

# IO4: Practices, training and skills needs of the digital teachers

Catalan Teacher Survey

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Version: 1



#### **TABLE OF CONTENTS**

Forward	0
1. Sample description	6
2. Teachers' personal views regarding using digital technologies	10
3. Teaching practice in ICT	14
4 Training needs of teachers	17
4.1 Training and updating	17
4.2 Self-assessment of digital skills of teachers according to DigCompEdu	18
Evaluation of the digital competency level of teachers (DigCompEdu)	18
4.3 ICT Training Needs	21
5. The identikit of the "digital teacher". Personal issues and career profiles	21
5.1 Personal data and career profiles	21
ANNEX	26
1. The context	26
Distribution of respondents by Region	27
Teacher age range	27
Teacher gender	27
Teaching area covered over the last three years	27
Type of contract in the school	28
Teaching role covered over the last three years	28
Role as digital coordinator in the school	28
2. Teachers' personal views regarding using digital technologies	29
Beliefs on uses and benefits of digital teaching tools	29
Motivation to use digital instruments in your didactic and professional practice	30
Perception of the utility of digital tools and technologies	30
3. Teaching practice in ICT	31
Use of digital tools and technologies	31
Frequency of use of digital resources in the classroom for teaching activities	31

	Familiarity with the main teaching practices in use	31
	Use of digital technologies for assessment methods	32
	Frequency of activities as part of teaching	32
4.	. Training needs of teachers	33
	4.1 Training and updating	33
	Training attended around using digital technologies in education	33
	4.2 Self-assessment of digital skills of teachers according to DigCompEdu	33
	Evaluation of the digital competency level of teachers (DigCompEdu)	33
	4.3 ICT Training Needs	35
	Needs of training to be able to use digital technologies effectively in the classroom	35
	Digital skills qualifications	35
5.	. The identikit of the "digital teacher". Personal issues and career profiles	36
	5.1 Personal data and career profiles	36
	5.2 Focus on innovation	44

## **INDEX OF CHARTS**

Chart 1- School type (%)	6
Chart 2 – Region (%)	7
Chart 3 - Age range (%)	7
Chart 4 - Gender	8
Chart 5 – Subject (%)	9
Chart 6 - Type of contract	9
Chart 7 - Teaching role (%)	10
Chart 8 - Digital coordinator role	10
Chart 9 - Beliefs on uses and benefits of digital teaching tools (%)	11
Chart 10 - Digital technologies usage scenario frequencies	12
Chart 11 - Perception of the utility of digital tools and technologies	13
Chart 12 - Frequency of use of digital resources in the classroom for teaching activities	
Chart 13 - Use of digital technologies for assessment methods	
Chart 14 - Frequency of online activities as part of teaching	
Chart 15 - Familiarity with the main teaching practices in use	17
Chart 16. Training attended around using digital technologies in education	18
Chart 17. Teacher digital competence by area	19
Chart 18. Teacher digital competence	20
Chart 19. Needs of training to be able to use digital technologies effectively in the classroom	21
Chart 20. Teaching area covered over the last three years, by age	22
Chart 21. Teaching area covered over the last three years, by gender	
Chart 22. Type of contract in the school, by age	24
Chart 23. Type of contract in the school, by gender	24
Chart 24. Type of contract in the school, by teaching role	25
Chart 25. Type of contract in the school by role as digital coordinator	25
INDEX OF TABLES	
Table 1 Population and teaching staff by region	7
Table 2. School type	26
Table 3. Region	27
Table 4. Age range	27
Table 5. Gender	27
Table 6. Disciplines	27
Table 7. Employment status	28
Table 8. Role undertaken	28
Table 9. School digital coordinator	28
Table 10. Beliefs on uses and benefits of digital teaching tools	29

Table 11. Motivation to use digital instruments in your didactic and professional practice	30
Table 12. Perception of the utility of digital tools and technologies	30
Table 13. Use of digital tools and technologies in teaching activities	31
Table 14. Use of digital technologies for assessment methods	32
Table 15. Frequency of activities as part of teaching	32
Table 16. Training attended around using digital technologies in education	33
Table 17. Self-assessment of digital skills of teachers according to DigCompEdu (means by DigComEd	u areas
	33
Table 18. Self-assessment of digital skills of teachers according to DigCompEdu	34
Table 19. Needs of training to be able to use digital technologies effectively in the classroom	35
Table 20. Digital skills qualifications	
Table 21. Teaching area by age	
Table 22. Teaching area by gender	
Table 23. Employment status * Age	
Table 24. Type of contract in the school by gender	42
Table 25 Type of contract in the school * teaching role	
Table 26 Type of contract in the school * role as digital coordinator	
Table 27 Role as digital coordinator * Age	
Table 28 Role as digital coordinator * Age	
Table 29 Frequency of use Office and similar packages * Age	
Table 30 Frequency of use Software for downloading audio/video files * Age	
Table 31 Frequency of use Search tools* Age	
Table 32 Frequency of use Resources for creating/editing audio, video, and graphics content * Age	
Table 33 Frequency of use Resources for creating blogs, sites, hypertexts * Age	
Table 34 Frequency of use Digital environments for learning, sharing, communication and collaborating	
Age	
Table 35 Frequency of use Digital Educational Content and OER * Age	
Table 36 Frequency of use Educational multimedia programs for discipline* Age	
Table 37 Frequency of use Educational Coding - Computational thinking * Age	
Table 38 Frequency of use Office and similar package * Gender	
Table 39 Frequency of use Software for downloading audio/video files * Gender	
Table 40 Frequency of use Search tools * Gender	
Table 41 Frequency of use Resources for creating/editing audio, video, and graphics content * Gender	
Table 42 Frequency of use Resources for creating blogs, sites, hypertexts * Gender	
Table 43 Frequency of use Digital environments for learning, sharing, communication and collaborating	
Gender	
Table 44 Frequency of use Digital Educational Content and OER * Gender	
Table 45 Frequency of use Educational multimedia programs for discipline * Gender	
Table 46 Frequency of use Coding - Computational thinking * Gender	
Table 47 Frequency of use Office and similar package * Type of contract	
Table 48 Frequency of use Software for downloading audio/video files * Type of contract	59

Table 49 Frequency of use Search tools * Type of contract	60
Table 50 Frequency of use Resources for creating/editing audio, video, and graphics content * Type	of contract
	61
Table 51 Frequency of use Resources for creating blogs, sites, hypertexts * Type of contract	62
Table 52 Frequency of use Digital environments for learning, sharing, communication and collaborate	ting online *
Type of contract	63
Table 53 Frequency of use Digital Educational Content and OER * Type of contract	64
Table 54 Frequency of use Educational multimedia programs for discipline * Type of contract	65
Table 55 Frequency of use Coding - Computational thinking * Type of contract	66
Table 56 Familiarity with Active methodologies * Age	67
Table 57 Familiarity with Collaborative Learning* Age	67
Table 58 Familiarity with Project based learning * Age	68
Table 59 Familiarity with Problem based learning * Age	69
Table 60 Familiarity with Case based learning * Age	69
Table 61 Frequency of use Office and similar packages * School type	70
Table 62 Frequency of use Software for downloading audio/video files * School type	71
Table 63 Frequency of use Search tools * School type	72

#### **Forward**

This national report is part of DECODE PROJECT's (DEvelop COmpetences in Digital Era Expertise, best practices and teaching in the XXI century, an Erasmus+ KA2 - Strategic Partnerships in the field of Education) intellectual output 4 (IO4). This output will collect and illustrate the results of a comparative research on the motivations, needs and expectations of teachers in relation to the use of new information and communication technologies (ICTs) in teaching, their professional development and training needs.

The questionnaire was sent to about 4500 educational centres of Catalunya of different levels, ranging from kindergarten to vocational training. An email was sent to the school leaders, asking them to make the diffusion of the questionnaire among the centre's teaching staff. Only fully completed questionnaires were considered, allowing comparable analyses across all questions asked of survey respondents.

There were 425 full responses to our survey, which make the final sample for analysis.

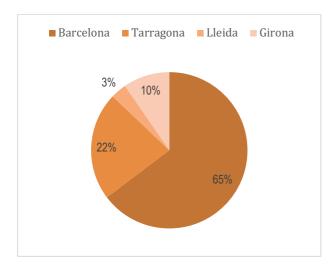
#### 1. Sample description

In this section, we will characterize our sample of Catalan Teachers, providing information about the distribution of respondents across professional and socio-demographic categories.



Chart 1 shows the distribution of teachers according to the type of school. Over half of respondents work in schools where Secondary Education levels are taught (53%), little less than half (40%) in Primary Education schools, about one third (31%) in Early Years education and about one fourth (26%) in VET education schools. Since this is a multiple response question, as normally schools integrate more than one educational level, these percentages are rather high and do not add up to 100%.

The regional distribution of teachers is expressed in Chart 2. As expected, most respondents are from the Barcelona province: almost two thirds (65%) of respondents selected this region. Tarragona is the second province in terms of proportion of respondents (22%), gathering slightly over one fifth of the sample. In third place comes Girona, with 10%, and in fourth place Leida, with 3%.

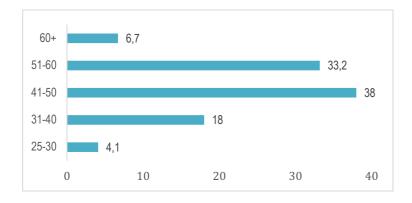


Acording to data from Idescat (Table 1), the Tarragona provice is overrepresented in our sample, whereas Barcelona, LLeida and Tarragona are underrepresented. Nevertheless, these discrepancies are not alarming.

Table 1 Population and teaching staff by region				
Region	N (teachers)	Percent (teachers)	N (population)	Percent (population)
Barcelona	44,619	71%	5,562,188	74%
Girona	6,836	11%	748,636	10%
Lleida	4,195	7%	428,418	6%
Tarragona	7,083	11%	795,571	11%
Total	62,733	100%	7,534,813	100%

Source: Idescat, (teacher data, acadèmic year 2014/2015, population data, 2018 – provisional results)

Chart 3 provides information about the age distribution of our sample of Catalan teachers. The most frequent age range is 41 to 50 years old (38%), followed by 51 to 60 years old (33%), 31 to 40 years old (18%), over 60 years old (7%), and finally 25 to 30 years old (4%). Thus, the vast majority of teachers (71%) is between 41 and 60 years old.



In terms of Gender (Chart 4), the proportion of women (70%) highly surpasses that of men (30%).

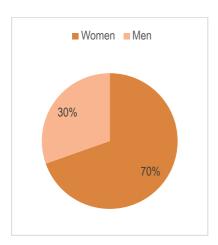
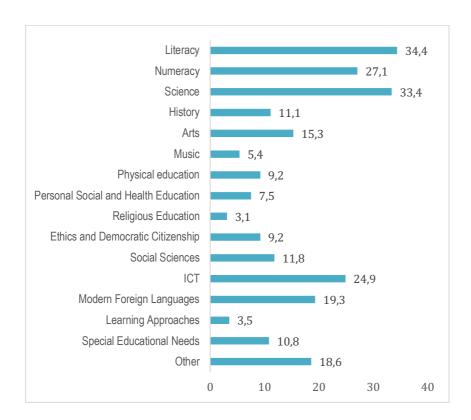
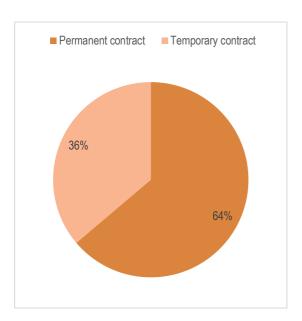


Chart 5 illustrates the distribution of teachers according to the subject areas taught during the last three years. The most frequent subjects are related to Literacy and Science, each area gathering around one third (33%) of respondents. Numeracy and ICT come next: each area gathers around one fourth (25%) of the sample. After Literacy and techno-scientific areas (Science and ICT), Modern Foreign Languages also stand out as a popular subject area, being selected by about one fifth (20%) of respondents. In turn, after Modern Foreign Languages come important subject areas related to social sciences and the humanities –Arts (15%), Social Sciences (12%), History (11%) – as well as Special Educational Needs (11%). Less commonly taught subject areas are Physical Education (9%), Ethics and Democratic Citizenship (9%), Personal, Social and Health Education (8%), Music (5%), Learning Approaches (4%) and Religious Education (3%). Since this is a multiple response question, as normally teachers work integrates more than one subject, these percentages are rather high and do not add up to 100%.

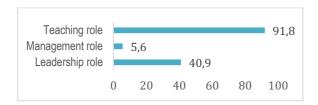


As shown in Chart 6, the large majority of teachers (64%) has a permanent position in the centre, as opposed to temporary contracts (36%). This means that most Catalan teachers have an established and secure work situation in the regional educational system.

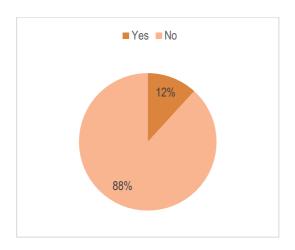


Teachers also described their roles in the centre during the last three years. Almost all the sample (92%) is comprised of individuals who worked as in-service teachers. Almost one half has occupied a leadership role (41%) and only about 6% worked in school management (Chart 7). Since this is a multiple response question,

as normally teachers perform more than one function, these percentages do not add up to 100%.



Finally, only 12% of teachers have played the role of digital coordinator in schools.

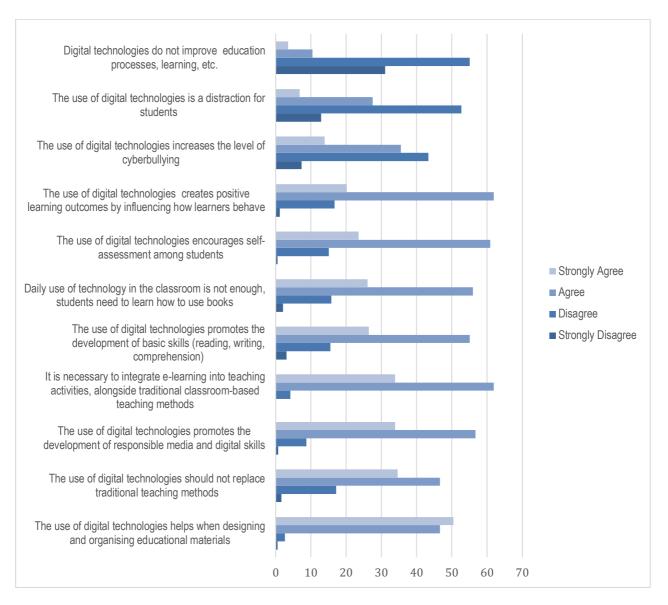


## 2. Teachers' personal views regarding using digital technologies

The present section reports the ideas and perspectives of teachers regarding the use of digital technologies.

Chart 9 shows the distribution of teachers according to their stated agreement level in relation to specific outcomes of using digital tools for education. Almost every teacher (97%) tended to agree with the sentence "The use of digital technologies helps when designing and organising educational materials" (50% strongly agree and 47% agree with it). It is the only sentence with which slightly over one half of respondents strongly agree with, pointing to a consensus around the importance of the relation between digital technologies and educational materials.

About one third (33%) of the sample strongly agrees with the following sentences three sentences. The first is, "The use of digital technologies should not replace traditional teaching methods", with which about 20% disagree or strongly disagree. The other two, "The use of digital technologies promotes the development of responsible media and digital skills", and "It is necessary to integrate e-learning into teaching activities, alongside traditional classroom-based teaching methods" are the subject of less controversy: the percentage of teachers who disagree or strongly disagree with them is only 9% and 4%, respectively. These results indicate that, while teachers seem to agree with the relevance of positive outcomes of digital technology usage in terms of literacy, there is no consensus about the status of those technologies as replacement for traditional methods – even if they are considered important elements to integrate in the educational processes.

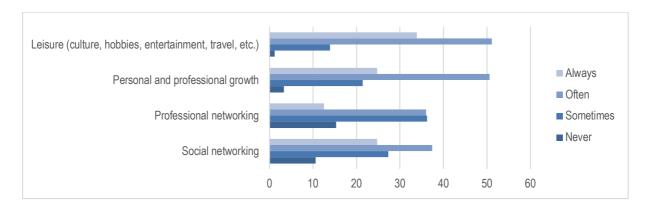


Between about one fourth (25%) and one fifth (20%) strongly agree with the following four sentences. "The use of digital technologies promotes the development of basic skills (reading, writing, comprehension)", "Daily use of technology in the classroom is not enough, students need to learn how to use books", "The use of digital technologies encourages self-assessment among students", "The use of digital technologies creates positive learning outcomes by influencing how learners behave". It is important to note that the percentage of those who simply agree with these statements vary between 55% and 65%. All the sentences mentioned until now gathered an overall agreement level (combining those who selected either agree or strongly agree) of over 80%. Less than 50% of teachers, however, express their agreement with remaining sentences.

Unlike the other sentences, which tend to show clear tendencies in terms of being agreed or disagreed with, the following sentence seems to be the subject of controversy: "The use of digital technologies increases the level of cyberbullying". The overall agreement tendency is hard to discern as the sample is divided in this regard (the percentages of those who agree and strongly agree add up to 50%). The high sensitivity of this topic and the

negative impacts in can have in an educational setting may be behind this ambiguous positioning: most teachers tend to position themselves more neutrally, with only 14% strongly agreeing and 36% agreeing, as opposed to 43% disagreeing and only 7% strongly disagreeing with the sentence.

Finally, the following sentences gather the lowest agreement levels, with overall agreement levels well below 50%. These sentences, with which Catalan teachers most disagree with, are related to two negative consequences of technology for learning: "The use of digital technologies is a distraction for students" (only 7% strongly agree and 28% agree) and "Digital technologies do not improve education processes, learning, etc." (only 4% strongly agree and 10% agree). The finding that the sentences with inferior agreement levels are related to negative outcomes of technology use, reflected in the controversial sentence about cyberbullying and these two final sentences, points to a highly positive view of technology by Catalan teachers.



Teachers' most frequent use of digital technologies is related to Leisure (40% always use them for this end, 51% use it often). The second most frequent use of said technologies refers to Personal and professional growth (25% always use them for this end, 51% use it often). Social networking use frequency comes in third place in terms of digital technology usage (25% always use them for this end, 37% use it often). The least frequent use of digital technologies is related to Professional networking (only 13% always use them for this end, 36% use it often).

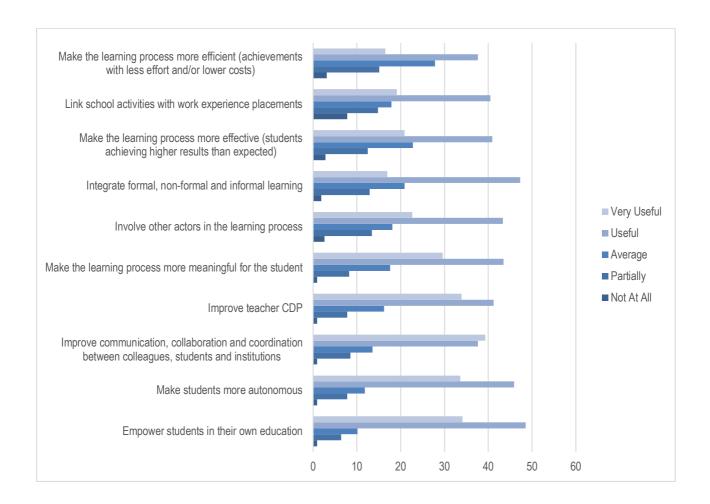


Chart 11 shows teachers' perception of the utility of digital tools and technologies. The very large majority of teachers consider that digital technologies are useful to "Empower students in their own education" (83% state they are either useful or very useful) and to "Make students more autonomous" (80%). Both are directly related to making learning more active, capacitating students and make them more autonomous - indicating teachers draw connections between those benefits and the usage of digital technologies.

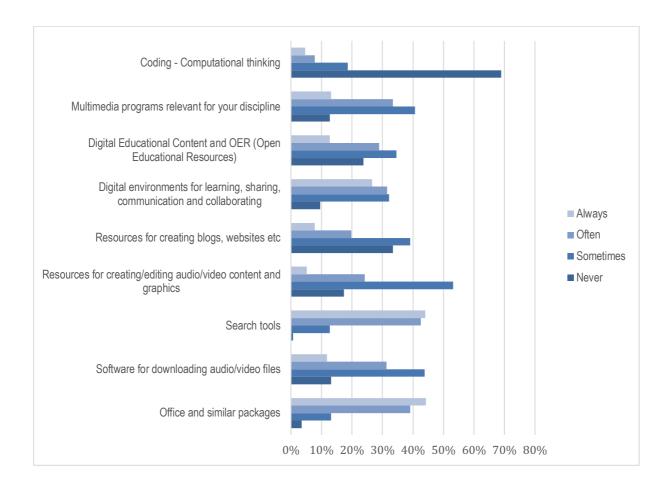
About three in four teachers (75%) consider that said technologies are useful to "Improve communication, collaboration and coordination between colleagues, students and institutions", "Improve teacher CDP", and "Make the learning process more meaningful for the student". Here we see the connection between digital technologies and a more dynamic and interconnected educational system, a better prepared teaching staff, and once again the active dimension of learning.

Next in terms of perceived usefulness come "Involve other actors in the learning process" and "Integrate formal, non-formal and informal learning": roughly two in three teachers (66%) signal this integrative function both at the level of social actors as at the level of learning modalities.

Approximately three in five (60%) teachers signal that digital technologies are useful to "Make the learning"

process more effective (students achieving higher results than expected)" and to "Link school activities with work experience placements". Finally, 54% of teachers state that technologies are useful to "Make the learning process more efficient (achievements with less effort and/or lower costs)". Thus, teachers are more suspicious and skeptic of the benefits of digital technologies in terms of effectiveness, efficiency, and connecting education with the world of labor. Nevertheless, all the elements of this last group are still considered as useful outcomes of digital technology by more than half the teachers.

#### 3. Teaching practice in ICT



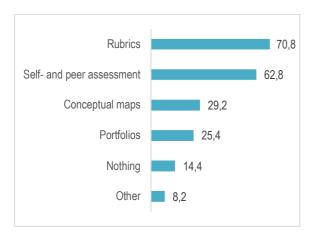
The digital resources most frequently used by Catalan teachers (Chart 12) are "Search tools" (44% always use them, 43% use them often) and "Office and similar packages" (44% always use them, 39% use them often). The fact that almost half of the teachers always use these resources indicates that the main function of digital technologies is related to information gathering and the preparation of documents. The prevalence of these uses goes beyond teaching as they underpin much of today's professional practices in many activity areas.

The following most frequently used digital resource is "Digital environments for learning, sharing, communication and collaborating" (27% always use them, 32% use them often). Those resources are now central for a growing set of activities related to both professional and private sphere – they are also increasingly integrated in teaching activities as parallel spaces for communication and collaboration, as well as student monitoring and assessment.

More than 50% of the Catalan teachers claimed they either always or often used the three previously mentioned resources. The following resources, despite being significantly used, already revert this tendency: slightly over 50% of teachers state they either never use them, or only use them sometimes. In this group are "Multimedia programs relevant for your discipline" (13% always use them, 33% use them often), "Software for downloading audio/video files" (12% always use it, 31% use it often) and "Digital Educational Content and OER (Open Educational Resources)" (13% always use them, 29% use it often). The proportion of teachers that never uses the latter, however, almost reaches 25%, unlike other resources in this group for which this proportion is around 13%. Those resources are related to digital multimedia objects and other educational content that support teaching activities as learning materials.

The next group of resources is considerably less frequently used than the previous one and integrates "Resources for creating/editing audio/video content and graphics" (5% always use them, 24% use them sometimes) and "Resources for creating blogs, websites etc" (8% always use them, 20% use them sometimes). Nonetheless, the proportion of teachers that claim they never use the latter is almost twice that of those who claim they never use the former. If the previous group was associated with the usage of digital multimedia objects and other educational content, this group gathers resources for creating multimedia, audiovisual, and web-based digital objects.

Finally, in the last position in terms of usage frequency is "Coding - Computational thinking" (5% always use it, 8% use it often). Nearly 70% of teachers state they never use those resources.



The usage of digital technologies for assessment by Catalan teachers are expressed in Chart 13. The digitally based assessment methods used by the majority of teachers are Rubrics (71%) and self- and peer-assessment (63%). Unlike those well-established methods, Conceptual maps and Portfolios are used by little more than one in four teachers, putting them in a significant but secondary position. The percentage of teachers who state they use no digitally-based assessment methods is 15%, and 8% uses other unlisted methods.

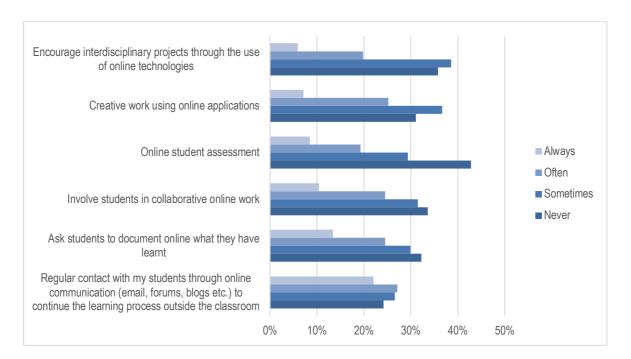


Chart 14 illustrates the frequency of online activities in teaching. The most frequent online activity is "Regular contact with my students through online communication" (22% always do it, 27% do it often). This is also the only activity that less than 25% of teachers claim they never enact – expectable since digital technologies provide a communication channel that can be used for student monitoring and support, and since these activities are frequent in daily teaching practice.

Next come "Ask students to document online what they have learnt" (13% always do it, 25% do it often) and "Involve students in collaborative online work" (10% always do it, 25% do it often). About one third of teachers state they never perform each of these activities.

The less frequent activities are "Online student assessment" (9%always do it, 19% do it often), "Creative work using online applications" (7% always do it, 25% do it often) and "Encourage interdisciplinary projects through the use of online technologies" (6% always do it, 20% do it often). About one third (33%) of teachers never engages in the latter two online activities, whereas this percentage is over 40% in the former activity.

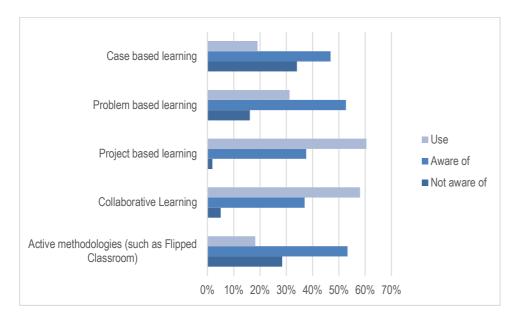


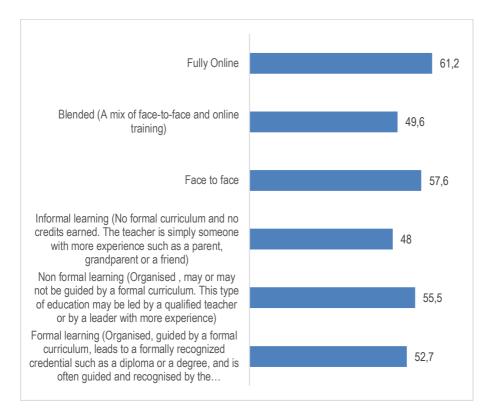
Chart 15 represents Catalan teachers' familiarity with important teaching practices. The teaching practices most familiar to Catalan teachers are "Project based learning" (only 2% are not aware of it, 38% are aware but don't use it, and 61% make use of it) and "Collaborative Learning" (5% are not aware of it, 37% are aware but don't use it, and 58% make use of it). The fact that the majority of teachers make use of these teaching practices indicates that these are well established practices in the Catalan educational system. The remaining practices, however, are not used by more than one third of teachers.

"Problem based learning" is also significantly known and used (16% are not aware of it, 53% are aware but don't use it, and 31% make use of it). Being widely known and used by roughly one third of the teachers grants this practice a significant, despite secondary, role in the Catalan education.

Finally, the lesser known and used teaching practices are "Active methodologies" (29% are not aware of it, 53% are aware but don't use it, and 18% make use of it) and "Case based learning" (34% are not aware of it, 47% are aware but don't use it, and 19% make use of it). Fostering active methodologies, such as Challenge based learning is both a goal and a design principles of the DECODE project teacher digital competence training.

## 4 Training needs of teachers

## 4.1 Training and updating

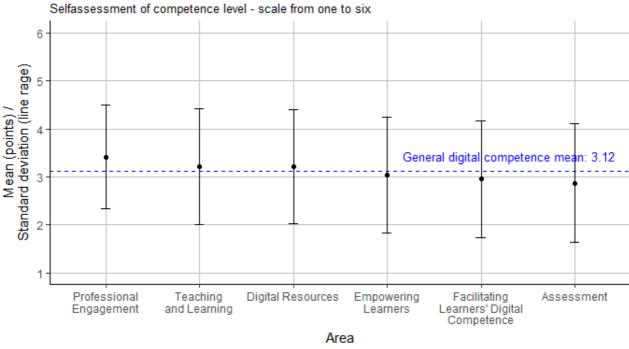


As shown in Chart 16, all the different learning modalities and approaches have been selected by between 50% and 60% of the teachers, approximately. The most common modalities are fully online (61%) and Face to face (58%). The most common approaches are non-formal (56%) and formal (53%) learning.

## 4.2 Self-assessment of digital skills of teachers according to DigCompEdu

Evaluation of the digital competency level of teachers (DigCompEdu)

#### Teacher digital competence by area (based on DigComEdu)

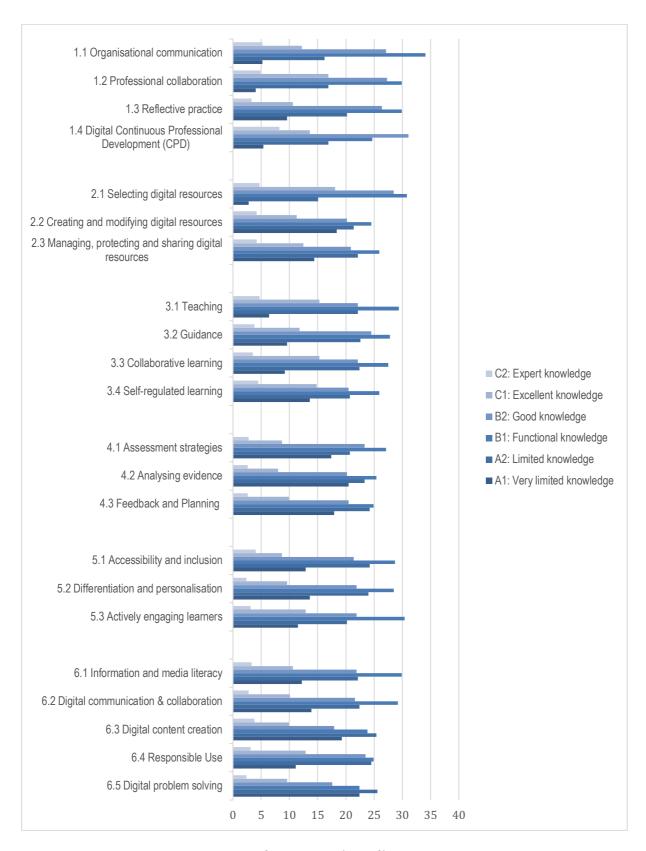


Data from the Catalan teacher survey (n = 425)

Chart 17 shows that there aren't many differences between the different areas, both in terms of the mean values and of standard deviations. The general digital competence mean, combining all indicators, is 3.12. The area in which Catalan teachers are more digitally competent is Professional Engagement (3.41), whereas the ones in which they are least competent are Facilitating Learners' Digital Competence (2.95) and Assessment (2.87).

A more detailed analysis (Chart 18) shows that:

- The most problematic indicator of Professional Engagement (area 1) is Reflective practice, whereas
  Digital Continuous Professional Development (CPD) and Professional collaboration are the indicators
  with greater associated levels of competence.
- For Digital resources (area 2), the lower level of competence is related to Creating and modifying digital resources and the highest level with Selecting digital resources.
- For Teaching and learning (area 3), the lower levels are associated with Self-regulated learning and Guidance, whereas the highest are Teaching and Collaborative learning.
- For Assessment (area 4), the lower levels is related with Analysing evidence and the highest level with Assessment strategies.
- For Empowering learners (area 5), the lower levels of competence are related to Differentiation and personalization, and the higher levels with Actively engaging learners.

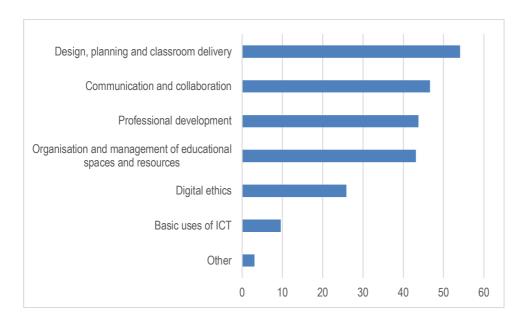


For Facilitating Learners' Digital Competence (area 6), the lower levels are related to Digital problem

solving and Digital content creation, and the higher level with Responsible Use.

#### 4.3 ICT Training Needs

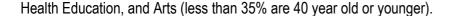
Chart 19 shows teachers' perceived training needs. The only training need selected by over half of Catalan teachers is Design, planning and classroom delivery (54%). Slightly lower percentages of teachers selected Communication and collaboration (47%), Professional development (44%) and Organisation and management of educational spaces and resources (43%). The areas in which there is less need for training are Digital ethics (26%) and Basic uses of ICT (10%).



## 5. The identikit of the "digital teacher". Personal issues and career profiles

## 5.1 Personal data and career profiles

Chart 20 shows the distribution of age ranges within the different teaching areas. The following analysis will focus on the percentage of younger teachers: those who are 40 years old or younger. Physical Education and Music are the areas with a greater proportion of young teachers, amounting to 62% and 52%, respectively. These are the only areas in which 40 years old or younger teachers outweigh the older ones. Literacy, Religious Education, Special Educational Needs and ICT are also characterized by a high proportion of younger teachers (around 45% are 40 years old or younger). Modern Foreign Languages, Learning Approaches, Social Sciences, Numeracy, Ethics and Democratic Citizenship, and History have relatively lower percentages of young teachers (around 40%). Finally, the areas with the lowest proportions of young teachers are Science, Personal Social and



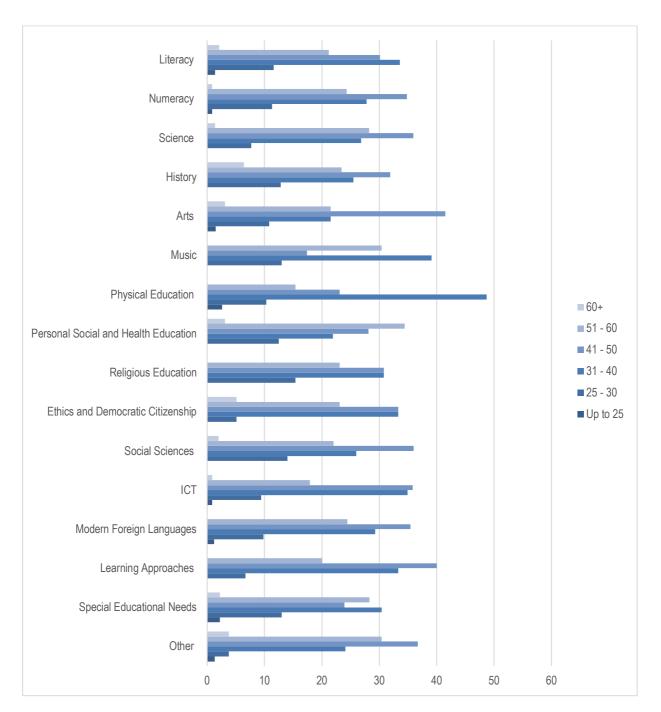
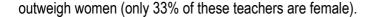
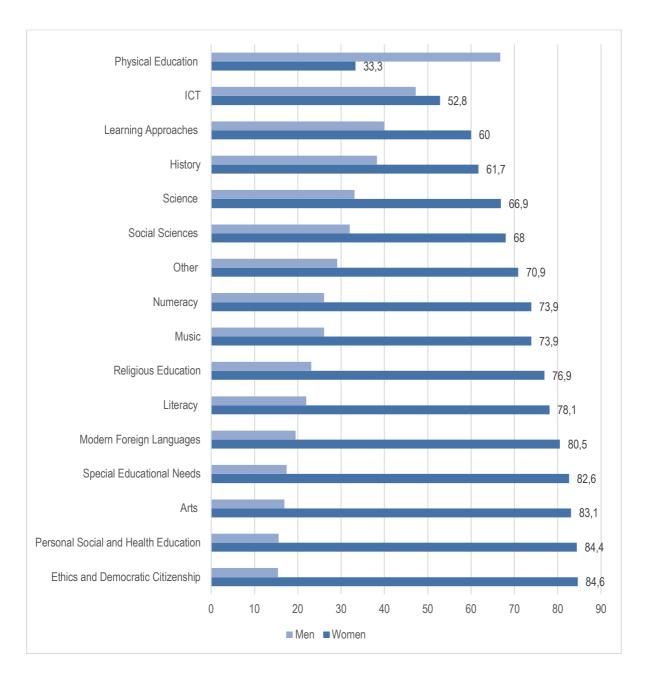
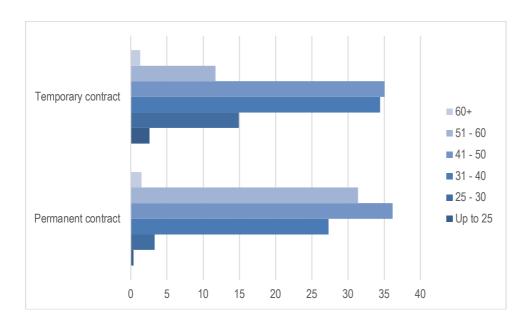


Chart 21 shows the distribution of men and women by teaching area covered over the last three years. The areas in which the proportion of females is the highest (over 75%) are Ethics and Democratic Citizenship, Personal Social and Health Education, Arts, Special Educational Needs, Modern Foreign Languages, Literacy and Religious Education. Other areas in which the proportion of women at least doubles that of men are Music, Numeracy, Social Sciences and Science. History, Learning Approaches, and ICT are areas where the proportion of women is slightly higher than the proportion of man. Finally, Physical Education is the sole area in which men

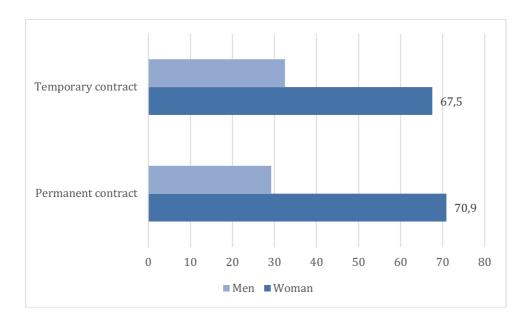


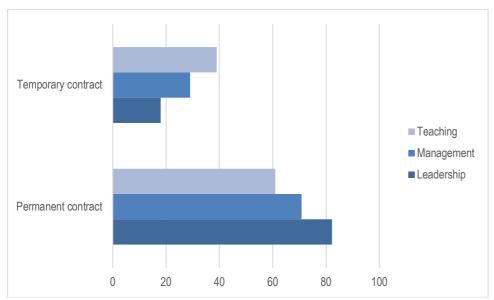


Previously in this report we identified a large number of teachers who are in a temporary work position in the school. Age seems to be a decisive factor in terms of the teachers' type of contract: as we can see in Chart 22, the proportion of younger teachers (40 years old or less) is much lower within those who have a permanent contract in the school (31%) when compared those who have a temporary contract (52%).

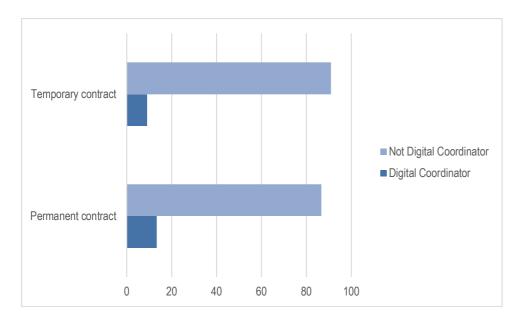


Gender, however, seems to be unrelated with the type of contract (see Chart 23).

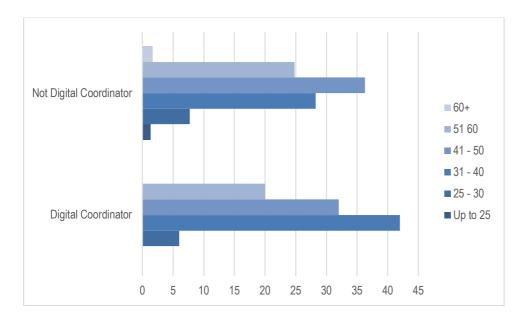




The type of contract in the school is also associated with different teaching roles: teachers with a permanent contract relatively are more likely to perform leadership roles than those with a permanent contract, and the opposite holds for teaching roles (more associated with temporary contracts, see Chart 24).



As we can see in Chart 25, teachers with a permanent contract are slightly more likely to perform the role of digital coordinator than those with a temporary contract.



The age distribution of digital coordinators is concentrated around 31-40 years (42%), whereas the same distribution for those who do not perform this role is

#### **ANNEX**

#### 1. The context

Table 2. School type		
	%	a.v.
Early Years (3-5 years)	31.1	132
Primary School (6-10 years)	39.8	169
Secondary School (11-16/11-18 years)	53.4	227
VET (Vocational Education and Training) (14-18 years)	26.4	112
Tot.	100,0	425

# Distribution of respondents by Region

Table 3. Region		
	%	a. v.
Barcelona	64.7	275
Tarragona	22.4	95
Lleida	3.3	14
Girona	9.6	41
Tot.	100,0	425

# Teacher age range

Table 4. Age range		
	%	a. v.
25-30	4,1	32
31-40	18,0	140
41-50	38,0	295
51-60	33,2	258
60+	6,7	52
Tot.	100,0	425

## Teacher gender

Table 5. Gender		
	%	a. v.
Women	69.6	296
Men	30.4	129
Tot.	100,0	425

# Teaching area covered over the last three years

Table 6. Disciplines		
	%	a.v.
Literacy	34.4	146
Numeracy	27.1	115
Science	33.4	142
History	11.1	47
Arts	15.3	65
Music	5.4	23
Physical education	9.2	39

Personal Social and Health Education	7.5	32
Religious Education	3.1	13
Ethics and Democratic Citizenship	9.2	39
Social Sciences	11.8	50
ICT	24.9	106
Modern Foreign Languages	19.3	82
Learning Approaches	3.5	15
Special Educational Needs	10.8	46
Other	18.6	79
Tot.	100,0	777

# Type of contract in the school

Table 7. Employment status		
	%	a. v.
Permanent contract	63.8	271
Temporary contract	36.2	154
Tot.	100,0	425

# Teaching role covered over the last three years

Table 8. Role undertaken		
	%	a. v.
Leadership role	40.9	174
Management role	5.6	24
Teaching role	91.8	390
Tot.	100,0	425

# Role as digital coordinator in the school

Table 9. School digital coordinator		
	%	a. v.
Yes	11.8	50
No	88.2	375
Tot.	100,0	425

# 2. Teachers' personal views regarding using digital technologies

# Beliefs on uses and benefits of digital teaching tools

Table 10. Beliefs on uses and benefits of digital teaching tools	Stror Disag		Disag	ree	Agre	ee	Stron Agre	~ ~	То	t.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
The use of digital technologies helps when designing and organising educational materials	0.5	2	2.6	11	46.6	198	50.4	214	100	425
The use of digital technologies promotes the development of basic skills (reading, writing, comprehension)	3.1	13	15.5	66	55.1	234	26.4	112	100	425
The use of digital technologies promotes the development of responsible media and digital skills	0.7	3	8.7	37	56.7	241	33.9	144	100	425
The use of digital technologies creates positive learning outcomes by influencing how learners behave	1.2	5	16.7	71	61.9	263	20.2	86	100	425
The use of digital technologies should not replace traditional teaching methods	1.6	7	17.2	73	46.6	198	34.6	147	100	425
The use of digital technologies encourages self-assessment among students	0.5	2	15.1	64	60.9	259	23.5	100	100	425
The use of digital technologies increases the level of cyberbullying	7.3	31	43.3	184	35.5	151	13.9	59	100	425
The use of digital technologies is a distraction for students	12.9	55	52.7	224	27.5	117	6.8	29	100	425
Digital technologies do not improve education processes, learning, etc.	31.1	132	55.1	234	10.4	44	3.5	15	100	425
It is necessary to integrate e- learning into teaching activities, alongside traditional classroom- based teaching methods	0.0	0	4.2	18	61.9	263	33.9	144	100	425
Daily use of technology in the classroom is not enough,	2.1%	9	15.8%	67	56.0%	238	26.1%	111	100%	425

students need to learn how to					
use books					

# Motivation to use digital instruments in your didactic and professional practice

Table 11. Motivation to use digital instruments in your didactic and professional practice	Ne	ver	Some	times	Oft	en	Alw	ays	To	ot.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
Social networking	10.6	45	27.3	116	37.4	159	24.7	105	100	425
Professional networking	15.3	65	36.2	154	36.0	153	12.5	53	100	425
Personal and professional growth	3.3	14	21.4	91	50.6	215	24.7	105	100	425
Leisure (culture, hobbies, entertainment, travel, etc.)	1.2	5	13.9	59	51.1	217	33.9	144	100	425

# Perception of the utility of digital tools and technologies

Table 12. Perception of the utility of digital tools and technologies		t At	Part	ially	Aver	age	Use	ful	Very U	seful	To	ot.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
Make students more autonomous	0.9	4	7.8	33	11.8	50	45.9	195	33.6	143	100	425
Empower students in their own education	0.9	4	6.4	27	10.1	43	48.5	206	34.1	145	100	425
Make the learning process more meaningful for the student	0.9	4	8.2	35	17.6	75	43.5	185	29.6	126	100	425
Make the learning process more effective (students achieving higher results than expected)	2.8	12	12.5	53	22.8	97	40.9	174	20.9	89	100	425
Make the learning process more efficient (achievements with less effort and/or lower costs)	3.1	13	15.1	64	27.8	118	37.6	160	16.5	70	100	425
Integrate formal, non-formal and informal learning	1.9	8	12.9	55	20.9	89	47.3	201	16.9	72	100	425
Involve other actors in the learning process	2.6	11	13.4	57	18.1	77	43.3	184	22.6	96	100	425
Improve communication, collaboration and	0.9	4	8.5	36	13.6	58	37.6	160	39.3	167	100	425

coordination between colleagues, students and institutions												
Improve teacher CDP	0.9	4	7.8	33	16.2	69	41.2	175	33.9	144	100	425
Link school activities with work experience placements	7.8	33	14.8	63	17.9	76	40.5	172	19.1	81	100	425

# 3. Teaching practice in ICT

# Use of digital tools and technologies

## Frequency of use of digital resources in the classroom for teaching activities

Table 13. Use of digital tools and technologies in teaching activities	Neve	er	Someti	mes	Ofte	n	Alway	ys	To	t.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
Office and similar packages	3.5%	15	13.2%	56	39.1%	166	44.2%	188	100%	425
Software for downloading audio/video files	13.2%	56	43.8%	186	31.3%	133	11.8%	50	100%	425
Search tools	0.7%	3	12.7%	54	42.6%	181	44.0%	187	100%	425
Resources for creating/editing audio/video content and graphics	17.4%	74	53.2%	226	24.2%	103	5.2%	22	100%	425
Resources for creating blogs, websites etc	33.40%	142	39.10%	166	19.80%	84	7.80%	33	100%	425
Digital environments for learning, sharing, communication and collaborating	9.60%	41	32.20%	137	31.50%	134	26.60%	113	100%	425
Digital Educational Content and OER (Open Educational Resources)	23.80%	101	34.60%	147	28.90%	123	12.70%	54	100%	425
Multimedia programs relevant for your discipline	12.70%	54	40.70%	173	33.40%	142	13.20%	56	100%	425
Coding - Computational thinking	68.90%	293	18.60%	79	7.80%	33	4.70%	20	100%	425

## Familiarity with the main teaching practices in use

Table 9. Use of digital tools and technologies in teaching activities	Not awa	re of	Aware	of	Use		То	t.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.

Active methodologies (such as Flipped	28.5%	121	53.3%	226	18.20%	77		
Classroom)							100%	424
Collaborative Learning	5.0%	21	37.0%	157	58.00%	246	100%	424
Project based learning	1.9%	8	37.6%	158	60.50%	254	100%	420
Problem based learning	16.1%	68	52.7%	223	31.20%	132	100%	423
Case based learning	34.10%	143	46.80%	196	19.10%	80	100%	419

# Use of digital technologies for assessment methods

Table 14. Use of digital technologies for assessment methods		
	%	a.v.
Portfolios	25.4	108
Rubrics	70.8	301
Conceptual maps	29.2	124
Self- and peer assessment	62.8	267
Nothing	14.4	61
Other	8.2	35
Tot.	100,0	425

# Frequency of activities as part of teaching

Table 15. Frequency of activities as part of teaching	Nev	er	Someti	mes	Ofte	n	Alwa	ys	To	t.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
Regular contact with my students through online communication (email, forums, blogs etc.) to continue the learning process outside the classroom	24.2%	103	26.6%	113	27.1%	115	22.1%	94	100%	425
Ask students to document online what they have learnt	32.2%	137	29.9%	127	24.5%	104	13.4%	57	100%	425
Involve students in collaborative online work	33.6%	143	31.5%	134	24.5%	104	10.4%	44	100%	425
Online student assessment	42.8%	182	29.4%	125	19.3%	82	8.5%	36	100%	425
Creative work using online applications	31.1%	132	36.7%	156	25.2%	107	7.1%	30	100%	425
Encourage interdisciplinary projects through the use of online technologies	35.8%	152	38.6%	164	19.8%	84	5.9%	25	100%	425

## 4. Training needs of teachers

## 4.1 Training and updating

# Training attended around using digital technologies in education

Table 16. Training attended around using digital technologies in education		
	%	a.v.
Formal learning (Organised, guided by a formal curriculum, leads to a formally recognized credential such as a diploma or a degree, and is often guided and recognised by the government).	52.7	224
Non formal learning (Organised , may or may not be guided by a formal curriculum. This type of education may be led by a qualified teacher or by a leader with more experience)	55.5	236
Informal learning (No formal curriculum and no credits earned. The teacher is simply someone with more experience such as a parent, grandparent or a friend)	48.0	204
Face to face	57.6	245
Blended (A mix of face-to-face and online training)	49.6	211
Fully Online	61.2	260
Tot.	100,0	425

# 4.2 Self-assessment of digital skills of teachers according to DigCompEdu

# Evaluation of the digital competency level of teachers (DigCompEdu)

Table 17. Self-assessment of digital skills of teachers according to DigCompEdu (means by DigComEdu areas)	y
	Mean
Assessment	2.87
Facilitating Learner's Digital Competence	2.95
Empowering Learners	3.04
Digital Resources	3.21
Teaching and Learning	3.22
Professional Engagement	3.41
Tot	3.12

Table 18. Self- assessment of digital skills of teachers according to DigCompEdu	A1: \ limit knowl	ited	A2 Limi knowl	ited	B1 Funct knowl	ional	B2: G knowl		C <sup>^</sup> Exce knowl	llent	kno	C2: Expert knowledge		ot.
	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.	%	a.v.
1.1 Organisational communication	5.2	22	16.2	69	34.1	145	27.1	115	12.2	52	5.2	22	100	425
1.2 Professional collaboration	4.0	17	16.9	72	29.9	127	27.3	116	16.9	72	4.9	21	100	425
1.3 Reflective practice	9.6	41	20.2	86	29.9	127	26.4	112	10.6	45	3.3	14	100	425
1.4 Digital Continuous Professional Development (CPD)	5.4	23	16.9	72	24.7	105	31.1	132	13.6	58	8.2	35	100	425
2.1 Selecting digital resources	2.8	12	15.1	64	30.8	131	28.5	121	18.1	77	4.7	20	100	425
2.2 Creating and modifying digital resources	18.4	78	21.4	91	24.5	104	20.2	86	11.3	48	4.2	18	100	425
2.3 Managing, protecting and sharing digital resources	14.4	61	22.1	94	25.9	110	20.9	89	12.5	53	4.2	18	100	425
3.1 Teaching	6.4	27	22.1	94	29.4	125	22.1	94	15.3	65	4.7	20	100	425
3.2 Guidance	9.6	41	22.6	96	27.8	118	24.5	104	11.8	50	3.8	16	100	425
3.3 Collaborative learning	9.2	39	22.4	95	27.5	117	22.1	94	15.3	65	3.5	15	100	425
3.4 Self- regulated learning	13.6	58	20.7	88	25.9	110	20.5	87	14.8	63	4.5	19	100	425
4.1 Assessment strategies	17.4	74	20.7	88	27.1	115	23.3	99	8.7	37	2.8	12	100	425
4.2 Analysing evidence	20.5	87	23.3	99	25.4	108	20.2	86	8.0	34	2.6	11	100	425
4.3 Feedback and Planning	17.9	76	24.2	103	24.9	106	20.5	87	9.9	42	2.6	11	100	425
5.1 Accessibility and inclusion	12.9	55	24.2	103	28.7	122	21.4	91	8.7	37	4.0	17	100	425
5.2 Differentiation and personalisation	13.6	58	24.0	102	28.5	121	21.9	93	9.6	41	2.4	10	100	425

5.3 Actively engaging learners	11.5	49	20.2	86	30.4	129	21.9	93	12.9	55	3.1	13	100	425
6.1 Information and media literacy	12.2	52	22.1	94	29.9	127	21.9	93	10.6	45	3.3	14	100	425
6.2 Digital communication & collaboration	13.9	59	22.4	95	29.2	124	21.6	92	10.1	43	2.8	12	100	425
6.3 Digital content creation	19.3	82	25.4	108	23.8	101	17.9	76	9.9	42	3.8	16	100	425
6.4 Responsible Use	11.1	47	24.5	104	24.9	106	23.5	100	12.9	55	3.1	13	100	425
6.5 Digital problem solving	22.4	95	25.6	109	22.4	95	17.6	75	9.6	41	2.4	10	100	425

# **4.3 ICT Training Needs**

# Needs of training to be able to use digital technologies effectively in the classroom

Table 19. Needs of training to be able to use digital technologies effectively in the classroom	0/	
	%	a.v.
Basic uses of ICT	9.6	41
Design, planning and classroom delivery	54.1	230
Organisation and management of educational spaces and resources	43.1	183
Communication and collaboration	46.6	198
Digital ethics	25.9	110
Professional development	43.8	186
Other	3.1	13
Tot.	100,0	425

The Catalan questionnaire had an extra digital certification, ACTIC.

# Digital skills qualifications

Table 20. Digital skills qualifications		
	%	a.v.
ECDL	0.2	1

ACTIC	13.4	57
MICROSOFT MOUS (Microsoft Office User Specialist)	1.2	5
IC3 Global standard	0.2	1
CISCO	1.2	5
PEKIT (Permanent Education and Knowledge on Information Technology)	0.0	0
NO OFFICIAL CERTIFICATION	76.0	323
EIPASS	0.0	0
Other	10.1	43
Tot.	100,0	425

## 5. The identikit of the "digital teacher". Personal issues and career profiles

## 5.1 Personal data and career profiles

Table 21. Teaching area by age								
		Age				Tot.		
		Up to 25	25 - 30	31 - 40	41 - 50	51 - 60	60+	
Literacy	Count	2	17	49	44	31	3	146
	% within Subject	1.4	11.6	33.6	30.1	21.2	2.1	100
	% within Age	40	53.1	38.6	28.9	30.1	50	34.4
	% of the total	0.5	4	11.5	10.4	7.3	0.7	34.4
Numeracy	Count	1	13	32	40	28	1	115
	% within Subject	0.9	11.3	27.8	34.8	24.3	0.9	100
	% within Age	20	40.6	25.2	26.3	27.2	16.7	27
	% of the total	0.2	3.1	7.5	9.4	6.6	0.2	27
Science	Count	0	11	38	51	40	2	142
	% within Subject	0	7.7	26.8	35.9	28.2	1.4	100
	% within Age	0	34.4	29.9	33.6	38.8	33.3	33.4
	% of the total	0	2.6	8.9	12	9.4	0.5	33.4
History	Count	0	6	12	15	11	3	47
	% within Subject	0	12.8	25.5	31.9	23.4	6.4	100
	% within Age	0	18.8	9.4	9.9	10.7	50	11
	% of the total	0	1.4	2.8	3.5	2.6	0.7	11
Arts	Count	1	7	14	27	14	2	65
	% within Subject	1.5	10.8	21.5	41.5	21.5	3.1	99.9

Table 21. Teaching area by age								
	% within Age	20	21.9	11	17.8	13.6	33.3	15.3
	% of the total	0.2	1.6	3.3	6.4	3.3	0.5	15.3
Music	Count	0	3	9	4	7	0	23
	% within Subject	0	13	39.1	17.4	30.4	0	99.9
	% within Age	0	9.4	7.1	2.6	6.8	0	5.3
	% of the total	0	0.7	2.1	0.9	1.6	0	5.3
Physical Education	Count	1	4	19	9	6	0	39
	% within Subject	2.6	10.3	48.7	23.1	15.4	0	100.1
	% within Age	20	12.5	15	5.9	5.8	0	9.1
	% of the total	0.2	0.9	4.5	2.1	1.4	0	9.1
Personal Social and Health Education	Count	0	4	7	9	11	1	32
	% within Subject	0	12.5	21.9	28.1	34.4	3.1	100
	% within Age	0	12.5	5.5	5.9	10.7	16.7	7.4
	% of the total	0	0.9	1.6	2.1	2.6	0.2	7.4
Religious Education	Count	0	2	4	4	3	0	13
	% within Subject	0	15.4	30.8	30.8	23.1	0	100.1
	% within Age	0	6.2	3.1	2.6	2.9	0	3
	% of the total	0	0.5	0.9	0.9	0.7	0	3
Ethics and Democratic Citizenship	Count	0	2	13	13	9	2	39
	% within Subject	0	5.1	33.3	33.3	23.1	5.1	99.9
	% within Age	0	6.2	10.2	8.6	8.7	33.3	9.3
	% of the total	0	0.5	3.1	3.1	2.1	0.5	9.3
Social Sciences	Count	0	7	13	18	11	1	50
	% within Subject	0	14	26	36	22	2	100
	% within Age	0	21.9	10.2	11.8	10.7	16.7	11.7
	% of the total	0	1.6	3.1	4.2	2.6	0.2	11.7
ICT	Count	1	10	37	38	19	1	106
	% within Subject	0.9	9.4	34.9	35.8	17.9	0.9	99.8
	% within Age	20	31.2	29.1	25	18.4	16.7	24.9
	% of the total	0.2	2.4	8.7	8.9	4.5	0.2	24.9
Modern Foreign Languages	Count	1	8	24	29	20	0	82
	% within Subject	1.2	9.8	29.3	35.4	24.4	0	100.1
	% within Age	20	25	18.9	19.1	19.4	0	19.2
	% of the total	0.2	1.9	5.6	6.8	4.7	0	19.2
Learning Approaches	Count	0	1	5	6	3	0	15
	% within Subject	0	6.7	33.3	40	20	0	100
	% within Age	0	3.1	3.9	3.9	2.9	0	3.5
	% of the total	0	0.2	1.2	1.4	0.7	0	3.5
Special Educational Needs	Count	1	6	14	11	13	1	46

	% of the total	1.2	7.5	29.9	35.8	24.2	1.4	100
	% of the total	0.2	0.7	4.5	6.8	5.6	0.7	18.5
	% within Age	20	9.4	15	19.1	23.3	50	18.5
	% within Subject	1.3	3.8	24.1	36.7	30.4	3.8	100.1
Other	Count	1	3	19	29	24	3	79
	% of the total	0.2	1.4	3.3	2.6	3.1	0.2	10.8
	% within Age	20	18.8	11	7.2	12.6	16.7	10.8
	% within Subject	2.2	13	30.4	23.9	28.3	2.2	100
Table 21. Teaching area by age								

Table 22. Teaching area by gender				
		S	ex	Tot.
		Woman	Men	
Literacy	Count	114	32	146
	% within Subject	78.1	21.9	100
	% within Gender	38.5	24.8	34.3
	% of the total	26.8	7.5	34.3
Numeracy	Count	85	30	115
	% within Subject	73.9	26.1	100
	% within Gender	28.7	23.3	27.1
	% of the total	20	7.1	27.1
Science	Count	95	47	142
	% within Subject	66.9	33.1	100
	% within Gender	32.1	36.4	33.5
	% of the total	22.4	11.1	33.5
History	Count	29	18	47
	% within Subject	61.7	38.3	100
	% within Gender	9.8	14	11
	% of the total	6.8	4.2	11
Arts	Count	54	11	65
	% within Subject	83.1	16.9	100
	% within Gender	18.2	8.5	15.3
	% of the total	12.7	2.6	15.3
Music	Count	17	6	23
	% within Subject	73.9	26.1	100
	% within Gender	5.7	4.7	5.4
	% of the total	4	1.4	5.4
Physical Education	Count	13	26	39
	% within Subject	33.3	66.7	100

Table 22. Teaching area by gender				
	% within Gender	4.4	20.2	9.2
	% of the total	3.1	6.1	9.2
Personal Social and Health Education	Count	27	5	32
	% within Subject	84.4	15.6	100
	% within Gender	9.1	3.9	7.6
	% of the total	6.4	1.2	7.6
Religious Education	Count	10	3	13
	% within Subject	76.9	23.1	100
	% within Gender	3.4	2.3	3.1
	% of the total	2.4	0.7	3.1
Ethics and Democratic Citizenship	Count	33	6	39
	% within Subject	84.6	15.4	100
	% within Gender	11.1	4.7	9.2
	% of the total	7.8	1.4	9.2
Social Sciences	Count	34	16	50
	% within Subject	68	32	100
	% within Gender	11.5	12.4	11.8
	% of the total	8	3.8	11.8
ICT	Count	56	50	106
	% within Subject	52.8	47.2	100
	% within Gender	18.9	38.8	25
	% of the total	13.2	11.8	25
Modern Foreign Languages	Count	66	16	82
	% within Subject	80.5	19.5	100
	% within Gender	22.3	12.4	19.3
	% of the total	15.5	3.8	19.3
Learning Approaches	Count	9	6	15
	% within Subject	60	40	100
	% within Gender	3	4.7	3.5
	% of the total	2.1	1.4	3.5
Special Educational Needs	Count	38	8	46
	% within Subject	82.6	17.4	100
	% within Gender	12.8	6.2	10.8
	% of the total	8.9	1.9	10.8
Other	Count	56	23	79
	% within Subject	70.9	29.1	100
	% within Gender	18.9	17.8	18.6
	% of the total	13.2	5.4	18.6
	% of the total			

Table 23. Employment status * Age								
Employment status				Ag	е			Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 - 60	60+	
Permanent contract	Count	1	9	74	98	85	4	271
	% within Employment status	0.37	3.32	27.31	36.16	31.37	1.48	100
	% within Age	20	28.12	58.27	64.47	82.52	66.67	64
	% of the total	0.24	2.12	17.41	23.06	20	0.94	64
Temporary contract	Count	4	23	53	54	18	2	154
	% within Employment status	2.6	14.94	34.42	35.06	11.69	1.3	100
	% within Age	80	71.88	41.73	35.53	17.48	33.33	36
	% of the total	0.94	5.41	12.47	12.71	4.24	0.47	36
	% of the total	1.18	7.53	29.88	35.77	24.24	1.41	100.0

gender		S	ex	Tot.
		Woman	Men	
Permanent contract	Count	192	79	271
	% within Type of Contract	70.9	29.2	100.0
	% within Gender	64.9	61.2	63.8
	% of the total	45.2	18.6	63.8
Temporary contract	Count	104	50	154
	% within Type of Contract	67.5	32.5	100.0
	% within Gender		38.8	36.2
	% of the total	24.5	11.8	36.2
	% of the total	69.6	30.4	100

Table 25 Type of contract in the school * teaching role					
					Tot.
		Leadership	Management	Teaching	
Permanent contract	Count	143	17	238	398
	% within Type				
	of Contract	82.2	70.8	61.0	214.0
	% within Role				
	in school	52.8	6.3	87.8	93.6
	% of the total	33.6	4	56	93.6
Temporary contract	Count	31	7	152	190
	% within Type of Contract	18	29	39.0	86.0
	% within Role				
	in school	20	5	98.7	44.7
	% of the total	7.3	1.6	35.8	44.7
	% of the total	40.9	5.6	91.8	138.3

Table 26 Type of contract in the school * role as digital coordinator				
				Tot.
		Digital Coordinator	Not Digital Coordinator	
Permanent contract	Count	36	235	271
	% within Type of Contract	13.28	86.72	100

Table 26 Type of contract in the school * role as digital coordinator				
	% within Role as	72	62.67	63.76
	D. Coord.			
	% of the total	8.47	55.29	63.76
Temporary contract	Count	14	140	154
	% within Type of Contract	9.09	90.91	100
	% within Role as D. Coord.	28	37.33	36.24
	% of the total	3.29	32.94	36.24
	% of the total	11.76	88.23	100

Table 27 Role as digital coordinator * Age								
								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Digital Coordinator	Count	0	3	21	16	10	0	50
	% within Role as D. Coord	0	6	42	32	20	0	100
	% within Age.	0	9.38	16.54	10.53	9.71	0	11.7 6
	% of the total	0	0.71	4.94	3.76	2.35	0	11.7 6
Not Digital Coordinator	Count	5	29	106	136	93	6	375
	% within Role as D. Coord	1.33	7.73	28.27	36.27	24.8	1.6	100
	% within Age.	100	90.62	83.46	89.47	90.29	100	88.2 4
	% of the total	1.18	6.82	24.94	32	21.88	1.41	88.2 4
	% of the total	1.18	7.53	29.88	35.76	24.23	1.41	100

Table 28 Role as digital coordinator * Age				
				Tot.
		Women	Men	
Digital Coordinator	Count	25	25	50
	% within Role as D. Coord	50	50	100

Table 28 Role as digital coordinator * Age				
	% within Gender.	8.45	19.38	11.76
	% of the total	5.88	5.88	11.76
Not Digital Coordinator	Count	271	104	375
	% within Role as D. Coord	72.27	27.73	100
	% within Gender.	91.55	80.62	88.24
	% of the total	63.76	24.47	88.24
	% of the total	69.64	30.35	100

## 5.2 Focus on innovation

Table 29 Frequency of use Office and similar packages * Age								T-4
		Up to	25 - 30	31 - 40	41 - 50	51 60	60+	Tot.
Never	Count	1	3	5	6	0	0	15
	% within Freq. of use	6.67	20	33.33	40	0	0	100
	% within Age.	20	9.38	3.94	3.95	0	0	3.53
	% of the total	0.24	0.71	1.18	1.41	0	0	3.53
Sometimes	Count	1	9	12	21	13	0	56
	% within Freq. of use	1.79	16.07	21.43	37.5	23.21	0	100
	% within Age.	20	28.12	9.45	13.82	12.62	0	13.18
	% of the total	0.24	2.12	2.82	4.94	3.06	0	13.18
Often	Count	2	10	50	56	45	3	166
	% within Freq. of use	1.2	6.02	30.12	33.73	27.11	1.81	100
	% within Age.	40	31.25	39.37	36.84	43.69	50	39.06
	% of the total	0.47	2.35	11.76	13.18	10.59	0.71	39.06
Always	Count	1	10	60	69	45	3	188
	% within Freq. of use	0.53	5.32	31.91	36.7	23.94	1.6	100
	% within Age.	20	31.25	47.24	45.39	43.69	50	44.24

Table 29 Frequency of use Office and similar packages * Age								
	% of the total	0.24	2.35	14.12	16.24	10.59	0.71	44.24
	% of the total	1.19	7.53	29.88	35.77	24.24	1.42	100

Table 30 Frequency of

use Software for downloading audio/video files * Age								
								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	1	6	21	23	5	0	56
	% within Freq. of use	1.79	10.71	37.5	41.07	8.93	0	100
	% within Age.	20	18.75	16.54	15.13	4.85	0	13.18
	% of the total	0.24	1.41	4.94	5.41	1.18	0	13.18
Sometimes	Count	2	17	54	71	40	2	186
	% within Freq. of use	1.08	9.14	29.03	38.17	21.51	1.08	100
	% within Age.	40	53.12	42.52	46.71	38.83	33.33	43.76
	% of the total	0.47	4	12.71	16.71	9.41	0.47	43.76
Often	Count	1	7	36	42	43	4	133
	% within Freq. of use	0.75	5.26	27.07	31.58	32.33	3.01	100
	% within Age.	20	21.88	28.35	27.63	41.75	66.67	31.29
	% of the total	0.24	1.65	8.47	9.88	10.12	0.94	31.29
Always	Count	1	2	16	16	15	0	50
	% within Freq. of use	2	4	32	32	30	0	100
	% within Age.	20	6.25	12.6	10.53	14.56	0	11.76
	% of the total	0.24	0.47	3.76	3.76	3.53	0	11.76

Table 31 Frequency of use Search tools* Age								
								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	0	0	1	2	0	0	3

7.53

29.88

35.76

24.24

1.41

100

% of the total

1.19

Table 31 Frequency of use Search tools* Age								
, and the second	% within Freq.							
	of use	0	0	33.33	66.67	0	0	100
	% within Age.	0	0	0.79	1.32	0	0	0.71
	% of the total	0	0	0.24	0.47	0	0	0.71
Sometimes	Count	1	6	17	21	9	0	54
	% within Freq. of use	1.85	11.11	31.48	38.89	16.67	0	100
	% within Age.	20	18.75	13.39		8.74	0	12.71
	% of the total	0.24	1.41	4	4.94	2.12	0	12.71
Often	Count	2	11	46	65	53	4	181
	% within Freq. of use	1.1	6.08	25.41	35.91	29.28	2.21	100
	% within Age.	40	34.38	36.22	42.76	51.46	66.67	42.59
	% of the total	0.47	2.59	10.82	15.29	12.47	0.94	42.59
Always	Count	2	15	63	64	41	2	187
<u> </u>	% within Freq. of use	1.07	8.02	33.69	34.22	21.93	1.07	100
	% within Age.	40	46.88	49.61	42.11	39.81	33.33	44
	% of the total	0.47	3.53	14.82	15.06	9.65	0.47	44
	% of the total	1.18	7.53	29.88	35.76	24.24	1.41	100

Table 32 Frequency of use Resources for creating/editing audio, video, and graphics content \*

								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	1	6	23	31	13	0	74
	% within Freq. of use	1.35	8.11	31.08	41.89	17.57	0	100
	% within Age.	20	18.75	18.11	20.39	12.62	0	17.41
	% of the total	0.24	1.41	5.41	7.29	3.06	0	17.41
Sometimes	Count	3	15	70	78	55	5	226
	% within Freq. of use	1.33	6.64	30.97	34.51	24.34	2.21	100
	% within Age.	60	46.88	55.12	51.32	53.4	83.33	53.18
	% of the total	0.71	3.53	16.47	18.35	12.94	1.18	53.18
Often	Count	0	11	27	38	26	1	103

<b>Table 32 Frequency of</b>
use Resources for
creating/editing
audio, video, and
graphics content *
Ago

ngc					_	_	_	
	% within Freq.							
	of use	0	10.68	26.21	36.89	25.24	0.97	100
	% within Age.	0	34.38	21.26	25	25.24	16.67	24.24
	% of the total	0	2.59	6.35	8.94	6.12	0.24	24.24
Always	Count	1	0	7	5	9	0	22
	% within Freq.							
	of use	4.55	0	31.82	22.73	40.91	0	100
	% within Age.	20	0	5.51	3.29	8.74	0	5.18
	% of the total	0.24	0	1.65	1.18	2.12	0	5.18
	% of the total	1.19	7.53	29.88	35.76	24.24	1.42	100

Table 33 Frequency of
use Resources for
creating blogs, sites,
hypertexts * Age

								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	3	14	34	52	37	2	142
	% within Freq. of use	2.11	9.86	23.94	36.62	26.06	1.41	100
	% within Age.	60	43.75	26.77	34.21	35.92	33.33	33.41
	% of the total	0.71	3.29	8	12.24	8.71	0.47	33.41
Sometimes	Count	0	8	59	58	38	3	166
	% within Freq. of use	0	4.82	35.54	34.94	22.89	1.81	100
	% within Age.	0	25	46.46	38.16	36.89	50	39.06
	% of the total	0	1.88	13.88	13.65	8.94	0.71	39.06
Often	Count	2	7	23	32	19	1	84
	% within Freq. of use	2.38	8.33	27.38	38.1	22.62	1.19	100
	% within Age.	40	21.88	18.11	21.05	18.45	16.67	19.76
	% of the total	0.47	1.65	5.41	7.53	4.47	0.24	19.76
Always	Count	0	3	11	10	9	0	33
	% within Freq. of use	0	9.09	33.33	30.3	27.27	0	100
	% within Age.	0	9.38	8.66	6.58	8.74	0	7.76
	% of the total	0	0.71	2.59	2.35	2.12	0	7.76

Table 33 Frequency of use Resources for creating blogs, sites, hypertexts \* Age

% of the total	1.18	7.53	29.88	35.77	24.24	1.42	100

Table 34 Frequency of use Digital environments for learning, sharing, communication and collaborating online\* Age

Tot. Up to 25 - 30 31 - 40 41 - 50 51 60 60+ 25 Count Never 5 0 8 1 14 13 41 % within Freq. of use 0 12.2 19.51 34.15 31.71 2.44 100 % within Age. 0 15.62 6.3 9.21 12.62 16.67 9.65 % of the total 0 1.88 3.29 0.24 1.18 3.06 9.65 Count Sometimes 2 10 44 48 31 137 % within Freq. of use 1.46 7.3 32.12 35.04 22.63 1.46 100 % within Age. 31.25 40 34.65 31.58 30.1 33.33 32.24 % of the total 0.47 7.29 2.35 10.35 11.29 0.47 32.24 Often Count 2 12 43 44 31 134 % within Freq. of use 1.49 8.96 32.09 32.84 23.13 1.49 100 % within Age. 40 37.5 33.86 28.95 30.1 33.33 31.53 % of the total 0.47 2.82 10.12 10.35 7.29 0.47 31.53 Count Always 5 32 46 28 113 % within Freq. of use 0.88 4.42 28.32 40.71 24.78 0.88 100 % within Age. 20 15.62 25.2 30.26 27.18 16.67 26.59 % of the total 0.24 7.53 0.24 26.59 1.18 10.82 6.59 % of the total 1.18 7.53 29.88 35.75 24.23 1.42 100

Table 35 Frequency of use Digital Educational Content and OER \* Age

and out Ago							
							Tot.
	Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	

<b>Table 35 Frequency of</b>
use Digital
<b>Educational Content</b>
and OED * Ago

and OER * Age								
Never	Count	0	10	39	33	19	0	101
	% within Freq.							
	of use	0	9.9	38.61	32.67	18.81	0	100
	% within Age.	0	31.25	30.71	21.71	18.45	0	23.76
	% of the total	0	2.35	9.18	7.76	4.47	0	23.76
Sometimes	Count	3	9	36	48	47	4	147
	% within Freq.							
	of use	2.04	6.12	24.49	32.65	31.97	2.72	100
	% within Age.	60	28.12	28.35	31.58	45.63	66.67	34.59
	% of the total	0.71	2.12	8.47	11.29	11.06	0.94	34.59
Often	Count	1	8	36	49	27	2	123
	% within Freq.							
	of use	0.81	6.5	29.27	39.84	21.95	1.63	100
	% within Age.	20	25	28.35	32.24	26.21	33.33	28.94
	% of the total	0.24	1.88	8.47	11.53	6.35	0.47	28.94
Always	Count	1	5	16	22	10	0	54
	% within Freq.							
	of use	1.85	9.26	29.63	40.74	18.52	0	100
	% within Age.	20	15.62	12.6	14.47	9.71	0	12.71
	% of the total	0.24	1.18	3.76	5.18	2.35	0	12.71
	% of the total	1.19	7.53	29.88	35.76	24.23	1.41	100

Table 36 Frequency of
use Educational
multimedia programs
for discipline* Age

								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	0	6	21	21	6	0	54
	% within Freq. of use	0	11.11	38.89	38.89	11.11	0	100
	% within Age.	0	18.75	16.54	13.82	5.83	0	12.71
	% of the total	0	1.41	4.94	4.94	1.41	0	12.71
Sometimes	Count	2	14	46	59	48	4	173
	% within Freq. of use	1.16	8.09	26.59	34.1	27.75	2.31	100
	% within Age.	40	43.75	36.22	38.82	46.6	66.67	40.71
	% of the total	0.47	3.29	10.82	13.88	11.29	0.94	40.71

<b>Table 36 Frequency of</b>
use Educational
multimedia programs
for discipline* Age

Often	Count	3	8	43	51	36	1	142
	% within Freq.							
	of use	2.11	5.63	30.28	35.92	25.35	0.7	100
	% within Age.	60	25	33.86	33.55	34.95	16.67	33.41
	% of the total	0.71	1.88	10.12	12	8.47	0.24	33.41
Always	Count	0	4	17	21	13	1	56
	% within Freq.							
	of use	0	7.14	30.36	37.5	23.21	1.79	100
	% within Age.	0	12.5	13.39	13.82	12.62	16.67	13.18
	% of the total	0	0.94	4	4.94	3.06	0.24	13.18
	% of the total	1.18	7.52	29.88	35.76	24.23	1.42	100

Table 37 Frequency of use Educational Coding - Computational thinking \* Age

								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Never	Count	4	21	89	101	75	3	293
	% within Freq. of use	1.37	7.17	30.38	34.47	25.6	1.02	100
	% within Age.	80	65.62	70.08	66.45	72.82	50	68.94
	% of the total	0.94	4.94	20.94	23.76	17.65	0.71	68.94
Sometimes	Count	1	8	19	30	20	1	79
	% within Freq. of use	1.27	10.13	24.05	37.97	25.32	1.27	100
	% within Age.	20	25	14.96	19.74	19.42	16.67	18.59
	% of the total	0.24	1.88	4.47	7.06	4.71	0.24	18.59
Often	Count	0	2	10	15	4	2	33
	% within Freq. of use	0	6.06	30.3	45.45	12.12	6.06	100
	% within Age.	0	6.25	7.87	9.87	3.88	33.33	7.76
	% of the total	0	0.47	2.35	3.53	0.94	0.47	7.76
Always	Count	0	1	9	6	4	0	20
	% within Freq. of use	0	5	45	30	20	0	100
	% within Age.	0	3.12	7.09	3.95	3.88	0	4.71

Table 37 Frequency of use Educational Coding - Computational thinking * Age								
	% of the total	0	0.24	2.12	1.41	0.94	0	4.71
	% of the total	1.18	7.53	29.88	35.76	24.24	1.42	100

of use Office and similar package *				
Gender				Tot.
		Women	Men	
Never	Count	11	4	15
	% within Freq. of use	73.33	26.67	100
	% within Gender.	3.72	3.1	3.53
	% of the total	2.59	0.94	3.53
Sometimes	Count	37	19	56
	% within Freq. of use	66.07	33.93	100
	% within Gender.	12.5	14.73	13.18
	% of the total	8.71	4.47	13.18
Often	Count	119	47	166
	% within Freq. of use	71.69	28.31	100
	% within Gender.	40.2	36.43	39.06
	% of the total	28	11.06	39.06
Always	Count	129	59	188
	% within Freq. of use % within	68.62	31.38	100
	Gender.	43.58	45.74	44.24
	% of the total	30.35	13.88	44.24
	% of the total	69.65	30.35	100

Table 38 Frequency

Table 39 Frequency of use Software for downloading audio/video files \* Gender

				Tot.
		Women	Men	
Never	Count	31	25	56
	% within Freq.			
	of use	55.36	44.64	100
	% within			
	Gender.	10.47	19.38	13.18
	% of the total	7.29	5.88	13.18
Sometimes	Count	125	61	186
	% within Freq.			
	of use	67.2	32.8	100
	% within			
	Gender.	42.23	47.29	43.76
	% of the total	29.41	14.35	43.76
Often	Count	103	30	133
	% within Freq.			
	of use	77.44	22.56	100
	% within			
	Gender.	34.8	23.26	31.29
	% of the total	24.24	7.06	31.29
Always	Count	37	13	50
	% within Freq.			
	of use	74	26	100
	% within			
	Gender.	12.5	10.08	11.76
	% of the total	8.71	3.06	11.76
	% of the total	69.65	30.35	100

Table 40 Frequency of use Search tools * Gender				
				Tot.
		Women	Men	
Never	Count	2	1	3
	% within Freq.			
	of use	66.67	33.33	100

Table 40 Frequency of use Search tools * Gender				
	% within			
	Gender.	0.68	0.78	1.45
	% of the total	0.47	0.24	0.71
Sometimes	Count	34	20	54
	% within Freq. of use	62.96	37.04	100
	% within Gender.	11.49	15.5	12.71
	% of the total	8	4.71	12.71
Often	Count	130	51	181
	% within Freq. of use	71.82	28.18	100
	% within Gender.	43.92	39.53	42.59
	% of the total	30.59	12	42.59
Always	Count	130	57	187
	% within Freq. of use	69.52	30.48	100
	% within Gender.	43.92	44.19	44
	% of the total	30.59	13.41	44
	% of the total	69.65	30.36	100

Table 41 Frequency
of use Resources for
creating/editing
audio, video, and
graphics content *
Gender

				Tot.
		Women	Men	
Never	Count	57	17	74
	% within Freq.			
	of use	77.03	22.97	100
	% within			
	Gender.	19.26	13.18	17.41
	% of the total	13.41	4	17.41
Sometimes	Count	150	76	226
	% within Freq.			
	of use	66.37	33.63	100

Table 41 Frequency
of use Resources for
creating/editing
audio, video, and
graphics content *
Gender

Gender				
	% within			
	Gender.	50.68	58.91	53.18
	% of the total	35.29	17.88	53.18
Often	Count	71	32	103
	% within Freq.			
	of use	68.93	31.07	100
	% within			
	Gender.	23.99	24.81	24.24
	% of the total	16.71	7.53	24.24
Always	Count	18	4	22
	% within Freq.			
	of use	81.82	18.18	100
	% within			
	Gender.	6.08	3.1	5.18
	% of the total	4.24	0.94	5.18
	% of the total	69.65	30.35	100

Table 42 Frequency
of use Resources for
creating blogs, sites,
hypertexts * Gender

				Tot.
		Women	Men	
Never	Count	103	39	142
	% within Freq.			
	of use	72.54	27.46	100
	% within			
	Gender.	34.8	30.23	33.41
	% of the total	24.24	9.18	33.41
Sometimes	Count	110	56	166
	% within Freq.			
	of use	66.27	33.73	100
	% within			
	Gender.	37.16	43.41	39.06
	% of the total	25.88	13.18	39.06
Often	Count	58	26	84
	% within Freq.			
	of use	69.05	30.95	100

Table 42 Frequency of use Resources for creating blogs, sites, hypertexts * Gender				
	% within			
	Gender.	19.59	20.16	19.76
	% of the total	13.65	6.12	19.76
Always	Count	25	8	33
	% within Freq. of use	75.76	24.24	100
	% within			
	Gender.	8.45	6.2	7.76
	% of the total	5.88	1.88	7.76
	% of the total	69.65	30.36	100

Table 43 Frequency of use Digital environments for learning, sharing, communication and collaborating online \* Gender

				Tot.
		Women	Men	
Never	Count	30	11	41
	% within Freq.			
	of use	73.17	26.83	100
	% within			
	Gender.	10.14	8.53	9.65
	% of the total	7.06	2.59	9.65
Sometimes	Count	93	44	137
	% within Freq.			
	of use	67.88	32.12	100
	% within			
	Gender.	31.42	34.11	32.24
	% of the total	21.88	10.35	32.24
Often	Count	100	34	134
	% within Freq.			
	of use	74.63	25.37	100
	% within			
	Gender.	33.78	26.36	31.53
	% of the total	23.53	8	31.53
Always	Count	73	40	113

Table 43 Frequency of use Digital environments for learning, sharing, communication and collaborating online * Gender				
	% within Freq.			
	of use	64.6	35.4	100
	% within			
	Gender.	24.66	31.01	26.59
	% of the total	17.18	9.41	26.59
	% of the total	69.65	30.35	100

Table 44 Frequency of use Digital Educational Content and OER * Gender				
				Tot.
		Women	Men	
Never	Count	70	31	101
	% within Freq. of use	69.31	30.69	100
	% within Gender.	23.65	24.03	23.76
	% of the total	16.47	7.29	23.76
Sometimes	Count	101	46	147
	% within Freq. of use	68.71	31.29	100
	% within Gender.	34.12	35.66	34.59
	% of the total	23.76	10.82	34.59
Often	Count	89	34	123
	% within Freq. of use	72.36	27.64	100
	% within Gender.	30.07	26.36	28.94
	% of the total	20.94	8	28.94
Always	Count	36	18	54
	% within Freq.	66.67	33.33	100
	% within Gender.	12.16	13.95	12.71

		% of the total	69.64	30.35	100
L		% of the total	8.47	4.24	12.71
	Table 44 Frequency of use Digital Educational Content and OER * Gender				

Table 45 Frequency
of use Educational
multimedia programs
for discipline *
Gender

				Tot.
		Women	Men	
Never	Count	39	15	54
	% within Freq.			
	of use	72.22	27.78	100
	% within			
	Gender.	13.18	11.63	12.71
	% of the total	9.18	3.53	12.71
Sometimes	Count	115	58	173
	% within Freq.			
	of use	66.47	33.53	100
	% within			
	Gender.	38.85	44.96	40.71
	% of the total	27.06	13.65	40.71
Often	Count	101	41	142
	% within Freq.			
	of use	71.13	28.87	100
	% within			
	Gender.	34.12	31.78	33.41
	% of the total	23.76	9.65	33.41
Always	Count	41	15	56
	% within Freq.			
	of use	73.21	26.79	100
	% within			
	Gender.	13.85	11.63	13.18
	% of the total	9.65	3.53	13.18
	% of the total	69.65	30.36	100

Table 46 Frequency of use Coding - Computational thinking * Gender		
		Tot.

<b>Table 46 Frequency</b>
of use Coding -
Computational
thinking * Gender

thinking " Gender		Women	Men	
Never	Count	220	73	293
	% within Freq.			
	of use	75.09	24.91	100
	% within			
	Gender.	74.32	56.59	68.94
	% of the total	51.76	17.18	68.94
Sometimes	Count	52	27	79
	% within Freq.			
	of use	65.82	34.18	100
	% within			
	Gender.	17.57	20.93	18.59
	% of the total	12.24	6.35	18.59
Often	Count	15	18	33
	% within Freq.			
	of use	45.45	54.55	100
	% within			
	Gender.	5.07	13.95	7.76
	% of the total	3.53	4.24	7.76
Always	Count	9	11	20
	% within Freq.			
	of use	45	55	100
	% within			
	Gender.	3.04	8.53	4.71
	% of the total	2.12	2.59	4.71
	% of the total	69.65	30.36	100

Table 47 Frequency of
use Office and similar
package * Type of
contract

Contract				
				Tot.
		Permanent contract	Temporary contract	
Never	Count	7	8	15
	% within Freq. of use	46.67	53.33	100
	% within Contract type.	2.58	5.19	3.53

Table 47 Frequency of use Office and similar	
package * Type of contract	
	Г

contract				
	% of the total	1.65	1.88	3.53
Sometimes	Count	31	25	56
	% within Freq.			
	of use	55.36	44.64	100
	% within			
	Contract type.	11.44	16.23	13.18
	% of the total	7.29	5.88	13.18
Often	Count	110	56	166
	% within Freq.			
	of use	66.27	33.73	100
	% within			
	Contract type.	40.59	36.36	39.06
	% of the total	25.88	13.18	39.06
Always	Count	123	65	188
	% within Freq.			
	of use	65.43	34.57	100
	% within			
	Contract type.	45.39	42.21	44.24
	% of the total	28.94	15.29	44.24
	% of the total	63.76	36.23	100

Table 48 Frequency	C
use Software for	
downloading	
audio/video files *	
Type of contract	

				Tot.
		Permanent contract	Temporary contract	
Never	Count	28	28	56
	% within Freq. of use	50	50	100
	% within Contract type.	10.33	18.18	13.18
	% of the total	6.59	6.59	13.18
Sometimes	Count	120	66	186
	% within Freq. of use	64.52	35.48	100

Table 48 Frequency of use Software for downloading audio/video files * Type of contract				
	% within	44.30	42.96	42.76
	Contract type.	44.28	42.86	43.76
	% of the total	28.24	15.53	43.76
Often	Count	93	40	133
	% within Freq. of use	69.92	30.08	100
	% within Contract type.	34.32	25.97	31.29
	% of the total	21.88	9.41	31.29
Always	Count	30	20	50
	% within Freq.	60	40	100
	% within Contract type. % of the total	11.07	12.99	11.76
	% of the total	7.06 <b>63.77</b>	4.71 <b>36.24</b>	11.76 100

Table 49 Frequency of use Search tools *				
Type of contract				Tot.
		Permanent contract	Temporary contract	
Never	Count	3	0	3
	% within Freq. of use	100	0	100
	% within Contract type.	1.11	0	0.71
	% of the total	0.71	0	0.71
Sometimes	Count	28	26	54
	% within Freq. of use	51.85	48.15	100
	% within Contract type.	10.33	16.88	12.71
	% of the total	6.59	6.12	12.71
Often	Count	116	65	181

Table 49 Frequency of use Search tools * Type of contract				
	% within Freq.			
	of use	64.09	35.91	100
	% within			
	Contract type.	42.8	42.21	42.59
	% of the total	27.29	15.29	42.59
Always	Count	124	63	187
	% within Freq.			
	of use	66.31	33.69	100
	% within			
	Contract type.	45.76	40.91	44
	% of the total	29.18	14.82	44
	% of the total	63.77	36.23	100

Table 50 Frequency of
use Resources for
creating/editing
audio, video, and
graphics content *
Type of contract

Type or contract				Tot.
		Permanent contract	Temporary contract	
Never	Count	39	35	74
	% within Freq. of use	52.7	47.3	100
	% within Contract type.	14.39	22.73	17.41
	% of the total	9.18	8.24	17.41
Sometimes	Count	147	79	226
	% within Freq. of use	65.04	34.96	100
	% within Contract type.	54.24	51.3	53.18
	% of the total	34.59	18.59	53.18
Often	Count	73	30	103
	% within Freq. of use	70.87	29.13	100

Table 50 Frequency of
use Resources for
creating/editing
audio, video, and
graphics content *
Type of contract

Type of continuot				
	% within			
	Contract type.	26.94	19.48	24.24
	% of the total	17.18	7.06	24.24
Always	Count	12	10	22
	% within Freq.			
	of use	54.55	45.45	100
	% within			
	Contract type.	4.43	6.49	5.18
	% of the total	2.82	2.35	5.18
	% of the total	63.77	36.24	100

Table 51 Frequency of
use Resources for
creating blogs, sites,
hypertexts * Type of
contract

				Tot.
		Permanent contract	Temporary contract	
Never	Count	91	51	142
	% within Freq. of use	64.08	35.92	100
	% within Contract type.	33.58	33.12	33.41
	% of the total	21.41	12	33.41
Sometimes	Count	102	64	166
	% within Freq.	61.45	38.55	100
	% within Contract type.	37.64	41.56	39.06
	% of the total	24	15.06	39.06
Often	Count	61	23	84
	% within Freq. of use	72.62	27.38	100
	% within Contract type.	22.51	14.94	19.76

<b>Table 51 Frequency of</b>
use Resources for
creating blogs, sites,
hypertexts * Type of
contract

	% of the total	14.35	5.41	19.76
Always	Count	17	16	33
	% within Freq.			
	of use	51.52	48.48	100
	% within			
	Contract type.	6.27	10.39	7.76
	% of the total	4	3.76	7.76
	% of the total	63.76	36.23	100

Table 52 Frequency of use Digital environments for learning, sharing, communication and collaborating online \* Type of contract

				Tot.
		Permanent contract	Temporary contract	
Never	Count	21	20	41
	% within Freq. of use	51.22	48.78	100
	% within Contract type.	7.75	12.99	9.65
	% of the total	4.94	4.71	9.65
Sometimes	Count	87	50	137
	% within Freq. of use	63.5	36.5	100
	% within Contract type.	32.1	32.47	32.24
	% of the total	20.47	11.76	32.24
Often	Count	87	47	134
	% within Freq. of use	64.93	35.07	100
	% within Contract type.	32.1	30.52	31.53
	% of the total	20.47	11.06	31.53
Always	Count	76	37	113

Table 52 Frequency of use Digital environments for learning, sharing, communication and collaborating online * Type of contract				
	% within Freq. of use	67.26	32.74	100
	% within	07.20	32.71	100
	Contract type.	28.04	24.03	26.59
	% of the total	17.88	8.71	26.59
	% of the total	63.76	36.24	100

Table 53 Frequency o	f
use Digital	
<b>Educational Content</b>	
and OER * Type of	
contract	

				Tot.
		Permanent contract	Temporary contract	
Never	Count	60	41	101
	% within Freq. of use	59.41	40.59	100
	% within Contract type.	22.14	26.62	23.76
	% of the total	14.12	9.65	23.76
Sometimes	Count	101	46	147
	% within Freq. of use	68.71	31.29	100
	% within Contract type.	37.27	29.87	34.59
	% of the total	23.76	10.82	34.59
Often	Count	84	39	123
	% within Freq. of use	68.29	31.71	100
	% within Contract type.	31	25.32	28.94
	% of the total	19.76	9.18	28.94
Always	Count	26	28	54
	% within Freq. of use	48.15	51.85	100

Table 53 Frequency of use Digital Educational Content and OER * Type of contract				
	% within	0.50	40.40	42.74
	Contract type.	9.59	18.18	12.71
	% of the total	6.12	6.59	12.71
	% of the total	63.76	36.24	100

Table 54 Frequency of

use Educational multimedia programs for discipline * Type of contract				
				Tot.
		Permanent contract	Temporary contract	
Never	Count	25	29	54
	% within Freq. of use	46.3	53.7	100
	% within Contract type.	9.23	18.83	12.71
	% of the total	5.88	6.82	12.71
Sometimes	Count	106	67	173
	% within Freq. of use	61.27	38.73	100
	% within Contract type.	39.11	43.51	40.71
	% of the total	24.94	15.76	40.71
Often	Count	103	39	142
	% within Freq. of use	72.54	27.46	100
	% within Contract type.	38.01	25.32	33.41
	% of the total	24.24	9.18	33.41
Always	Count	37	19	56
	% within Freq. of use	66.07	33.93	100
	% within Contract type.	13.65	12.34	13.18

% of the total

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4.47

13.18

8.71

Table 54 Frequency of use Educational multimedia programs for discipline \* Type of contract

% of the total 63.77 36.23 100

Table 55 Frequency of use Coding - Computational thinking \* Type of contract

				Tot.
		Permanent contract	Temporary contract	
Never	Count	174	119	293
	% within Freq. of use	59.39	40.61	100
	% within Contract type.	64.21	77.27	68.94
	% of the total	40.94	28	68.94
Sometimes	Count	56	23	79
	% within Freq. of use	70.89	29.11	100
	% within Contract type.	20.66	14.94	18.59
	% of the total	13.18	5.41	18.59
Often	Count	24	9	33
	% within Freq. of use % within	72.73	27.27	100
	Contract type.	8.86	5.84	7.76
	% of the total	5.65	2.12	7.76
Always	Count	17	3	20
	% within Freq. of use % within	85	15	100
	Contract type.	6.27	1.95	4.71
	% of the total	63.77	0.71 <b>36.24</b>	4.71 100

Active methodolo	gies Age							Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Not aware of	Count	2	9	38	47	22	3	121
	% within Familiarity with the main							
	teaching practices	1.65	7.44	31.4	38.84	18.18	2.48	100
	% within Age.	40	28.12	29.92	30.92	21.57	50	28.54
	% of the total	0.47	2.12	8.96	11.08	5.19	0.71	28.54
Aware of	Count	2	17	70	79	56	2	226
	% within Familiarity with the main							
	teaching practices	0.88	7.52	30.97	34.96	24.78	0.88	100
	% within Age.	40	53.12	55.12	51.97	54.9	33.33	53.3
	% of the total	0.47	4.01	16.51	18.63	13.21	0.47	53.3
Use	Count	1	6	19	26	24	1	77
	% within Familiarity with the main							
	teaching practices	1.3	7.79	24.68	33.77	31.17	1.3	100
	% within Age.	20	18.75	14.96	17.11	23.53	16.67	18.16
	% of the total	0.24	1.42	4.48	6.13	5.66	0.24	18.16
	% of the total	1.18	7.55	29.95	35.84	24.06	1.42	100

Table 57 Familiari Learning* Age	ty with Collaborative							
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Not aware of	Count	0	2	4	8	7	0	21
	% within Familiarity with the main							
	teaching practices	0	9.52	19.05	38.1	33.33	0	100
	% within Age.	0	6.25	3.15	5.26	6.86	0	4.95
	% of the total	0	0.47	0.94	1.89	1.65	0	4.95
Aware of	Count	2	10	39	63	38	5	157

Table 57 Familiari Learning* Age	ty with Collaborative					_		
	% within Familiarity							
	with the main teaching practices	1.27	6.37	24.84	40.13	24.2	3.18	100
	% within Age.	40	31.25	30.71	41.45	37.25	83.33	37.03
	% of the total	0.47	2.36	9.2	14.86	8.96	1.18	37.03
Use	Count	3	20	84	81	57	1	246
	% within Familiarity with the main							
	teaching practices	1.22	8.13	34.15	32.93	23.17	0.41	100
	% within Age.	60	62.5	66.14	53.29	55.88	16.67	58.02
	% of the total	0.71	4.72	19.81	19.1	13.44	0.24	58.02
	% of the total	1.18	7.55	29.95	35.85	24.05	1.42	100

Table 58 Familiari learning * Age	ty with Project based							
J								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Not aware of	Count	0	0	0	2	6	0	8
	% within Familiarity with the main							
	teaching practices	0	0	0	25	75	0	100
	% within Age.	0	0	0	1.34	5.88	0	1.9
	% of the total	0	0	0	0.48	1.43	0	1.9
Aware of	Count	2	11	48	55	39	3	158
	% within Familiarity with the main							
	teaching practices	1.27	6.96	30.38	34.81	24.68	1.9	100
	% within Age.	40	34.38	38.1	36.91	38.24	50	37.62
	% of the total	0.48	2.62	11.43	13.1	9.29	0.71	37.62
Use	Count	3	21	78	92	57	3	254
	% within Familiarity with the main							
	teaching practices	1.18	8.27	30.71	36.22	22.44	1.18	100
	% within Age.	60	65.62	61.9	61.74	55.88	50	60.48
	% of the total	0.71	5	18.57	21.9	13.57	0.71	60.48
	% of the total	1.19	7.62	30	35.48	24.29	1.42	100

								Tot.
		Up to 25	25 - 30	31 - 40	41 - 50	51 60	60+	
Not aware of	Count	1	5	22	24	15	1	68
	% within Familiarity with the main							
	teaching practices	1.47	7.35	32.35	35.29	22.06	1.47	100
	% within Age.	20	15.62	17.32	15.89	14.71	16.67	16.08
	% of the total	0.24	1.18	5.2	5.67	3.55	0.24	16.08
Aware of	Count	3	17	61	82	56	4	223
	% within Familiarity with the main teaching practices	1.35	7.62	27.35	36.77	25.11	1.79	100
	% within Age.		-					
	% of the total	60 0.71	53.12 4.02	48.03 14.42	54.3 19.39	54.9 13.24	66.67 0.95	52.72 52.72
Use	Count	1	10	44	45	31	1	132
	% within Familiarity with the main	0.76	7.50	22.22	24.00	22.40	0.76	100
	teaching practices	0.76	7.58	33.33	34.09	23.48	0.76	100
	% within Age.	20	31.25	34.65	29.8	30.39	16.67	31.21
	% of the total	0.24	2.36	10.4	10.64	7.33	0.24	31.21
	% of the total	1.19	7.56	30.02	35.7	24.12	1.43	100

		Up to 25 - 30 31 - 40 41 - 50 51 60 60+						
Not aware of	Count	1	8	44	56	32	2	143
	% within Familiarity with the main teaching	0.7	5.50	20.77	20.46	22.20	4.4	40
	practices % within Age.	0.7	5.59	30.77	39.16	22.38	1.4	100
		20	25	35.2	37.09	32	33.33	34.13
	% of the total	0.24	1.91	10.5	13.37	7.64	0.48	34.1
Aware of	Count	4	18	56	64	50	4	19

	arity with Case based							
learning * Age	% within Familiarity with the main teaching practices	2.04	9.18	28.57	32.65	25.51	2.04	100
	% within Age.	80	56.25	44.8	42.38	50	66.67	46.78
	% of the total	0.95	4.3	13.37	15.27	11.93	0.95	46.78
Use	Count	0	6	25	31	18	0	80
	% within Familiarity with the main teaching practices	0	7.5	31.25	38.75	22.5	0	100
	% within Age.	0	18.75	20	20.53	18	0	19.09
	% of the total	0	1.43	5.97	7.4	4.3	0	19.09
	% of the total	1.19	7.64	29.84	36.04	23.87	1.43	100

## Frequency of use of digital resources in the classroom for teaching activities (q0009) o school type (q0001)

Table 61 Frequency of use Office and similar packages * School type						
						Tot.
		Early Years	Primary School	Secondary School	VET	
Never	Count	8	8	7	2	25
	% within Freq.					
	of use	32	32	28	8	100
	% within School					
	type.	6.1	4.7	3.1	1.8	5.9
	% of the total	1.9	1.9	1.6	0.5	5.9
Sometimes	Count	15	18	33	11	77
	% within Freq.					
	of use	19.5	23.4	42.9	14.3	100

Table 61 Frequency of use Office and similar packages * School type						
	% within School					
	type.	11.4	10.7	14.5	9.8	18.1
	% of the total	3.5	4.2	7.8	2.6	18.1
Often	Count	61	78	90	40	269
	% within Freq.					
	of use	22.7	29.0	33.5	14.9	100
	% within School					
	type.	46.2	46.2	39.6	35.7	63.3
	% of the total	14.4	18.4	21.2	9.4	63.3
Always	Count	48	65	97	59	269
	% within Freq.					
	of use	17.8	24.2	36.1	21.9	100
	% within School					
	type.	36.4	38.5	42.7	52.7	63.3
	% of the total	11.3	15.3	22.8	13.9	63.3
	% of the total	31.1	39.8	53.4	26.4	150.6

Table 62 Frequency of
use Software for
downloading
audio/video files *
School type

Concortype						Tot.
		Early Years	Primary School	Secondary School	VET	
Never	Count	17	20	33	10	80
	% within Freq. of use	21.3	25.0	41.3	12.5	100
	% within School type.	12.9	11.8	14.5	8.9	5.9
	% of the total	4.0	4.7	7.8	2.4	18.8
Sometimes	Count	64	76	101	49	290
	% within Freq. of use	22.1	26.2	34.8	16.9	100
	% within School type.	48.5	45.0	44.5	43.8	18.1
	% of the total	15.1	17.9	23.8	11.5	68.2
Often	Count	39	59	65	38	201
	% within Freq. of use	19.4	29.4	32.3	18.9	100

Table 62 Frequency of
use Software for
downloading
audio/video files *
Only and former

School type						
	% within School					
	type.	29.5	34.9	28.6	33.9	63.3
	% of the total	9.2	13.9	15.3	8.9	47.3
Always	Count	12	14	28	15	69
	% within Freq.					
	of use	17.4	20.3	40.6	21.7	100
	% within School					
	type.	9.1	8.3	12.3	13.4	63.3
	% of the total	2.8	3.3	6.6	3.5	16.2
	% of the total	31.1	39.8	53.4	26.4	150.6

Table 63 Frequency of
use Search tools *
School type

						Tot.
		Early Years	Primary School	Secondary School	VET	
Never	Count	1	1	1	1	4
	% within Freq. of use	25.0	25.0	25.0	25.0	100
	% within School type.	0.8	0.6	0.4	0.9	5.9
	% of the total	0.2	0.2	0.2	0.2	0.9
Sometimes	Count	11	12	37	17	77
	% within Freq. of use	14.3	15.6	48.1	22.1	100
	% within School type.	8.3	7.1	16.3	15.2	18.1
	% of the total	2.6	2.8	8.7	4.0	18.1
Often	Count	55	75	102	42	274
	% within Freq. of use	20.1	27.4	37.2	15.3	100
	% within School type.	41.7	44.4	44.9	37.5	63.3
	% of the total	12.9	17.6	24.0	9.9	64.5
Always	Count	65	81	87	52	285
	% within Freq. of use	22.8	28.4	30.5	18.2	100

Table 63 Frequency of use Search tools * School type						
	% within School					
	type.	49.2	47.9	38.3	46.4	63.3
	% of the total	15.3	19.1	20.5	12.2	67.1
	% of the total	31.1	39.8	53.4	26.4	150.6