Schools Harnessing Inclusive Facilitator Technology

SHIFT

School staffs' digital training and competencies, multidisciplinary competencies, and needs related to the use of inclusive facilitator technology in Cyprus, Finland, and Spain.

Results from phase I of the SHIFT project

Anette Bengs and Emmanuel Acquah
Åbo Akademi University
Finland

EXECUTIVE SUMMARY

This report is part of the co-funded Erasmus+ project SHIFT (Schools Harnessing Inclusive Facilitator Technology). The main aim of the project is to develop methods and learning paths for school staffs' evaluation of the transfer of digital training into the inclusive classroom. The first phase of the project included the identification of ICT standards, digital competencies derived from training, multidisciplinary competencies of both teaching staff and educational support staff, along with the identification of inclusion needs. In order to accomplish these goals, a questionnaire study was conducted in February and March 2020. A total of 583 school staff members including principals, teaching staff and educational support staff responded to the questionnaire in the three participating countries Cyprus (n = 318), Finland (n = 146), and Spain (n = 119). The results of the study linked to each of the four goals for this phase of the project are presented below.

Identified digital competencies derived from training

The majority of the respondents across the three countries had received training in the use of the internet and general software (79 %), whereas 48 % had received training in the equipment-specific use of general technology such as laptops and computers. Training in the use of apps and games in the current context had been received by about one third of the respondents (31 %), whereas training in the use of multimedia production tools was lower (21 %). The majority of respondents (37 % often to very often and 34 % sometimes) reported that they apply the skills and knowledge gained from training in order to facilitate inclusion in the classroom, however, 39 % considered the training and competencies derived from it to be insufficient for applying digital tools for inclusion facilitative purposes. Furthermore, only an average of 10 % had received training in the use of new technology and 9 % in assistive technology.

Regarding training received related to the use of digital tools to facilitate inclusion in the classroom, about one third of school staff members reported that they had received training in the pedagogical use of digital tools (34 %) and 18 % reported that they had received training in the use of digital tools to facilitate assessment and diagnosis. With regard to students with different characteristics and needs, 9 % of the school staff members had received training in the use of digital tools to facilitate inclusion of students with special educational needs and 6 % had received training in the inclusion of immigrant students. Only 3 % of the respondents had received training in using digital tools to facilitate inclusion of students with problematic school absence and 2 % reported that they had received training in the inclusion of students with low-socio economic background

Furthermore, the respondents reported encountering barriers such as time limitations (53 %), the fact that this kind of training is rarely offered (31 %) and training being too expensive (22%). The lack of incentives (21 %), lack of employer support (18 %), and conflicts with the work schedule (16 %) were further barriers, which the school staff had encountered.

Identified ICT standards and digital competencies

The majority of respondents reported using general technology (88 %) and multimedia software (such as power point and different editing programs) (64 %). The use of other digital tools reported by about half of the respondents included online resources, digital games, apps, and mobile technology. The use of digital books, social media, and multimedia technology were reported by about 30-40 % of the respondents and less than 17 % reported using assistive features of general technology, assistive or supportive technology or new technology. However, the availability of these kinds of technologies in schools was low (5 %) compared to that of general technology (> 90 %), which might partly explain the low level of application.

Using digital tools to foster social aspects of inclusion (such as communication and collaboration) on a general level was quite common. However, the results indicate a need for support and training in the use of digital tools to facilitate academic inclusion as well as in facilitating emotional wellbeing, positive behaviour, empathy, and openness to diversity. Only a minority of respondents across the three countries reported that they use digital tools to facilitate inclusion of students with different characteristics, particularly students with different cultural and linguistic background than the mainstream and students with problematic school absence.

Identified multidisciplinary inclusive work and competencies

Across the three countries, 51% of the respondents reported that their school utilizes multidisciplinary teams in order to facilitate inclusion of students in the classroom. About 25 % (n = 147) of the respondents were part of multidisciplinary teams at the time of the study. According to the majority of these respondents (over 80 %), multidisciplinary teams were composed of principals, special education teachers, school psychologists and school counselors. Parents, students and class teachers were also involved according to more than 50% of the 147 respondents. Less than 9 % reported the involvement of other professionals, such as school assistants, special educational support staff, social workers and social integration facilitators, speech therapists, physiotherapists, occupational therapists, the school nurse, tutor teacher or school coaches.

Of the main functions of the multidisciplinary teams, diagnosis and assessment of students constituted 25 %, the evaluation of student progress in relation to the individual student plan constituted 22 %, and the development of students plans constituted 21 %. Less than 17 % (100 respondents) of the multidisciplinary functions constituted of the implementation of student program (17 %) and monitoring the student in the program (14 %). Furthermore, 34% of the multidisciplinary teamwork for facilitating inclusion of students with different characteristics were with students with special educational needs, whereas 23% of the multidisciplinary teamwork focused on students with problematic school absence and low socio-economic background respectively. Only 18% focused on inclusion of students with different linguistic and cultural background.

Inclusion needs

Several inclusion needs related to the digital training, digital and multidisciplinary competencies were also identified. These may be shortly summarized as needs for more frequent, focused and directed digital training explicitly targeting the inclusion of a diversity of students in the classroom; training in and use of new technology for inclusive purposes; a paradigm shift from uncritically following curriculum to Culturally an Linguistically Responsive Teaching and Learning (CLRT). Further needs identified were training in and use of digital tools to foster diversity awareness, reduce bullying, support mental health and to facilitate academic aspects of inclusion (such as transversal skills, math, science, language, and literacy).The results also indicated a need for increasing peer discussion regarding the use of digital tools to facilitate inclusion in the classroom.

INTRODUCTION

The current report is part of the co-funded Erasmus+ project SHIFT (Schools Harnessing Inclusive Facilitator Technology), which main aim is to develop methods and learning paths for school staffs' evaluation of the transfer of digital training into the inclusive classroom. In order to accomplish this, the first phase of the project included the identification of ICT standards, digital competencies derived from training, multidisciplinary competencies of both teaching staff and educational support staff, and the identification of inclusion needs.

In this report, digital tools refer to all kinds of digital technology, systems, services, and resources used to facilitate inclusion in the classroom. Inclusive pedagogy is conceptualized as a process for transforming education systems, the structure and operation of the school to a teaching approach that addresses individual differences between learners, while actively avoiding the marginalisation of some learners. These include, for example, ethnic minority students with culturally and linguistically diverse backgrounds and whose special needs are derived from late incorporation into the educational system; students with special educational needs; students with problematic school absence and risk of early drop out; and students from lower socio-economic backgrounds. Inclusion can be academic (such as teaching and learning processes and subjects), social (such as communication and collaboration) and physical. Inclusion may also be related to emotional and behavioural aspects.

The identification of indicators and needs related to digital training, digital competencies and ICT standards, as well as multidisciplinary competencies, was realized through a questionnaire study conducted with elementary and secondary schools within the three participating countries in February and March 2020. Some of the questionnaire items were adapted from the OECD Teaching and Learning International Survey (TALIS). A total of 583 school staff members including principals, teaching staff and educational support staff responded to the questionnaire in the three participating countries; Cyprus (318), Finland (146), and Spain (119). The countries are ranked in alphabetical order throughout this report. The demographics of the participants are presented in Table 1 and the frequencies of students with different characteristic in the participating schools are presented in table 2. Both results for across the three countries and country-specific results are presented, as well as results specific to staff category (teaching staff and educational support staff). The reported results are the school staffs' subjective perceptions, experiences and opinions.

The results of this study are presented according to the following structure: school staffs' digital training and competencies derived from it along with specific needs, in the context of facilitating inclusion in the classroom, ICT standards, digital competencies and needs related to the current context, identified multidisciplinary competencies and concluding remarks. A table or figure that summarizes competencies or needs is presented at the beginning of each chapter, after which results and more detailed descriptive statistics are presented.

Table 1. Demographics across countries and separately for each country.

Demographic variables		Across countries (n)	Country-specific (n)		
			Cyprus	Finland	Spain
Total number of participants		583	318	146	119
Gender	Females	379	180	112	87
	Males	203	138	33	32
Age category	Young (18-39 years)	195	99	50	46
	Middle aged (40-59 years)	371	210	93	68
	Older (60+ years)	17	9	3	5
Staff category	Teaching staff	438	-	-	-
	Support staff	39	-	-	-
Time in profession	0-5 years	104	73	57	78
	6-10 years	62	32	28	19
	11-19 years	216	136	28	12
	20+ years	113	77	28	8
School level	Elementary	246	191	88	55
	Secondary	274	122	58	64
	Multiple	5	5		
School location	Urban	243	70	55	118
	Suburban	34	23	11	-
	Rural	152	146	6	-
	Multiple	1			1

Table 2. The frequencies and distribution of students with different characteristics in the participating schools.

| Student characteristics		Across countries (n)	Country-specific (n)		
			Cyprus	Finland	Spain
Special educational needs	0 %	39	32	3	4
	1-10 %	297	198	60	39
	11-25 %	107	54	27	26
	26-50 %	54	9	15	30
	51-100 %	82	25	39	18
Different language and culture than mainstream	0 %	85	77	8	-
	1-10 %	280	180	90	10
	11-25 %	72	33	21	18
	26-50 %	50	15	18	17
	51-100 %	77	-	5	72
Socio-economic disadvantage	0 %	24	18	5	1
	1-10 %	244	141	87	16
	11-25 %	137	92	27	18
	26-50 %	119	67	12	40
	51-100 %	49	-	7	42
					3
Problematic school absence and risk for drop out	0 %	199	158	29	12
	1-10 %	261	106	93	62
	11-25 %	49	18	8	20
	26-50 %	41	23	8	10
	51-100 %	13	-	3	10

TRAINING

In order to identify the digital training received, the respondents were asked to report received equipment-specific training related to general technology, new technology, assistive/supportive technology as well as apps and digital games for facilitating inclusion in the classroom. The respondents were further asked about the training received in using digital tools to facilitate different aspects of inclusion as well as inclusion of students with different characteristics (including students with special educational needs, low socio-economic background, different cultural and linguistic background, and problematic school absence). Barriers to participating in the training were also inquired about. The training received and the competencies derived from it are summarized in the box below. The detailed description is presented under subheadings.

| Summary of received digital training and competencies |
|---|
| ❖ School staff have received training in the use of general applications and the internet. This was reported by 79 % of the respondents.
 ❖ Part of the school staff has received equipment-specific training in the use of general technology, such as computers and laptops (46 %).
 ❖ About one third (31%) have received training in digital apps and games.
 ❖ About 20 % had received training in multimedia production tools and assessment and diagnosis.
 ❖ Less than 10% have received training in new technology and assistive technology.
 ❖ 34 % had received training in the pedagogical use of digital tools.
 ❖ Less than 10 % had received training in the use of digital tools to facilitate inclusion of students with different characteristics.
 ❖ 34 % of the respondents had received their last training over 2 years ago, 30 % 1-2 years ago and 18 % under 1 year ago.
 ❖ School staff apply the competencies and skills derived from training to facilitate inclusion in the classroom. Across the three countries, 72 % of the respondents reported that they sometimes to very often apply the knowledge and skills gained from training.
 ❖ 39% of the respondents were of the opinion that the training they had received was insufficient, compared to 33 % reporting that the training was enough for applying digital tools to facilitate inclusion in the classroom. |

Received training

As can be seen in Figure 1, most respondents (79%) reported that they had received training in the use of the internet and general applications for inclusive purposes. Equipment specific training of general technology (such as computers and laptops) was also reported by just under half of the respondents (46 %). Training in the use of apps and games in the current context had been received by about one-third of the respondents (31 %), whereas training in the use of multimedia production tools (21 %) and assessment and diagnosis (19 %). The number of respondents who had received training in the use of new technology (10 %) and assistive technology (9 %) was very low.

Figure 1. Equipment-specific training received by school staff across the three countries.
Percentage of school staff who have received the following training.
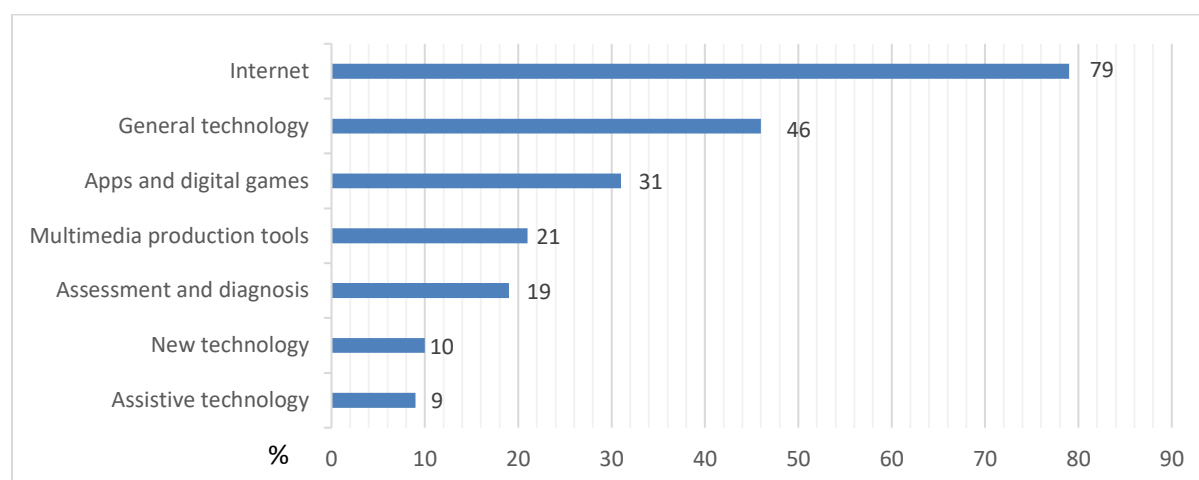
When asked about the training received related to the use of digital tools to facilitate inclusion in the classroom, about one-third of school staff members reported that they had received training in the pedagogical use of digital tools (34 %) and 19 % reported that they had received training in the use of digital tools to facilitate assessment and diagnosis. Concerning students with different characteristics and needs, 9 % of the school staff members had received training in the use of digital tools to facilitate inclusion of students with special educational needs and 6 % had received training in the inclusion of immigrant students. Only 3 % of the respondents had received training in using digital tools to facilitate inclusion of students with problematic school absence and 2 % reported that they had received training in the inclusion of students with a low-socioeconomic background.

Figure 2. Digital training for facilitating inclusion of students with different backgrounds across the three countries.
Percentage of school staff who have received the following training.
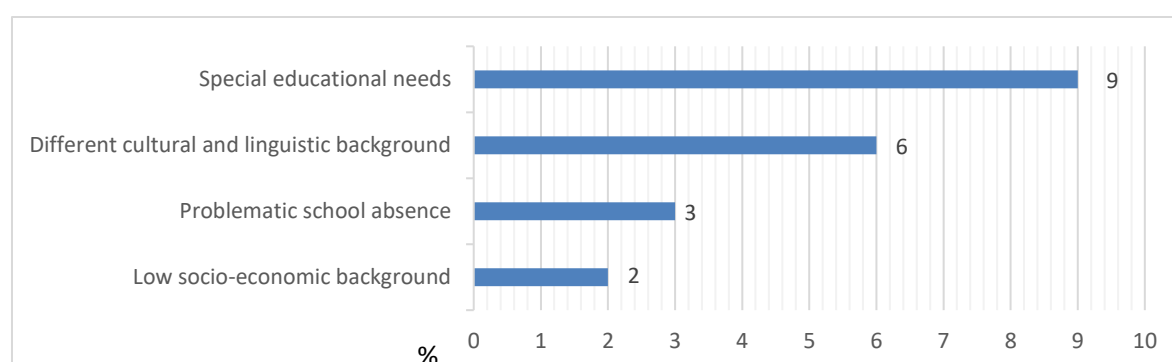
A question regarding the time that had passed since the respondents had received their last training revealed that it was over two years ago for 34 %, 1-2 years ago for 18 %, and about one third (30 %) reported that they had received their last training under one year ago. The majority of the respondents (39 %) did not think that the training had provided them with enough competencies to use digital tools to facilitate inclusion of the students, whereas 33 % of the respondents reported that the training they had received was enough. The qualitative data also revealed that the respondents wished for more frequent, continuous and focused training related to both students with different characteristics and needs as well as training related to specific teaching/learning goals and the use of specific technology and digital content. This might explain that about half of the respondents did not

think that or were unsure about whether the training received was sufficient for applying digital tools to facilitate the inclusion of the students. However, although the majority reported that the digital competencies derived from training were not enough, the training they had received was still useful, as 37 % of the respondents reported applying what they had learnt often or very often and 34 % reported that they sometimes apply the skills and knowledge the training had provided them. As may be seen in the figures below (Figures 3-4), there were also some country-specific differences regarding the received training.

Figure 3. Country-specific training in digital content and technology for inclusion.
Percentage of respondents across the three countries who reported that they have received training in the following inclusive technology and content.
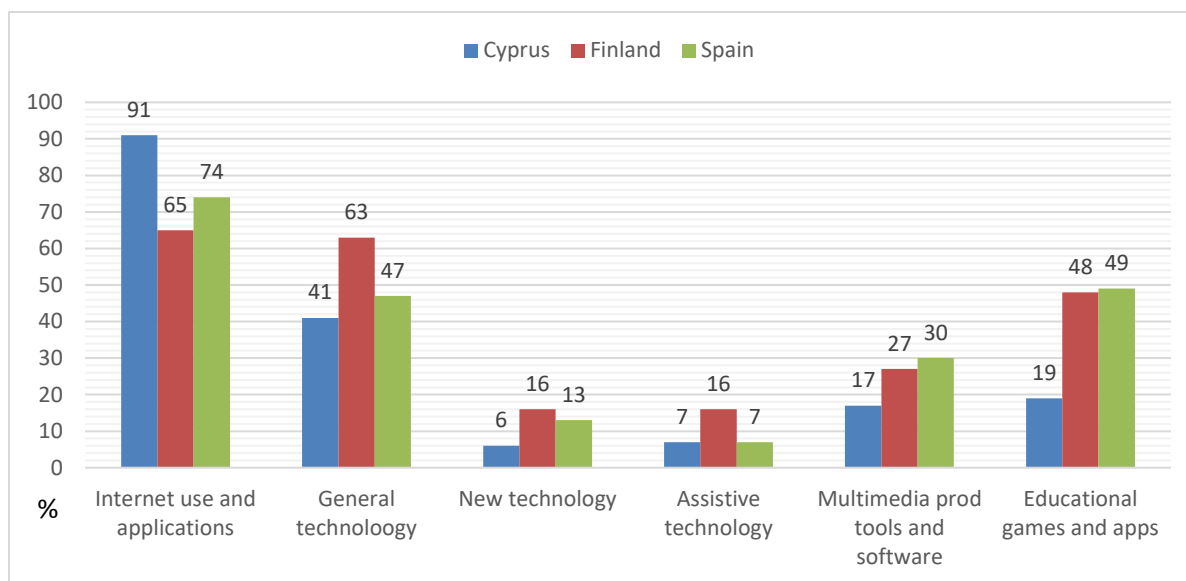
Figure 4. Country-specific digital training in facilitating different aspects of inclusion.
Percentage of respondents across the three countries who reported that they have received training in the following inclusive activities.
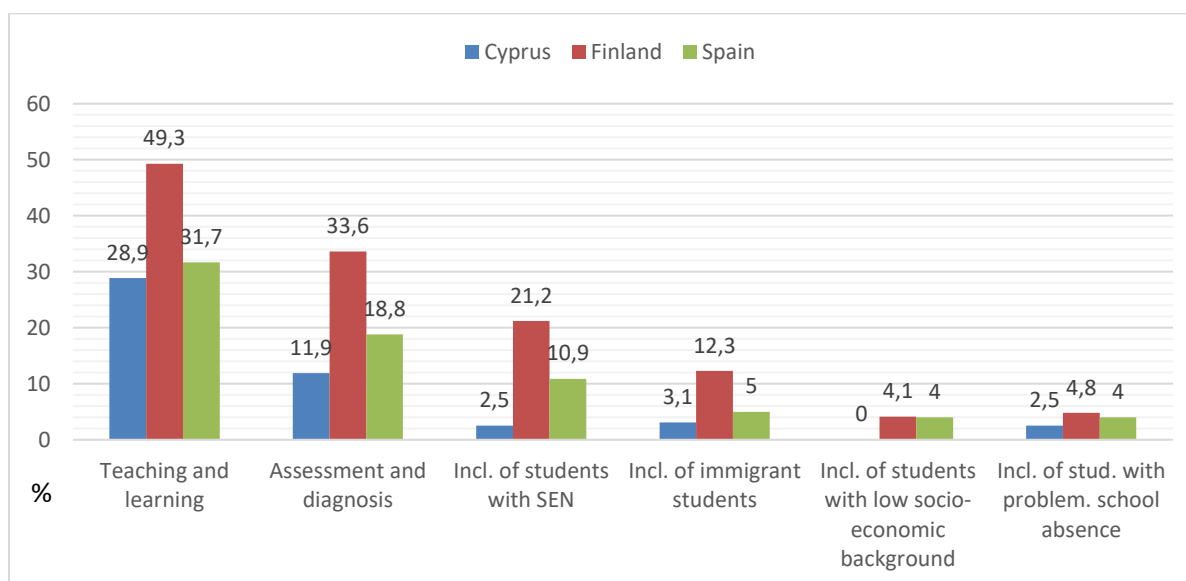
Barriers for participating in training

The question of what kinds of barriers (if any) the school staff had encountered regarding their participation in training, clearly show that time limitation was the most common barrier reported by 53 % of the respondents. This was also evident in the qualitative data referred to above. The second most commonly reported barrier was that training is not offered or that it is rare (31 %). The training was too expensive according to 22% of the respondents and lack of incentives was reported by 21 %. The rest of the barriers, i.e. lack of employer support and the training schedule conflicting with the work schedule were reported by less than 20 % of the respondents. However, the data indicates that there are country-specific differences in the barriers encountered. Lack of employer support and lack of incentives were more commonly reported by school staff in Cyprus (29 % and 31 % respectively) compared to Finland (5 % respectively) and Spain (3% and 12% respectively). The lack of available training and courses was higher in Spain (53 %) compared to Finland (35 %) and Cyprus (22 %).

Figure 5. Barriers to receive training in the use of digital tools to facilitate inclusion.
Percentage of school staff in the three countries who reported that they had encountered the following barriers.
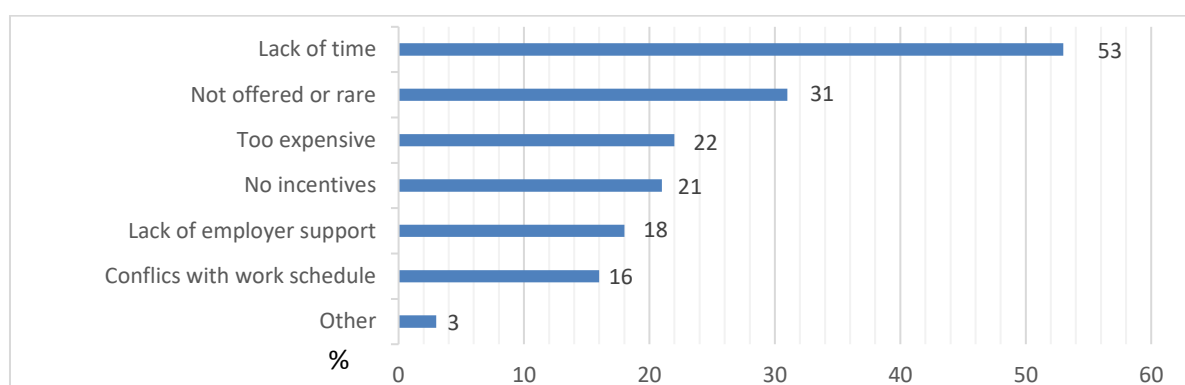
**Figure 6. Country-specific training barriers.**
Percentage of school staff in the different countries who have encountered the following barriers for participating in or receiving training.
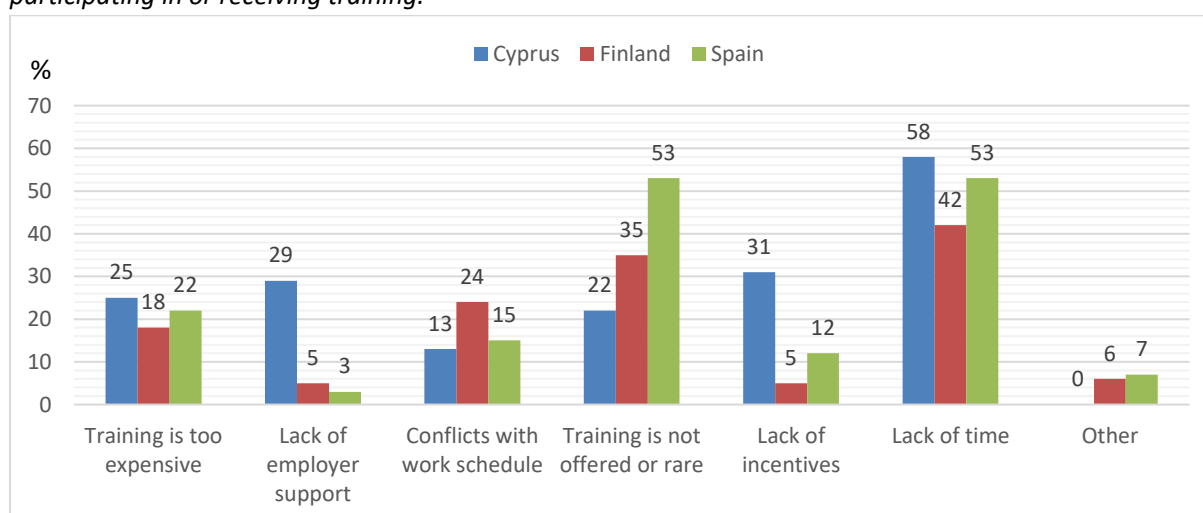
ICT STANDARDS AND DIGITAL COMPETENCIES

ICT standards and digital competencies were identified by asking the respondents about the availability of technology in the schools and whether the technology was equally available to all of the students. Furthermore, questions about which technology the respondents use, the reasons for their choices as well as the specific purposes they use it for, were further inquired about. Figure 7 below summarizes the identified digital competencies and needs of the school staff and more detailed information may be found below each subheading.

Figure 7. Digital competencies related to inclusion.
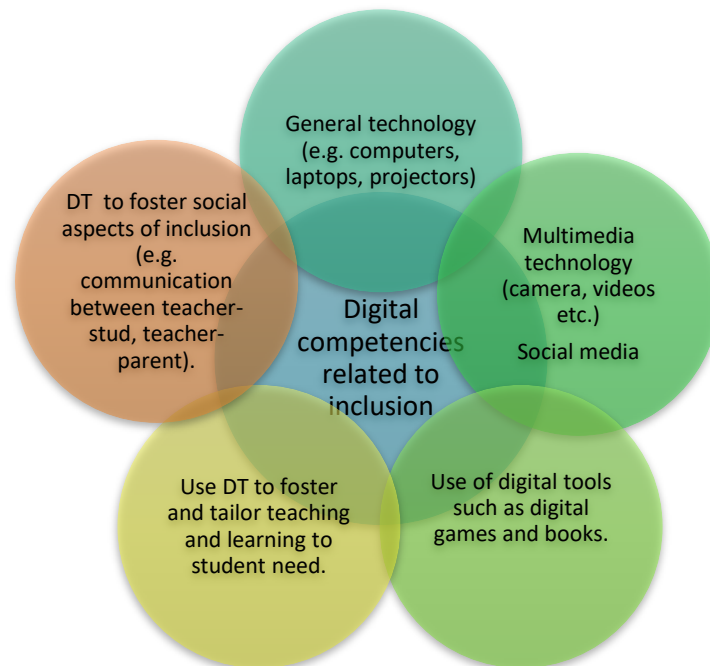
Availability and use of technology

Across the three countries, most respondents (> 90 %) reported that more general technology, such as computers and projectors, was available in some or all lessons, or upon request. However, the availability of new technology, such as virtual reality augmented reality and robots, was less than 5 % (see Figure 8). Furthermore, although the majority of the respondents (55 %) reported that technology was equally available to all students, still about one third reported that this was not the case (34 %).

**Figure 8. Availability of technology across the three countries**
Percentage and frequencies of respondents across the three countries who reported that the following technology is available in their school.
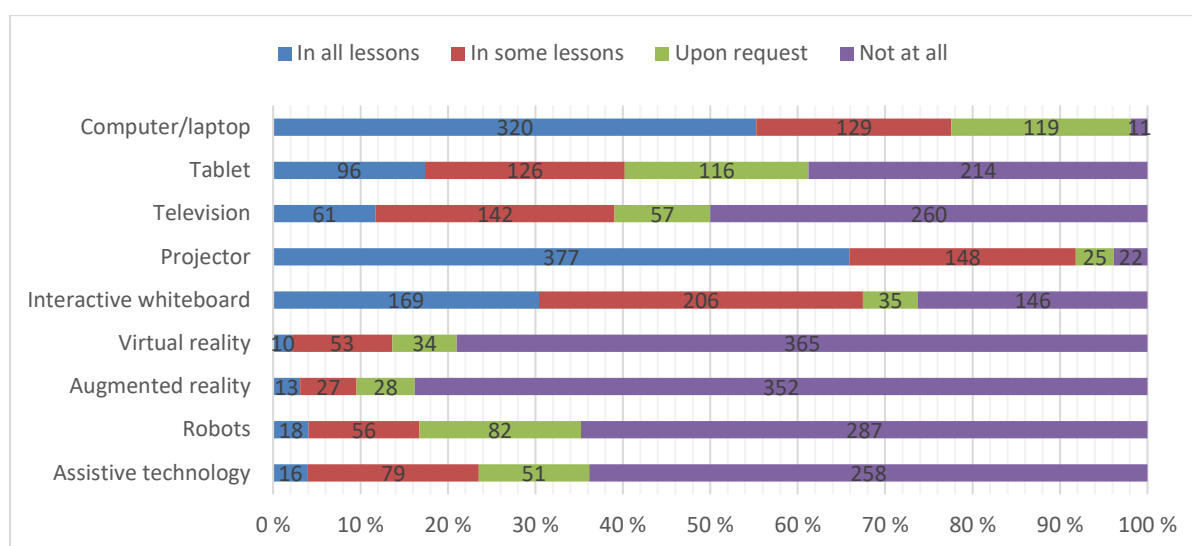
Reflecting the results reported for both the received training and availability of technology in the schools, the use of technology to facilitate inclusion in the class was bound to general technology (88 %) and multimedia software (64 %). The use of other digital tools reported by about half of the respondents (40-50 %) included online resources, digital games, apps, and mobile technology. The use of digital books, social media, and multimedia technology was reported by about one-third of the respondents and less than 17 % reported using assistive features of general technology, assistive or supportive technology or new technology (see Figure 9).

Figure 9. School staffs' use of digital content and technology across the three countries.
Percentage of respondents across the three countries who reported that they use the following digital tools.
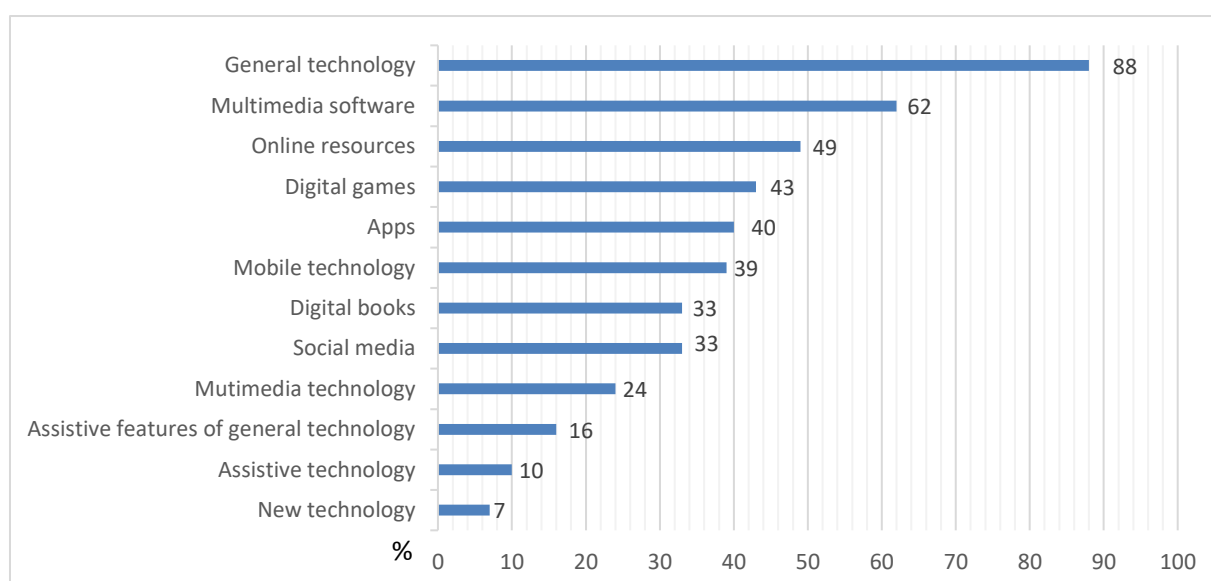
Country-specific differences regarding the use of digital tools to facilitate inclusion in the classroom were related to mobile technology, which was reported by 80 % of the Finnish respondents whereas the percentage for Spain was 47 % and 17 % for Cyprus. However, social media use was reported by a larger percentage of respondents in Cyprus (43 %), compared to Spain (24 %), and Finland (19 %). Also, apps, games and online resources were reported to be used by more respondents in Spain (61 %, 59 %, and 58 % respectively) compared to Finland (51 %, 45 %, and 35 % respectively) and Cyprus (28 %, 37 %, and 53 % respectively).

Figure 10. Country-specific use of technology.
Percentage of respondents in each country who reported that they use the following digital tools.
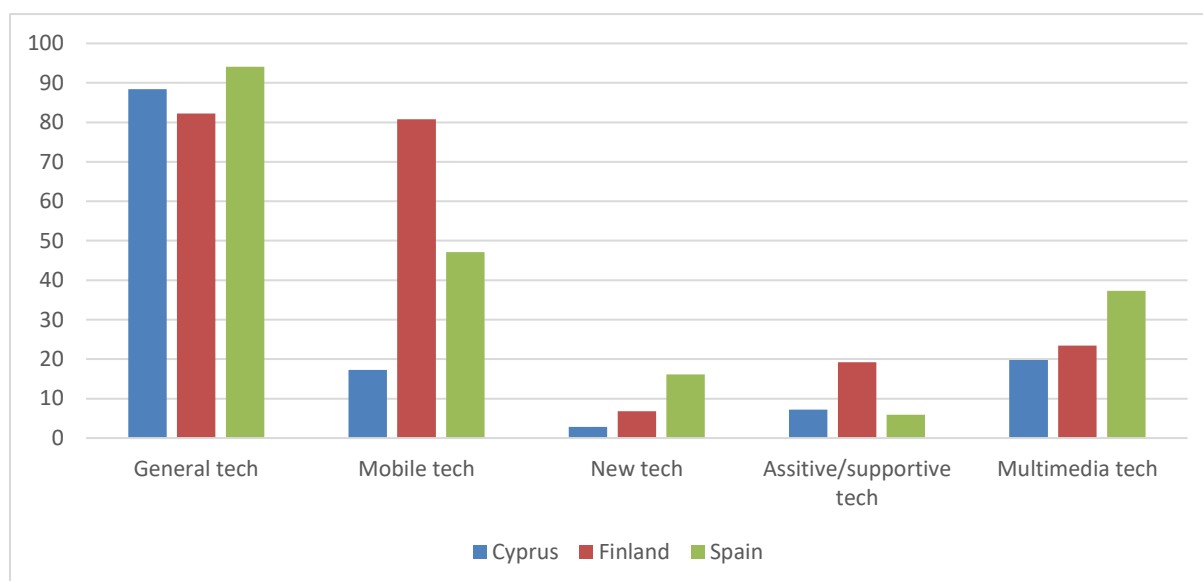
Figure 11. Country-specific use of digital content.
Percentages of respondents in each country who reported that they use the following digital tools.
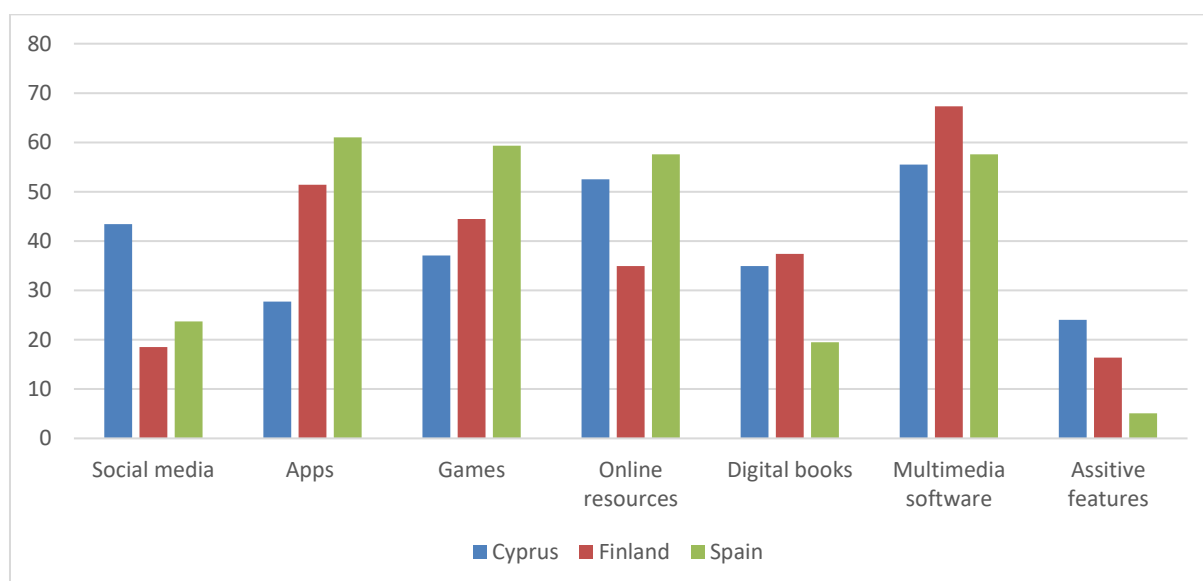
As presented in Figure 12, the most common determinant for applying digital tools in the inclusive work was the teaching objectives (85 %), quite closely followed by the availability (74 %) and accessibility (71 %) of the digital tools in the schools. About 60% of the respondents further reported that their familiarity with digital technology and content is a determinant for their use and just above half of the respondents based their use on the needs and preferences of the students they were working with. The majority of the staff reported asking the students about their preferences (see Figure 14). Although received training and curriculum policies were reported less than the others, these were still reported as determinants for using digital tools by 42-48% of the respondents. The availability of the latest technology was a factor for using digital tools among about 24% of the respondents. The distribution of determinants for using digital tools were quite similar across the three countries, however, curriculum policies were reported by a larger percentage of respondents in Cyprus (60 %) compared to Finland (30 %), and Spain (13 %).

Figure 12. Determinants for school staffs' use of digital tools across the three countries.
Respondents across the three countries who reported that the choices of implementing digital tools depend on the following factors.
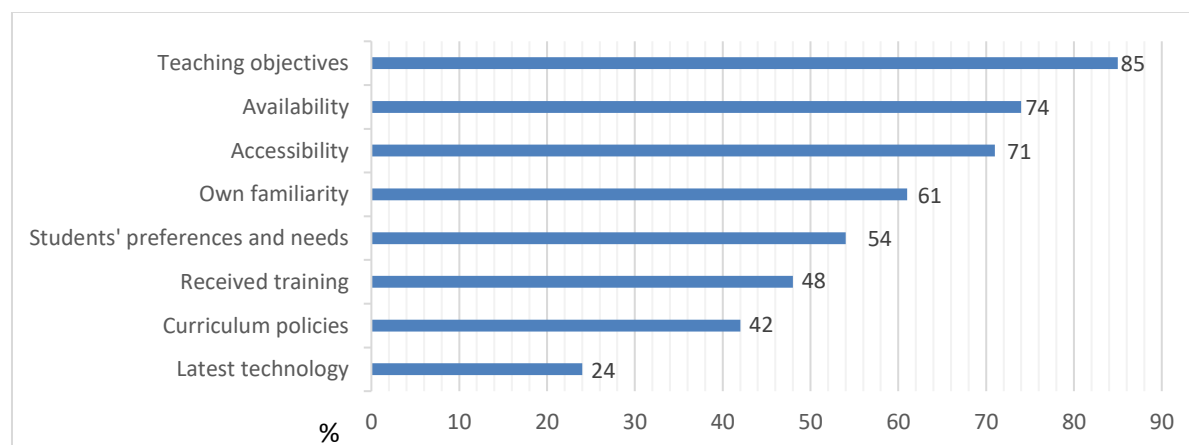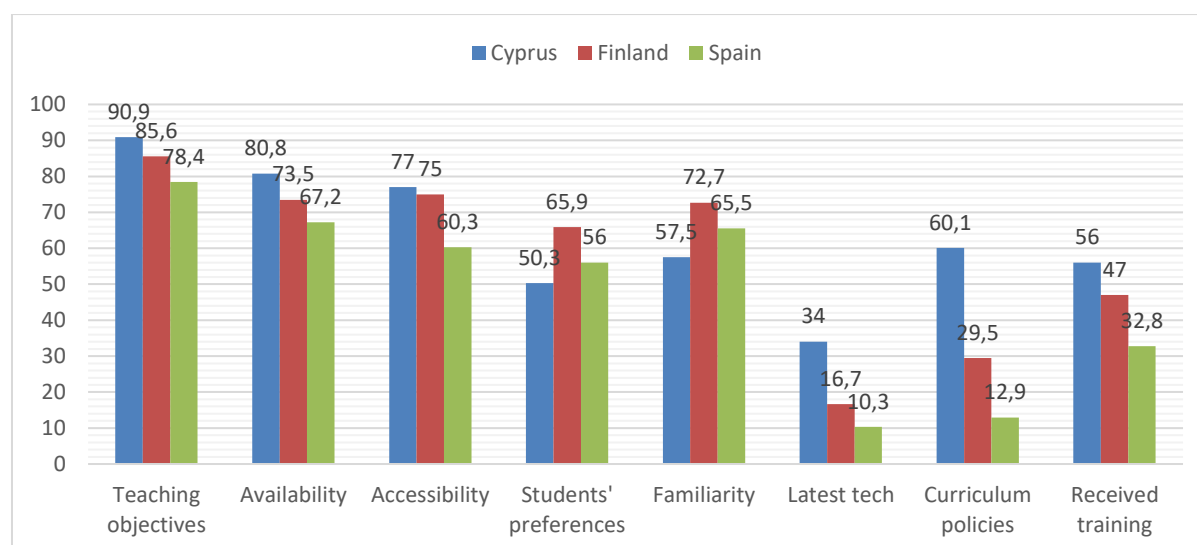

Figure 13. Country-specific determinants for school staffs' use of digital tools.
Percentage of respondents in each country who reported that the choices of implementing digital tools depend on the following factors.

School staffs' experiences of using digital tools to facilitate inclusion in the classroom

Regarding their experiences of applying digital tools, about 70 % of the respondents reported being comfortable with using digital tools in the current context and more than 80 % had access to ICT support in their schools. Almost 80 % further perceived themselves as being competent enough to adapt and create digital content or tools to facilitate inclusion. Over half of the respondents ask students about their preferences and needs regarding the use of digital tools (55 %). However, time limitations were again reported as an issue, as a majority reported that there is not enough time to plan for the use of digital tools in the inclusive work (44 %). The data further indicate that there may be a need to increase the discussions among the school staff regarding the experiences and use of digital tools for facilitating inclusion, as 50 % reported disagreeing, compared to 34 % agreeing, with this statement. Also, a slightly higher number of respondents reported that they disagree (51 %), compared to those agreeing (35 %), with the statement about all students using the same technology and 43 % disagreed with the statement that the students work on the same subjects and tasks. This implies the application of different perspectives and activities related to inclusion and the use of digital tools among the schools.

Figure 14. School staffs' experiences of the use of digital content and technology across the three countries
Percentage and frequencies of respondents across the three countries reporting the following.
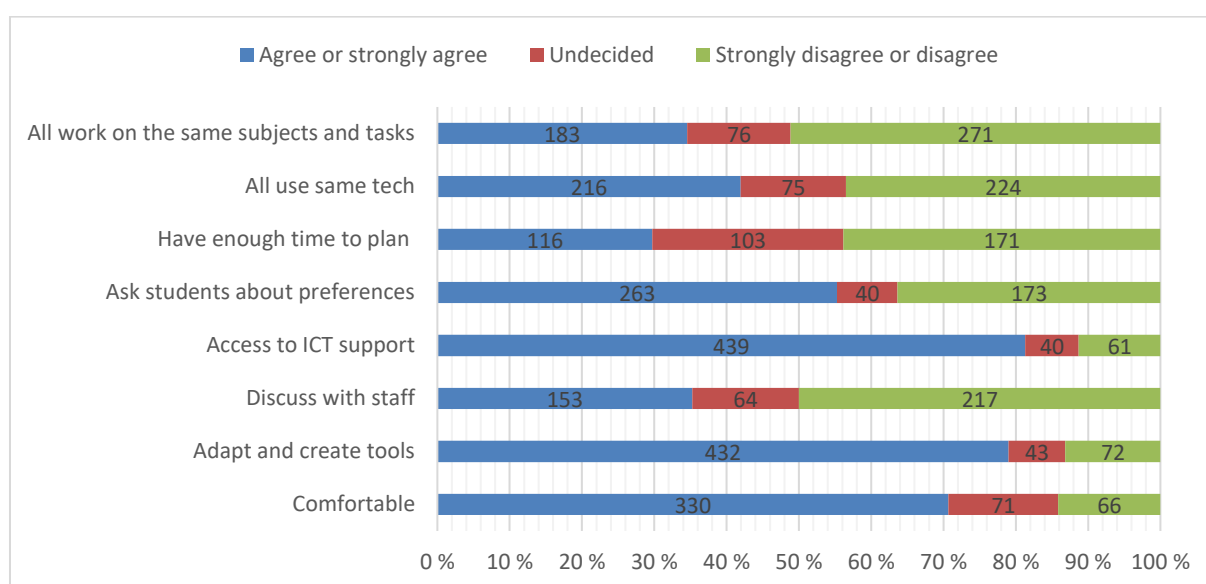
School staff's use of digital tools to facilitate different aspects of inclusion in the class

Although most respondents reported that they sometimes or often use digital tools to facilitate social inclusion (see Figure 16 on communication), and learning in general, the study also indicates that the development of competencies in the use of digital tools to facilitate academic and social inclusion could be further advanced and supported. Although a quite large proportion of the respondents reported using digital tools to facilitate social and academic inclusion sometimes or often, the fact that the number of respondents reporting that they never or rarely use digital tools for these purposes indicate that there is room for improvements and that there are needs to be met. This was particularly evident

in the case of facilitating transversal skills and language learning, for which more than 45 % of the respondents reported that they never or rarely use digital tools. The qualitative data also highlighted this, were respondents for instance called for more focused training in and availability of digital tools to facilitate language learning among students.

Furthermore, as can be seen in Figure 15 the number of respondents reporting that they do not use digital tools to facilitate inclusion of students with different characteristics and students exhibiting challenging behaviour is quite high. This was also the case for using digital tools to facilitate mental health, awareness of and openness to diversity, and the reduction of bullying and discrimination. Thus, this indicates that the emotional and behavioural aspects of inclusion, as well as the inclusion of students with different characteristics, would benefit from digital training and support.

Figure 15. School staffs' use of digital tools to facilitate wellbeing, good behaviour and openness to diversity across the three countries.
Frequencies of respondents across the three countries reporting how often they use digital tools to facilitate inclusion and wellbeing in the classroom.
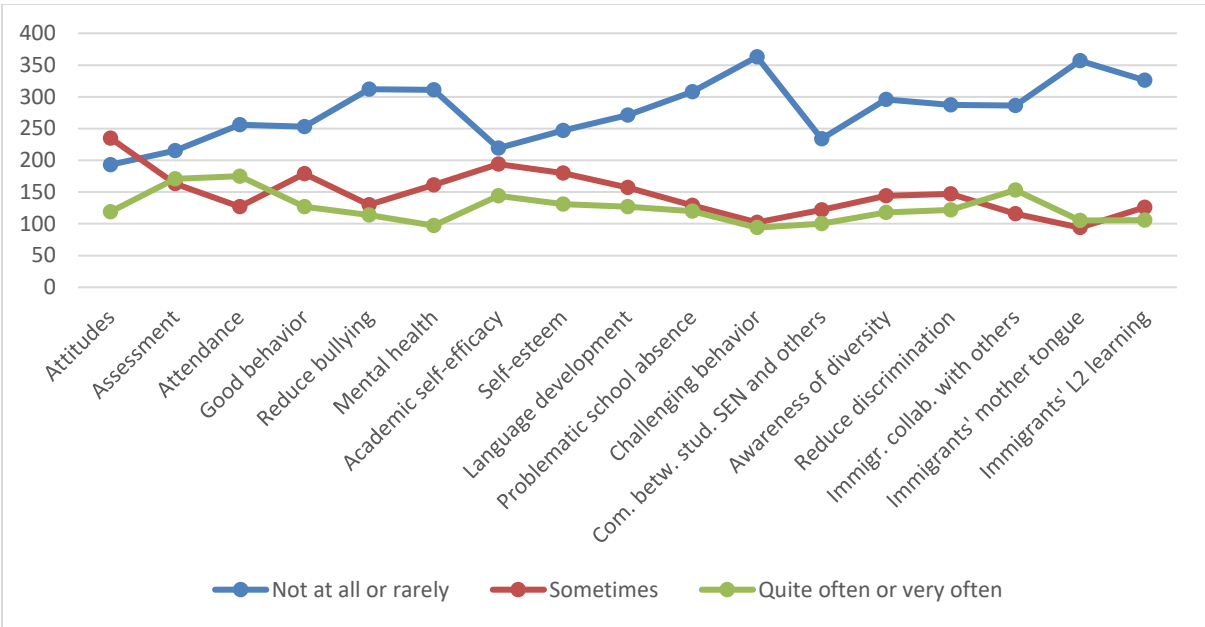

Figure 16. School staffs' use of digital tools to facilitate social inclusion across the three countries.
Percentage and frequencies of respondents across the three countries reporting how often they use digital tools to facilitate social inclusion.
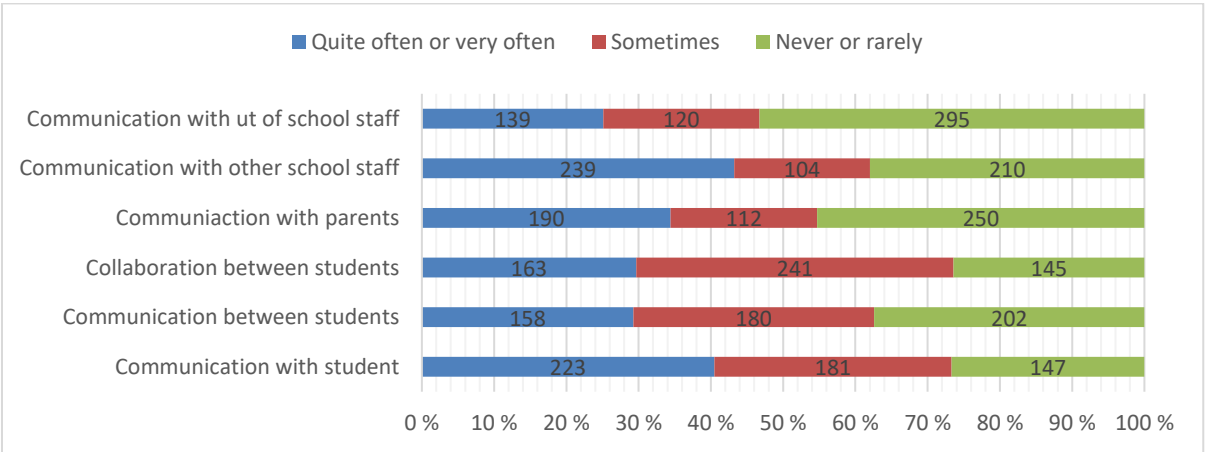
Figure 17. School staffs' use of digital tools to facilitate academic inclusion across the three countries.
Percentage and frequencies of respondents across the three countries reporting how often they use digital tools to facilitate academic inclusion.
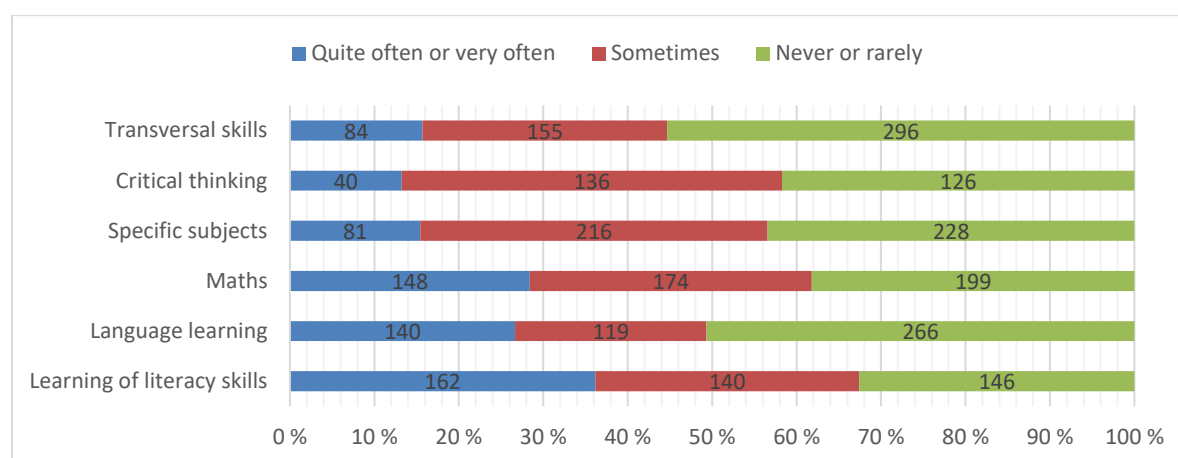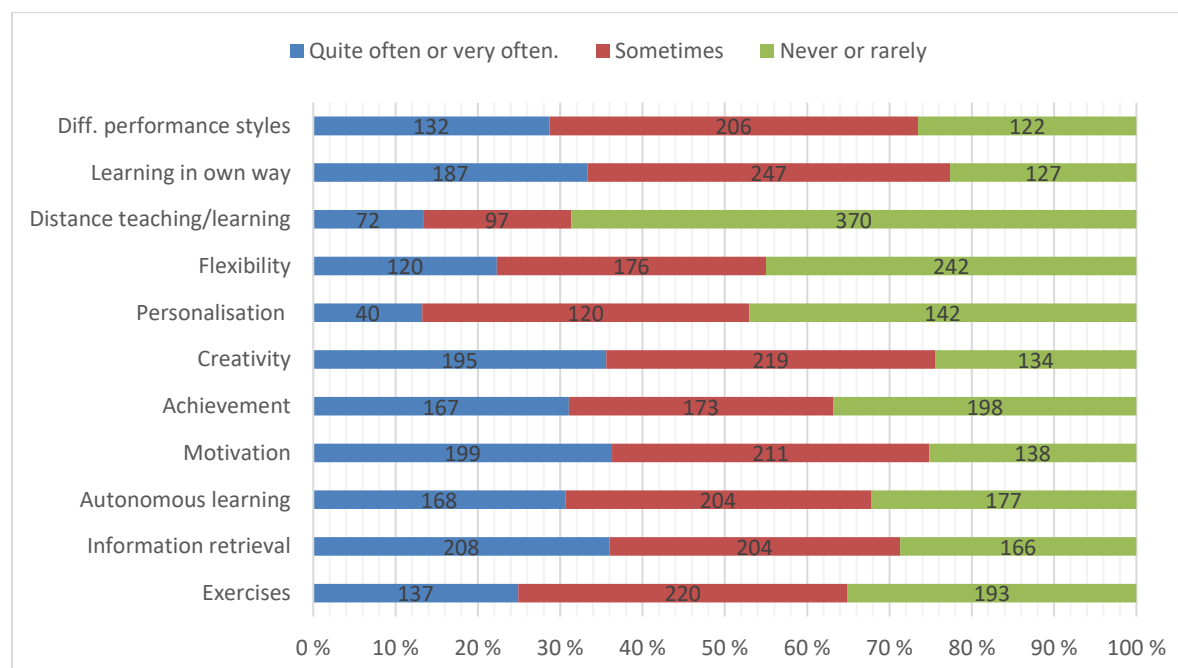

Figure 18. School staffs' use of digital tools to facilitate other aspects of inclusion across the three countries.
Percentage and frequencies of respondents across the three countries reporting how often they use digital tools to facilitate the following aspects of inclusion.

MULTIDISCIPLINARY COMPETENCIES

The third objective of the study was to identify multidisciplinary competencies and needs. Multidisciplinary teamwork refers to the collaboration between different professionals within the school staff (both principals, teaching and support staff) as well as the involvement of students and their parents or legal guardians. Questions in the questionnaire pertaining to this included the use of multidisciplinary teams in the school, the teams' functions, the persons involved, the strengths, barriers and needs related to multidisciplinary work. The multidisciplinary competencies and needs are summarized in the box below and more detailed information may be found under each subheading.

Summary of multidisciplinary work and competencies for facilitating inclusion in the classroom.

❖ 51% of the respondents reported that their school implements multidisciplinary teams in facilitating inclusion of students in the class, and 25% (147) of the respondents were currently involved in a multidisciplinary team.

❖ The majority of professionals reported to be part of a team were special education teachers (93 %), principals (86 %), and school counselors (85 %). Between 63 % and 67 % reported the involvement of parents and the class teachers, and about half of the respondents reported the inclusion of the students, headteachers, and teachers of specific subjects. Less than 38 % reported the involvement of other professionals, such as assistants, social workers, and different therapists.

❖ 48 % of the respondents in a team reported that they have enough time to collaborate, whereas 55 % reported the opposite.

❖ Multidisciplinary teams meet 1-3 time per year according to 33 % of the respondents, 4-6 times according to 34 %, and 54 % reported meeting 7 times or more.

❖ The coordinative and collaborative activities of the multidisciplinary teamwork constituted of regular meetings (29 %), making preparations before a school year or semester begins (28 %), the development of shared resources (24 %) and coordination to develop individual teaching plans (19 %).

❖ The proportion of multidisciplinary teamwork for facilitating inclusion of students in the classroom was 34 % for students with special educational needs, 23% for students with problematic school absence and low socio-economic background respectively, and 18% for students with culturally and linguistically divers backgrounds.

❖ 25% of the functions of multidisciplinary teamwork was related to the diagnosis and assessment of students, 22 % was related to the evaluation of a student's progress in relation to the student's plan, 21 % constituted of the development of individual student plans, 17 % of the implementation of a student's program and 14 % of monitoring students in a program.

Multidisciplinary teams in the schools

Across the three countries involved in the project, 51 % of the respondents (n = 299) reported that their school uses multidisciplinary teams to facilitate the inclusion of students in the classroom. Concerning country-specific details, this sub-sample constituted 41% Spanish school staff, 34% of school staff in Cyprus, and 25% were Finnish respondents. However, 18 % (n = 107) of the 583 participants in the study reported that they did not know whether multidisciplinary teams are used for facilitating inclusion in their school and only 25 % (n = 147) reported that they are currently involved in a multidisciplinary team (Cyprus 13 %, Finland 41 %, Spain 39 %).

Of those 147 respondents who were currently involved in a multidisciplinary team, the majority reported the involvement of a special education teacher (n = 136 or 93%), the school counselor (n = 126 or 86%), the principal (n = 125 or 85%), and the school psychologist (n = 120 or 82%) (see Figure

19). Parents and the class teacher were also reported to be part of a team by more than half of the respondents (n = 98 or 67% and n = 93 or 63% respectively). Between 48-53 % reported that students, teachers of special subjects and headteachers were part of the team. Less than 38 % of the respondents involved in a multidisciplinary team (147) reported that the team included teaching or school assistants, special educational support staff, social workers and social integration facilitators, speech therapists, physiotherapists, occupational therapists, the school nurse, tutor teacher or school coaches.

As Figure 20 illustrates, there were some significant country-specific differences regarding the composition of multidisciplinary teams, with Finnish respondents reporting higher levels of involvement of special education teachers, principals, school counsellors, school psychologists, parents, students, teachers, assistants, school nurses and school coaches, compared to the other two countries. A larger proportion of Spanish respondents reported the participation of social integration facilitators and tutor teachers compared to Cyprus and Finland.

Figure 19. Composition of multidisciplinary teams.
Percentages of respondents across the three countries who reported the following to be part of the multidisciplinary teams they are currently involved in.
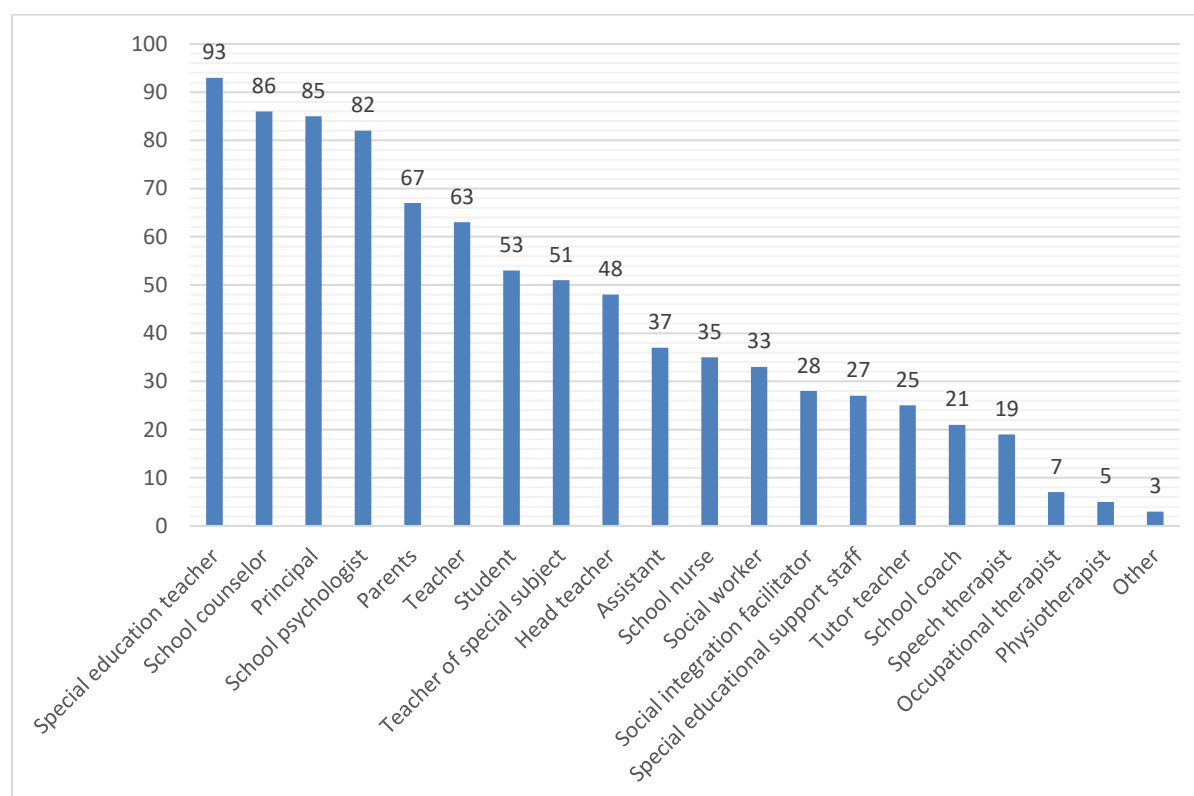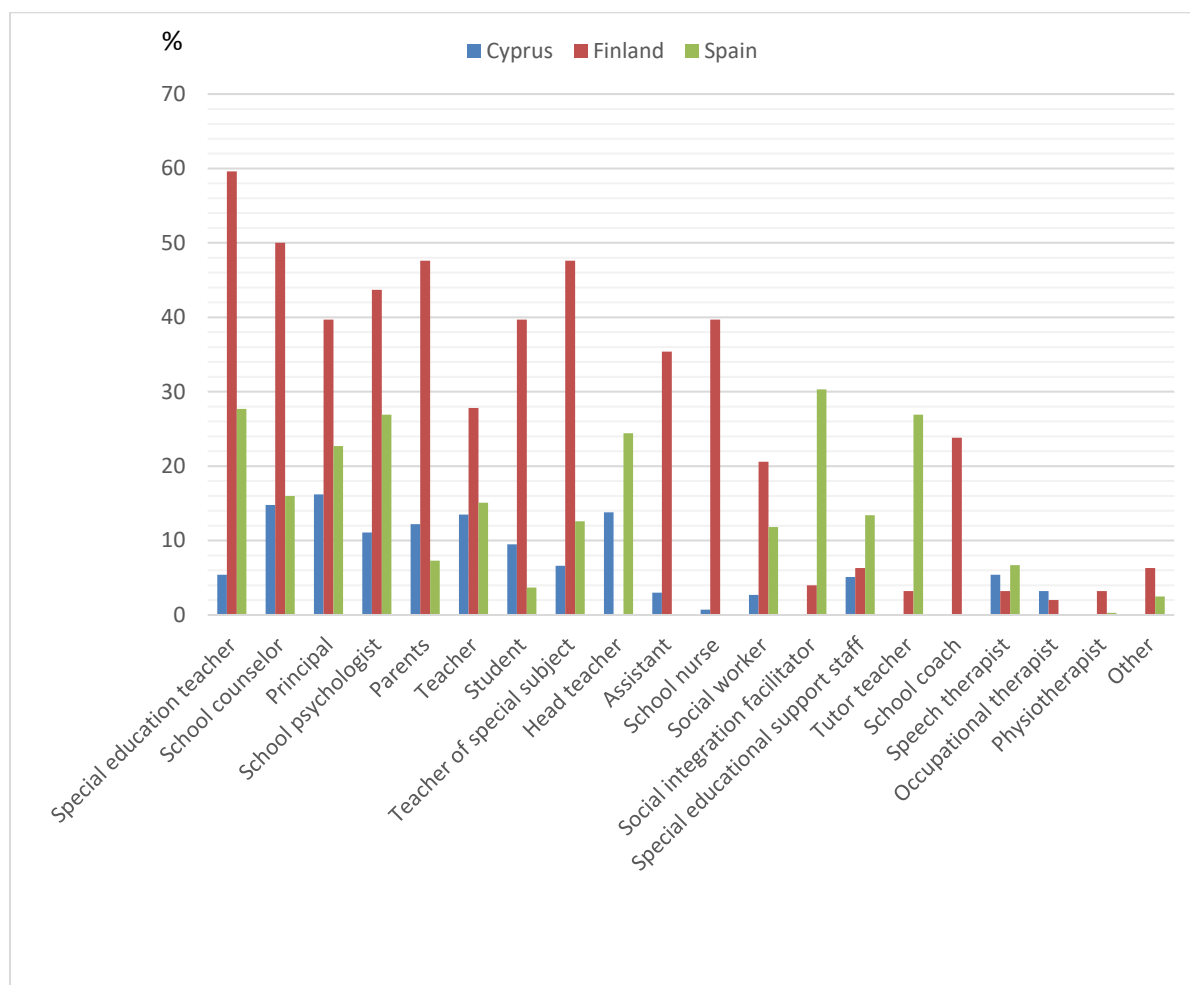
Figure 20. Country-specific composition of multidisciplinary teams
Percentage of respondents (i.e. teaching and support staff) in each country who reported the following to be part of the multidisciplinary teams they are currently involved in.

Multidisciplinary teamwork

The coordinative and collaborative activities of the multidisciplinary teamwork constituted of regular meetings (29 %), making preparations before a school year or semester begins (28 %), the development of shared resources (24 %) and coordination to develop individual teaching plans (19 %) (Figure 21). The respondents in Spain reported the highest level of coordinative and collaborative work (see Figure 22). Furthermore, 48 % (n = 71) of the respondents reported that they have enough time to collaborate, whereas 55 % (n = 81) reported the opposite. Regarding the frequency of meetings of multidisciplinary teams during a school year, 33 % (n = 48) reported that the student's team meets 1-3 times per year, 24 % (n = 36) reported that the team meets 4-6 times per year and 54 % (n= 79) reported that the team meets over 7 times per year. However, respondents in Cyprus did not report meeting 7 times or more at all, whereas 45 % of the Spanish respondents reported that they meet 7 times or more per year and Finland 18 % (Figure 23).

Figure 21. Multidisciplinary coordination and collaboration
Percentage of the respondents who are part of a multidisciplinary team reporting the following activities.
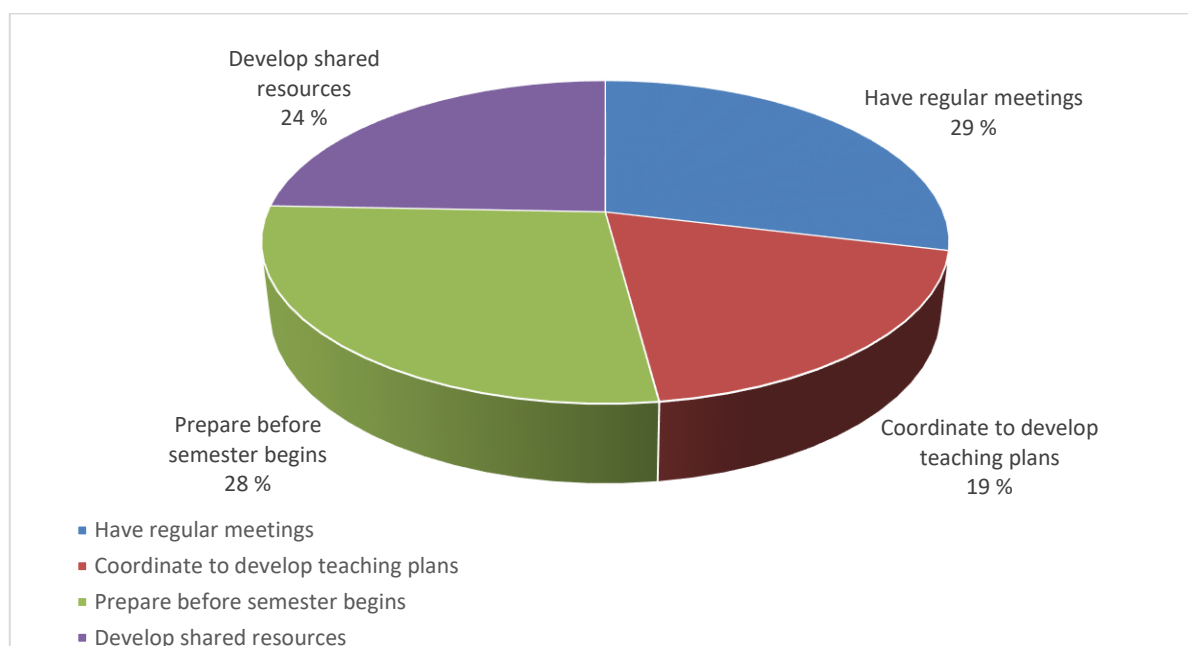

Figure 22. Country-specific coordination and collaboration of multidisciplinary teamwork
Percentage of the respondents in each country who are part of a multidisciplinary team reporting the following teamwork.
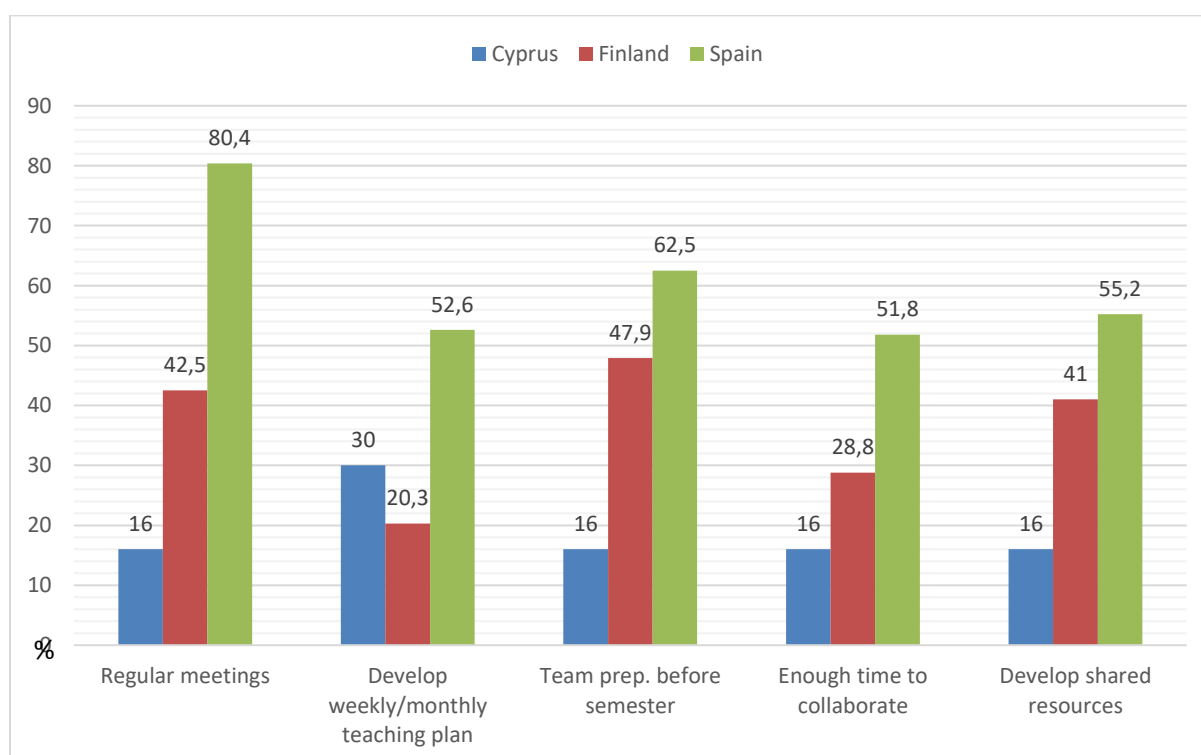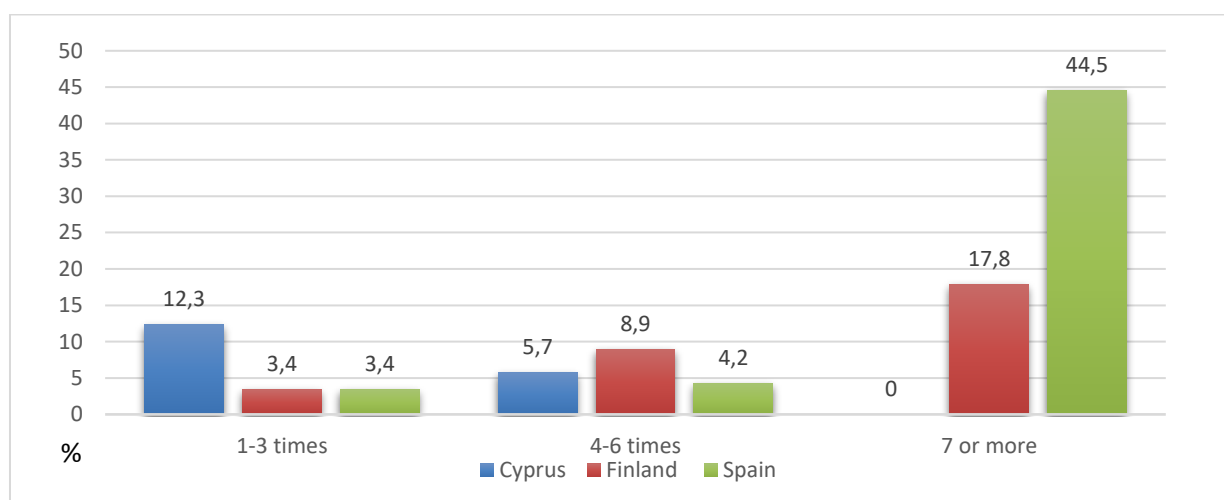
Figure 23. Country-specific frequencies of team meetings in a year.
Percentage of the respondents who are part of a multidisciplinary team reporting the following.

Functions of multidisciplinary teams

The question of the different functions of the multidisciplinary teamwork to facilitate inclusion across the three countries revealed that 25% of the functions were related to diagnosis and assessment of students and 22 % were related to the evaluation of a student's progress in relation to the student's plan (Figure 24). The development of individual student plans constituted 21% whereas multidisciplinary teamwork to implement a student's program and monitoring students in a program constituted 17% and 14% respectively. Country-specific differences were again identified, with Spain having the highest ratings across all functions (Figure 25).

Figure 24. Functions of multidisciplinary teams
Percentage of respondents across the three countries who reported that the teams they are involved in have the following functions.
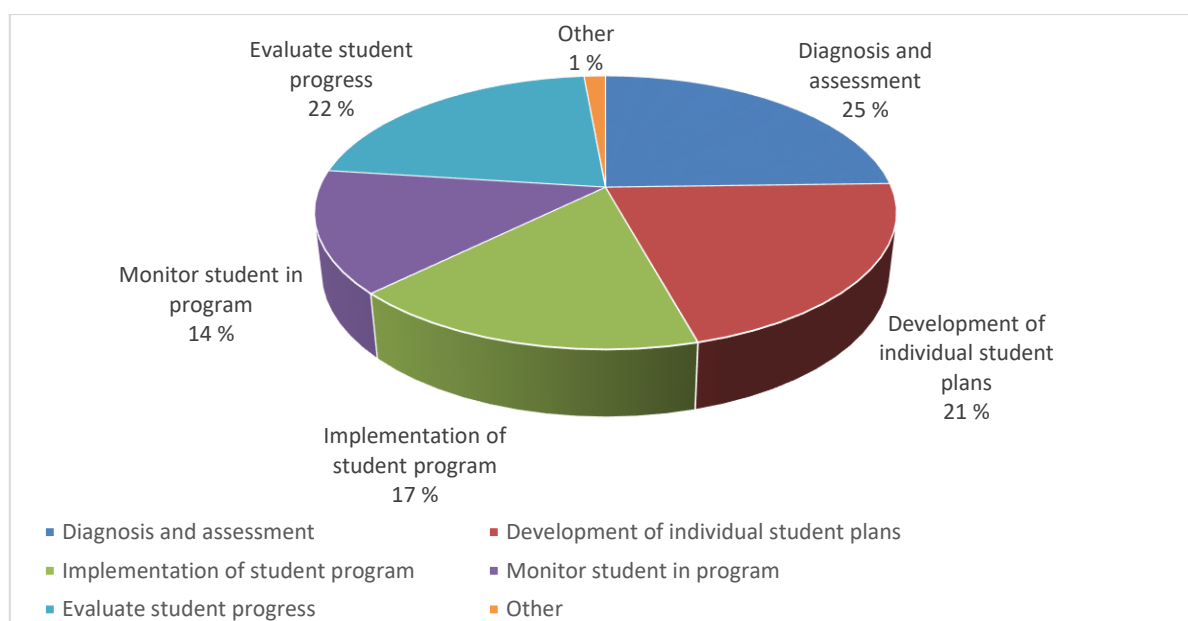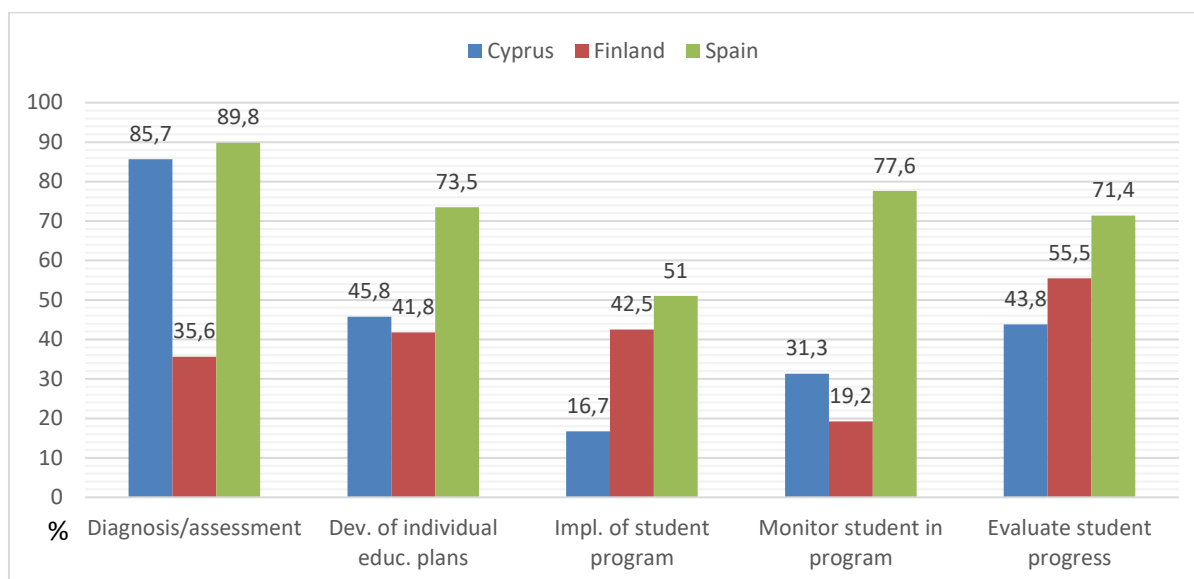
Figure 25. Country-specific functions of multidisciplinary teams
Percentage of respondents in each country who reported that the teams they are involved in have the following functions.

Furthermore, 34% of the multidisciplinary teamwork for facilitating inclusion of students with different characteristics were with students with special educational needs, whereas 23% of the multidisciplinary teamwork focused on students with problematic school absence and low socio-economic background respectively. Only 18% focused on inclusion of students with different linguistic and cultural background. Country-specific details reporting frequencies of respondents reporting multidisciplinary and inclusive work with students with different characteristics may be found in the Figures 27-30.

Figure 26. Multidisciplinary teamwork according to students with different characteristics
Percentage of the respondents who reported that the school usually or always work in multidisciplinary teams for the inclusion of students with the following characteristics.
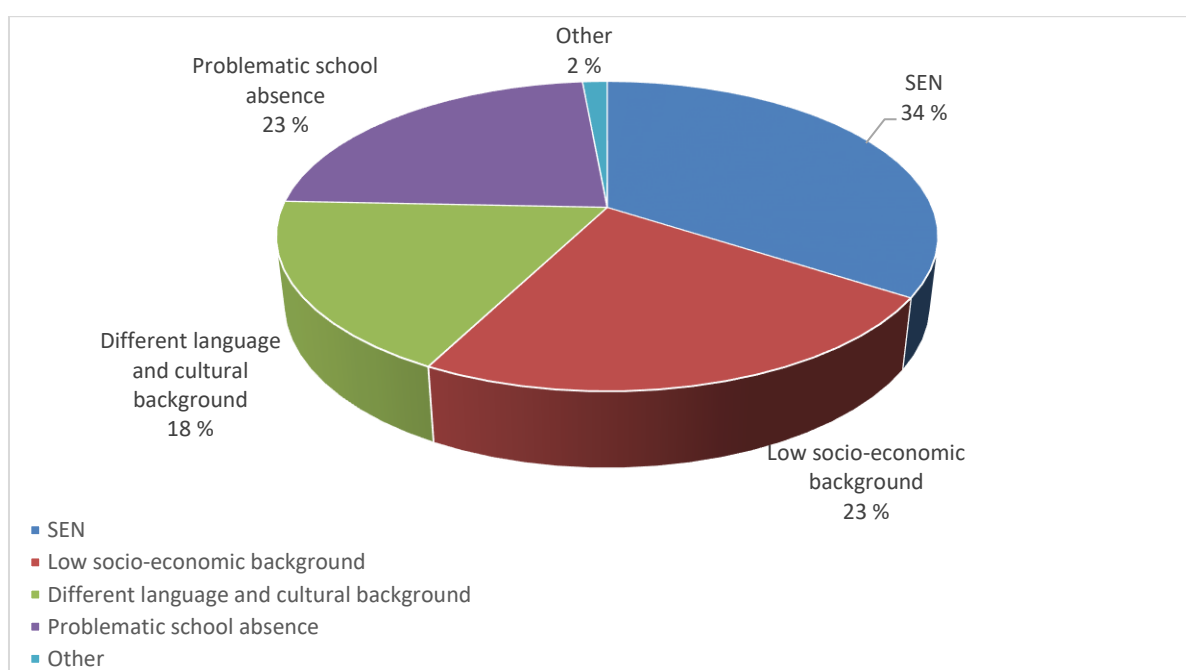
Figure 27. Country-specific multidisciplinary work with students with special educational needs.
Frequencies of the respondents who reported multidisciplinary teamwork for the inclusion of the students with the following characteristic.
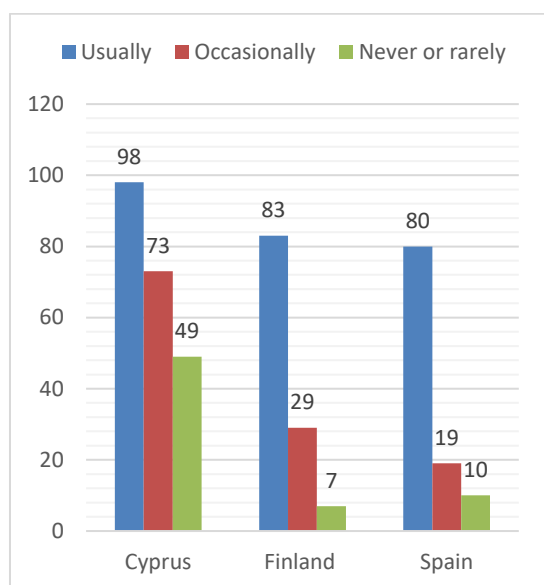

Figure 28. Country-specific multidisciplinary work with students with a different cultural and linguistic background.
Frequencies of the respondents who reported multidisciplinary teamwork for the inclusion of the students with the following characteristic.
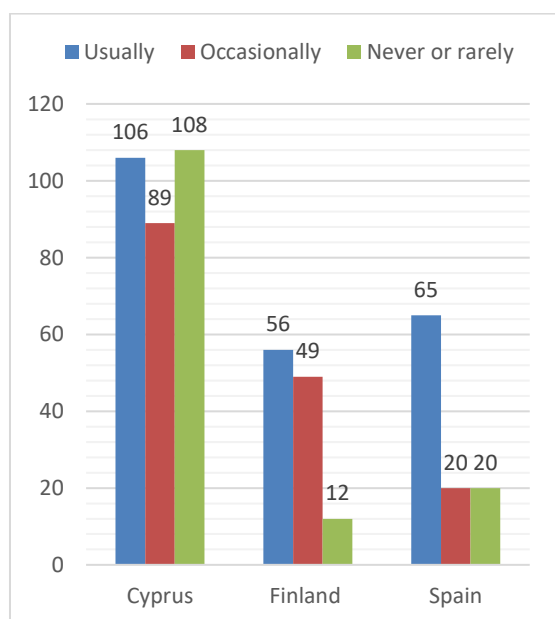

Figure 29. Country-specific multidisciplinary work with students with low socio-economic background.
Frequencies of the respondents who reported multidisciplinary teamwork for the inclusion of the students with the following characteristic.
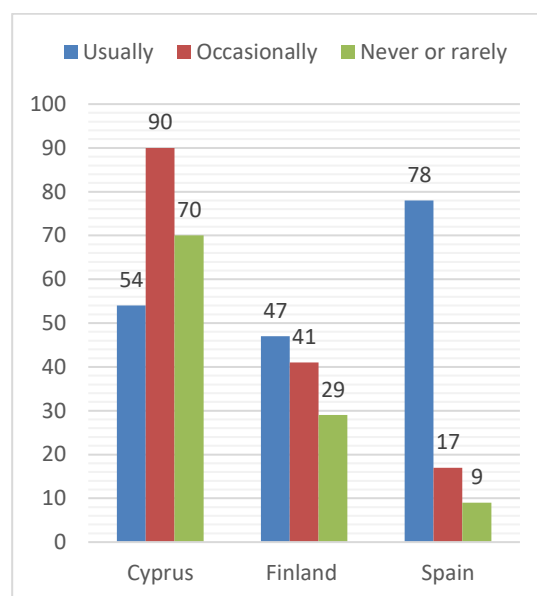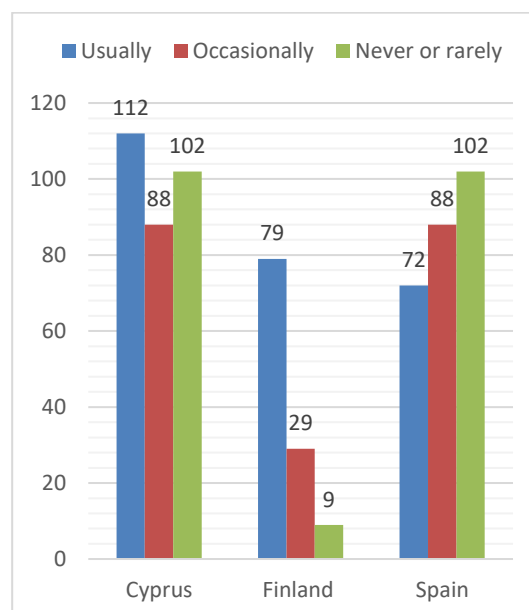

Figure 30. Country-specific multidisciplinary work with students with problematic school absence.
Frequencies of the respondents who reported multidisciplinary teamwork for the inclusion of the students with the following characteristic.

INCLUSIVE NEEDS

A fourth objective of the study was to identify school staffs' needs related to the training and use of digital tools and multidisciplinary competencies to facilitate inclusion in the classroom. These were derived from the results reported above. In addition, open ended questions inquiring about needs related to digital training and competencies in the inclusive classroom as well as the strengths, barriers and needs related to the multidisciplinary competencies and teamwork to facilitate inclusion in the classroom were included in the questionnaire.

Needs related to digital training

The results reported above indicate that there are some needs regarding digital training for facilitating inclusion in the classroom. For instance, less than 10 % of the respondents reported receiving training in the use of digital tools to facilitate inclusion of students with different characteristics, as well as training in using new technology (9 %). There is also clearly a need for more general training regarding using digital tools to facilitate inclusion as many respondents (31 %) reported that the limited availability of training and courses was one of the barriers hindering their professional development in the area. Furthermore, almost half of the respondents reported that the training received had not provided them with enough competencies to use digital tools to facilitate inclusion in the classroom. This was supported by the qualitative data, according to which there is a need for more digital training in general for the facilitation of inclusion in the classroom. There is also a call for more directed and focused training in the use of inclusive facilitator technology. This was related to both the use of digital tools to facilitate the inclusion of students with different characteristics, academic inclusion including language development and learning, as well as more emotional/behavioural aspects.

The qualitative data also indicated a need for more practical examples and practically oriented training as well as more frequent and continuous training. Another need reported by most of the respondents, both in the quantitative data and the qualitative data, was the time and resources for participating in training. Time limitation was reported as a significant barrier by 53 % of the respondents. The needs for management's support and incentives for participating in training were highlighted among the respondents in Cyprus. Furthermore, although the support staff's reception of digital training followed a similar pattern to all school staff, the percentage of support staff participating in training was lower except for training in assistive technology and educational apps and games. This indicates a need to include support staff in the digital training offered to the teaching staff or to provide specific digital training for these staff members. This was also highlighted in the answers to the open questions, where a school assistant concluded that it is difficult to participate in training as school assistants are responsible for one student throughout their workday and that they cannot leave that student. On the other hand, one member of the school staff wrote that she has always been included in the digital training offered to the teaching staff and that she appreciated that, although she is not teaching herself. The needs identified related to digital training to facilitate inclusion in the classroom are summarized in the box below.

Training needs
- More focused and directed training (including students with different characteristics, new technology, and academic and emotional/behavioral inclusion). - More frequent and continuous training. - Practical examples. - Inclusion of support staff in the digital training. - Time and resources. - Management's support and incentives for participating in training, particularly in Cyprus.

Needs related to digital competencies

Similar to the needs related to digital training, the data indicate that respondents need more time and resources to plan, prepare and use digital tools to facilitate inclusion in the classroom. The availability and consequently the use of new technology was reported by less than 7 % of the respondents, clearly indicating a need for developing competencies related to this. Further needs, which were identified, include the need for peer discussions related to the use of digital tools to facilitate inclusion. Only 34 % of respondent reported that they engage in these kinds of discussions and learning with and from their peers, compared to 50 % reporting that they do not. There were also clearly a need for using digital tools to facilitate both academic and more emotional and behavioural aspects of inclusion. For instance, more than 45 % of the respondents reported to never or rarely use digital tools to promote and support transversal skills, language learning, mental health, good behavior, inclusion of students with problematic school absence, the communication with and language learning among immigrant students etc. Furthermore, although digital tools were generally used for facilitating communication and collaboration, the number of respondents reporting that they do not use digital tools to facilitate communication and collaboration between all students, including students with and without special educational needs and between students with and without an immigrant background, was quite high. A need for a paradigm shift from uncritically following the curriculum to CLRT (Culturally and Linguistically Responsive Teaching and Learning) was further identified. These needs are summarized in Figure 31.

Figure 31. Needs related digital competencies for facilitating inclusion in the classroom.
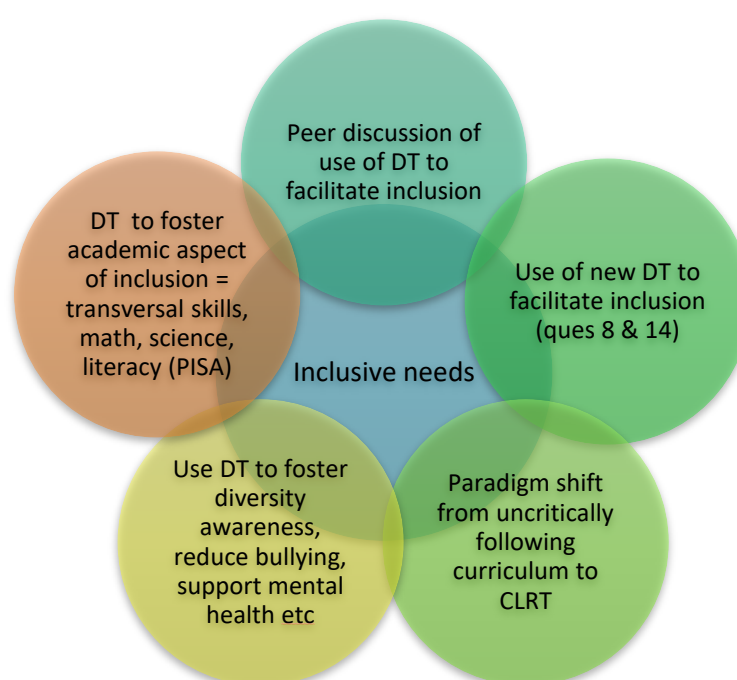
Needs related to multidisciplinary competencies and teamwork

The results also indicate that there are some needs related to the multidisciplinary teamwork and competencies. In general, it may be concluded that both the awareness and discussions about the existence and use of multidisciplinary teams to facilitate inclusion in the classroom could be raised among the school staff, as 18 % of the respondents reported that they do not know whether multidisciplinary teams are used in their school. Another need that the results indicate is to increase the multidisciplinary teamwork and according competencies to work with the inclusion of students

with culturally and linguistically diverse backgrounds. Only 18% of the multidisciplinary teamwork focused on these students as compared to 34 % of multidisciplinary work focusing on students with special educational needs.

The low ratings of school assistants (37 %) and different therapists (such as speech therapists, physiotherapists, occupational therapists etc. [less than 9 %]) in multidisciplinary teams, compared to other professionals, furthermore suggest a need to include these in the multidisciplinary work. About half of the respondents who are part of multidisciplinary teams reported that students themselves are included in the teams, suggesting a need for supporting the competencies and possibilities for including them in the work. Similar to the need for more time reported for both digital training and the application of digital tools in the classroom, more available time is also required for the multidisciplinary teamwork. This was identified in both the quantitative and the qualitative data. The qualitative data indicated that besides time, the resources needed for the multidisciplinary work include the availability of professionals and experts, an appropriate number of cases per team, as well as personal energy.

Some themes related to multidisciplinary competency needs were also identified in the qualitative data. The respondents reported that motivation and willingness are needed to work in multidisciplinary teams. Social and cooperative/collaborative skills are further needed, including conflict resolution skills, social skills, and a combination of assertiveness and listening skills. Further competencies identified included empathy and emotional intelligence, analytical and reflective capacities, self- awareness and flexibility. Management skills, such as decision-making and ability to follow up and support others were also reported by the respondents. Digital competencies were also reported to be important for the multidisciplinary work. These needs are summarized in the box below.

Needs related to multidisciplinary competencies and teamwork.

- Motivation and willingness to work in teams;
- Cooperative/collaborative skills, including conflict resolution, assertiveness, and listening skills, social skills;
- Empathy and emotional intelligence;
- Analytical and reflective capacities;
- Management support and skills, such as decision-making and ability to follow up and support others;
- Self-awareness;
- Flexibility;
- Digital competencies;
- Need to involve the students themselves in the multidisciplinary work;
- Inclusion of educational support staff, such as assistants and therapists in the team;
- Need for resources (time, energy, and availability of professionals, appropriate number of teams/ staff in relation to cases);
- Need to discuss and raise awareness of multidisciplinary work in the schools;
- Incentives.

CONCLUSION

The aim of this report was to present the results from a study conducted at the first phase of the co-founded Erasmus+ project SHIFT (School Harnessing Inclusive Facilitative technology). The project's main aim is to develop a manual with methods and tools to support school staff in their evaluation of the transfer of digital competence derived from training into the inclusive classroom, and to support the staff's development of these competencies. In the first phase of the development process, the received digital training, digital competencies and multidisciplinary competencies, were identified through a questionnaire study conducted among elementary and secondary school staff in the three countries Cyprus, Finland, and Sweden. The main conclusion that may be drawn is that there is a need for developing digital competencies related to facilitating inclusion in the classroom, both through training, peer discussions, and practical examples, among others. These needs are prevalent both with regard to facilitating inclusion of students with different characteristics as well as specific aspects of inclusion, particularly academic inclusion and more emotional and behavioural aspects of inclusion. Multidisciplinary competencies and needs for facilitating inclusion in the classroom were further identified, pointing to needs for multidisciplinary skills such as good management skills, social and collaborative skills, empathy, flexibility, and self-awareness, among others. More time and resources for this way of working with the inclusion of the students in the classroom were further highlighted. The competencies and needs identified and reported here will provide the base for developing the manual and the methods in the next phase of the project.