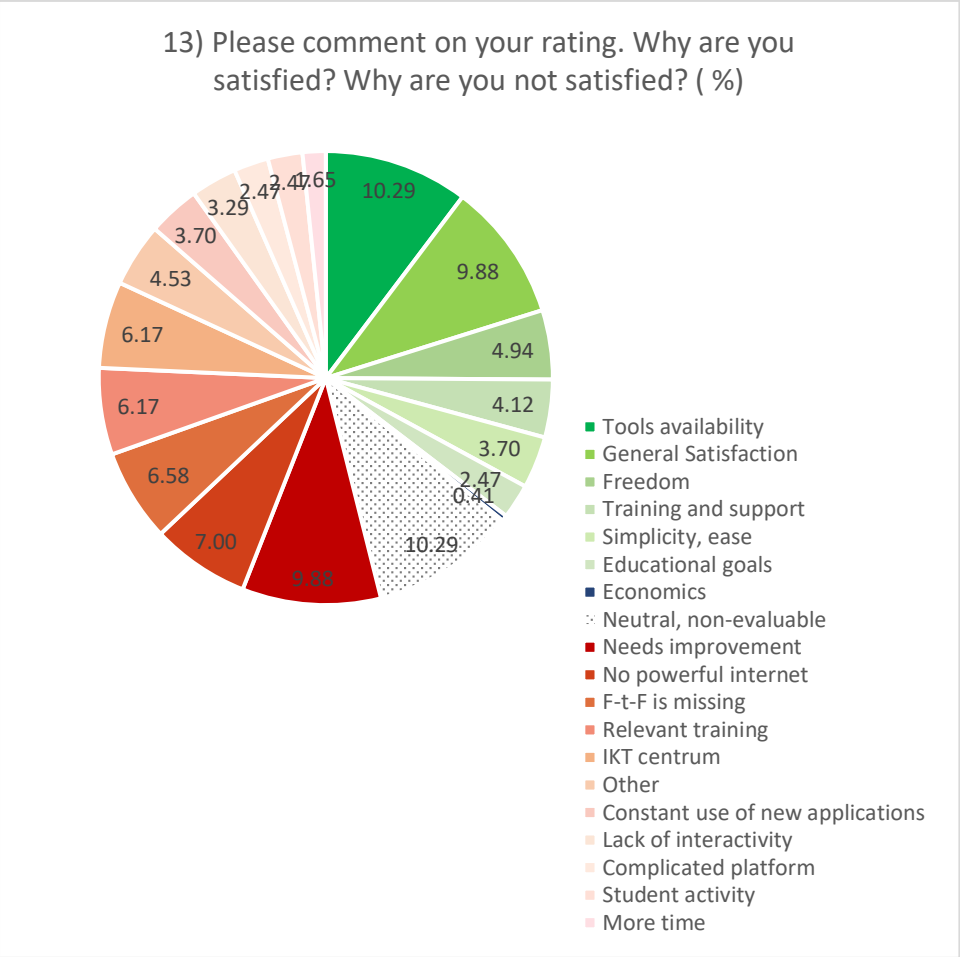
Additional technologies mentioned by respondents: *Space for painting, Remote support / workstation takeover tools, Wordwall, LearningsApp MS Teams, Skype, zoom, google classroom, teams, google meet; Augmented reality.*

Q12 – Satisfaction with online collaborative learning environments



A clear difference can be seen between different countries.
While in Germany (56%) and Cyprus (64%) a majority of teachers were “satisfied” or “very satisfied” with the online collaborative learning environment in their institutions, this was not the case in other countries.
In Greece 31% were “dissatisfied” or “very dissatisfied” with the situation (compared to 21% satisfied/very satisfied). In Italy the dissatisfied respondents amounted to 30% (compared to 23% satisfied).
Among Swedish respondents, 47% were “dissatisfied” or “very dissatisfied”, but at the same time 45% were “satisfied” or “very satisfied”. This might indicate big institutional differences in providing online collaborative learning environments.

Q13 – Factors for satisfaction/dissatisfaction



*F-t-F = Face to Face component

Examples of some typical answers are below:

- **Satisfaction**

Tools availability (10.3 %)

The user interfaces are very good and easy to use and the participants have good possibilities to deepen the digital, there are ICT centers and unlimited internet services; Digital media are available or are adapted to current requirements.

General Satisfaction (9.9 %)

Everything works as good as perfect; Good feedback from trainees; We are free to use various tools and this facilitates our work at its best; I am generally provided with a good environment with space to work as I wish I am happy because these technologies are my field. And I feel very good in this area; I believe that we have largely succeeded in meeting the needs of the students.

Freedom (4.9 %)

Can reach my students at any moment; Can work from anywhere; I have free hand and can use all tools; Operational availability, flexibility.

Training and support (4.1 %)
Also in some courses I may have an operator who sets up the break out rooms or shares links to where the participants have to go;; Satisfied with our technical support; I am very satisfied, as the trainers have 10 years of experience in online education and are constantly updated on new applications and tools in online education .... offers for further education in the digital area.; We have invested, have trained our staff, the support is there, Excellent trainers and support.
Simplicity, ease (3.7 %)
Everything is understandable, easy and very comfortable; It´s accessible stable user friendly & the support is there; We easily adjust to online educational trainings and that's a positive thing.
Educational goals (2.5 %)
At the very end didacgtical objectives are achieved. Both attendance and collaboration have increased; language skills are enhanced and participation rate has gone up; Work is quite productive.
Economics (0,4 %)
It is low cost.
Representative quote
„We have invested, have trained our staff and are using extensively the latest digital platforms in Unified Communication, Remote support Web Conferencing and training tools. We have upgraded our laptops internet access to the high bandwidth line as well equipped all staff with professional high quality communication interaction hardware (headsets and cameras); The learning platform enables learning in digital space almost like in physical reality. "

- **Neutral, non-evaluable answers** (10.3%)

We research all possible modalities of teaching by achieving all objectives; very high technical standard, stable learning platform, powerful internet, powerful internet; The tools are usually impose by our customer; I only use in strict lockdown.; Equipment and communication; All around carefree package and many investments in this area; Absolute minimum standard.; Not as i would wish it to be; ... and so on.

- **Dissatisfaction**

Needs improvement (9.9 %)
There is room for improvement; More investments should be done; Has potential but must to be improved; We use MsTeams and some features is not so qualified like I want.; Tools should respond to the new digital learning environment.; too static; To improve ICT; The software equipment could be better; Not enough technological; New tools are needed; New methods are needed; new means and tools are needed.
No powerful Internet (7 %)
We need a better internet connection. Without interruptions.; Limited internet service; Because the institute should provide all instruments neccesary to connect to online classrooms.
F-t-F is missing (6.6 %)
Can not meet my physical needs for my students; I am not fully responsible for my students and I feel that I do not meet the physical needs there;; It feels like there is a big gap between lectures and students; It is difficult to be able to get the same feeling of experience over internet tools; Learning is not realistic because it can not meet students' physical needs; Learning platform is not so flexible and self-explanatory and also visually not so attractive; Not as good and face to face learning.

Relevant training (6.2 %)

New tools need to be taken into account to respond to the new data; Need to download new applications; need to download new applications; Technologies are constantly changing, we have new applications and we need time for our own training / development. but I need time to learn them.

IKT centrum (6.2 %)

There are no ICT centers, limited internet service; I don't which toold to use.

Other (4.5 %)

Very inappropriate when it comes to students suffering from various mental conditions; I wish we could help more people to participate.; It's less economical; Perhaps budget constraints; Little knowledge; Management could be improved; Digital reorganization underway; Cooperation between students is not enhanced.

Constant use of new applications (2.7 %)

We are doing our best to co-ope with the situation and continuously update our systems; Continuous training for teachers.

Lack of interactivity (3.3 %)

Interaction could be higher; Students vs. teachers' interactive session is minimal; Poor relationship between teachers and students; Need interactive tools to promote learning through apps.; Cooperation and interaction is not supported. Better more interactive media are needed.

Complicated platform (2.5 %)

There are no ICT centers.; Because of the lack of technical and training assistance. I am not good at using technologies and developing online lessons; the platform used is not particularly easy to use; Lack of preparation on how to use ICT; It is little intuitive; However, I would like to be able to use them more easily.; but there is little knowledge of technological tools; Because of the adaptation of the technical equipment.

Student activity (2.5 %)

Students and lectures ratio is minimal; I am not satisfied becuase of the lack of the attention of students who are too mucha distracted; The disadvantage is the motivation of students; It feels like there is a big gap between lectures and students; Lack of time for organizing material and techniques as well as students' motivation to join learning actively; Lively lectures for students are fantastic, It makes it possible for the supervisor to be responsible for the students' attention.

More time (1.7 %)

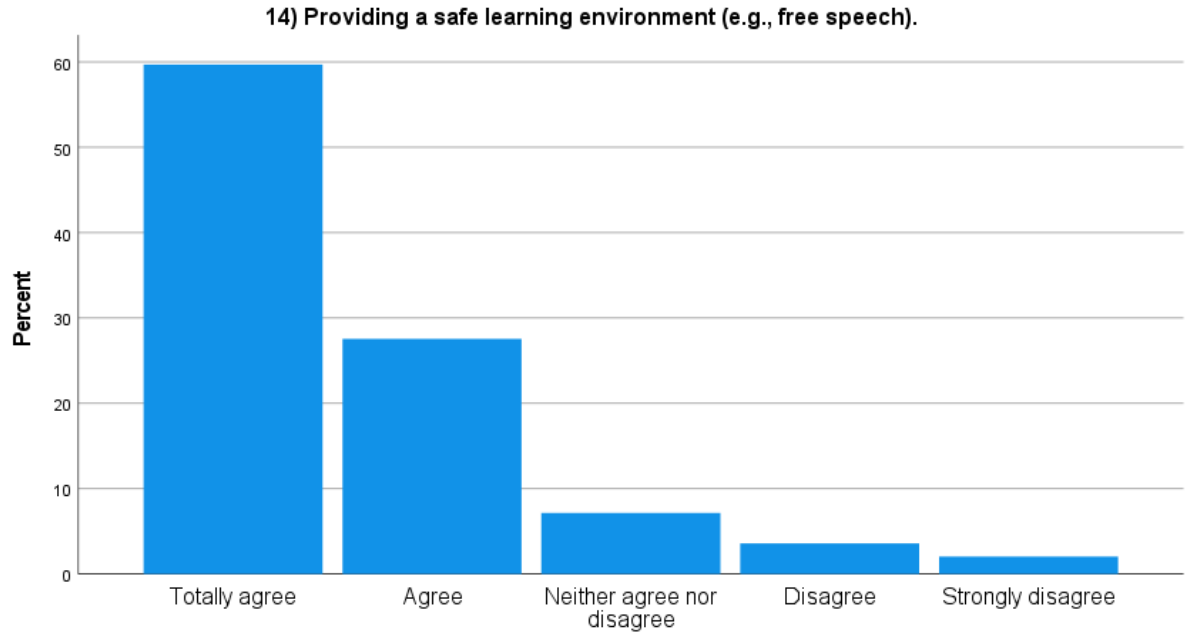
Need more time to adjust and come up with soluions; Lack of time for organizing material and techniques as well as students' motivation to join learning actively; Because we were not able to face online classroom in such shor time; Need more time to adjust and come up with soluions; Because we were not able to face online classroom in such shor time.

Representative quote

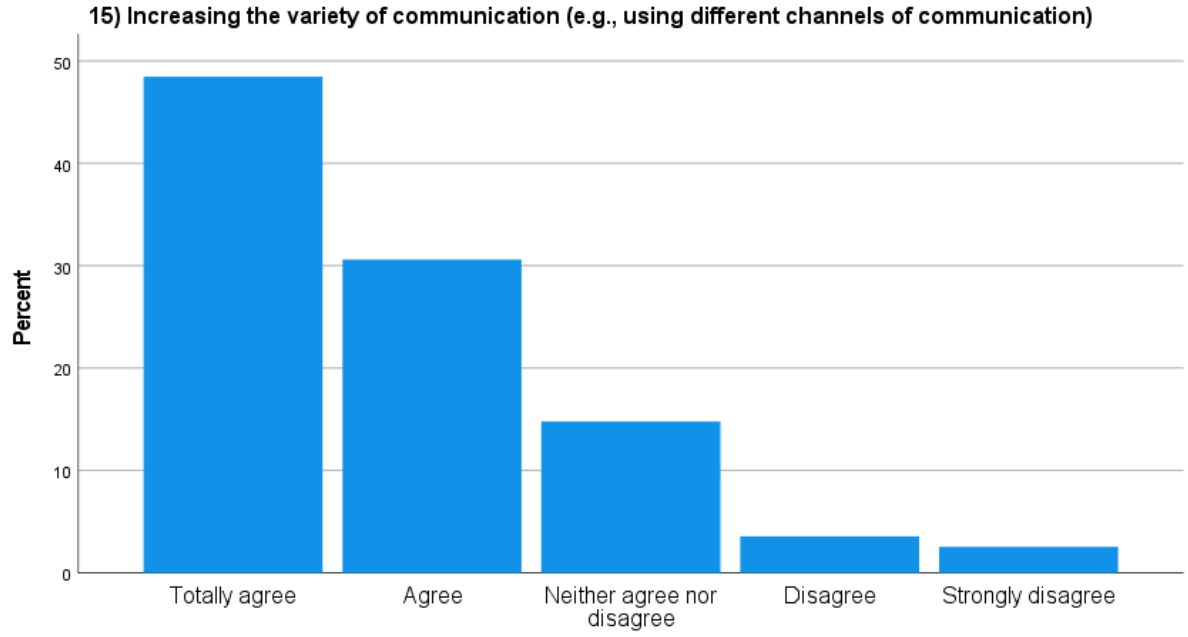
„I am not satisfied because we are not ready to use technoligies in creating online lessons. Moreover, Covid pandemic situation has demonstrated weak points of eLearning because the it has demonstrated that students learn less online that in classic learnin environment because we teachers were not ready for new technologies. Finally, all those months of teaching/learning online have demonstrated that the course cannot be developed just online. Yes, it is important to study in flxible way and to have all material always ready. But I do think that blended learning is nowadays actuality."

Q14-17 – Improving levels of interaction between students

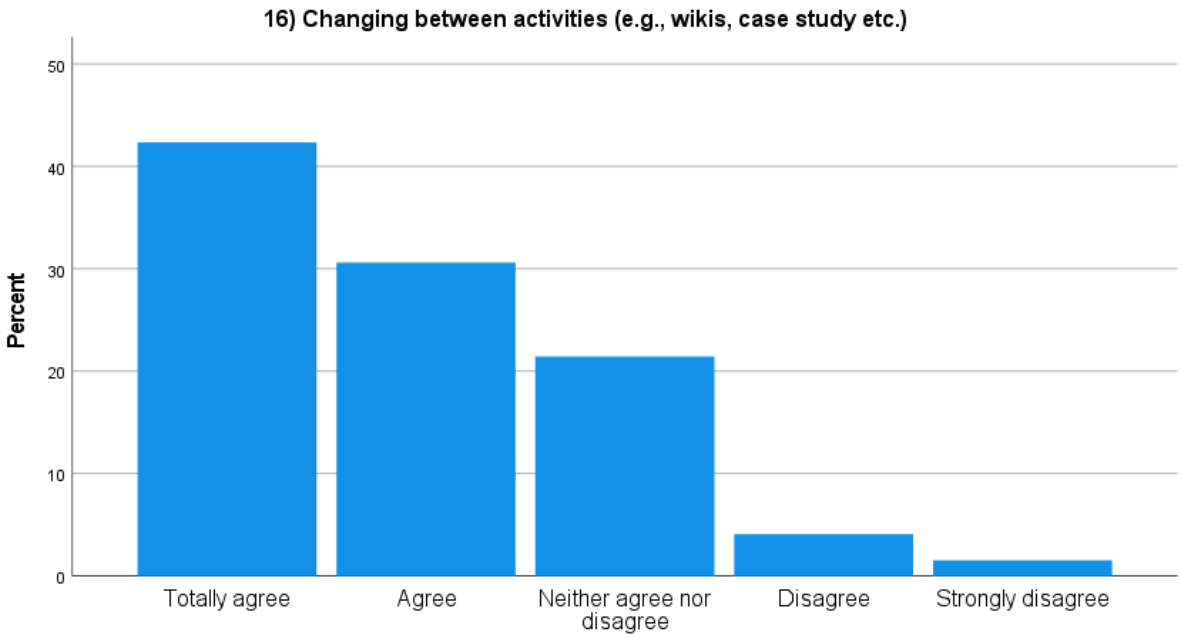
"In your opinion, which of the following aspects improve the level of interaction between students?"



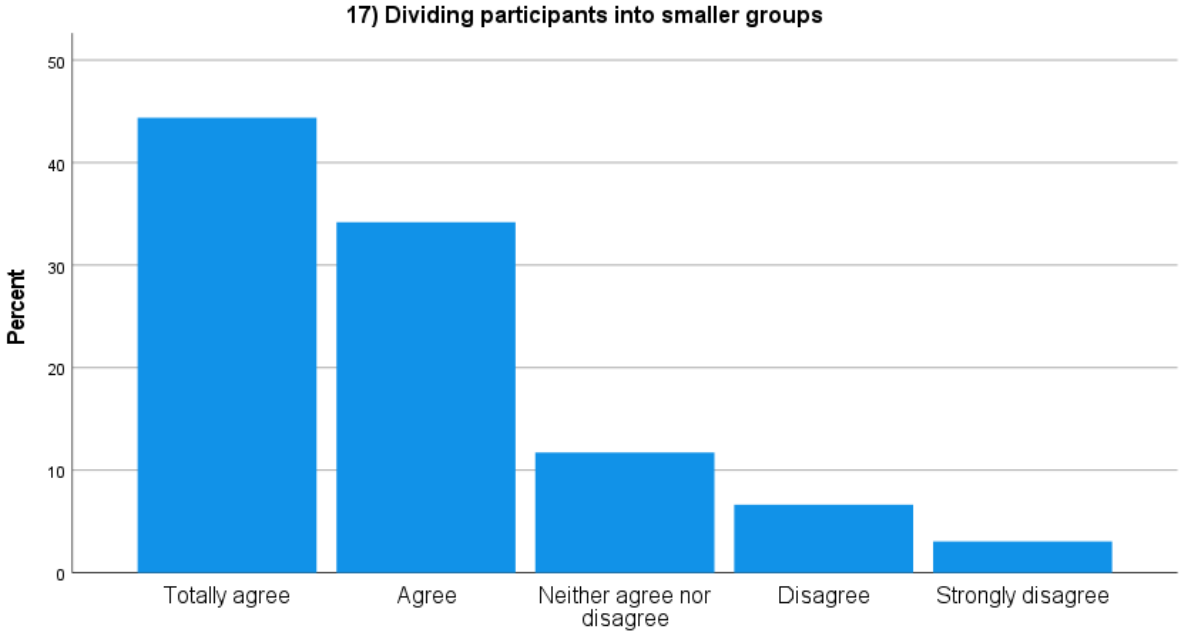
14) Providing a safe learning environment (e.g., free speech).



15) Increasing the variety of communication (e.g., using different channels of communication)

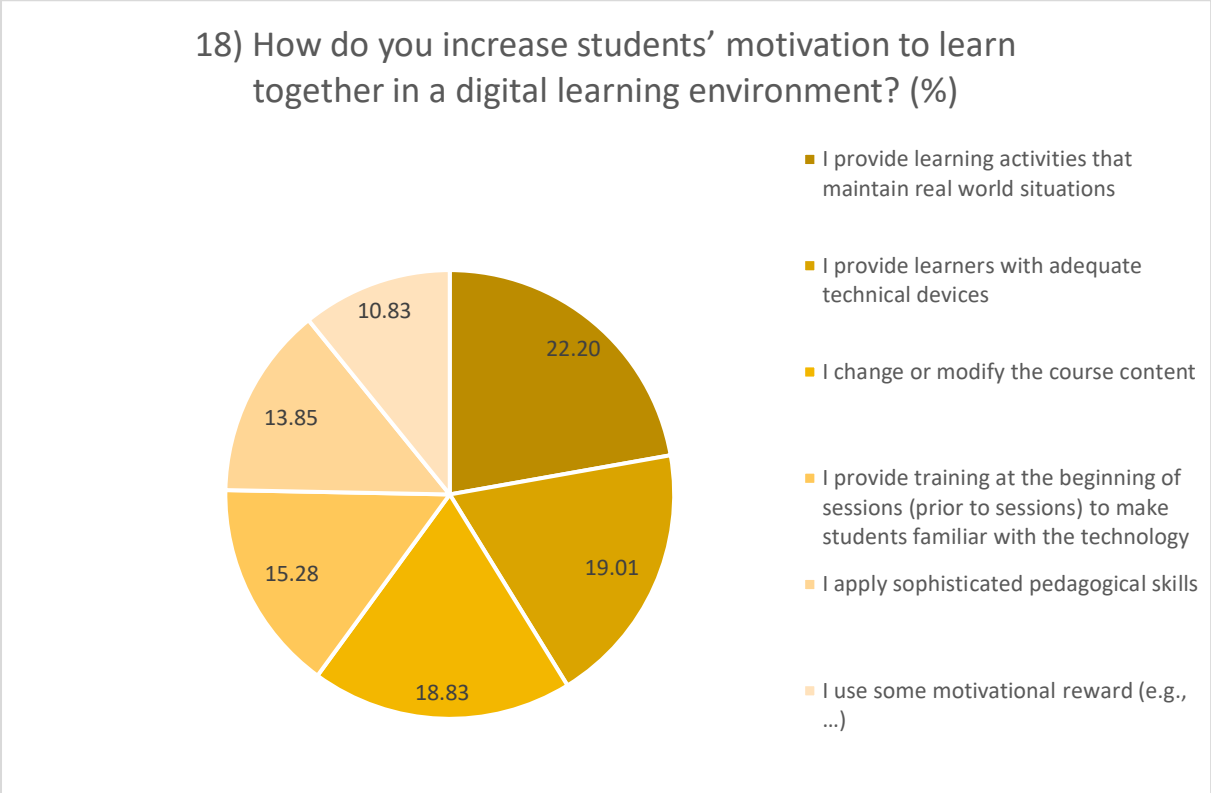


16) Changing between activities (e.g., wikis, case study etc.)



17) Dividing participants into smaller groups

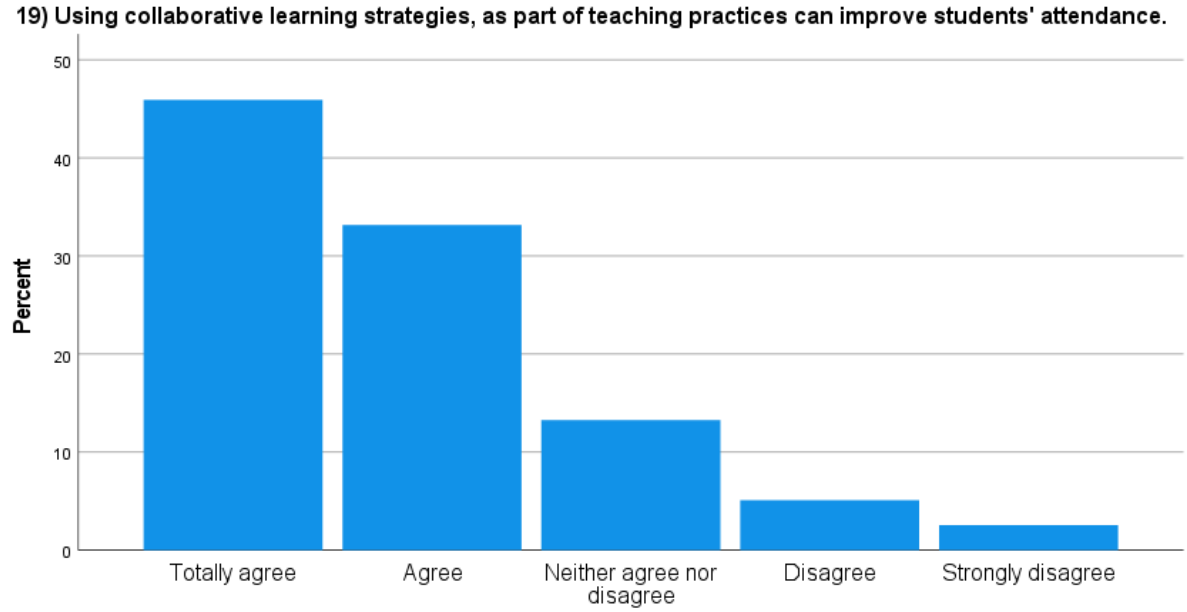
Q18 – Increasing students' motivation for online collaborative learning



Answers outside the menu template:

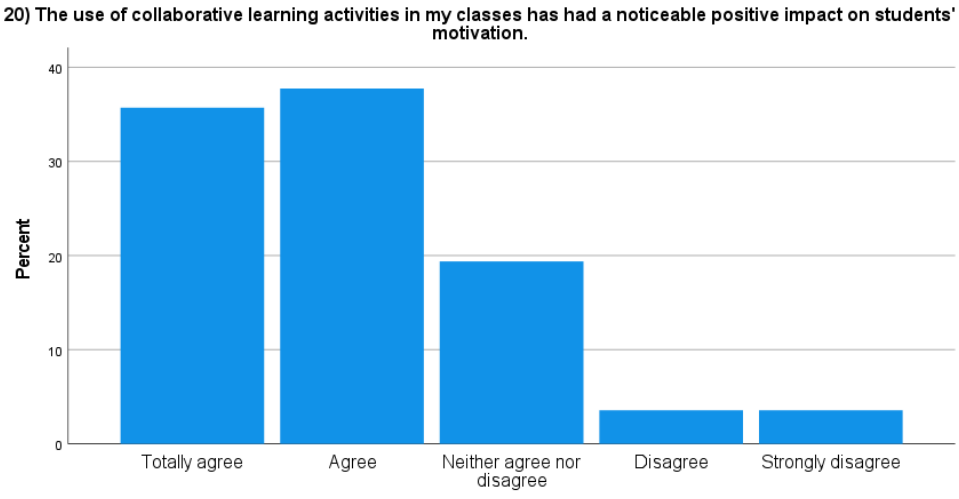
- *I link elements of self-awareness with the transfer of ped. knowledge related to client*s*
- *In principle, I believe that you cannot motivate anyone. Not destroying the learners' motivbation is the art.*
- *I ask about learner expectations*
- *For adult continuing education, motivation is often very high, so special motivation is not necessary!*
- *Stimulate students' curiosity*
- *provide them with extra information on the subject which are usually unexpected and make the students exited.*

19) Using collaborative learning strategies, as part of teaching practices can improve students' attendance^



19) Using collaborative learning strategies, as part of teaching practices can improve students' attendance.

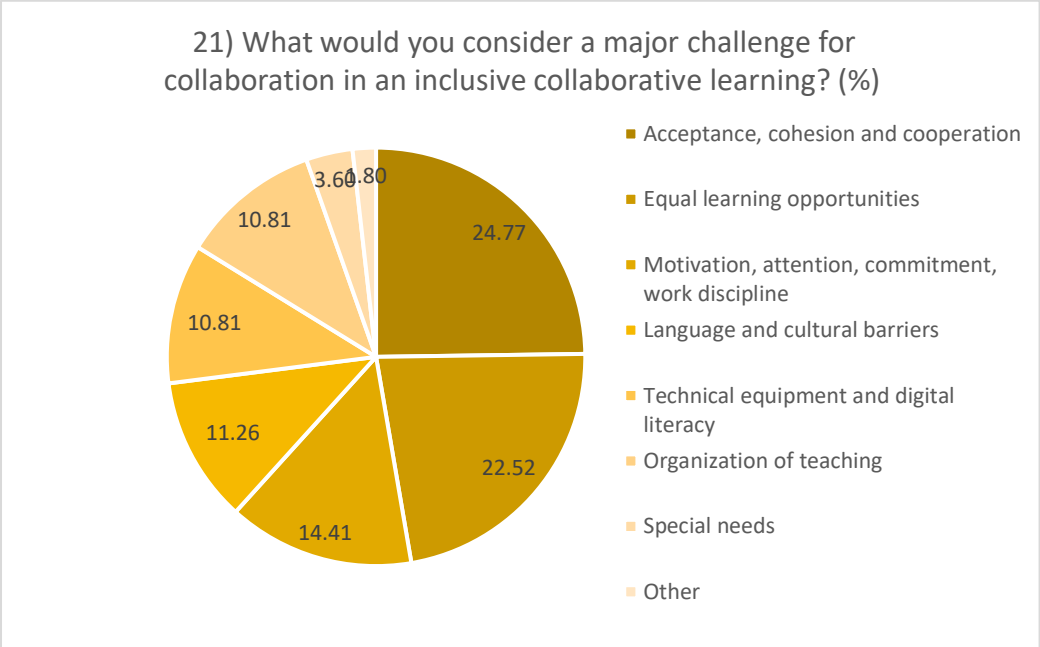
20) The use of collaborative learning activities in my classes has had a noticeable positive impact on students' motivation.



20) The use of collaborative learning activities in my classes has had a noticeable positive impact on students' motivation.

There are apparent differences in the perceived positive impact of collaborative learning between countries. In Sweden, 86% of respondents indicated to “totally agree” or “agree”. In comparison, Cyprus (75%), Greece (66%), Germany (59%), Italy (57%).

Q21 - Major challenges for collaboration in an inclusive collaborative learning?



Acceptance, cohesion and cooperation

- Strengthen feelings of security, acceptance, cohesion and cooperation, tolerance for differences

To treat every students in the same way, allowing every student to express their thoughts; To help the interaction of students in and out of class; To form the previous attitudes of the participants into a new WE together and still promote the important individuali; there should be dialogue and openness;the cultivation of democracy, dialogue, mutual respect; Some students do not get along well.; Skills to do something togehter; Promote respect and freedom of expression; Make participants feel psychologically safe; Lack of collabortion between colleagues; Group conflict; Cooperation between students from different social backgrounds; Common goal; Achieving respectful interaction between all; Addressing the needs of different communities at the same time, while maintaining a safe space for all.; Acceptance of all by all.

Equal learning opportunities

Competence and capacity differences of students

Lack of enough time to keep up with the same pace for everyone; Some students require special attention; Difference in teaching styles; Different needs among the students; Equal access to technological resources and equal learning opportunities; Difficolties to observe which difficulties students might face as it is not easy to approach every student, the needs, own ways and styles of

learning because evey student is unique; Learning to take place on the basis of the needs of all students; Reaching all participants equally; Some students need a special support system to adapt to social order; To involve equaly all students; Treat all students equally, allow each student to express their thoughts.

Motivation, attention, commitment, work discipline

- Insufficient motivation, student attention, commitment, attendance and work discipline

Some students tend to miss classes; The lack of physical presence; Students' attention; the active listening; Poor motivation for students, lack of individual's responsibility, increase negative students' dependence; Motivation of the learners; Motivation & the 4 C´s: Collaboration, Communication, Creativity & Critical thinking; Lack of students' will to collaborate; Getting students to speak and use their their cameras; Focus, commitment and managing disruption; Attention, engagement.

Language and cultural barriers

- multiculturalism, different social and cultural backgrounds, misunderstanding of language

A major challenge would be to have full respect for nationality; Not all students have the same comprehension level, some of them have linguistic dificulties because of different nationalities; Cultural differences and difficolties of some students to approach each otehr in adeguate manner; Cultural diversity and language barrier; Different cultural heritage, students different understanding of the subject is taught; Mostly the language barrier. Anything else can be resolved more easily.; Intercultural differences (including language problems) in relation to proactive participation.

Technical equipment and digital literacy

- ensure better technical equipment and digital literacy for all

This platform does not meet all students' motor skills;Access to laptops / smartphones / tablets...access to good quality internet.; All students should have access to technology and be properly trained to use it; An inclusive online school is difficult to achieve because countries do not ensure that students (from lower economic strata) have the necessary equipment.; Equal access to technological resources; Insufficient digital skills and abilities of learners and teachers; Lack of teaching materials; Lack of technical knowledge; Regular use, needs to become commonplace for learners; The lack of technological knowledge as well as about methods on how these type of lessons could be created.

Organization of teaching

- improving management, organization of teaching, preparation of lessons, improving pedagogical skills of teachers

The learning platform is the first one and doesn't give sufficient time to take notes; To structurize the tasks in equal ways; Each teacher uses their own different materials and different methods; To create involving contents; The students think that there is a lack of lectures that have a real experience of work in the course they teach; The optimal dovetailing of online and offline content and dealing with changing participants at different intervals.

Something that teachers clearly realise as they spend time in the classroom is that different students have different learning styles. We know that some learn best through group work, while others feel

more comfortable doing tasks on their own, and while one student may enjoy learning through action, another may prefer to read about a topic. I believe that teaching will become increasingly personalised, and we are already, albeit very slowly, starting to move in that direction.

Classes composed of big number of students; Small groups to build social relationships; Dividing into smaller groups students coming from the same country in front of other students and trying not to exclude them form other conversations and activities; Learners need to be informed exactly what, when, how and why.; Lack of pedagogical competences; Coordination; Control over only few students.

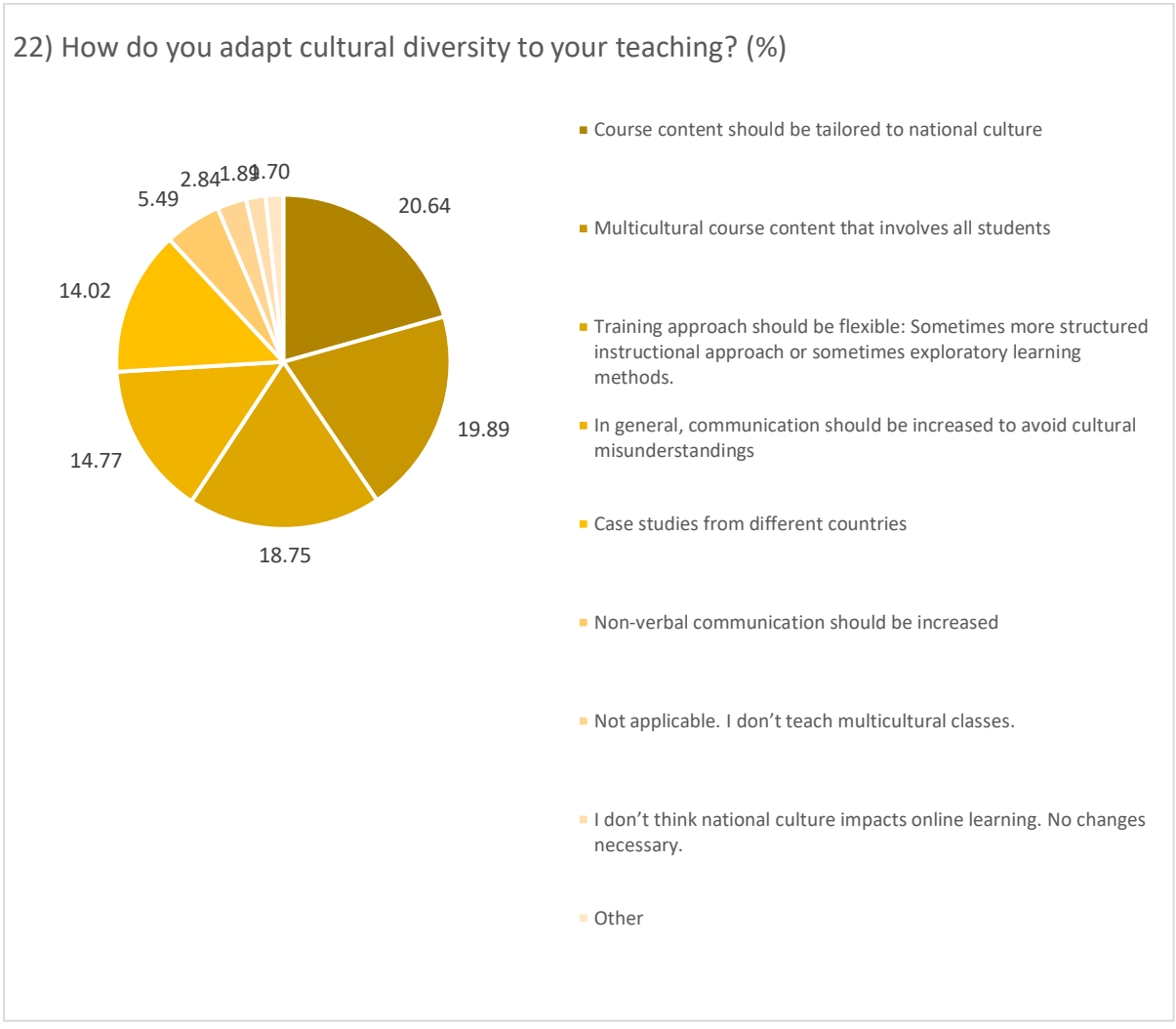
Special needs

- *The students with special needs could be excluded*
  Audio (for deaf students); Students with special needs are left behind; Support for children with special needs. Providing necessary equipment to children with special needs.

Other

- evaluation of educational results, assessment, economic aspects

Q22 – Adaptation to cultural diversity



Additional open answers given:

- *maintain a slower pace and avoid examples that could offend certain cultures;*

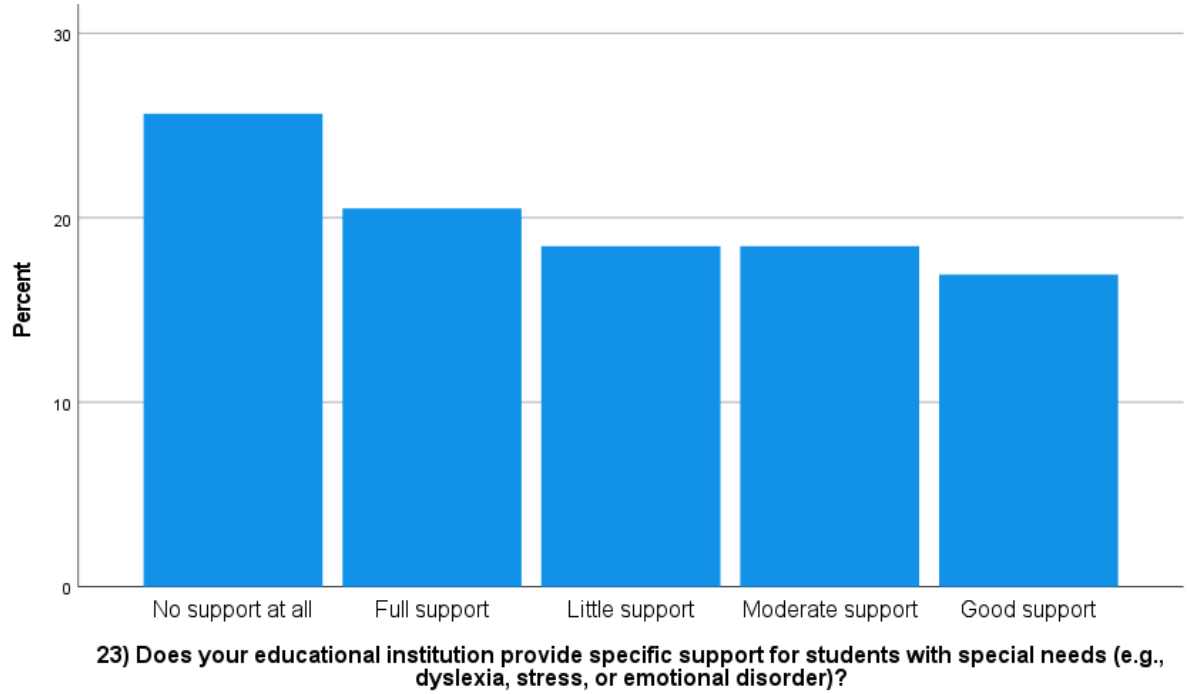
- *Current world events include this issue;*

- *When there are very many international participants, tailoring to all respective cultures is difficult;*

- *I teach Intercultural Communication as a subject;*

- *I ask learners what they need in terms of diversity*.

Q23 – Institutional support for students with special needs

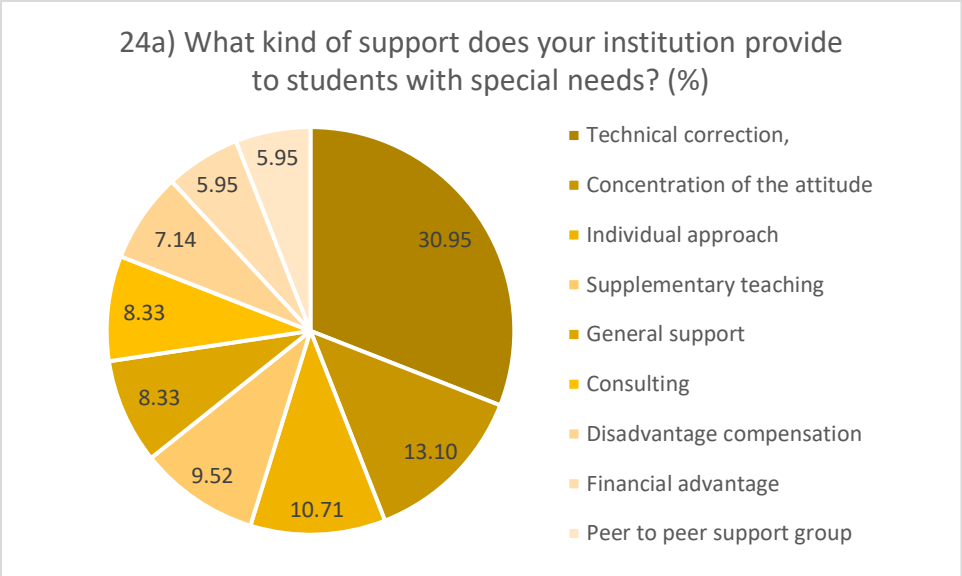


23) Does your educational institution provide specific support for students with special needs (e.g., dyslexia, stress, or emotional disorder)?

The answers to this question were quite divided.
There are substantial differences in support by country.

Country	"Full support" or "Good support"	"Little support" or "No support at all"
Sweden	60%	38%
Cyprus	39%	43%
Italy	30%	47%
Greece	21%	45%
Germany	19%	50%

Q24a – Kinds of support provided



Technical correction

Audio and visual support; Audio visual material with screen readers or voice to text technologies, customized solutions; Converting voice to text; Special equipment for visually impaired children; Interactive whiteboard, Tablet.

Concentration of the attitude

I don't know exactly, but in my own learning, stress regulation is a learning topic that learns through self-awareness; Emotional; Provide psychological support; Support for mental health.

General support

Guidance; Extra attention; Didactical material and clinical and personal support; Depending on the disturbance, there are various supports; All necessary support.

Individual approach

Individual assistance; Diferencované inštrukcie a vyučovanie; In theory they can view the classes several times; Individual case solutions; More time to write assignments; Motivational support from speakers who clearly understand their needs; Programs for students with disabilities; Exemption from non-tested subjects.

Consulting

We will need our support as a Vocational Training Centre to handle such cases.; There is a relevant office that provides support and advice; Cooperation with suitable institutions, individual assistance; Consulting, coaching, tutoring.

Supplementary teaching

Conversation and support by problems; Extra attention, private lessons; Extra hours of teaching in the main courses. Special equipment for visually impaired children; Online trainings.

Disadvantage compensation

Physiotherapy; Compensation for disadvantages, interactive boards; Extension of time for tests/exams; Complementary aids and services; Aids for physical disability.

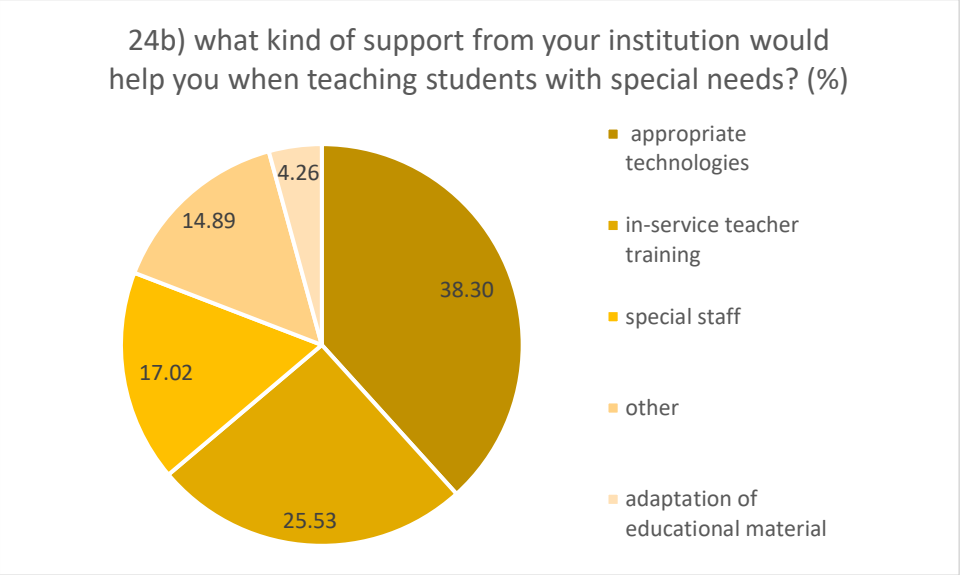
Financial advantage

Course fees are for free; Free network services; Free scholarships.

Peer to peer support group

Student to student support groups; Collaboration with some members of the team; Action inclusive team thinking.

Q24b – Missing support



Appropriate technologies

Voice to text technologies and audovisual materials; Voice to text technologies & customized audio visual material; Screen Readers; Special equipment.

In-service teacher training

Better awareness of the teachers about existing problems; Psychologiocal preparation; Providing of sufficient resources and materials.; Pedagogical knowledge; Our training is always about the individual support of the respective skills of the TN; More experiential seminars for training on specific topics; It is a specialized issue we need training; Have enough resources and materials to teach them different skills.

Special staff

A person with skills as a psychologist who could follow up students with special needs. It could also provide more mentoring online using technological tools such as computers or apps.; An assessment of the children's needs because in many cases the children themselves do not know what kind of support they would need; this can be done by special advisors - special education teachers; Assistant teacher; Psycho-pedagogical accompaniment; needs diagnosis; Qualified staff to run these courses.; Specialised educators.

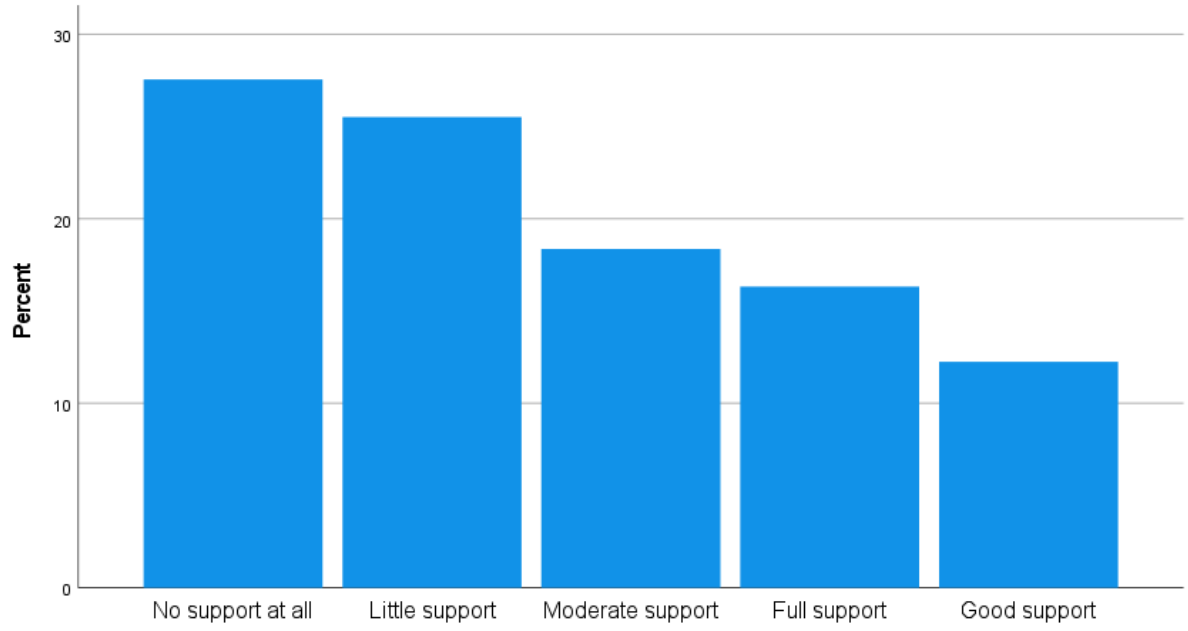
Adaptation of educational material

Specific books and equipment; Support and adaptation of educational material for pupils with special needs; Changing the educational material and media used.

Other

Adequate support, based on individual cases; Arranging on-demand education; Resilience, self-management; Help for students with dyslexia, autism, attention deficit disorder, mental disorders; We will check the special needs and adapt.

Q25 – Trainer skills

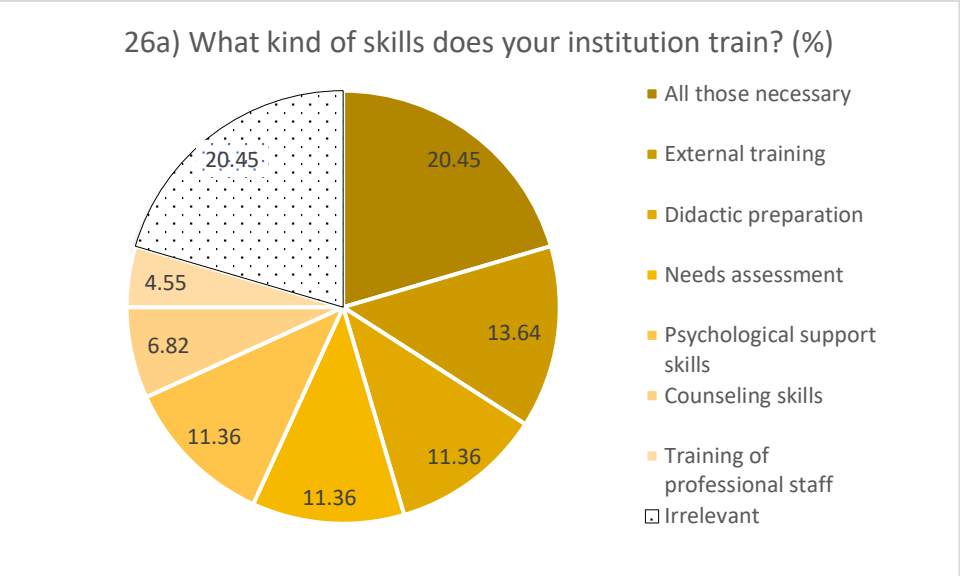


25) Does your educational institution provide the trainers with specific skills to collaboratively teach students with special needs?

Country	"Full support" or "Good support"	"Moderate support"	"Little support" or "No support at all"
Sweden	55%	-	45%
Italy	23%	10%	67%
Cyprus	18%	28%	54%
Greece	17%	35%	48%
Germany	12%	41%	47%

Teachers' work experience in VET	"Full support" or "Good support"	"Moderate support"	"Little support" or "No support at all"
Less than 5	32%	26%	42%
6-10 years	28%	9%	63%
11-15 years	23%	19%	58%
More than 15 years	28%	16%	56%

Q26a – Teacher skills trained in educational institutions



All those necessary

Updating/training in numerous topics; Depending on the difficulty it adapts the educational material; Before every session we ask for special needs and then we adapt with the teacher; Approach and best practices training, how to use interactive / collaborative / online tools effectively, using scripts, having backup plans; All those necessary in reference to the special needs ad hoc; all kinds.

External training

Attend a conference or training related to the special needs of students; Complementary courses; From time to time psycho-pedagogical courses are needed. However, I would need a more targeted and specific training; Further education and training; Regular obligatory and facultative advanced trainings.

Didactic preparation

Training on motivational support; Training on how to adapt our writing and presenting skills accordingly, correct terminology for each situation etc.; Short communication courses and how to manage multicultural groups; Peer to peer support groups; Dealing with remote tools and didactic preparation of learning content for the remote situation;

Needs assessment

Evaluation of needs; Needs assessment; Seminars on assessment of special needs.

Psychological support skills

Potential analysis, training in the individual psychological field.

Counseling skills

Guidance and counseling skills, free scholarships.

Training of professional staff

The support of professional figures such as psychologists; Using special pedagogies.

Q26b – Teacher skills to support students with special needs

Teachers who have not yet encountered pupils with special disabilities have a fairly general view. They feel they have insufficient education to work with handicapped students and any course for working with such students would help them.

- *It would be necessary to attend specific training courses that are able to provide adequate methodologies and tools to teach students with SEN*

At the same time, they assume that they would not be able to do it on their own. They think this is a highly specialized job for specially trained professionals and specialists.

- *May need socio-educational support for learners and coaching for me as a teacher as a needs-based back-up and tailored to the individual case.*

This part of the respondents is 15.8 %.

Only 21.1% of respondents are aware that special supportive teachers are needed to educate students with special needs. They see a solution to this issue in special external training and psycho-pedagogic courses;

- *I am trained and I am aware of these particular disorders thanks to personal training courses;*

Other respondents (5.3%) focused on addressing the situation of students with specific diagnoses (dyslexia, visual and hearing impairments, etc.)

- *Providing ready-made educational material for people with different needs (e.g. visual impairment). Seminars on how to deal with these children.*
- *Help finding material for the blind (auditory) and learning sign language.*
- *Guidelines for handling behaviours associated with dyslexia, dyslexia disorder*

Another (5.3%) believe that Courses on the different approaches and on innovative tools will help here and ask

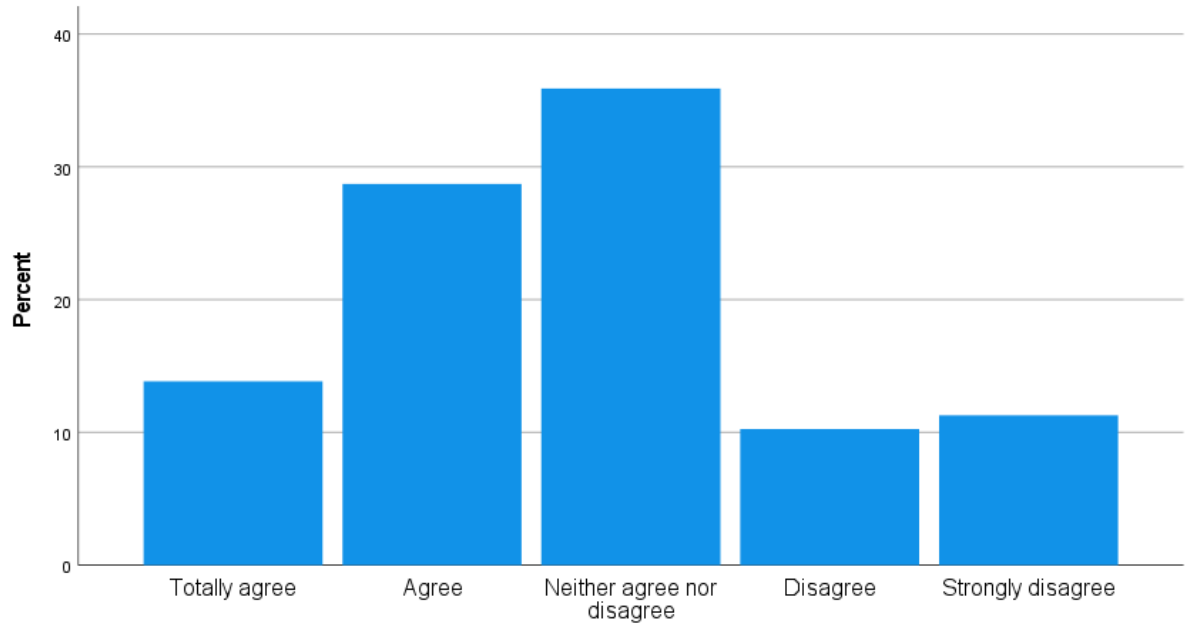
- *The courses how to create effective and collaborative online lessons with collaborative exercises that involve all students;*
- *Courses about digital skills, soft & social skills, psychological support;*

6.6% of respondents focused on supporting technology. They think that the situation in education can be improved by the introduction of technology and they would expect education in this direction:

- Training on computer-assisted learning;
- How to use special equipment and which program for such teaching;
- Dealing with the new programs;

A small group consists of three opinions that it is sufficient to consult with colleagues (4%) to address students with special needs. Two respondents (2.6%) would expect coaching.

Q27 - The rejection of digitization in VET is caused by different divergent budget priorities and the general fear to change.



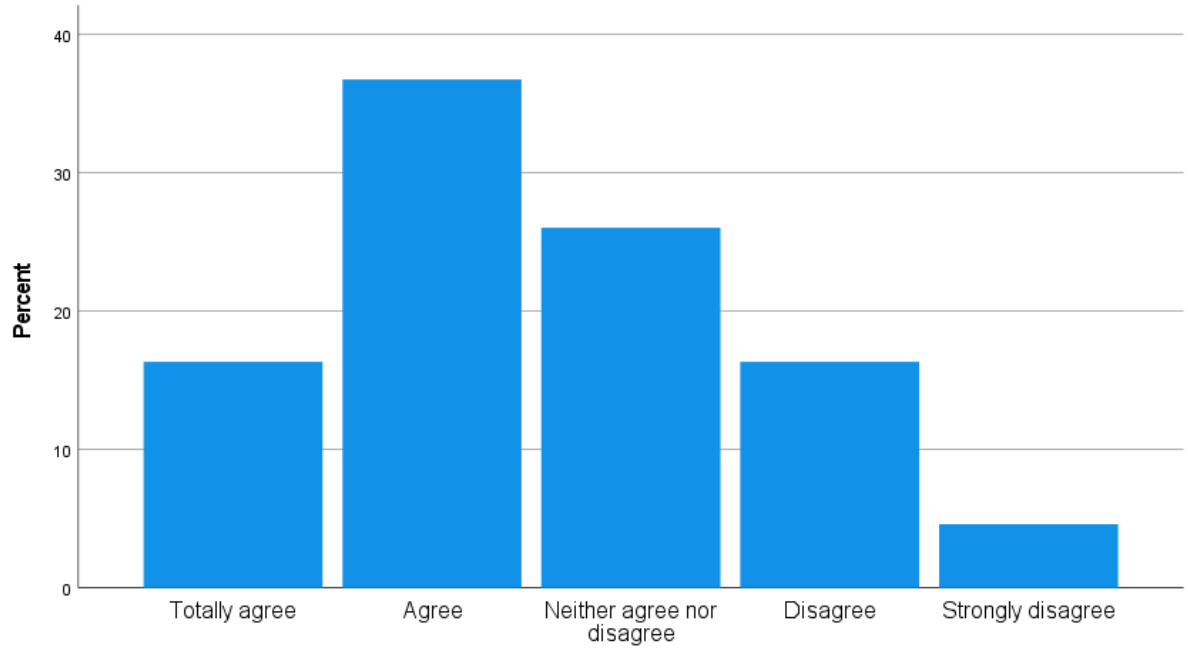
27) The rejection of digitization in VET is caused by different divergent budget priorities and the general fear to change.

27) The rejection of digitization in VET is caused by different divergent budget priorities and the general fear to change.

In which country is your institution located?		N	%
Cyprus	Totally agree	6	21,4%
	Agree	12	42,9%
	Neither agree nor disagree	9	32,1%
	Disagree	1	3,6%
Germany	Totally agree	2	6,3%
	Agree	12	37,5%
	Neither agree nor disagree	12	37,5%
	Disagree	4	12,5%
	Strongly disagree	2	6,3%
Grece	Totally agree	1	3,4%
	Agree	10	34,5%
	Neither agree nor disagree	16	55,2%
	Disagree	1	3,4%
	Strongly disagree	1	3,4%
Italy	Totally agree	3	10,0%
	Agree	9	30,0%

	Neither agree nor disagree	16	53,3%
	Disagree	1	3,3%
	Strongly disagree	1	3,3%
Sweden	Totally agree	13	22,4%
	Agree	5	8,6%
	Neither agree nor disagree	9	15,5%
	Disagree	12	20,7%
	Strongly disagree	18	31,0%
	Missing System	1	1,7%
other	Totally agree	2	10,5%
	Agree	8	42,1%
	Neither agree nor disagree	8	42,1%
	Disagree	1	5,3%

28) There is a lack of human dimension in a virtual setting.



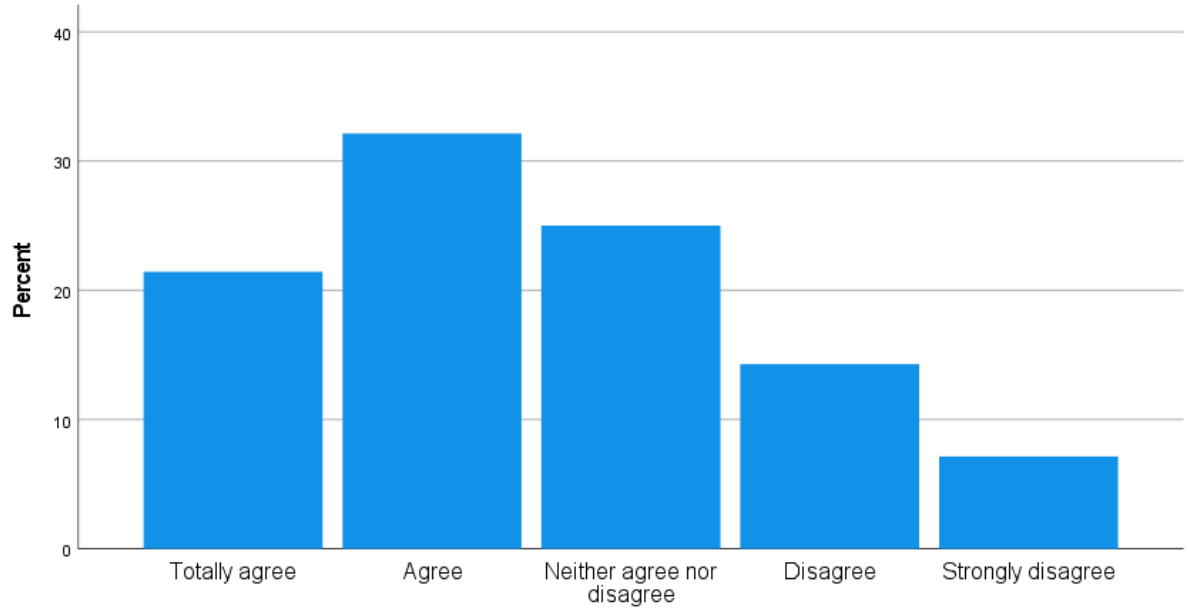
28) Please rate. There is a lack of human dimension in a virtual setting.

28) Please rate. There is a lack of human dimension in a virtual setting.

How old are you?		N	%
20-30 years	Totally agree	10	19,2%
	Agree	14	26,9%
	Neither agree nor disagree	12	23,1%

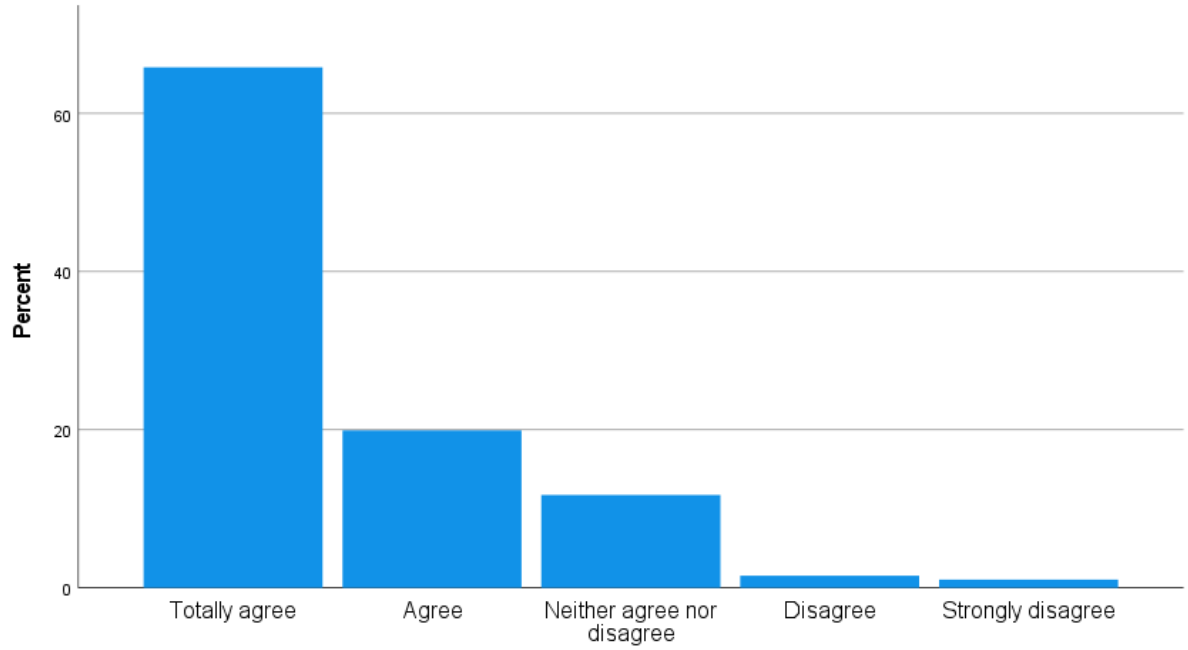
	Disagree	12	23,1%
	Strongly disagree	4	7,7%
31-45 years	Totally agree	9	15,0%
	Agree	26	43,3%
	Neither agree nor disagree	17	28,3%
	Disagree	7	11,7%
	Strongly disagree	1	1,7%
46-60 years	Totally agree	11	16,7%
	Agree	23	34,8%
	Neither agree nor disagree	18	27,3%
	Disagree	11	16,7%
	Strongly disagree	3	4,5%
Older than 60 years	Totally agree	2	11,1%
	Agree	9	50,0%
	Neither agree nor disagree	4	22,2%
	Disagree	2	11,1%
	Strongly disagree	1	5,6%

29) Students tend to hide behind their cameras in a virtual learning environment.



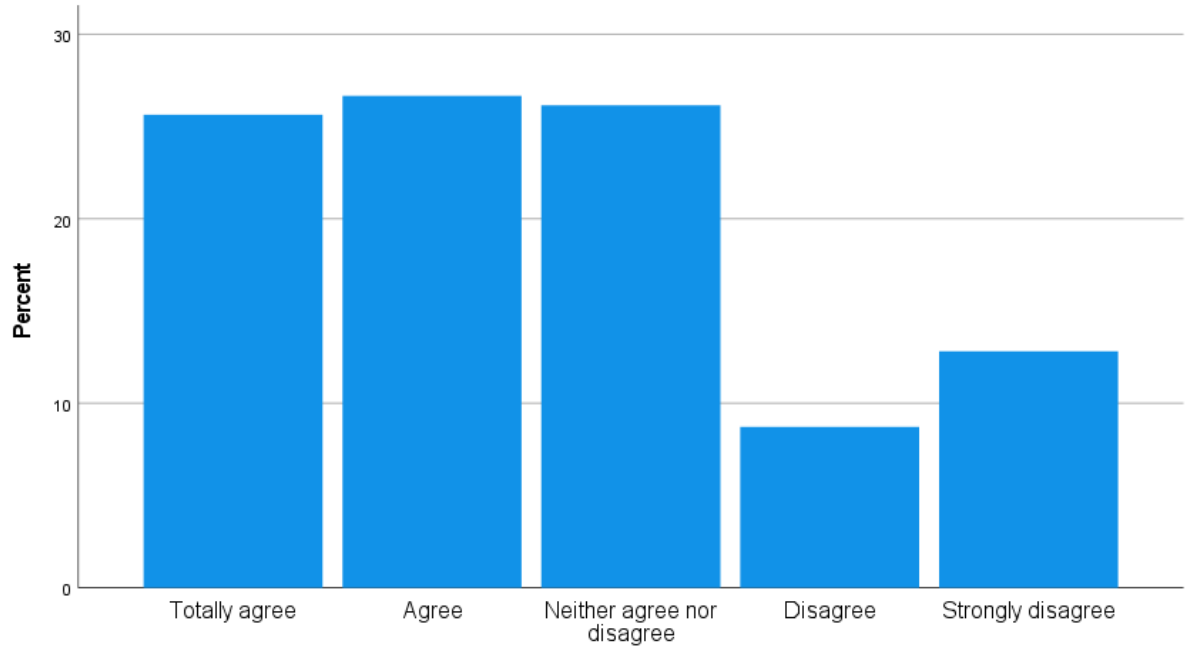
29) Please rate. Students tend to hide behind their cameras in a virtual learning environment.

30) Virtual platforms should have an intuitive and easy to use design



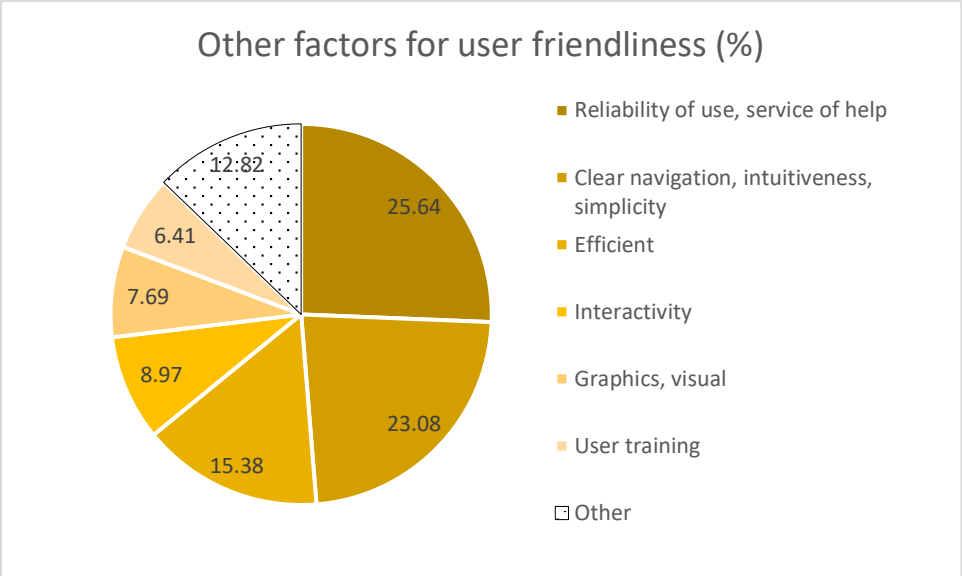
30) Virtual platforms should have an intuitive and easy to use design:

31) Virtual platforms should have a limited number of the most important features



31) Virtual platforms should have a limited number of the most important features

Q32 – Other factors for user friendliness



Reliability of use, service of help
Usability test before use; Technical support; Speed of connection and its reliability.; Secure data line; Error rate; Technical stability. If I don't have to worry about the technology, then I can focus on the content and what I'm doing.; Compatibility, group spaces, fading in of all mgl. Resources;

Clear navigation, intuitiveness, simplicity
Clear instructions and guidelines for use; Easy access; Easy accessibility, If I don't have to worry about the technology, then I can focus on the content and what I'm doing.; Easy to connect, easy to share, easy to split and a simple monitoring tool for the teacher; Easy to set up; Intuitivity; ser-friendly; Simple interface. clear functions; Simple. Rather low-tech; The tools for creating other formats should be well implied!; Understandable, only with few features; Virtual platform should be user-friendly;

Efficient
The tool must fit the purpose and VC's are just that - tools.; Efficiency; Cost factor, general awareness;

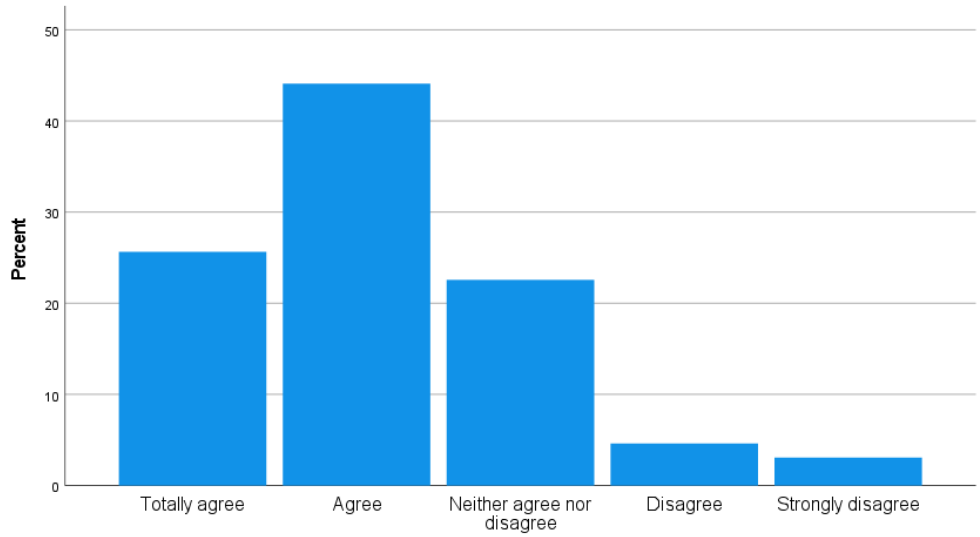
Interactivity
Allow students to note and share their screen; Better joint creativity development; Chat functions, group room; Interactive aspect; It's always nice to hold ice-breaker conversations and activities each time to make everyone feel more connected and included.; Providing the student with an opportunity to ask questions; Some fun effect that the students could use to express their motivation or learning outcome;

Graphics, visual
Visual design; Clean and readable interface.; Vibrant colours; Simpler graphics; Minimal design; Decent colours;

User training
Adequate explanation /training for the use of a tool or feature.; Gave a clear introduction that is user-friendly; Get special equipment or teaching materials; Guide on how to use; To have instructions for use for each digital tool or software;

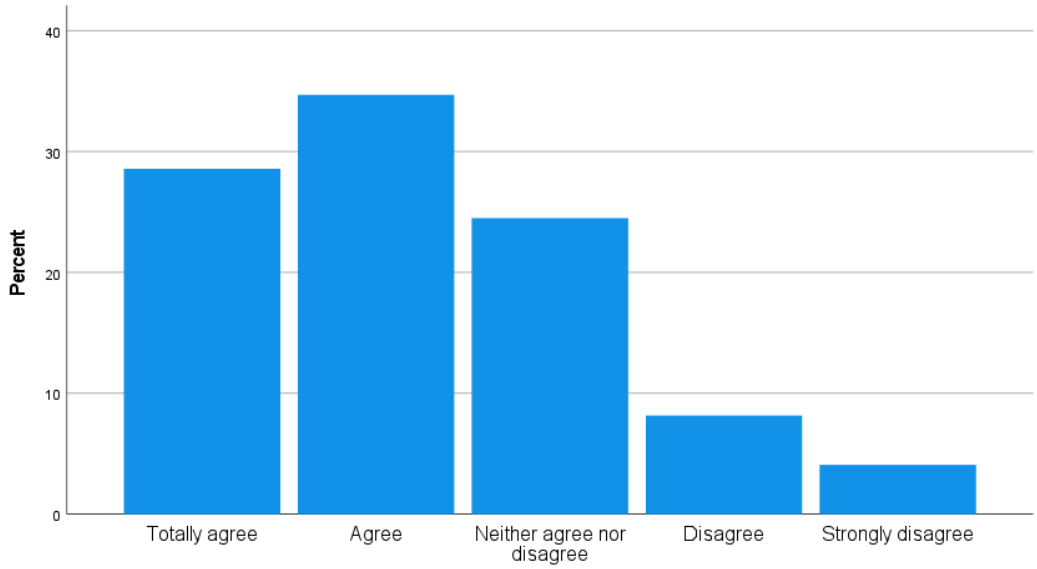
Other
There are platforms like MIRO which I use mainly with puppets who prefer to write instead of opening the microphones and talking;
The use of dictionaries to facilitate difficulties among multi-ethnic students;
Different ways of performing an operation.;
Self-explanatory, error-friendly;
PPT-friendly;
Multilingual user interface;
Hand signs;
Ease of use on mobile devices;
Breakout rooms, white boards, connecting external devices, e.g. iPad;
Adaptability to individual needs (e.g. temporary activation of certain functions);

33 – Educational differences are a major challenge in a virtual environment?



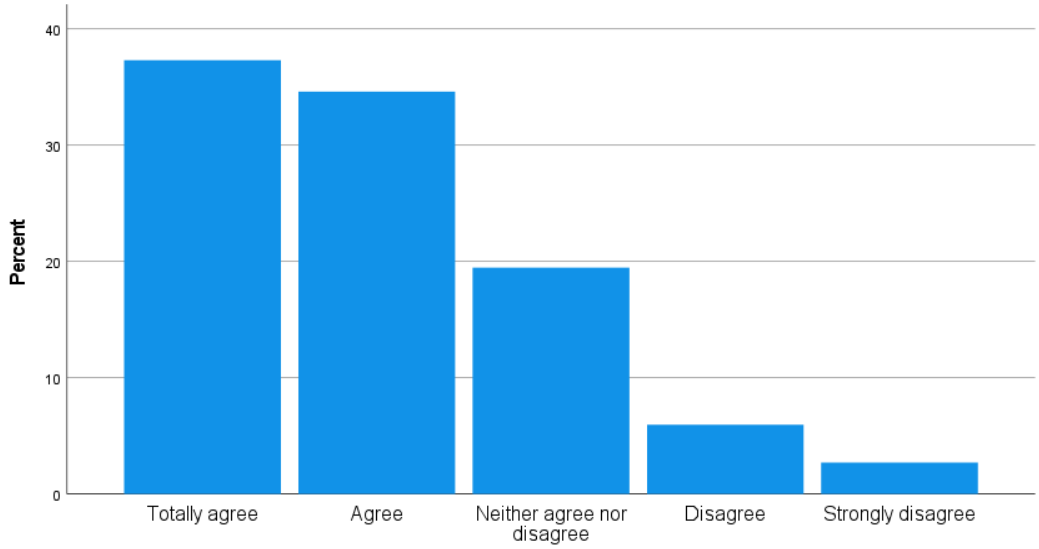
33): Educational differences are a major challenge in a virtual environment?

34 – Language barriers are a major challenge in a virtual environment?



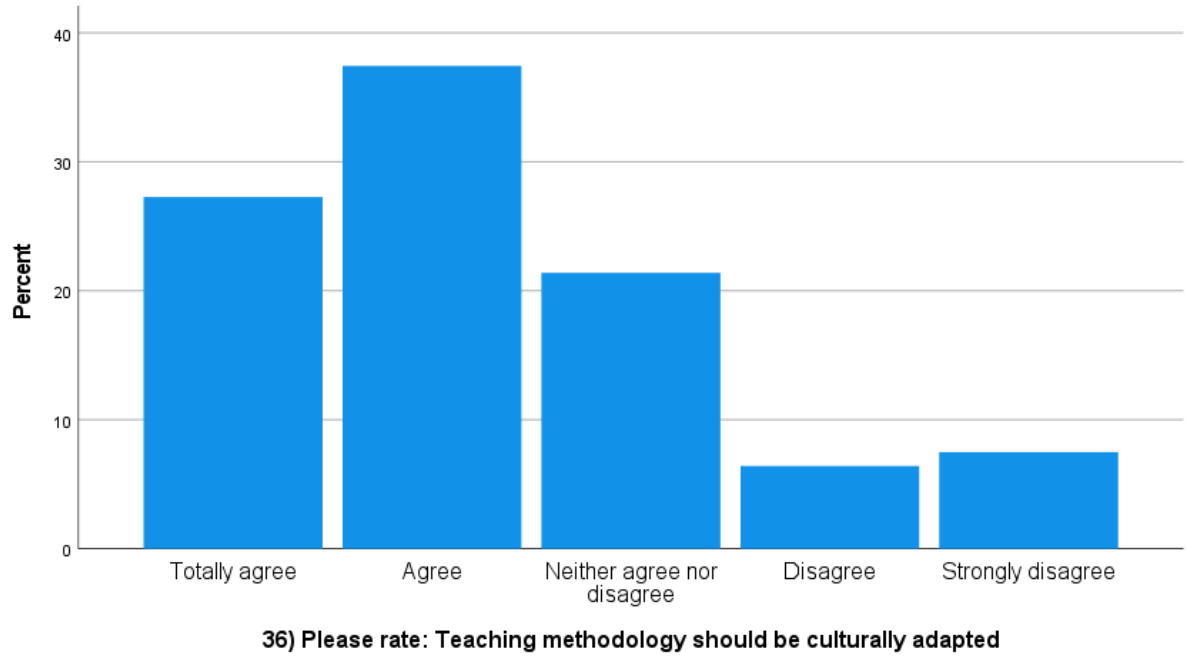
34): Language barriers are a major challenge in a virtual environment?

35 – Multicultural course content should apply a wider/ diverse perspective (e.g., case studies from different countries/ cultures)



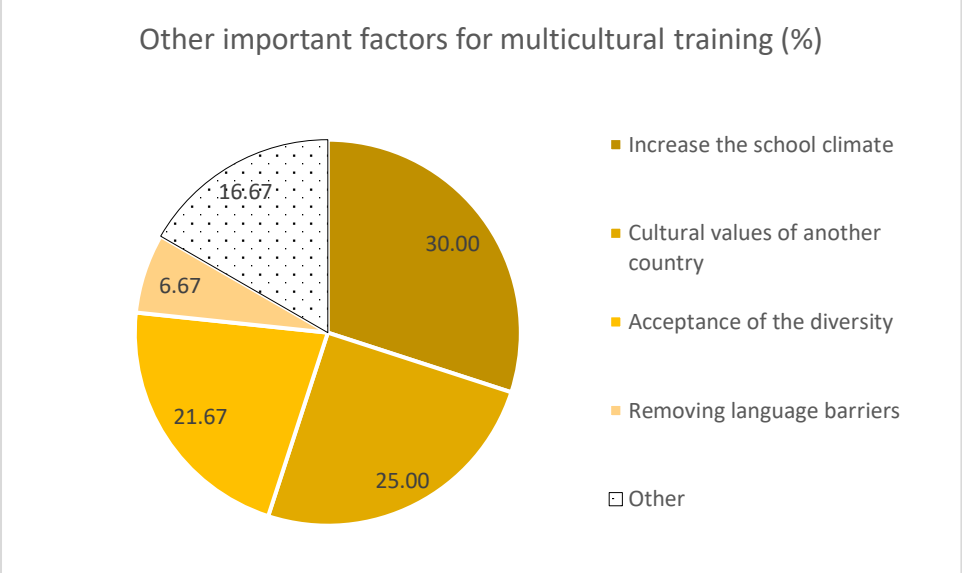
35) Please rate: Multicultural course content should apply a wider/ diverse perspective (e.g., case studies from different countries/ cultures)

36 – Teaching methodology should be culturally adapted



36) Please rate: Teaching methodology should be culturally adapted

Q37 – Other important factors for multicultural training



Increase the school climate

School culture and social structure, equality in pedology, pressure reduction; Verbal and non-verbal communication Social inclusion; Open dialogue; Open attitude of the teacher (as identification person) and a wide horizon.; Empowering school culture and social structure, an equity pedalogy, prejudice reduction; Collaboration; Atmosphere, trust, "rules of the game;

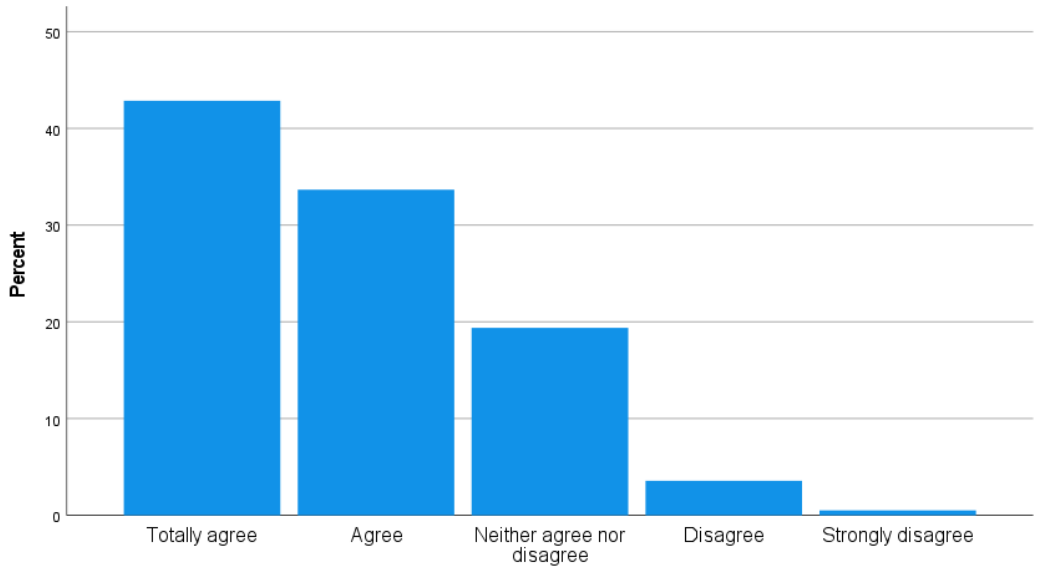
Cultural values of another country
Staying in different countries for a period of time and volunteering in structures working with migrants.; Respect for foreign culture, through knowledge; Respect for all cultural heritage, provide appropriate translation to avoid bias; Respect cultural diversity, avoid stereotypical type of education,; Recognize and respect everyone's culture; Listen to student from different coutries to learn from them how is in their country; Knowledge about cultures; It promotes intercultural interaction and harmony in a school environment, broadens the way of thinking about current issues around cultural diversity; Case studies per country; Allow students to expand mine into topics related to cultural and social issues.;

Acceptance of the diversity
Tolerance, openness; Acceptance of the other, interest; Be inclusive, paying attention to diversity of approaches; Diversity = enrichment; Knowledge of the other, acceptance and respect of the other, human rights, universal values, love; Mutual appreciation; Mutual respect in general motivation; Appreciation of different points of view; Respecting feelings of shame in the face of criticism.;

Removing language barriers
Language issues and issues that may need to overcome stereotypes, prejudices, etc.;

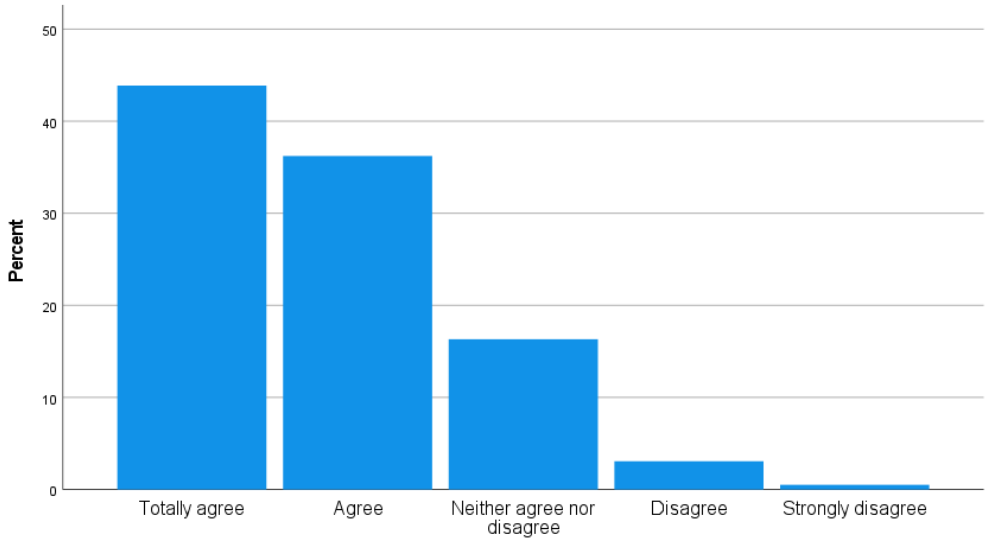
Other
Encourage divergent thinking as welcome input; Exchange among the group needs time, which has to be planned.; External guests, readiness for discussion; Hierarchy towards the teachers, collective and individual approaches; Changes to existing curricula (qualitative and not quantitative criteria); Learning and being open to new elements; Pace management and remote coaching during workshops; Social background and training on education/school; Support mediators; Teachers' personalities;

38 – Barrier free technological access creates an inclusive learning environment.



38) Barrier free technological access creates an inclusive learning environment.

39 – Acceptance of learner groups with diverse abilities creates an inclusive learning environment.



39) Acceptance of learner groups with diverse abilities creates an inclusive learning environment.

Q40 - Which of the following factors are most important for your satisfaction with online collaborative education? (%)

It can be said that the interest in choosing from the offer decreased according to the order in the menu.
The usefulness of the answers should be questioned.