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DiCTE Questionnaire Report

OUTPUT 2

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Output 2 – DiCTE Questionnaire Report

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The Erasmus+ project 'Developing ICT in Teacher Education' (DiCTE) is a collaborative project with partners from Universities of Limerick, Malta, Oslo and Valencia and led by Oslo Metropolitan University. One of the deliveries in the project is a questionnaire intended to explore and examine student teachers' digital competence on entry onto their teacher education programme and how it subsequently develops over the duration of their pre-service education. Furthermore, the broader project aimed to identify the various dimensions of student teachers' digital competence, comparing levels of digital competence across the participating institutions and to identify and share approaches used to develop student teachers' digital competence.

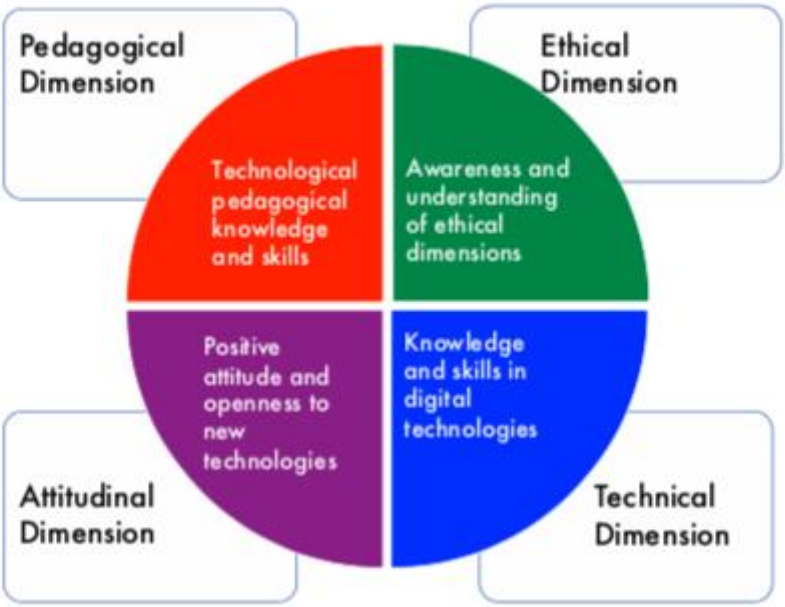
The overarching aim of this report is to describe the process of developing the questionnaire, and the rationale behind both the questions, structure and content as well as discuss the decisions taken.

1 Establishing a knowledge base

In order to establish a robust knowledge base, the first delivery of the project involved a review of the existing literature to identify the key issues in the field. The overarching aim of the literature review was to form an overview of the different models that define digital competence for student teachers. Equally important was to gain an initial insight into what is considered 'best practice' in the research field. The various conceptualisations of digital competence that emerged from this review were particularly important in the design and development of the survey instrument. This knowledge, as well as the knowledge gained from the results of the survey, were used in the design of follow up interview questions, which forms the third delivery from the project. This literature review is available at: Literature review about the concept of Digital competence.

The review of the literature highlighted that digital competence is a complex area. Nevertheless, key aspects of digital competence did emerge from this review. These key aspects are included in the PEAT model and refer to 'Pedagogical dimensions', 'Ethical dimensions', 'Attitudinal dimensions' and 'Technological dimensions' of student teachers' digital competence. The pedagogical dimensions relate to one's knowledge and understanding of unique pedagogical practices afforded by technology in specific subject areas to broader 'professional' educational practices that transcend subject or classroom use. Ethical dimensions relate to the broad range of cyber ethics issues that teachers need to be aware of including issues of privacy, copyright and source awareness, information security, child welfare etc. The attitudinal dimension relates to one's openness to explore new and emerging technologies and their potential in education. Finally, the technical dimension relates to one's knowledge and understanding of essential aspects related to digital technology. These four dimensions form the PEAT (Pedagogical, Ethical, Attitudinal and Technical) model, which provided the foundations for the structure of the questionnaire and an overall guiding framework for the development of the project.

Pedagogical, Ethical, Attitudinal and Technical dimensions (PEAT model)



Dicte (2019), *Pedagogical, Ethical, Attitudinal and Technical dimensions of Digital Competence in Teacher Education*. Developing ICT in Teacher Education Erasmus+ project https://dicte.oslomet.no/dicte/

2 Developing the questionnaire

The final questionnaire is based on two previous test questionnaires conducted in the academic years 2017/2018 and 2018/2019. The questionnaire was developed cognisant of keeping it succinct, taking no more than 10 to 15 minutes to complete. This is was believed would help to increase the rate of completion. Throughout these successive iterations, the questionnaire was continually refined, based on insights gained from the previous versions' development, implementations and data produced. In the first version (2017), we included questions around frequency of use, for example, how often they shared files on social media and how often they were using different communication software on social media. After analysis, the team determined that these questions did not provide new or indeed relevant information, hence they were subsequently removed from future versions, and this helped to reduce the time taken to complete the survey. In the 2018 version, questions regarding self-reported skills and some technical skills were also removed. The rationale for removing the self-reported questions were two-fold. Firstly, there is a question regarding the value of any data that is self-reported and secondly the inclusion of these questions increased the time taken by student teachers to complete the questionnaire. However, on reflection, and when reviewing the questionnaire with the PEAT model at the forefront of the team's mind, a decision was made to reinstate some of the questions around the technical skill and this is now included in the final version (2019). The final version is largely structured according to the PEAT model and the technical dimensions is afforded greater attention, putting it on a par with the other three dimensions. The rationale behind the questions is taken up in greater detail in section 5 of this report. The final version of the questionnaire has different types of questions, self-reported competence and actions, test-questions, statements, frequency questions regarding cyber ethics and open-ended questions.

3 Measuring digital competence

The literature review also explored studies that had previously examined the complexities of 'assessing' or 'measuring' digital competence. In the three rounds of conducting the questionnaire with student teachers in the four countries, several challenges related to measurement and assessing digital competence surfaced. One of the key issues that emerged was related to the use of self-reported questionnaires which were seen as problematic due to the tendency of participants to rate themselves positively in such instances. This is a well-known phenomenon and can be seen in different research such as (Albion, Jamieson-Proctor, & Finger, 2010; Engen et al., 2014; Harris, Grandgenett, & Hofer, 2010; Tondeur et al., 2017). For that reason, alternative approaches were suggested in the literature review including the use of authentic tasks that can be set to capture functional competency and the mapping of completed work to pre-existing competency frameworks and assessment rubrics (Fraillon et al., 2015; Tondeur et al., 2017). Within the scope of the DICTE project, we have however not been able to add an authentic task assignment to the questionnaire.

However, in considering these approaches other issues need to be taken into consideration as questions that seek specific knowledge can assess only a limited spectrum of competencies (Siddiq, Hatlevik, Olsen, Throndsen, & Scherer, 2016).

4 Challenges at different levels

In developing the questionnaire, we experienced challenges at different levels. Implementing a research instrument of this nature across samples from four countries brings forth several logistical, technical and methodological challenges. The first and most immediate challenge is related to the scope of the study. Through the literature review as well as the development of the PEAT-model, the scope was refined and focused.

4.1 Challenges with practical aspects of the questionnaire

One challenge included identifying a reliable and easily accessible online platform to deliver the questionnaire, agreeing on the most suitable time to administer the questionnaire in each country (balancing local demands with the need to maintain consistency for all project partners). The platform Questback was chosen as this allowed both for cross-country collaboration as well as having a function for developing parallel translations. A master questionnaire was developed in English, and translations took this version as point of departure. Only one member had administrator user access to the master questionnaire. Furthermore, the folder structure developed was rigorously designed for keeping track of the different working versions of the questionnaire.

4.2 Methodological challenges

In developing the questionnaire, several challenges emerged. In this section we describe and discuss the most important challenges. One challenge that emerged early on in developing a questionnaire about digital competence, was that of the rapid development of technology, and consequently, the equally rapid redundancy and obsolesce of terms, tools and software. We therefore attempted to use principles, functions and make use of generic terms rather than software.

4.2.1 Duration and scope

A significant methodological challenge relates to the number of questions that could be asked. Mindful of the need to keep the questionnaire relatively short to increase completion rates and reduce respondent fatigue, the resultant questionnaire is a compromise between attempting to agree on a sample range of questions that represent the four dimensions of the PEAT model and the need to ensure that the questionnaire is not excessively long. In striking this balance, difficult decisions were made resulting in the omission of some questions that others may consider important. This is an inevitable challenge in designing a survey instrument that aims to capture a broad and complex area and to a certain extent, highlights the limitations of this research tool.

4.2.2 Scales

The questionnaire comprises of different types of questions, self-reported competence and actions, test-questions, statements, frequency questions regarding cyber ethics and open-ended questions. Different scales were used to rate these questions.

For the self-reported competence questions, a 5-point Likert scale was used: Very good, Good, Neither good nor poor, Poor and Very poor. For the test questions students were given 5 options, including 'I don't know' and asked to identify the most correct answer. The option of 'I don't know' was included after the study was piloted and we experienced that students guessed answers to questions that they did not understand, such as for example questions regarding creative commons licenses. For statement type questions a 5-point Likert scale was used: Strongly agree, Agree, Neither agree nor disagree, Disagree and Strongly disagree. Frequency questions regarding cyber ethics the following options: Always, occasionally, rarely, very rarely and never.

4.2.3 Self-reporting questions

In addition to these technical and logistical challenges, there were also more substantial methodological issues that needed to be discussed and agreed on. The most significant of these was the issue of self-reporting. There are long established criticisms of self-reporting questionnaires in the research literature relating to the tendency of the respondent to present themselves in a good light or appear to comply with expected norms of behaviour. In the case of this study, there is therefore a strong possibility that the respondents would rate their use and interest in digital technologies higher than their actual use to present themselves positively and thus aligning with the techno-positive discourses they are familiar with. Questions seeking specific understanding of different terms and technologies were inserted in an attempt to address this challenge. For example, if a student self-reported very high levels of technology use but could not answer factual questions about technology, this may indicate that their self-reported use was if not inflated, subjective and therefore biased.

4.2.4 Open-ended questions

Open-ended questions were included to allow for the students' opinion and reflections. The questions addressed student teachers' attitudes towards teachers' digital competence and the role of ICT in learning:

- "As a teacher I should be digitally competent because..."
- "ICT enhances and/or distracts pupils' from learning?"

Open-ended questions are both a challenge and an opportunity. They present a challenge because the questions have to be open enough to be applicable for all countries. In addition, analysing open-ended questions can pose a challenge, as these questions can be regarded as leaning towards the qualitative methodologically. At the same time, open-ended questions are an opportunity for quantifying a large number of responses. Furthermore, they allow students to reflect with more freedom and less rigidity than in multiple choice or Likert scale responses to the questions proposed. They work quite well if, as an appendix to the questionnaire, each country asks two or three questions adapted to its own reality.

4.2.5 Challenges related to the translation and terminology

In designing a questionnaire that was to have a level of cultural validity across the four countries, and thereby for other European countries, methodological challenges presented themselves related to specific terminological or linguistic challenges.

A challenge we identified in translating the questionnaire, was due to the absence of common international terms related to ICT and digital competence and the lack of correspondence of meanings. One of the main challenges of the questionnaire is the translation of scientific terminology, which in both Spanish and Norwegian, present significant variations, where the concepts do not work in their literal translation. This contributes to uncertainty about the quality of the translation. A way of working around this was to “back-translate” the translations from Spanish and Norwegian to English.

Language variations can make translating the exact meaning of words and phrases difficult. We identified several terms that do not have a shared understanding cross culturally. For example, what one respondent understands as ‘digital technology’ may be quite different from another respondent. In that context, the ‘object of thought’ is not clearly defined. A second example of this is the difficulty in defining the term "cyber-ethics", which we recognised had different focus, emphasise and understanding in the involved countries. A third example is the lack of common elements with regards to the reference works on the Internet (for example, encyclopaedias such as Webster and Britannica).

Across the four countries, there are cultural differences with regards to the use of generic versus program specific terms for applications, such as “spreadsheet”/ “Excel” and “collaborative writing tools”/ “Google Docs”. In order to solve this issue, we exemplified the generic with the programme specific terms. This allowed for differentiating for the different programmes that are used in different cultural contexts.

4.2.6 Challenges related to cultural differences and use of software

The development of the questions and test-items to the questionnaire is a collaboration between five universities in four countries. It is challenging to develop questions and test-items that are relevant across countries because of local contexts, cultures and languages.

There are variations in both how digital technologies are integrated into different curricula across the countries and in what specific technologies in school and leisure. In designing the questions, we attempted to meet this challenge by using generic terms and country specific examples.

Questions seeking details on the uses of specific software needed to be mindful of dominance of different software in different jurisdictions. To address this, different examples were emphasised in different countries. On the one hand using generic terms makes the questionnaire more universal in terms of use across different nations, but perhaps more abstract. On the other hand, specificity in terms of technology use (Kahoot or Moodle) means that the questionnaire loses its general appeal. For example, in Spain and Malta, the educational platform par excellence is *Moodle* and the Norwegian

platform is *It's Learning*. Similarly, the instant messaging application *WhatsApp i*s essential in Spain, Ireland and Malta at any age, but rarely used in Norway.

The countries also have different foci on the use of digital technologies in their teacher education programme, which influences what questions are relevant for all partners. Finally, another specific challenge is that of changing terms and confusion related to the terminology used. The rapid emergence of some technologies and obsolescence of others exacerbates this challenge in constructing a questionnaire in this field.

4.2.7 Validation

The validation of a questionnaire is always an indicator of the quality and validity of the questionnaire itself. In order to achieve validation of this questionnaire, it has been submitted to the review of a selected group of experts[1] who will validate, amend or reject certain formulations of both content and form, and whose feedback serves as an external verification. A validated questionnaire establishes a certain scientific accuracy.

In addition, the questionnaire was piloted to a selected group of respondents similar to the target group, who gave their opinion on the content as well as on the formulation, clarity, duration and other aspects.

Model construction and instrument development:

We conducted a literature review about the concept of digital competence in teacher education as a point of departure for the questionnaire. Furthermore, we developed the PEAT-model as the framework to describe ICT in teacher education (Dicte, 2019).

Factor Structure and Measurement Invariance:

Data was collected in 2017, 2018 and 2019. The data from 2017 was used in order to analyse the factor structure of the items and examining measurement invariance across institutions/countries. The first aim was to confirm the factor structure of the self-reported statements. There are many topics and many statements in the survey. We therefore divided the analysis so that we examined one topic at a time. A confirmatory factor analysis gave us support for the fact that most items worked relative to describing the factors. The second aim was to examine invariance; measurement invariance was therefore carried out across institutions and countries. We found that there was no invariance between the two Norwegian institutions, but that there was measurement invariance between institution zones in the countries Ireland, Spain and Norway (Malta was excluded from the analysis due to the low numbers of respondents). The measurement invariance of the items may be due to language, culture, emphasis on ICT in syllabus, age and gender. We concluded that it was difficult to compare the measures across countries. The third aim was to analyse the factor structure of the test items of digital judgement, and the results indicate that there is a low correlation between the questions for mapping skills in digital judgment. Therefore, it was not necessary to investigate measurement invariance of test items.

Overall, reviewing and discussing individual questions (self-report statements and test items) indicated that clarification was needed. As a result, we changed some statements and the response options from 2017 to 2018. These were further revised from the 2018 version of the survey to the 2019 version of the survey.

[1] The proposal was sent to be validated. However due to COVID-19 interrupted the process.

To conclude, the self-reported statements seem to be useful when it comes to map the selected topics from the PEAT-model, and highlights differences and similarities between countries, both cultural and structural issues within teacher education.

5 The PEAT-model and the distribution of questions

The questionnaire is based on the PEAT model and following are the questions under each of the PEAT dimensions.

5.1 Questions within the Pedagogical dimension

There are 13 (of 75) questions related to the pedagogical dimension of the PEAT model. Please see appendix for answering alternatives and values.

- Learning management systems (e.g. Canvas, It's Learning, Moodle)
- Tools for creating content (e.g. Book creator)
- Tools for interactive whiteboards (e.g. SmartBoard, Promethean)
- Tools for making graphical representations (e.g. Geogebra)
- Educational games (e.g. Minecraft Edu ++)
- Student response systems (e.g. Kahoot, Socrative…)
- Before I post videos on social media, I consider whether this might have an impact on my teaching career

- ICT reduces pupils' focus on schoolwork
- ICT helps pupils to find information effectively
- ICT facilitates collaboration among pupils
- ICT encourages pupils' copying from the Internet
- ICT contributes to pupils' motivation for learning
- ICT enhances pupils' academic achievement

5.2 Questions within the Ethical dimension

There are 27 (of 75) questions related to the ethical dimension of the PEAT model. Please see appendix for answering alternatives and values.

- Who is the owner of the images I post on my Facebook profile?
- Can I delete my Facebook profile and all images I have posted?
- Can you republish an image downloaded from an image-sharing service on the Internet (such as Instagram, Pinterest)?

I know how to

- apply copyright rules online
- apply privacy rules online
- detect cyber bullying
- take action if someone posts an unwanted image of me on the internet
- evaluate the credibility of digital information

- Who owns the copyright on an assignment produced by a pupil at school?
- Creative Commons is ...
- Can someone track down which websites you have visited?
- Can you trust information from online encyclopaedias, (such as Webster, Encyclopaedia Britannica)?
- Can you remove an image you have posted online?
- Who is the owner of the images I post on my Facebook profile?
- Can I delete my Facebook profile and all images I have posted?
- Can you republish an image downloaded from an image-sharing service on the Internet (such as Instagram, Pinterest)?

I know how to

- apply copyright rules online
- apply privacy rules online
- detect cyber bullying
- take action if someone posts an unwanted image of me on the internet
- evaluate the credibility of digital information

Do you agree with the following statements:

- A teacher should use ICT in his/her teaching practice
- A teacher should use ICT to vary his/her teaching methods

Respond to the following statements:

- When it comes to online information:
- I judge if the information is relevant for my purpose
- I check if the publisher of the information is trustworthy
- I consider the credibility of the author(s)
- I am determined to find objective information

5.3 Questions within the Attitudinal dimension

There are 23 (of 75) questions related to the attitudinal dimension of the PEAT model.

Please see appendix for answering alternatives and values.

Respond to the following statements:

The use of computers, tablets or mobile during studies,

- support my understanding of a topic
- is helpful for me when learning subjects
- makes me want to learn
- makes it easier for me to learn
- steal time I could use to understand a topic
- disturbs me when learning subjects
- makes me prolong schoolwork

- leads me off studies activities
- gives me sore eyes
- leads to headache
- leads to pain in arms and shoulders

Respond to the following statements:

The use of computers, tablets or mobile during studies,

- support my understanding of a topic
- is helpful for me when learning subjects
- makes me want to learn
- makes it easier for me to learn
- steal time I could use to understand a topic
- disturbs me when learning subjects
- makes me prolong schoolwork
- leads me off studies activities
- gives me sore eyes
- leads to headache
- leads to pain in arms and shoulders

Do you agree with the following statement?

- A teacher should have a positive attitude towards ICT

5.4 Questions within the Technical dimension

There are 12 (of 75) questions related to the technical dimension of the PEAT model.

Please see appendix for answering alternatives and values.

Rate your competence when it comes to using:

- word processor
- spreadsheet
- presentation tools
- image processing
- video editing

Rate your competence when it comes to using

- Digital collaborative writing tools
- Systems for cloud storing of files
- Social media
- Email
- Online discussion groups

What does "this email is encrypted" mean?

6 Conclusions (and recommendations for future actions)

Several issues that have emerged to date in this study that merit comment. Like many terms that are commonly used in popular discourse, it is only when one begins to unpack its meaning that the complexity of the term is recognised. What has become apparent in this study is that the term digital competence is a complex term with different perceptions across time and borders. Defining a robust working definition of the term is made more difficult by the rapidly evolving field of digital technology. As a result, new aspects of what constitutes digital competence will constantly emerge, and similarly, other aspects will become redundant. Hence, what is conceptualised as digital competence in this project could be seen as a snapshot in time, representing the conceptualisation of the term at this point of its evolution in the literature. Acknowledging the increasing body of research in this area and the inevitable development of the term in the future, the broad perspective taken by the PEAT model is an attempt to address this dilemma by ensuring that the framework remains sufficiently broad to encompass existing dimensions of digital competence and is sufficiently flexible to incorporate new and emerging areas.

A second issue arising to date relates to the validation of the survey instrument produced as part of the project. Having been shaped by key issues emerging from the literature review, the questionnaire has a level of face validity. The questions asked can be seen to address contextual, specific and relevant aspects of digital competence as is recognised across the field of teacher education. In addition, the mapping of digital competence under the four key areas highlights the construction of digital competence in this project aligns and extends established constructs of the concept, hence a level of construct validity can be proffered. However, the extent to which the questionnaire instrument does indeed capture one's digital competence, i.e, one's actual professional usage of digital technologies in teaching and learning (criterion-related validity), has yet to be established as it is beyond the scope of this project to explore the extent to which one's score in the survey instrument reflects one's use in teaching and learning. We contend however that this is a critical issue. One may appear from the completion of a questionnaire that they have a good understanding of cyber ethics for example, but the extent to which this reflects their ethical practice in their day-to-day digital practices is another matter

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Appendix

DiCTE questionnaire

In this study we want to map your everyday experiences and use of ICT. Your response to these questions is very important for us when planning for the teaching of digital competence. All information gathered through this survey will be treated in accordance with ethical guidelines and will be treated anonymously.					
We ask you to reply as honestly as possible.					
Thank you for participating by finding the time to answer these questions.					
2)* Age					
Under 20					
21 - 25					
26 -30					
Over 30					
3)* Gender					
Female					
Male					
4) "As a teacher I should be digitally competent because,.." Please complete below:					
5) Rate your competence when it comes to using:					
	Very Good	Good	Neither good nor poor	Poor	Very poor
word processor (e.g. Word, Pages, Google Docs)					

spreadsheet (e.g. Excel, Numbers, Google Spreadsheet)					
presentation tools (e.g. PowerPoint, Keynote, Google Presentation)					
image processing					
video editing					
6) Rate your competence when it comes to using					
	Very Good	Good	Neither good nor poor	Poor	Very poor
Digital collaborative writing tools					
Systems for cloud storing of files					
Social media					
Email					
Online discussion groups					
7) Rate you competence when it comes to using					
	Very Good	Good	Neither good nor poor	Poor	Very poor
Learning management systems (e.g. Canvas, It's Learning, Moodle)					
Tools for creating content					
Tools for interactive whiteboards (e.g. SmartBoard, Promethean)					
Tools for creating graphical representations					
Educational games					
Student response systems (e.g. Kahoot, Socrative…)					
Please identify the most correct answer					

8)* A pupil has created a text with images copied from Wikipedia. Can the pupil publish the text with the images on the Internet (e.g. on Facebook or blog) ?					
No, the pupil needs consent from the copyright owner of the images					
Yes, all images on the Internet can be republished					
Yes, the images on Wikipedia are published under a free licence					
No, it's not legal to publish images from Wikipedia					
I don't know					
Please identify the most correct answer					
9)* What does "this email is encrypted" mean?					
It means that the email is infected by a virus					
It means that the information in the email is protected					
It means that it is not possible to know who sent the email					
It means that the email is sent through a secret server					
I don't know					
Please identify the most correct answer					
10)* Who owns the copyright on an assignment produced by a pupil at school?					
The teacher					
The pupil					
The guardian/parent					
The school/Institution					
I don't know					

Please identify the most correct answer					
11)* Creative Commons is ...					
a non-profit arrangement that offers an alternative to full copyright					
not commonly used as online content is always the property of the one who creates it					
a system for letting people sell online content					
online content that is defined by copyright and can not be used in school/university					
I don't know					
Please identify the most correct answer					
12)* Can someone track down which websites you have visited?					
Yes, it is possible to track but only if I accept it					
It is possible to track, but only if someone borrows my computer or mobile					
There are many (companies and organizations) that track what I do on the Internet					
Yes, but only when I use wireless network					
I don't know					
13)* Can you trust information from online encyclopaedias (e.g. Webster, Encyclopaedia Britannica) ?					
Yes, I can always trust articles from on online encyclopaedias					
Yes, I can trust articles from popular online encyclopaedias with many likes					
Yes, but I am always critical of information - no matter what encyclopaedias I use					
Yes, I can trust articles from online encyclopaedias with a lot of citations					
I don't know					

Please identify the most correct answer					
14)* Can you remove an image you have posted online?					
Yes, it is always possible to remove an image that I have posted online					
Yes, it is possible if it is my own image					
Yes, I can ask the webpage administrator to remove the image					
Yes, but it can be difficult to remove an image because others may have reposted a copy					
I don't know					
15)* Who is the owner of the images you post on your Facebook profile?					
It is Facebook that owns my images					
I own the images, but Facebook is fully entitled to use these images					
Nobody owns the images I post on my Facebook profile					
Anyone on Facebook can use my images					
I don't know					
16)* Can you delete your Facebook profile and all images you have posted?					
Yes, but it costs money					
Yes, I can delete my profile, but not all my images					
Yes, but I need permission from my friends to delete my profile and images					
Yes, I can delete all images, but not my profile					
I don't know					

17)* Can you republish an image downloaded from an image-sharing service on the Internet (such as Instagram, Pinterest)?					
No, images on image-sharing services can not be republished on the Internet					
Yes, all the images on image-sharing services can be republished on the Internet					
Yes, but only if the image is licensed for free use					
Yes, an image downloaded from the Internet can be republished if the owner is not known					
I don't know					
18)* Rate your competence in relation to					
	Very good	Good	Neither good nor poor	Poor	Very poor
applying copyright rules online					
applying privacy rules online					
detecting cyber bullying					
take action if someone posts an unwanted image of me on the internet					
evaluate the credibility of digital information					
19) Respond to the following statements: The use of computers, tablets or mobile during studies,					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
support my understanding of a topic					
is helpful for me when learning subjects					
makes me want to learn					
makes it easier for me to learn					
steal time I could use to understand a topic					

disturbs me when learning subjects					
makes me prolong schoolwork					
leads me off studies activities					
gives me sore eyes					
leads to headache					
leads to pain in arms and shoulders					
20) Respond to the following statements: When it comes to online information:					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I judge if the information is relevant for my purpose					
I check if the publisher of the information is trustworthy					
I consider the credibility of the author(s)					
I am determined to find objective information					
21) "ICT enhances and/or distracts pupils' from learning?" Please comment below:					
22)* Respond to the following statements					
	Always	Occasionally	Rarely	Very rarely	Never
When I share images of friends on social media I ask for consent					
Before I post images on social media, I consider whether it might have an impact on my teaching career					
When I share videos of friends on social media I ask for consent					

Before I post videos on social media, I consider whether it might have an impact on my teaching career					
23)* Do you agree with the following statements about the use of ICT in teaching at school?:					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
reduces pupils' focus on school work					
helps pupils to find information effectively					
facilitates collaboration among pupils					
encourages pupils' copying from the Internet					
contributes to pupils' motivation for learning					
enhances pupils' academic achievement					
supports pupils' independent learning					
challenges classroom management					
disrupts classroom cohesion					
24)* Do you agree with the following statements:					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
A teacher should have a positive attitude towards ICT					
A teacher should use ICT in his/her teaching practice					
A teacher should use ICT to vary his/her teaching methods					