DIGISOL
DIGITAL SOLUTIONS FOR TRAINERS AND EDUCATORS
ERASMUS+

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ERASMUS PLUS PROJECT: 2019-1-LV01-KA202-060434

# Digital Solutions for Trainers and Educators (DIGISOL)

***2019 - 2021***

# Intellectual Result 1

## Trainers' Self-assessment Questionnaire and Training Participants' Assessment Questionnaire on Adult Educator's ICT Competences

Analysis and presentation of the results
of the survey in Latvia, Estonia and Germany

September 2020

Latvian School of Public Administration
DZC Datorzinību centrs
FRAUEN COMPUTER SCHULE
TARTU KUTSEHARIDUSKESKUS

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# I Project Description Summary

The Digital solutions for trainers and educators (DIGISOL) project address the vocational and adult education sectors and the professional individual needs of educators and trainers who are working mostly with the adult learners.

The objective of the project is to develop a Curriculum for the training course on the Digital solutions for trainers and educators in the VET and adult education sectors aiming at increasing their digital competences and skills by learning the most demanded and broadly used digital tools in each of the partner organisation countries.

There will be 3 Transnational meetings organized:
-Kick-off meeting in Latvia, January 2020: 8 – 10 teachers/staff members participating.
- Intermediate evaluation meeting Germany, August 2020: 8 – 10 teachers/staff members participating.
- Final recap' meeting Estonia, October 2021: 8 – 10 teachers/staff members participating
In total there will be up to 40 in total taking part in the Transnational meetings.

In total, 36 teachers and staff members of partner institutions will be involved in the short-term joint staff training events that will be held in:
- Estonia in September 2020 (online).
- Latvia in November 2020
- Germany in March 2021.

The main outcomes of the project related activities are:
- Trainers and educators know how to use different digital learning tools;
- trainers and adult learners have the possibility to have the blended learning approach (face-to-face + online);
- they can choose the better digital learning solution for their individual needs;
- survey on the specific digital needs of trainers in each partner institution country (100 trainers and 100 adult learners will participate from each country) and its analysis.
- Curriculum for the online training course on the Digital solutions for trainers and educators (DIGISOL) in the VET and adult education sectors.
- Pilot of the DIGISOL Course for 2 groups of 12 learners in each partner organization country

- Free access to the DIGISOL course through a Moodle platform for everyone.
- Online test and online certificate certifying the acquired digital competence / skills upon the test successful completion.

In labour market perspective, the open access to the DIGISOL Course modules will increase professional qualifications of VET educators and adult education trainers and help them meet the education sector swiftly digitalizing requirements and needs.

The course will contain an innovative approach, methodology, schedule of the course, lesson outlines and activities to be ready for the use of trainers and educators from the VET and adult education sectors, but also educators or teachers from every other educational sector.

The course would contain 3 learning modules with different topics. The 3 main modules are:
1) Cyber Security & Digitalisation
2) Webinars and other Communication Tools
3) Files & Documents Sharing Tools

The choice of the topics for each module will be based on the results of the survey - the Assessment Questionnaire on the specific digital needs of VET trainers led in each partner institution country before designing the Curriculum of the Course. The Curriculum will be drawn after the analysis of the results of the Assessment Questionnaire and will be fully based on them.

The curriculum and the course will be designed in order to improve trainers' and educators' digital skills and knowledge of different digital solutions used in the new era of teaching / learning, to learn how to use and apply the Information and Communication Technologies, to better understand the concept of the digitalization and to apply it in accordance to their competence areas.

# II Description of Project partners

## Latvian School of Public administration

The Latvian School of Public administration (LSPA) was established in 1993 as a public administration institution under direct supervision of the State Chancellery. The LSPA is the largest training centre for civil servants and public administration employees in Latvia and it provides a high-quality training and consultation service to meet the current and future needs of public administration and municipalities. In 2018 the LSPA trained 13 741 people.

The LSPA develops open and tailor-made training for both the public and private sectors, and oversees the certification of internal audit specialists in public service. Since 2012 the LSPA has been applying a business approach to training public administration employees, at the same time maintaining close links with national priorities for human resource development in public administration. For this purpose, the LSPA has developed training module system, linking training topics with the concept of human resources development of public administration sector and training needs of civil servants. The whole training has been organized in ten modules.

In addition, LSPA provide an opportunity for public administration employees, as well as local government officials to acquire professional English at the basic user and independent user levels (A and B levels) and, since the September 2015, the LSPA performs the administrative functions of the French language course organization, the costs of studies being covered from the state budget and the International Francophone Organization.

The LSPA is situated in the centre of Riga - the capital of Latvia on one of the central and important boulevards of the city - Raina Boulevard, within 5 minutes' walk from the historic centre – the Old City of Riga. The building of the LSPA - Raina Boulevard 4 - was designed in 1880 by the famous Latvian architect Janis Fridrihs Baumanis.

Regarding the premises and the venue, there are 16 training rooms in the LSPA building, the largest of which can accommodate up to 100 people, all fully equipped with modern technology, including screens, white boards, audio-visual and simultaneous interpreting equipment and

modern computer lab available on the first floor. Wireless Internet is provided throughout the building. The total premises are over 2,400 m2. LSPA premises can accommodate up to 356 trainees a day. Coffee and refreshments can be provided in various lobbies throughout the building.

Currently the LSPA employs 20 employees specialized in financial management, law, communication, project management, training organization and management, among other areas. LSPA employees also benefit from the regular opportunities of further study and qualification. As to the training staff and the staff, LSPA has more than 80 highly professional trainers who are experts in public administration, experienced business leaders and university lecturers.

In order to ensure the quality of training delivery the electronic version of evaluation forms has been designed and the evaluation is carried out at the end of each course. The summary and results of evaluation forms are sent to the trainers. There are also discussions/talks organized with the training staff and the clients on the process of course organization and necessary improvements. In addition, there is a lesson/ session observation taking place when experts/ trainers observe their colleagues 'work and give feedback on it. The average evaluation of the courses according to the results of the evaluation forms in 2016 was – 8,4 points out of 10.

In 2014 the LSPA has successfully implemented the largest centralized training for public administration in Latvia - the preparation of public administration employees for the Latvian Presidency of the Council of the European Union in the first half of 2015.

Currently, there are two ESF projects carried out by LSPA – "Professional Development of Public Service to improve Legal Framework for support of Small and Medium-Sized Enterprises" and "Professional Development of Public Service in Prevention of Corruption and Reduction of Shadow Economy" (2016-2022)

**DZC training centre**

Private Joint Stock Company Datorzinibu Centrs (DZC) is one of the leading IT companies in Latvia providing solution development, e-learning content development and IT training to various customers in public and private sector. The quality of DZC services is confirmed by ISO 9001:2008 quality certification. DZC is the Microsoft Gold Certified Partner since

2000. DZC top priority is complete understanding of the needs of our customers for the maximum benefit of their investment into the digital technologies. Therefore, DZC work is targeted to implementation of modern and perspective information system solutions. DZC services include:

- Design, development, implementation and maintenance of information systems (databases, data warehouses and analysis, web application software);
- IT training for Microsoft Office and other modern digital tools and applications, as well as for custom-developed information systems designed exclusively for the needs of a customer;
- Development and implementation of learning management (LMS) and learning content management systems (LCMS);
- E-learning content development;
- Certification services (Pearson VUE authorized test centre);
- IT consulting; IT audit and security;
- Design, delivery and maintenance of IT infrastructure solutions.

The total number of company staff is 40, including 12 employed in the training department. On average, 2.5 thousand participants are trained per year.

Training Centre's highly professional trainers have deep expertise for teaching all digital skills and competencies required to work with newest Microsoft 365 tools and classic Microsoft Office programs, as well as modern collaboration and communication technologies and other business applications. DZC trainers are certified by Microsoft and have wide experience in IT training and practical work.

The key to DZC success is a perfect combination of the best teaching methods, professional experience and well-prepared hand-outs. The theoretical material is accompanied by diverse examples, practical tasks and self-assessment options. DZC also develop and adjust our study programs to the needs of employees of a specific company. DZC provide individual trainings and consultations. Training methods include classroom as well as virtual trainings and consultations.

DZC has acquired considerable experience in development of e-learning courses since 2001. It is possible to facilitate mastering of different study content by means of e-learning. Such courses can be intended for improvement of general level of education, such as, learning languages or

practicing computer skills. E-learning can be used in institutions and companies to study the internal procedures and business processes as well as the application of the company's information system. E-learning environment provides an opportunity to create interesting and exciting materials by applying various means: multimedia, hyperlinks, interactivity, communication (e-mail, forums, discussions, etc) and automated knowledge testing. A registered user may operate in the e-learning environment from any computer that has the Internet access as only a Web browser is required for working with the e-learning courses.

DZC offers various standardized and customizable solutions for the support of our clients' business activities. The main types of these solutions are the following:
• E-learning management/guidance systems – products developed based on Microsoft SharePoint technologies for providing distance as well as traditional in-class learning and the testing of knowledge;
• Document and information management systems for organizing the record keeping: storing, systemizing and processing different business correspondence;
• Project resource management tools for planning the personnel resources, time management, cost calculation and analysis;
• Portal and collaboration solutions – multilevel Internet or intranet portals with a specific and adjustable additional functionality;
• Specialized portal solutions for educational establishments to organize the internal communication and the study process with integrated tools for preparing electronic study materials.

The perennial experience of the Training Centre in working with the adult audience in teaching the use of ICT tools as well as developing programmes, course content and handouts has ensured the high professionalism of our trainers. Therefore, the experience and professional competence of teachers will ensure the quality of the materials developed in the project.

**The Institute of technology-oriented women´s education (ItF e.V.)**

The Institute of technology-oriented women´s education (ItF e.V.) is a regional non-profit organization established in 1991 (registered association), based in Kassel, Germany. The Institute is a provider of training in vocational and adult education for women as well as research

in the area of gender and MINT (Women in Science and Technology). The institute offers a wide variety of vocational trainings targeting labour market demanded knowledge. The offer includes consulting, coaching, skill assessment, analysis of training needs, design and implementation of training programs (online and face-to-face) as well as their follow-up for different educational levels. For example, ItF e.V. developed a course for young migrant women to get a completed and recognized vocational training as a computer science clerk (Mach M-IT).

Another focus is the start-up for women. Among other things, ItF e.V. successfully completed a Grundtvig project entitled Women fit4Business. As a follow up of this project ItF e.V. is offering consultancy for women (with migrant background) who want to start their own small business for many years. Qualified scientists and trainers with experience also in the intercultural field are working in our organization.

Many of the further trainings that ItF e.V. offers target women re-entering the labour market after longer periods of family leave, providing them with the needed software and commercial knowledge but also supporting them to integrate family and working life, creating new daily routines for them and their families. One very successful module of these courses is the "KOMpetenzPASS", a tool to assess the informally gained skills acquired during family leave which was developed by ItF Institut in cooperation with numerous other adult education providers and regional advocacy groups for women on the labour market.

Furthermore ItF e.V. has created an online learning platform also targeting women returning to the labour market to provide access to the required skills also to women located in rural areas with limited opportunities to participate in classroom training.

ItF e.V. established a very vast dissemination portfolio thanks to more than 25 years of experience and our network comprises SMEs, national non-governmental organisations, employment agency, universities and international project partners. ItF e.V cooperates with regional and national partners from the areas of research, science (e.g. University of Kassel), education (e.g. IHK and HWK), politics (European Parliament B. Weiler) and labour market stakeholders (FEDERAL EMPLOYMENT AGENCY of Kassel) and are also part of specific networks (e.g. Bündnis für Familie).

ItF e.V. has been cooperating in and coordinating diverse European projects (Leonardo and Grundtvig). ItF e.V. regularly informs our partners during network events about our project activities and use these networks to spread information about current status, topic and outcomes of the projects. ItF e.V. main focus is to support women through vocational training, to (re-)integrate them into the labour market. The mission of ItF e.V. is to provide educational, research and innovation services in the fields of information technology, entrepreneurship and social skills development for women.

Additionally, one of our main aims is to increase the opportunity of low skilled women to acquire competences in ICT, to motivate them to attend courses for a better re-integration into the labour market. In recent years, it has become increasingly important to have knowledge in the use of electronic media which is no longer solely related to work but is essential for everybody, since more and more information and services (including those related to government and authorities) are only available online. Therefore, it is increasingly critical that all groups of people have access to digital media – also those with low digital skills. As digital media continue to develop and change with an increasing speed, the gap in related knowledge of different generations expands. To teach younger generations a responsible usage of these media and to be able to appropriately evaluate information and their context, it is critical for parents to improve their knowledge of digital media. Our trainers use advanced teaching methods and improve and update their knowledge through constant evaluation and training to allow the greatest learning success for our customer.

ItF e.V. will be an operative partner due to its more than 25 years of experience in working with different target groups. Trainer/teacher as well as students who want to improve their digital skills in order to be able to work across borders in international groups with the help of digital tools.
The team involved in the project has more than 27 years of experience in adult education and training, especially for women.

**Tartu Kutsehariduskeskus**

The Tartu Vocational Education Centre (Tartu VEC) is the biggest vocational education provider in Estonia. Tartu Vocational Education Centre is owned by Tartu City Government and therefore share the same PIC number.

Tartu VEC has more than 2700 students in vocational studies, 3500 adult learners at various courses annually. Tartu Vocational Education Centre has 338 employees. Tartu VEC provides the chance to study more than 50 professions and practical skills that are relevant in the labour market. Our fields of study include:

- construction and wood work
- ICT - business and trade
- beauty and textile
- catering and tourism
- food processing technology
- industrial technology
- car maintenance
- adult education.

The Tartu VEC's ICT department teaches the specialties of IT and business and management. It offers the opportunity for every learner to shape their own future and therefore use the most diverse learning opportunities, open up new ideas and work closely with companies. Students have the opportunity to use modern study rooms and computer hardware and computer network laboratories. The department's teachers are innovative and entrepreneurial, and, in addition to basic teachers, there are a number of specialist companies teaching professional skills.

The strength of the department is openness to new ideas and networking with different Estonian and European schools. The department provides different target groups with different forms of learning and learning opportunities. To support entrepreneurship education, they collaborate with the University of Tartu Idea Lab. Undergraduate IT specialty students create their own student company within the framework of learning. They are a member of Microsoft's IT Academy, Mikrotiki Online Academy, and are planning to continue the collaboration with the CISCO Online Academy.

The department has long-term cooperation partners: Tartu University Hospital, different departments of Tartu City Government, University of Tartu, National Archives, Sonictest, Diara Development, Ministry of Education and Research, various software and security companies in Tartu and others. Close co-operation is with the trade unions- ITL, the Estonian Leadership Association, the Estonian Accountants' Association, the Estonian Security Companies' Association and the Estonian Archivists' Association.

Tartu VEC has a adult training and counselling department, that offers professional development courses and re-trainings for adults. It offers training in all basic study fields provided by Tartu VEC in initial VET training. Annually it offers about 400 different courses, of which currently 4 are e-courses. The course selection includes both courses for the general public and tailor-made courses for companies. Tartu TEC has long term partnership with Estonian Unemployment Insurance Fund, offering re-training possibilities to unemployed people.

# III Description of IO 1, Trainers' Self-assessment Questionnaire and the Learners' Assessment Questionnaire

According to the project application, during the first phase of the project two questionnaires were designed to assess adult educators' current knowledge of different Information and communication technologies (ICT) tools.

Nowadays ICT tools have become an integral part of everyday life and is changing how education is resourced and delivered, therefore, Vocational education institutions and adult learning centres face a digital challenge and a need to adapt their traditional teaching methods to offer a mix of face-to-face and online learning possibilities.

Interest in ICT tools is high and growing and according to recent study in OECD countries, students are more sophisticated in their use of technology than their teachers. VET and adult learning should be sensitive to learners' background – for adult learners it is especially important to account of what they already know from previous education and their jobs to make the learning more relevant to their actual situation.

Both questionnaires have provided a measurable and objective starting point to define the outline of the curriculum to be developed in the next stage of the project.

Both questionnaires were designed in English and translated into each partner's language. The questionnaires were delivered online.

**Trainers' Self-assessment Questionnaire on Adult Educators ICT skills**

First questionnaire was designed for adult educators in order to better understand adult trainers and vocational education trainer's overall knowledge of different ICT tools and how confident they feel in using them during their classes.

The main aim of this questionnaire was to reflect on the adult educators' weak and strong points in using different ICT tools. The questionnaire looked at use of ICT tools from three main aspects:

- cyber security and digitization;
- webinars and other communication tools;
- files and documents sharing tools.

This questionnaire helped to get an assessment of the adult educators' overall knowledge of ICT tools and recognize the elements in which adult educators lack knowledge and information. Since adult educators were involved in the analysis of the situation, it helps in the further planning of the curriculum so that it is designed to meet their actual needs.

**Learners Assessment Questionnaire on Adult Educators ICT skills**

With the intention of achieving a more in-depth analysis of adult educators' ICT knowledge, a second questionnaire was made for adult learners to better understand their views on using ICT tools during their classes and how they assess their educators' ICT proficiency.

Adult learners' questionnaire was designed to mirror adult educators' questionnaire in order for data to be more comparable and achieve better insights from both main adult education agents – learners and their trainers. The questionnaire asked for learners to assess educators use of ICT tools from the same three main aspects:

- cyber security and digitization;
- webinars and other communication tools;
- files and documents sharing tools.

Additional questions were also asked to better understand how, in learners' opinion, use of ICT tools during classes can benefit the learning process.

# IV Conclusion of IO1, Trainers' Self-assessment Questionnaire and the Learners' Assessment Questionnaire

According to the project application, during the period from February 2020 until June 2020 two questionnaires were developed and distributed to adult educators and adult learners. 486 adult learners and 540 adult educators filled the assessment questionnaires.

## Analysis of Trainers' Self-assessment Questionnaire on Adult Educators ICT skills

540 adult trainers filled self-assessment questionnaire with 178 trainers representing the age group of 50-59 years old, 167 trainers representing the age group of 40-49 years old, 93 trainers representing the age group of 30-39 years old, 78 trainers representing the age group of 60-69 years old, 16 trainers representing the age group of 20-29 years old and 8 people representing the age group of 70 and above.

Vast majority of trainers (238) have been working in the field for 10 years or less, 154 trainers have been working in the field for 20 years or less, 108 trainers have been teaching for 30 years or less, 50 for 40 years or less, 15 trainers have been teaching for 40 years or more.

Vast majority of trainers feel confident to use computers for their own needs with 338 strongly agreeing and 144 agreeing with this statement. However, when asked if they feel confident to use computer for teaching purposes, only 235 trainers strongly agree and 182 agree with this statement. Pointing out that even if trainers feel confident to use computers for different daily tasks, it's not always the case when it comes to their professional work.

When questioned about specific skills, 389 respondents either agreed or strongly agreed that they have the necessary skills to login to an online learning platform. Approximately the same number of trainers either agreed or strongly agreed that they have the skills to install or download a new software or an app or to add a shared folder (366 and 364 respectively). However, a slightly smaller number of trainers – 305 – agreed or strongly agreed that they could solve a basic user technical problem when using a computer. 106 trainers strongly disagreed and 137 disagreed that they have the necessary skills to do so, indicating that one

or the reasons why trainer's avoid using ICT tools in their classes might be the concern for technical difficulties that might arise from using these tools.

This problem is also pointed out when respondents were questioned about if they have undergone any ICT-related training. 393 trainers admitted to having undergone computer literacy training and 238 had undergone security and safety risk training. However, when asked about specific ICT tools the number were considerably lower. Only 200 (less than a half from all the respondents) had undergone training for use of online presentation tools, 131 had undergone training for use of online databases, 129 had undergone training for use of online cloud storage and 111 trainers said that they had undergone training for use of webinars, but 62 respondents admitted to not had undergone any ICT-related training. These number show that even if a considerable number of trainers have undergone computer literacy training, when it comes to specific ICT tools, trainers don't have as much knowledge.

When asked about for what purpose do trainers use ICT tools during their classes, three most common responses were – to find information and resources on the Internet (490 either agreed or strongly agreed), to prepare presentations and materials for lectures (493 either agreed or strongly agreed) and during their classes to show presentations (480 either agreed or strongly agreed). Having said that, when it comes to more specific ICT tools use, the numbers again are considerably lower, showing that there' s still a space for growth using ICT tools to communicate with students (390 either agreed or strongly agreed), to get feedback from students (385 either agreed or strongly agreed), to share documents and files with students (372 either agreed or strongly agreed), to develop digital content for students use (345 either agreed or strongly agreed) and to access resources using online databases (327 either agreed or strongly agreed).

The same tendency is mirror also in the responses when trainers were asked for what purpose students use ICT tools in their lectures. Trainers as the two most common responses indicated use of Internet to search for information (452 either agreed or strongly agreed) and making presentations (443 either agreed or strongly agreed) which are the same most popular responses when trainers answered the same question about their own use of ICT tools. Similarly, when asked about more specific ICT tools use, the numbers were lower for sharing files and documents (339 either agreed or strongly agreed), giving feedback and self-assessment

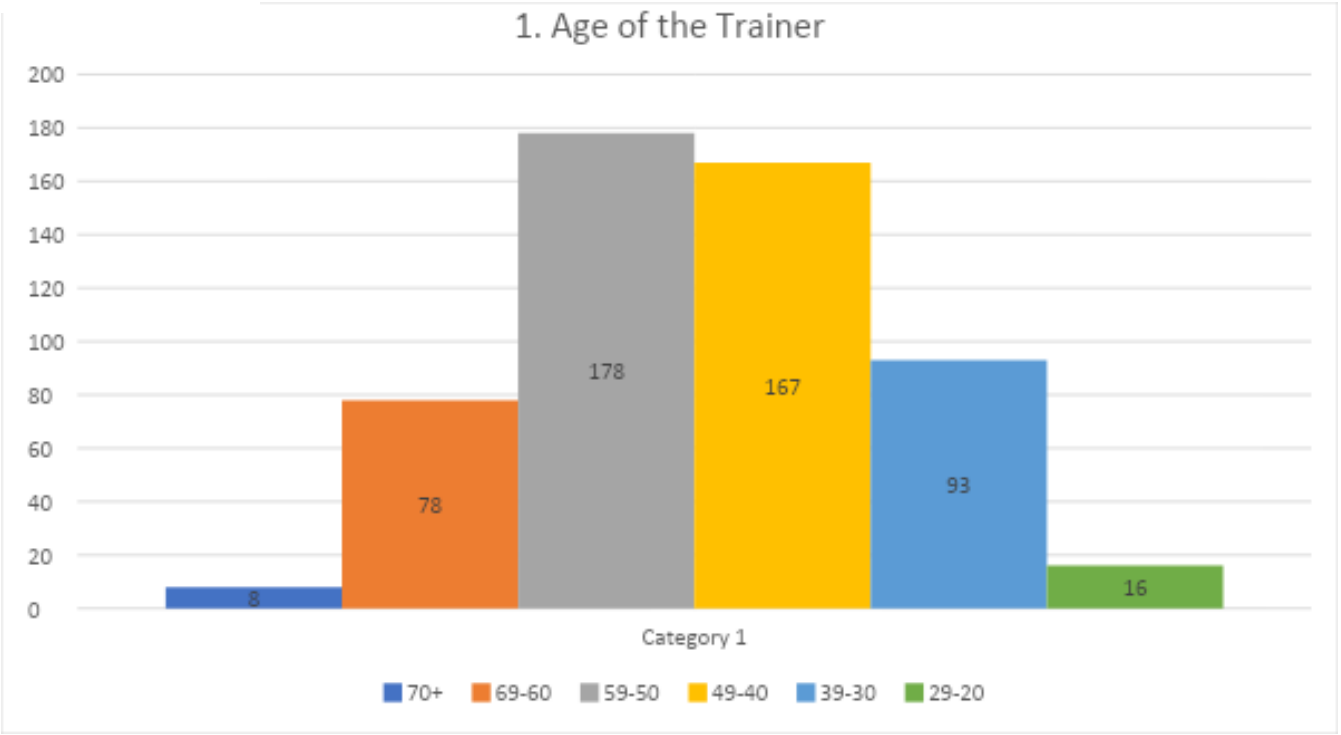
(333 either agreed or strongly agreed) and collaborating and working on projects (313 either agreed or strongly agreed).

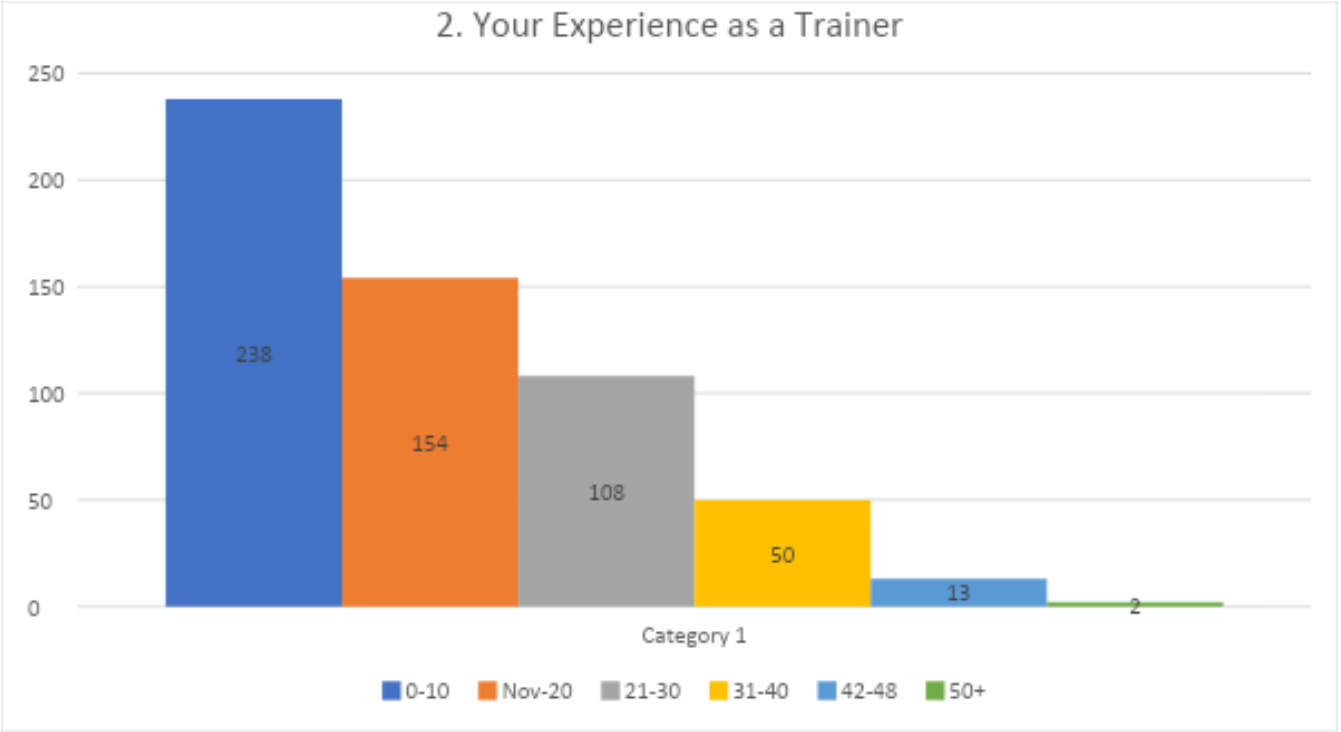
In survey's respondents' overall experience, trainers don' t feel necessary confident to integrate different ICT tools in their teaching process. Only in few instances more than half of the trainers either agreed or strongly agreed that they feel confident in using different ICT tools in their classes. Trainers feel most confident in using cloud storage of online files to share tutorials with students, with 356 trainers agreeing or strongly agreeing that they feel confident to use Google Drive and 213 saying the same for One Drive.
Little more than half of the respondents agreed that they feel confident using one or more online collaboration tools. With 296 trainers agreeing or strongly agreeing that they feel confident in using Facebook for teaching purposes and 199 trainers agreeing or strongly agreeing that they feel confident in using Kahoot for the teaching purposes.
Similar situation is with using different social media tools in learning process. Only a little more than half of all respondents indicated that they feel confident in using such tools in their classes. 302 trainers either agreed or strongly agreed that they feel confident in using Facebook in their classes, with 284 saying the same for YouTube and 278 for Skype.
Regarding different e-learning environments, trainers only feel confident to use Moodle for organizing learning process with 348 trainers either agreeing or strongly agreeing.
When it comes to using mobile devices in their lectures, trainers feel equally confident in using tablets (349 either agreed or strongly agreed) and smartphones (377 either agreed or strongly agreed) to support interactive learning activities.

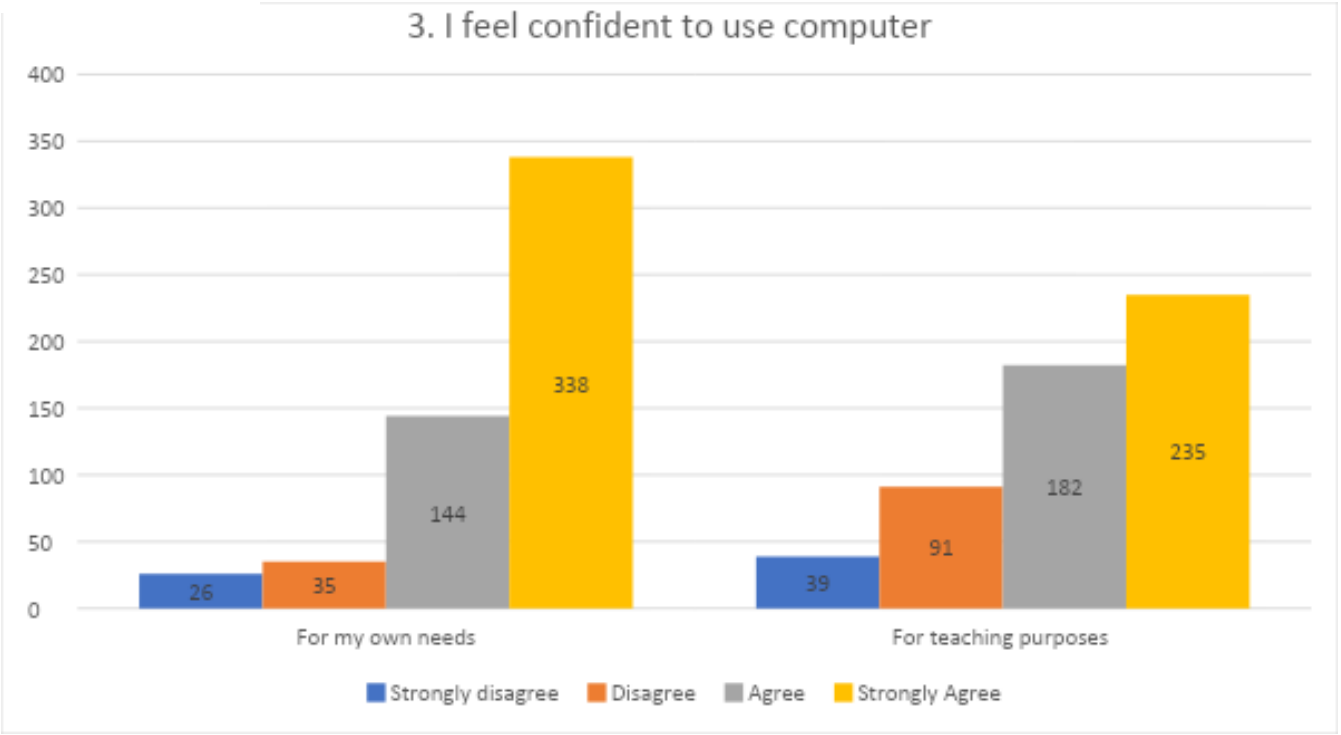
Less often trainers feel confident to use different online calendars and communications tools with less than a half of all the respondents agreeing that they feel confident in using Google Calendar (260 either agreed or strongly agreed) or Outlook Calendar (195 either agreed or strongly agreed).
When it comes to different webinar platforms, less than half of all the respondents indicated that they feel confident in using one or more webinars platforms with 247 trainers either agreeing or strongly agreeing feeling confident in using Zoom, 232 with using Skype and 177 with using Microsoft Teams.
Less than one third of respondents indicated that they feel confident in using web-based data visualization and infographic platforms. With 153 trainers either agreeing or strongly agreeing feeling confident in using

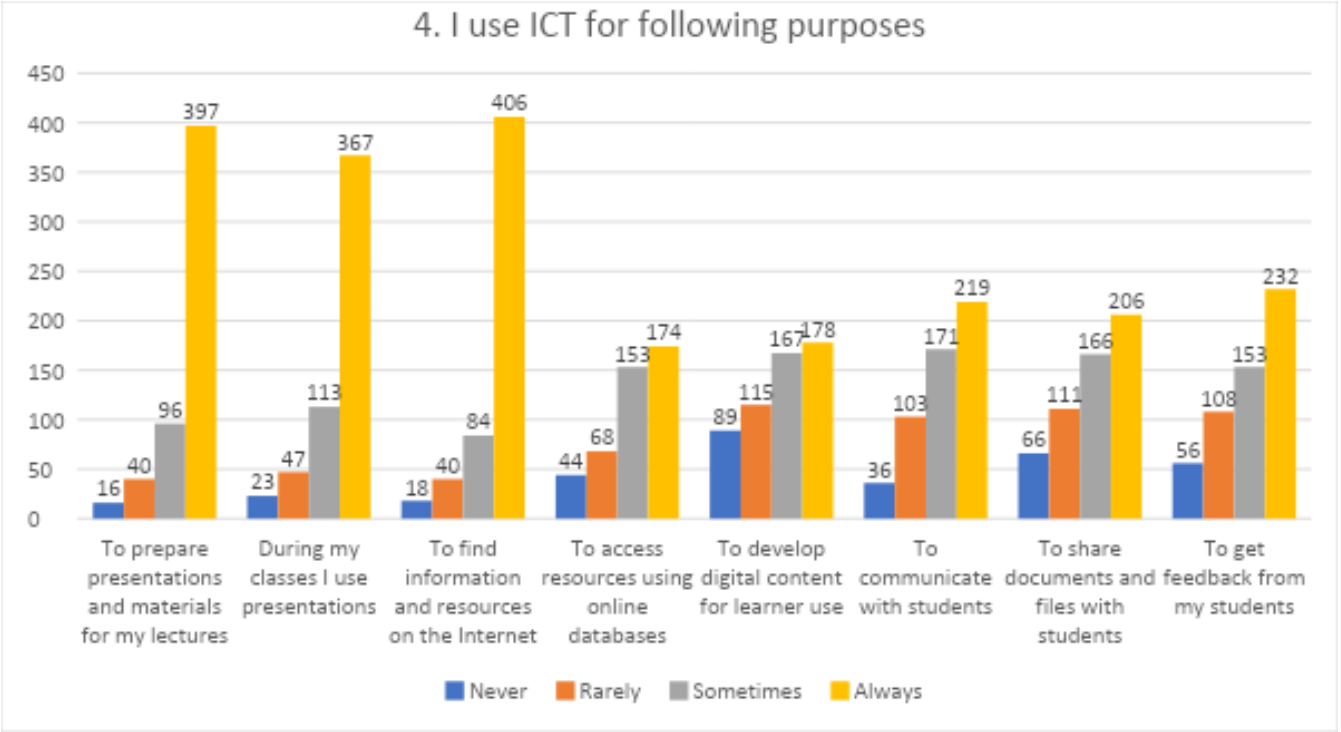
ınrogram and ı10 trainers either agreeing or strongly agreeing feeling confident in using Piktochart.
When asked about online presentation tools, less than half of all the trainers said they feel confident in using such tools with Prezi.com being frontrunner between such tools (236 either agreeing or strongly agreeing). However, trainers don' t feel as comfortable with other online presentation tools. Only 132 trainers agreed or strongly agreed that they feel confident in using Infogram, and 102 said the same about Piktochart.

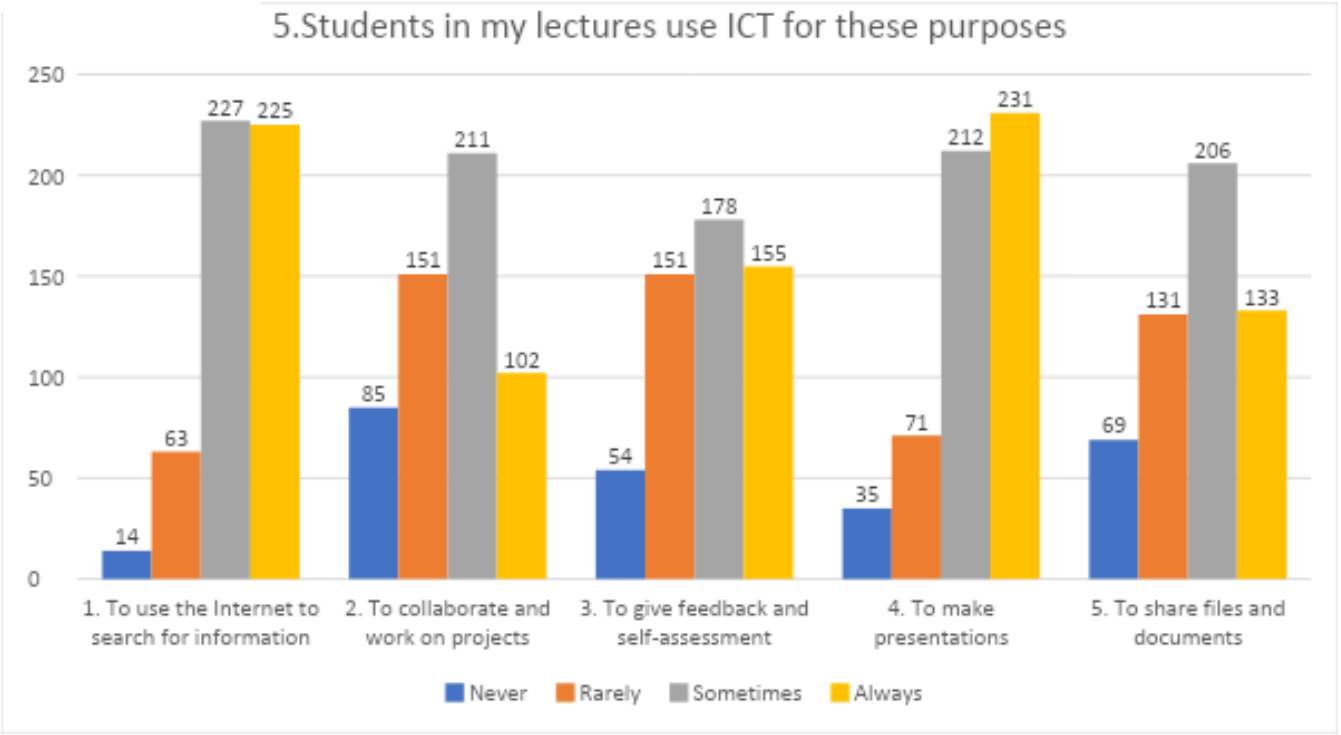
Majority of trainers consider different cyber security risks. Most of the trainers either agree or strongly agree that they consider securing data (468), data protection (467), security risks (456) and copyrights (444). However, when asked if they raise their student awareness about these risks, numbers are significantly lower. 370 trainers said they raise their students' awareness about data protection, 363 – about securing data, 328 – about copyrights, and 310 – about security risks. Nevertheless, vast majority of trainers admit that their knowledge about security risks would be improved by a better awareness about cyber security and by a training about cyber security and digitization, 475 and 471 respectively. Trainers also believe that this could be achieved trough an advanced antivirus software (459) and an information security guidelines (456).

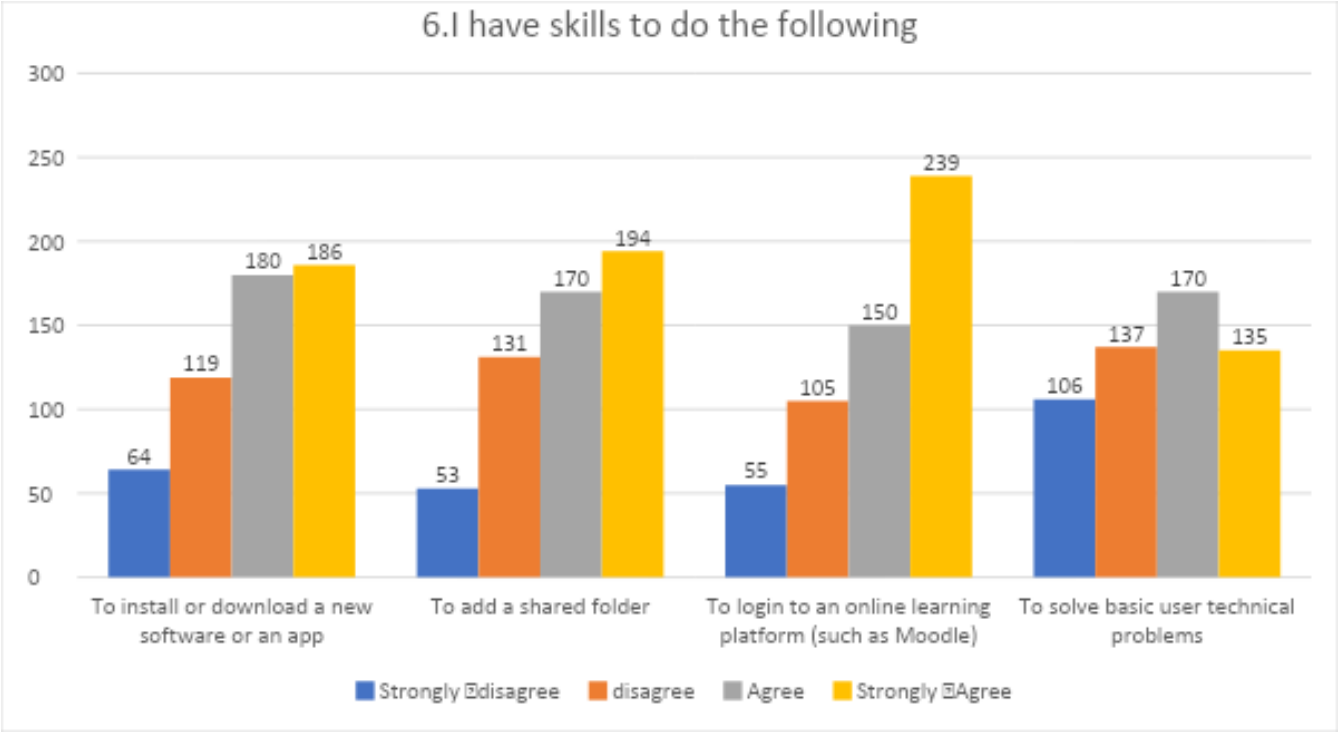

1. Age of the Trainer
200
180
160
140
120
100
80
60
40
20
0
8
78
178
167
93
16
Category 1
70+
69-60
59-50
49-40
39-30
29-20

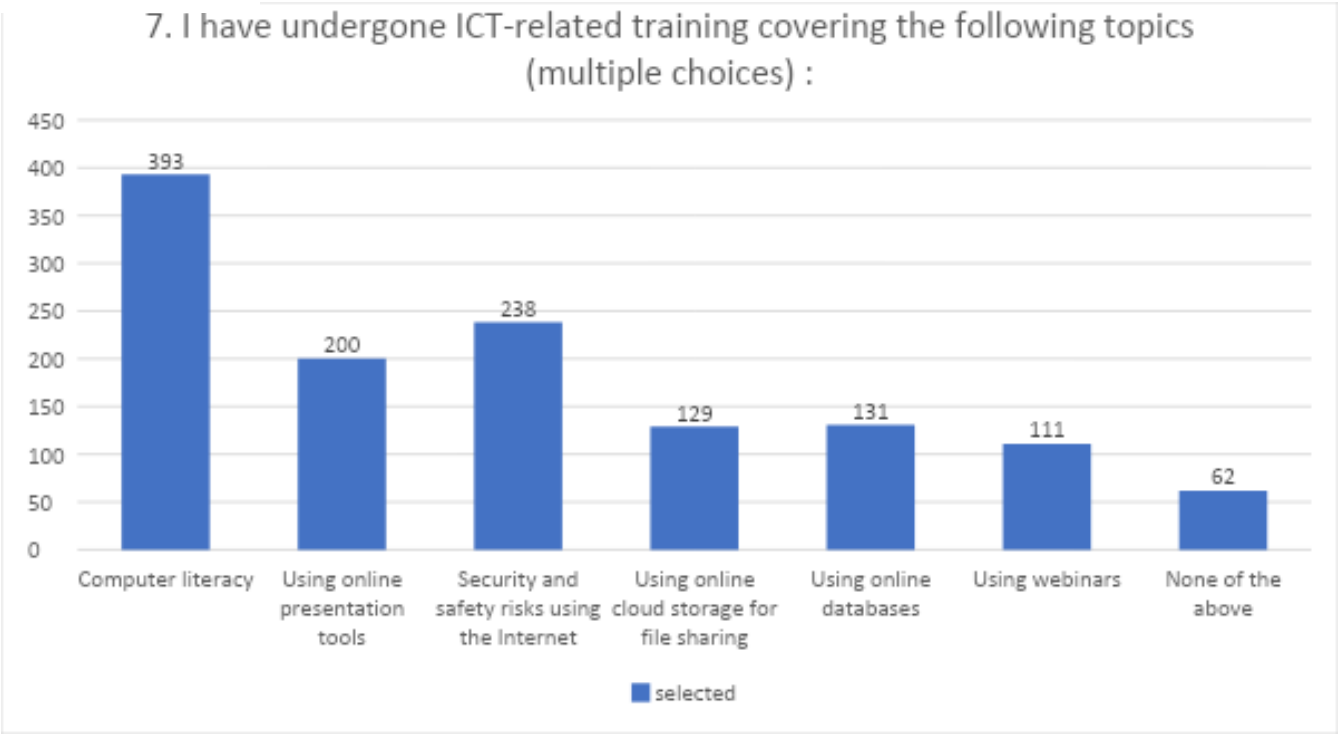

2. Your Experience as a Trainer
250
200
150
100
50
0
238
154
108
50
13
2
Category 1
0-10
Nov-20
21-30
31-40
42-48
50+


3. I feel confident to use computer
400
350
300
250
200
150
100
50
0
26
35
144
338
39
91
182
235
For my own needs
For teaching purposes
Strongly disagree
Disagree
Agree
Strongly Agree

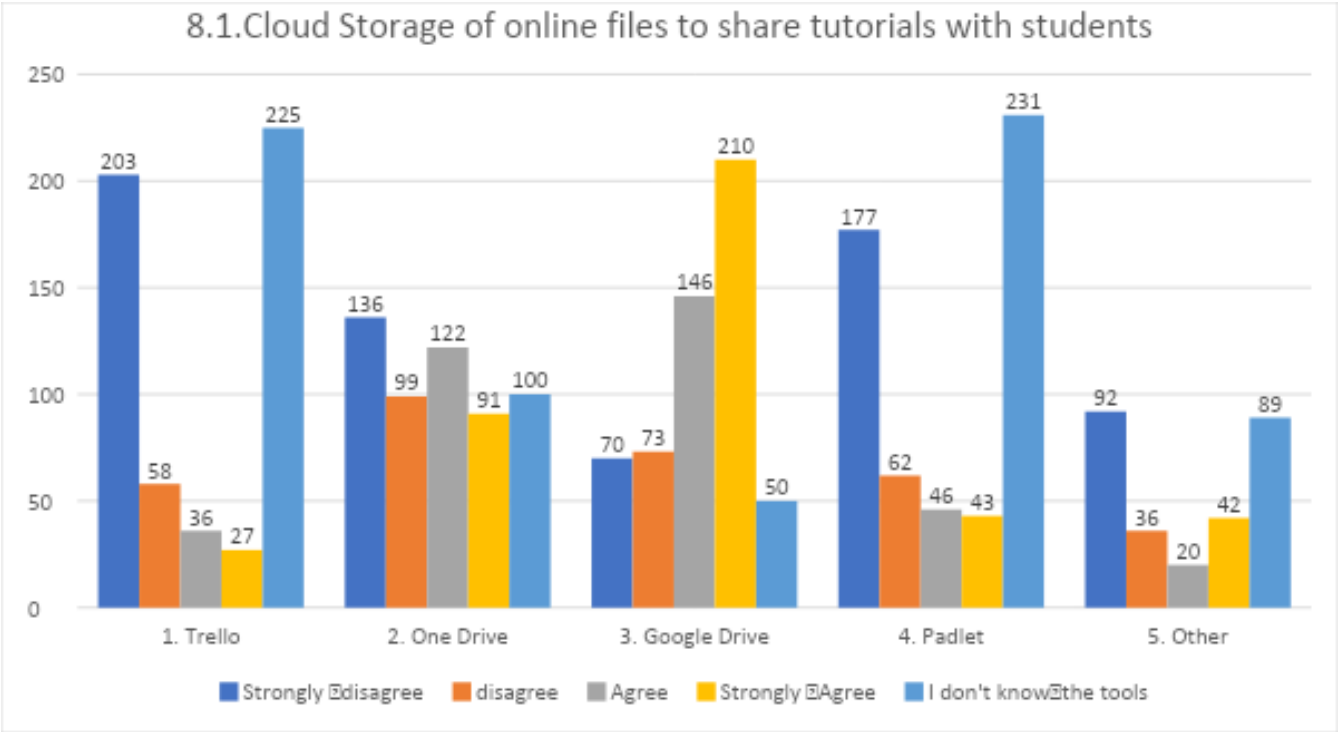

4. I use ICT for following purposes
450
400
350
300
250
200
150
100
50
0
16
40
96
397
23
47
113
367
18
40
84
406
44
68
153
174
89
115
167
178
36
103
171
219
66
111
166
206
56
108
153
232
To prepare presentations and materials for my lectures
During my classes I use presentations
To find information and resources on the Internet
To access resources using online databases
To develop digital content for learner use
To communicate with students
To share documents and files with students
To get feedback from my students
Never
Rarely
Sometimes
Always

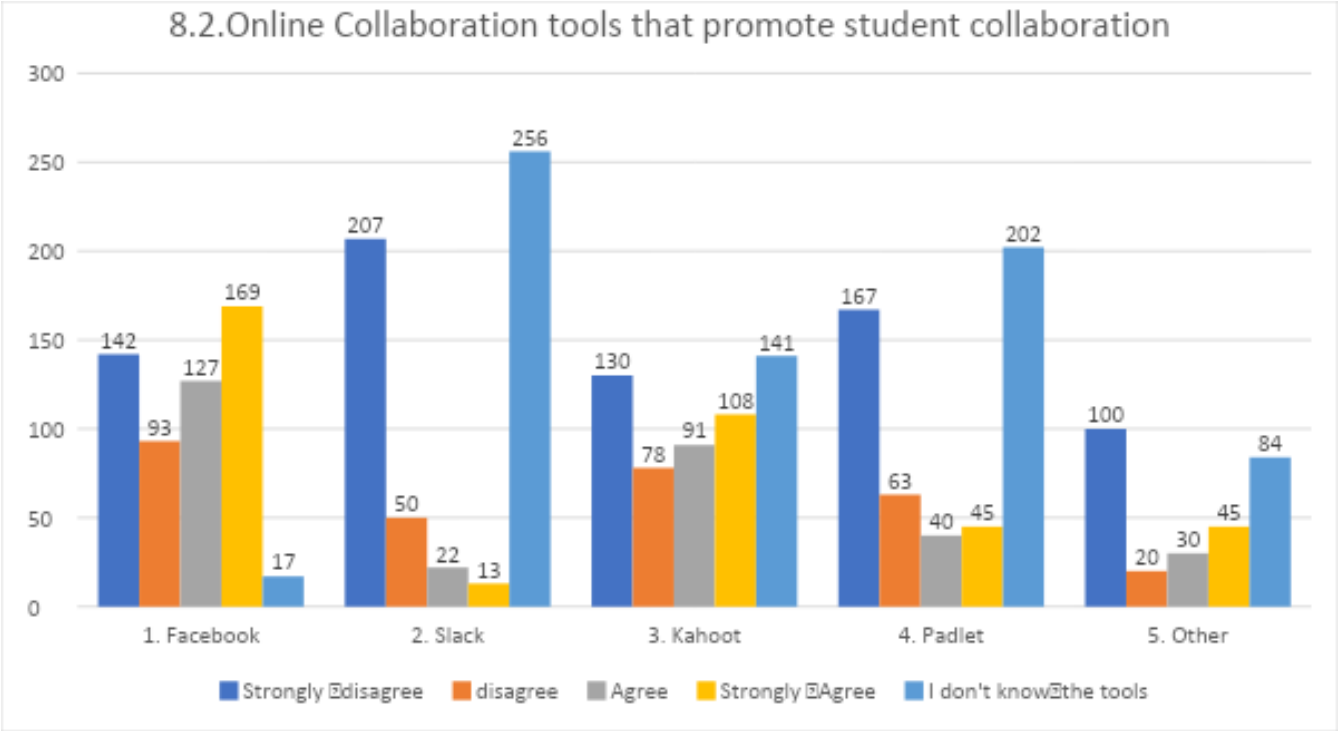

5.Students in my lectures use ICT for these purposes
250
200
150
100
50
0
14
63
227
225
85
151
211
102
54
151
178
155
35
71
212
231
69
131
206
133
1. To use the Internet to search for information
2. To collaborate and work on projects
3. To give feedback and self-assessment
4. To make presentations
5. To share files and documents
Never
Rarely
Sometimes
Always

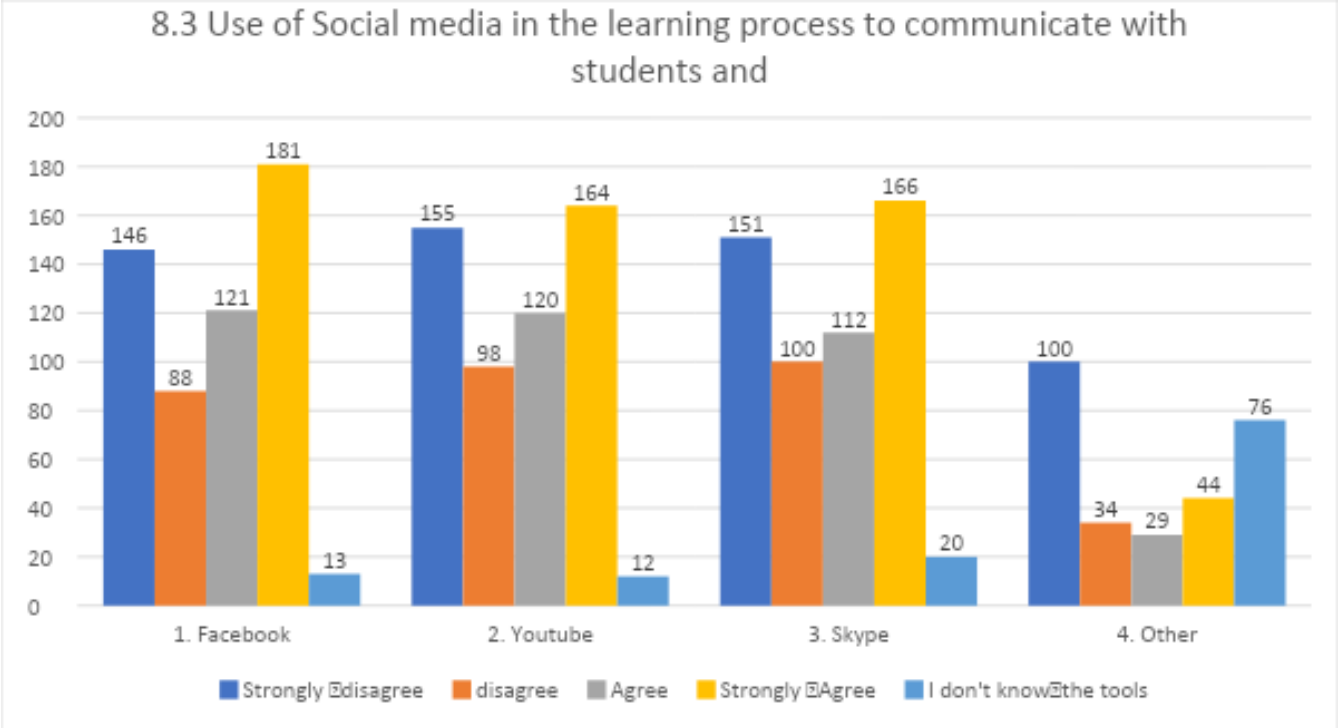

6.I have skills to do the following
300
250
200
150
100
50
0
64
119
180
186
53
131
170
194
55
105
150
239
106
137
170
135
To install or download a new software or an app
To add a shared folder
To login to an online learning platform (such as Moodle)
To solve basic user technical problems
Strongly disagree
disagree
Agree
Strongly Agree

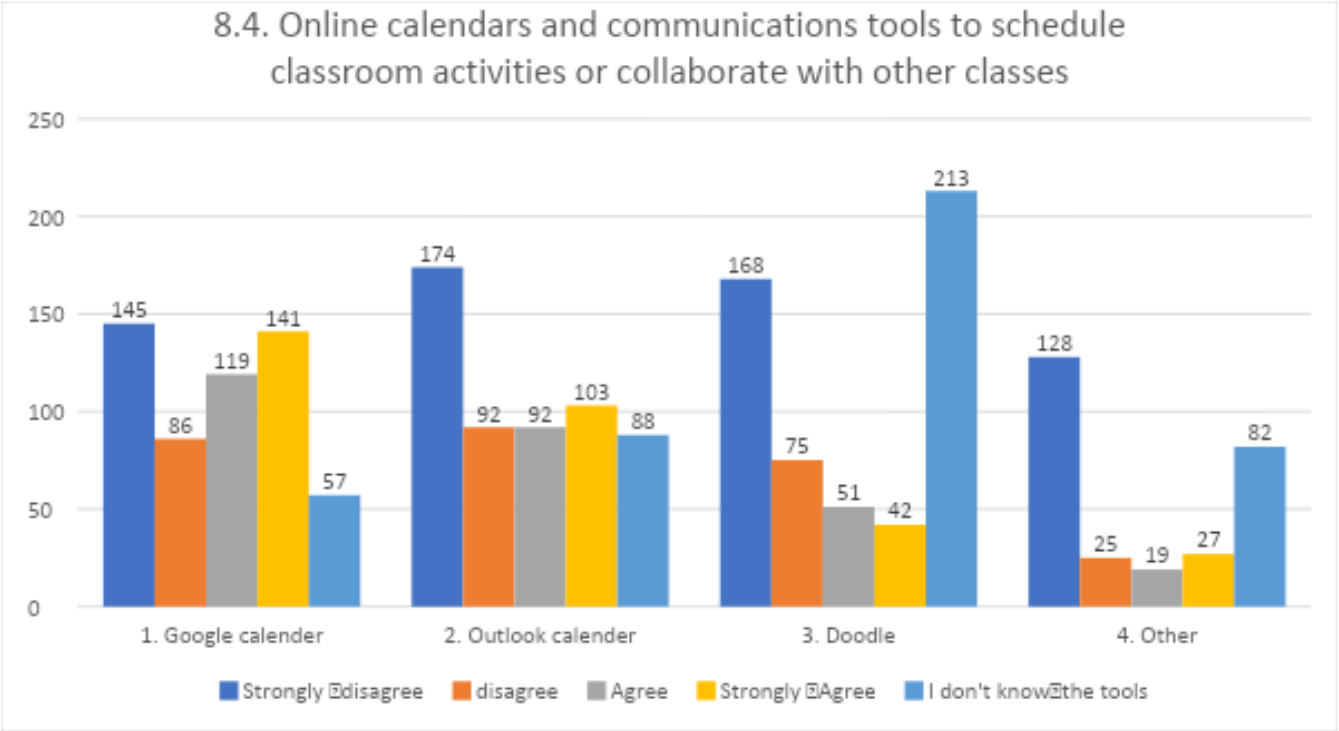


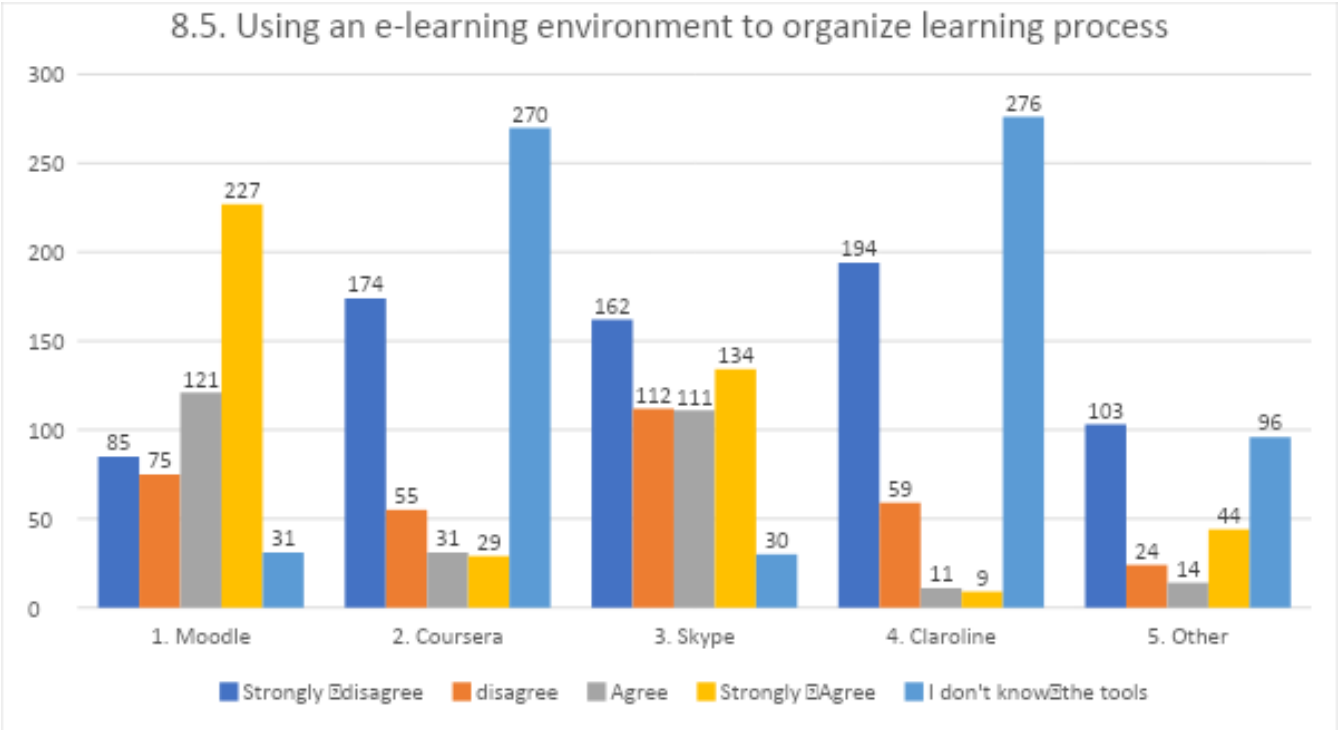

8. I feel confident to use these ICT tools for teaching purposes:

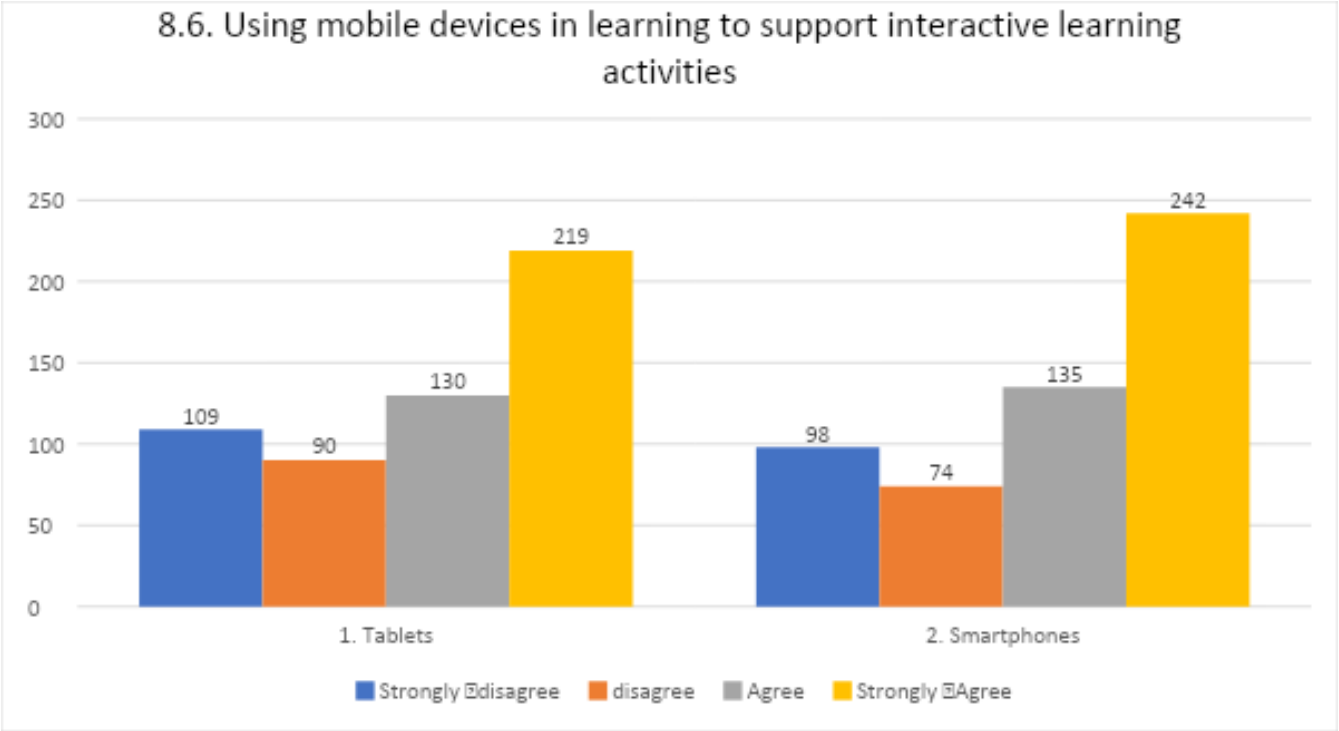


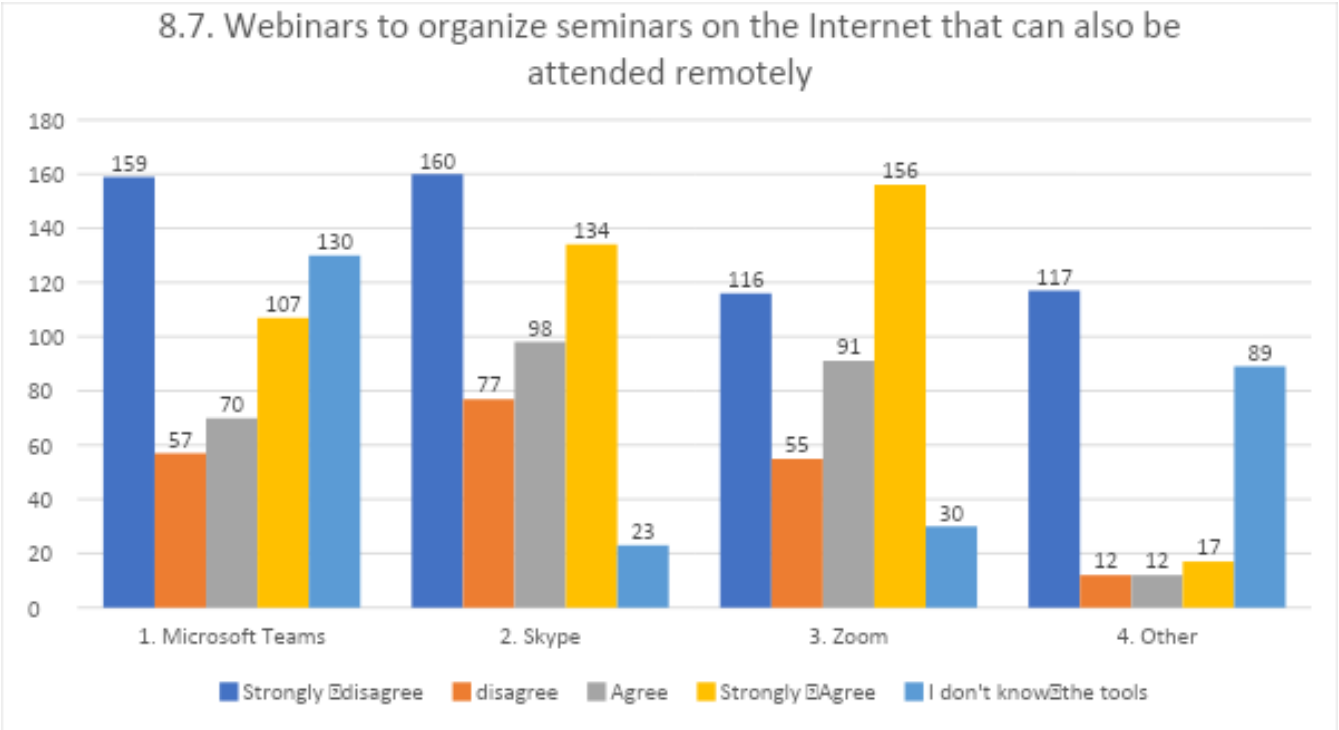

8.2.Online Collaboration tools that promote student collaboration
300
250
200
150
100
50
0
142
93
127
169
17
207
50
22
13
256
130
78
91
108
141
167
63
40
45
202
100
20
30
45
84
1. Facebook
2. Slack
3. Kahoot
4. Padlet
5. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools

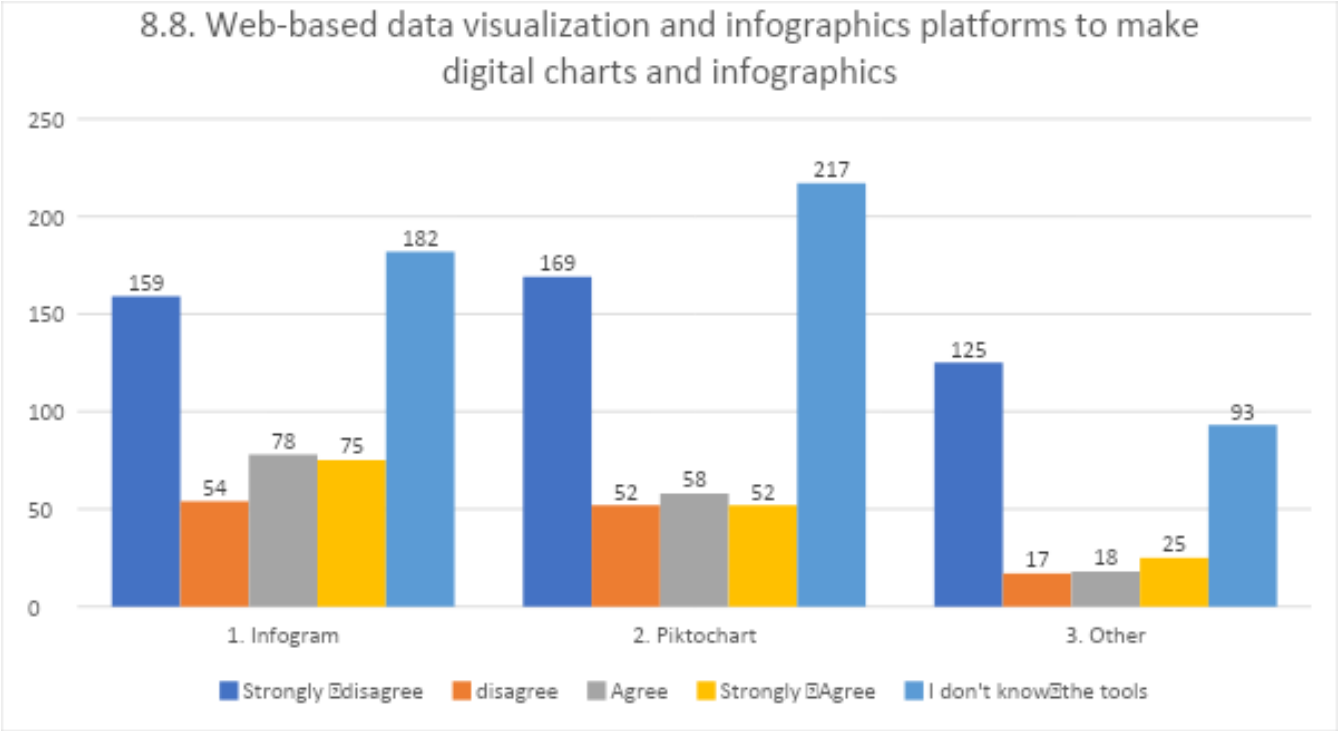

8.3 Use of Social media in the learning process to communicate with students and
200
180
160
140
120
100
80
60
40
20
0
146
88
121
181
13
155
98
120
164
12
151
100
112
166
20
100
34
29
44
76
1. Facebook
2. Youtube
3. Skype
4. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools

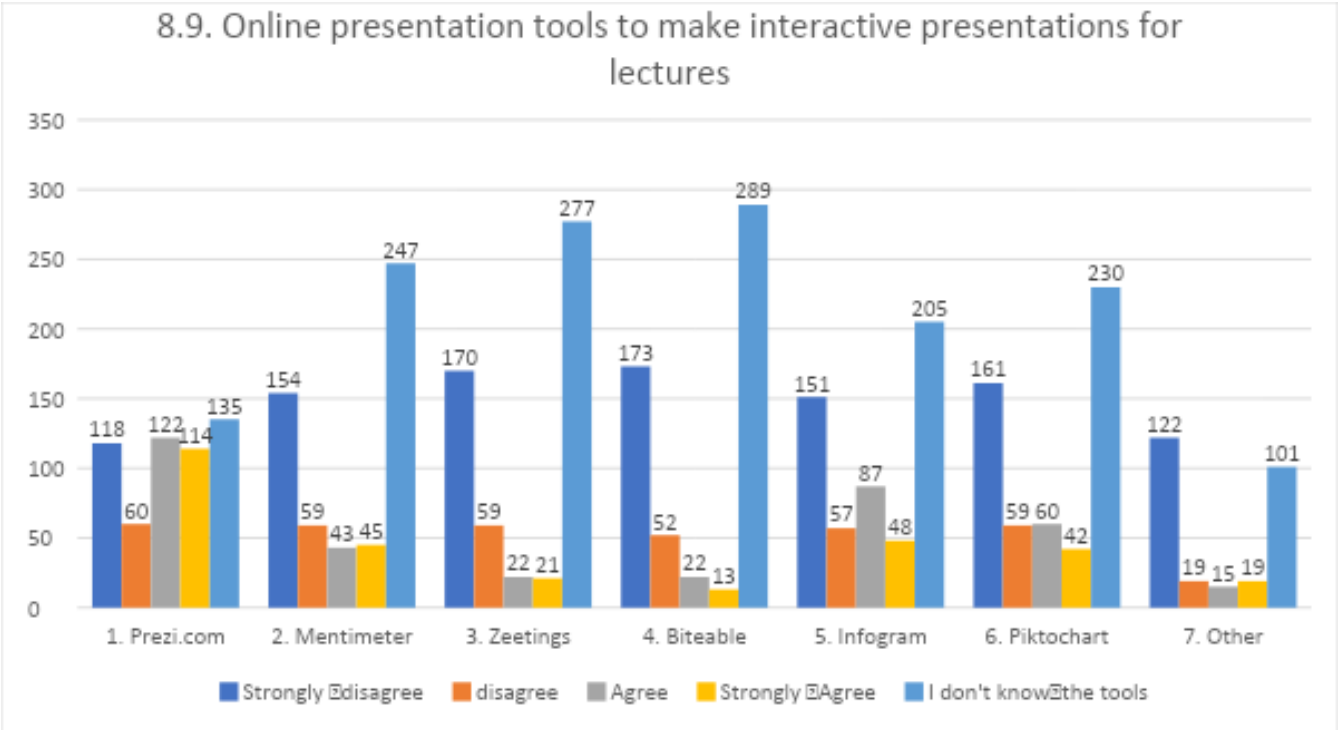

8.4. Online calendars and communications tools to schedule classroom activities or collaborate with other classes
250
200
150
100
50
0
145
86
119
141
57
174
92
92
103
88
168
75
51
42
213
128
25
19
27
82
1. Google calender
2. Outlook calender
3. Doodle
4. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools

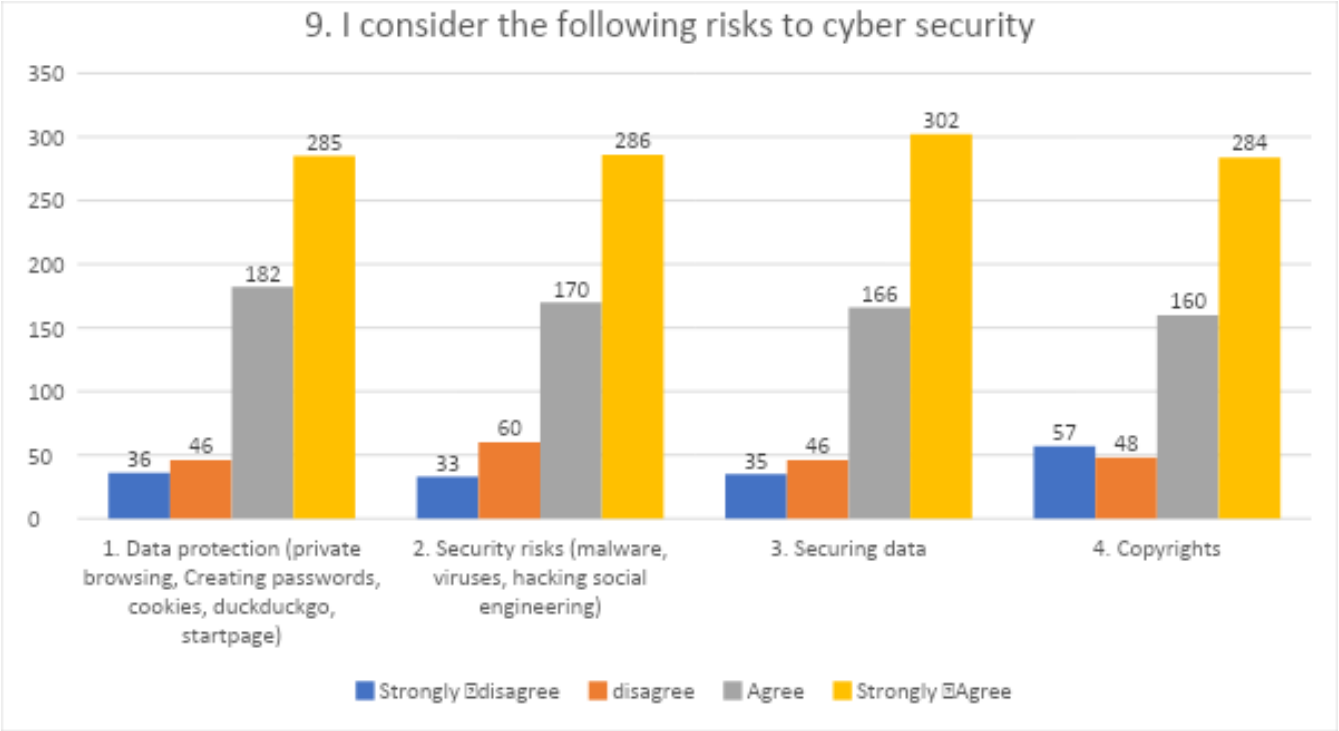

8.5. Using an e-learning environment to organize learning process
300
250
200
150
100
50
0
85
75
121
227
31
174
55
31
29
270
162
112
111
134
30
194
59
11
9
276
103
24
14
44
96
1. Moodle
2. Coursera
3. Skype
4. Claroline
5. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools

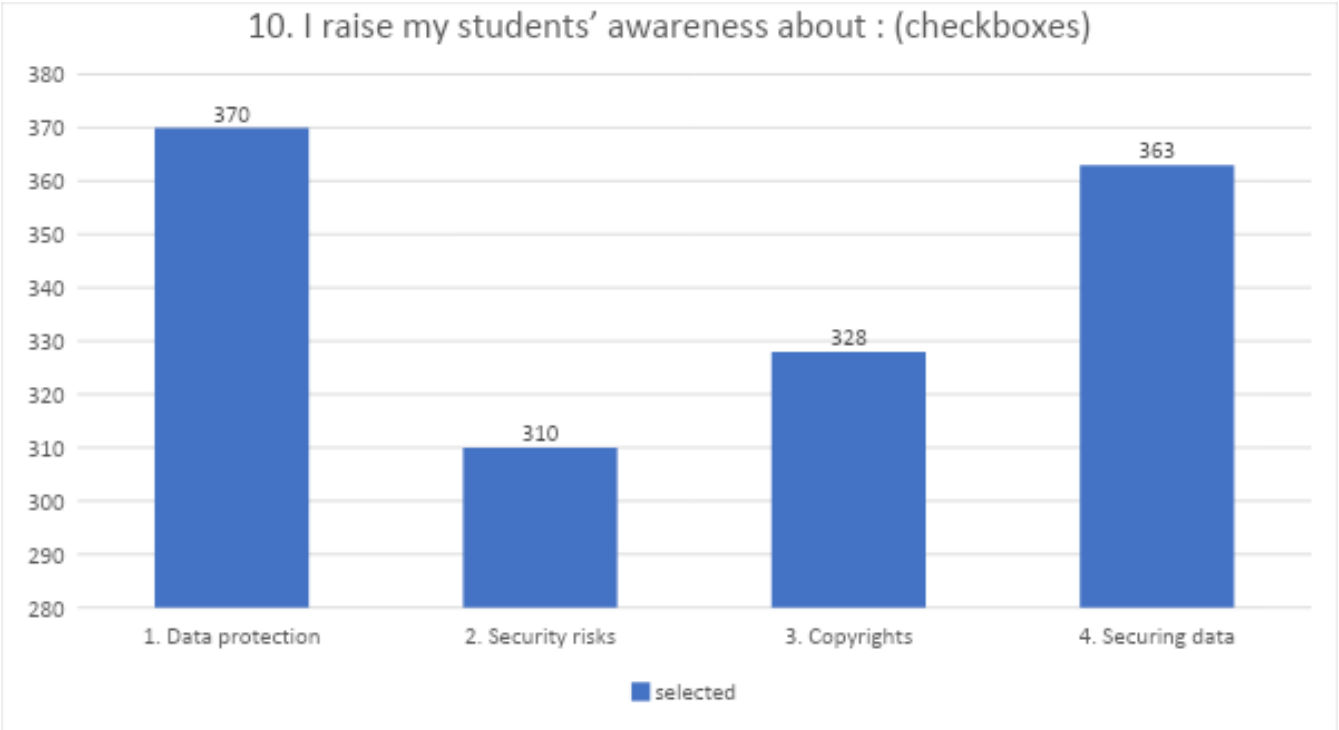

8.6. Using mobile devices in learning to support interactive learning activities
300
250
200
150
100
50
0
109
90
130
219
98
74
135
242
1. Tablets
2. Smartphones
Strongly disagree
disagree
Agree
Strongly Agree

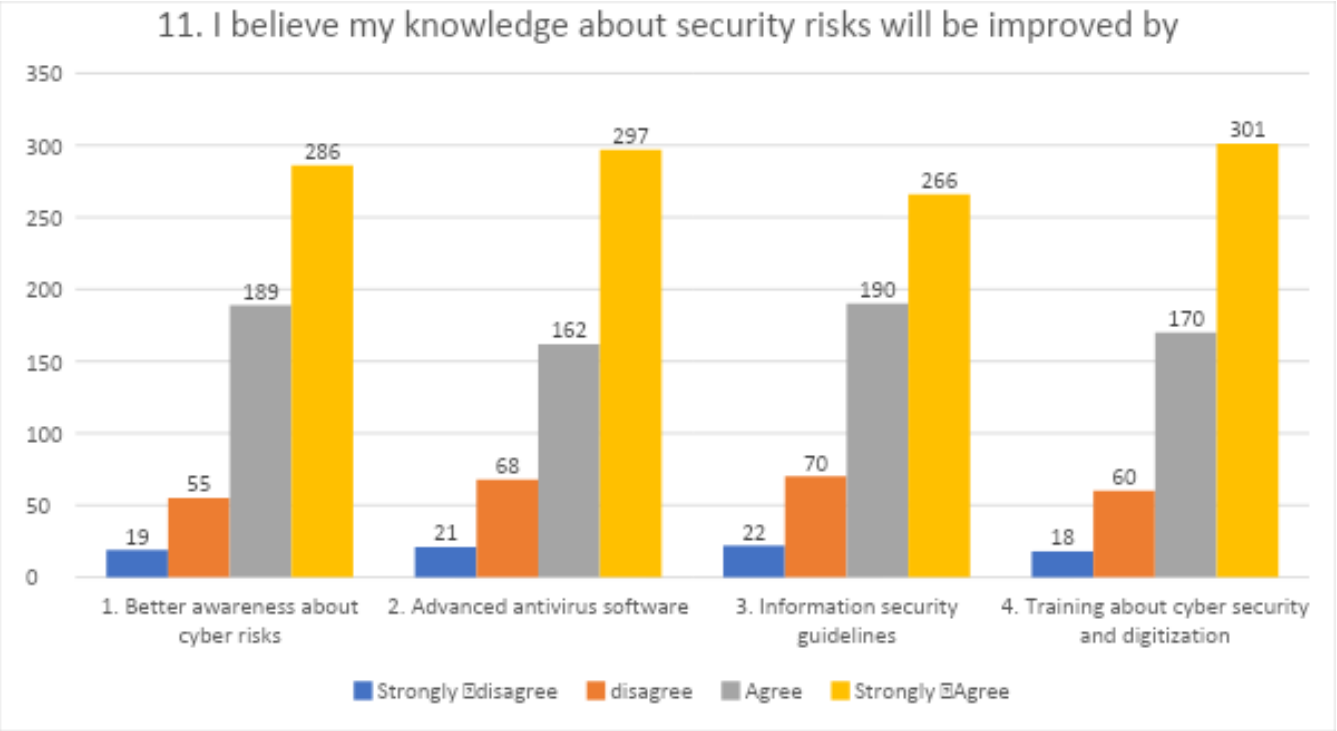

8.7. Webinars to organize seminars on the Internet that can also be attended remotely
180
160
140
120
100
80
60
40
20
0
159
57
70
107
130
160
77
98
134
23
116
55
91
156
30
117
12
12
17
89
1. Microsoft Teams
2. Skype
3. Zoom
4. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools


8.8. Web-based data visualization and infographics platforms to make digital charts and infographics
250
200
150
100
50
0
159
54
78
75
182
169
52
58
52
217
125
17
18
25
93
1. Infogram
2. Piktochart
3. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools


8.9. Online presentation tools to make interactive presentations for lectures
350
300
250
200
150
100
50
0
118
60
122
114
135
154
59
43
45
247
170
59
22
21
277
173
52
22
13
289
151
57
87
48
205
161
59
60
42
230
122
19
15
19
101
1. Prezi.com
2. Mentimeter
3. Zeetings
4. Biteable
5. Infogram
6. Piktochart
7. Other
Strongly disagree
disagree
Agree
Strongly Agree
I don't know the tools


9. I consider the following risks to cyber security
350
300
250
200
150
100
50
0
36
46
182
285
33
60
170
286
35
46
166
302
57
48
160
284
1. Data protection (private browsing, Creating passwords, cookies, duckduckgo, startpage)
2. Security risks (malware, viruses, hacking social engineering)
3. Securing data
4. Copyrights
Strongly disagree
disagree
Agree
Strongly Agree


10. I raise my students' awareness about : (checkboxes)
380
370
360
350
340
330
320
310
300
290
280
370
310
328
363
1. Data protection
2. Security risks
3. Copyrights
4. Securing data
selected




**Analysis of Learners Assessment Questionnaire on Adult Educators ICT skills**

486 adult learners filled the learners' assessment questionnaire with 95 people representing the age group of 20 years old and younger, 87 people representing the age group of 20-29 years, 158 representing the age group of 30-39, 104 representing the age group of 40-49, 38 representing the age group of 50-59 and 4 people representing the age group of 60 years old and older.

84,76 % of the respondents had attended at least one adult learning or vocational education training in the past year.

Almost have of the respondents (45,63%) have a university degree, but 40,27% have a secondary school diploma, but 14,1% of the respondents have a primary school education or lower.

The primary reason of choosing an adult education programs is quality of teaching (375), adequate learning materials (337), interaction between learners and trainers (312) and a possibility of developing new

competencies and skills that are valuable for their work (308). Only 184 respondents said that when choosing a learning course, they pay attention to the availability of ICT tools.

However, when asked to what respondents pay attention to when taking adult learning courses 274 pointed out that they pay attention to the use of interactive methods and 270 said that they pay attention to the use of digital tools, but absolute majority (408) said that they choose courses based on the organisation of the respective course.

Nevertheless, when asked if respondents agree that ICT tools improve organization of the course, absolute majority responded positively with 37,24% agreeing and 44,41% strongly agreeing, underlying one of the main conclusion from this survey – even if the use of ICT tools isn't primary reason for choosing adult education course, use of these tools can considerably benefit education process and improve participants overall satisfaction with the trainings.

As the most valuable benefits of using ICT tools in the learning process, respondents point out that during their courses they simultaneously can improve their ICT skills (346), have access to more information (310) and that with ICT tools their learning schedule is more adaptable to their personal schedules (306). A slightly smaller number of respondents as a benefit of use of ICT tools in the learning process mention interactivity (270), more effective communication (224) and a stronger trainer's involvement (169).

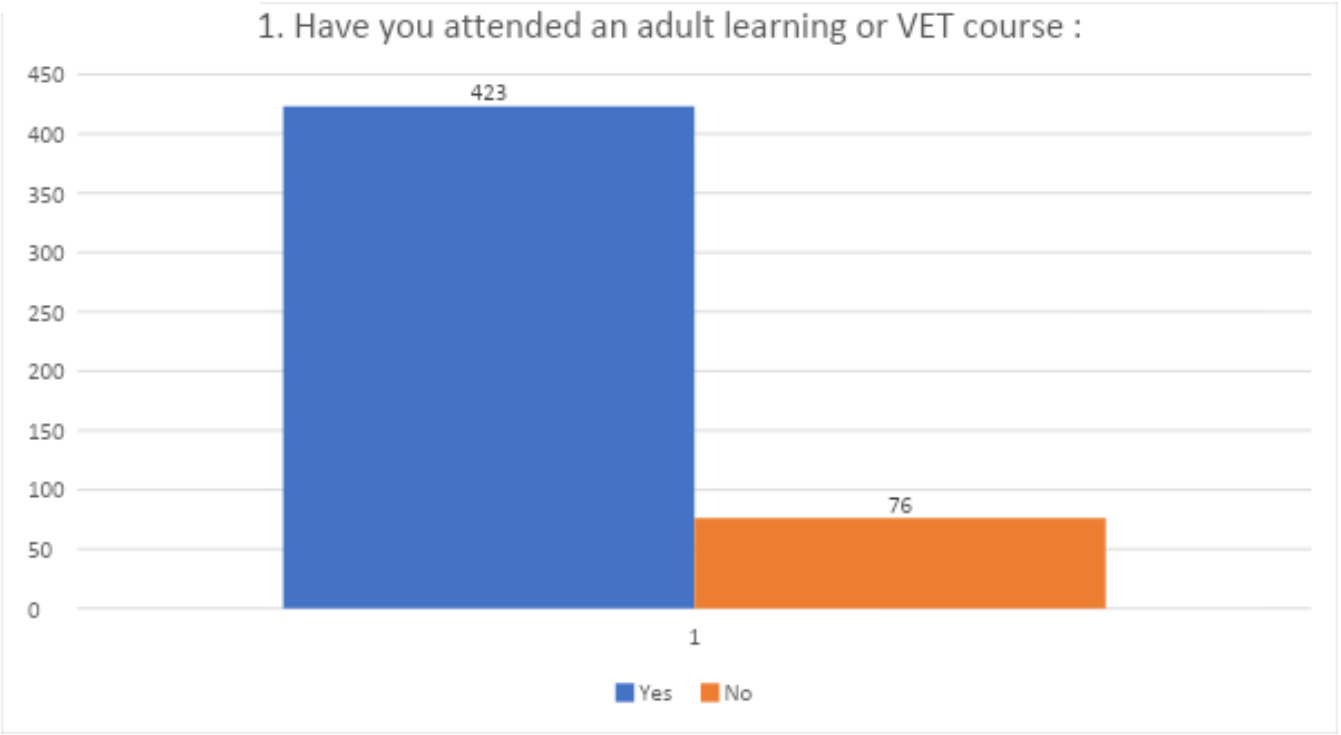
Majority of respondents either agree or strongly agree that adult education and VET centres should offer training events via various communication tools, via webinars and offer online training events in general, as well as offer additional resources using different document sharing platforms and inform students about cyber security challenges when using these platforms.

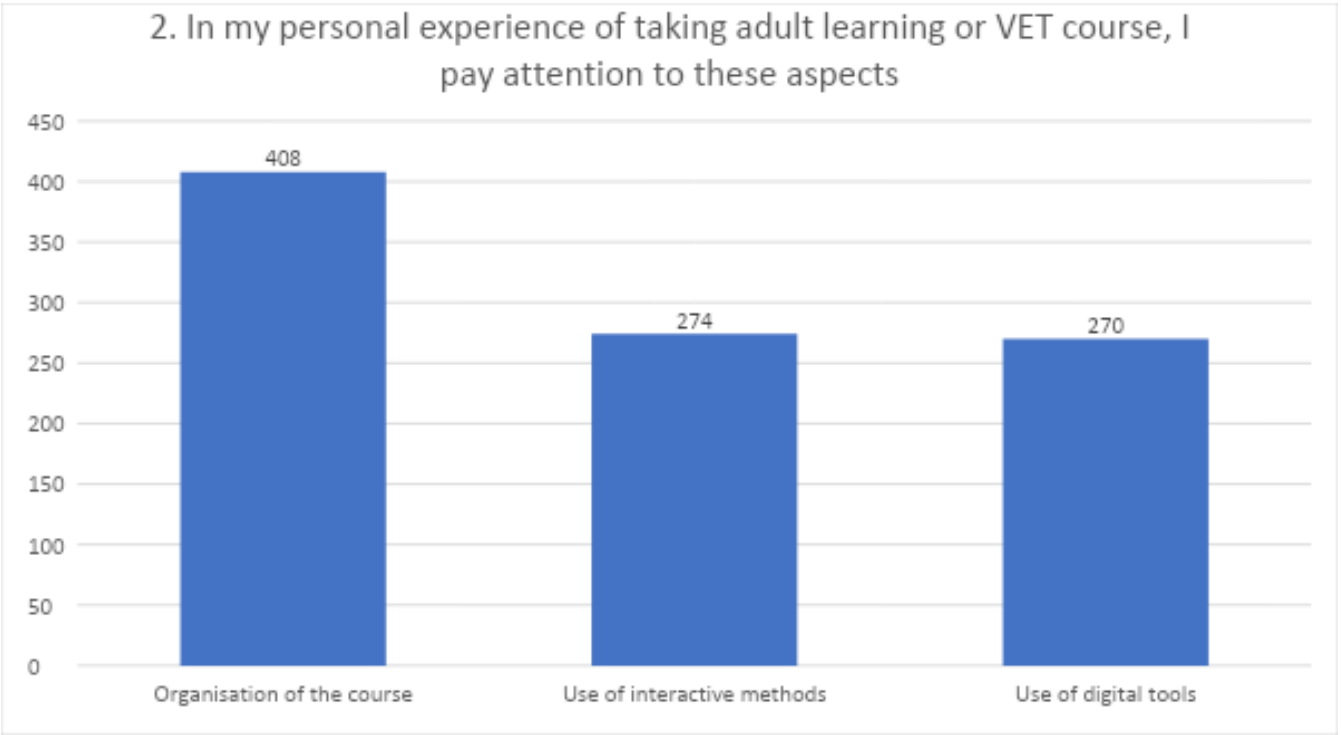
However, when asked about different cyber security risks, students admit that trainers not always manage to raise awareness about different cyber security related issues. Majority of respondents either strongly disagree or disagree that trainers raise their awareness about data protection, security risks, securing data and copyrights, indicating that trainers would benefit from additional training about cyber security risks while using different ICT tools.

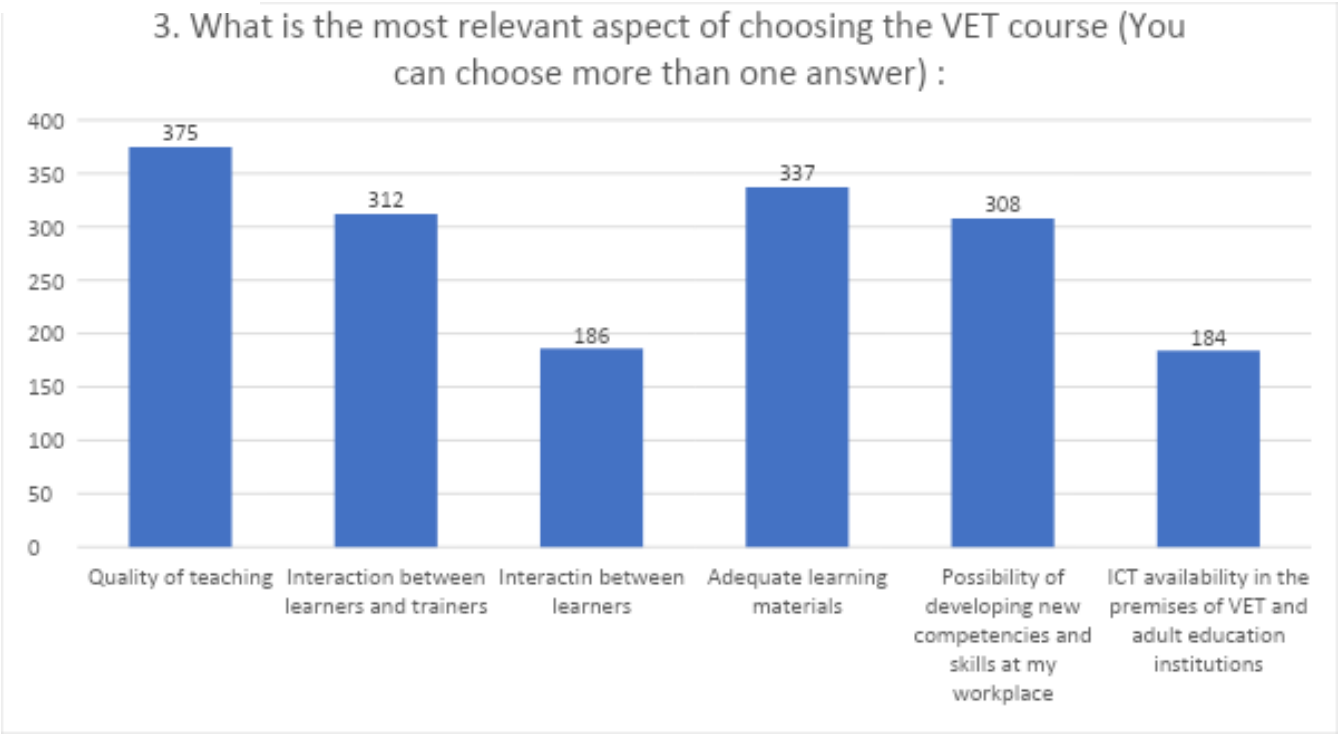
According to the survey, trainers mostly use ICT tools to show presentations during their lectures, to offer additional information and resources from the Internet, to offer digital content for learner's use and to share documents and files with students. Less often trainers use ICT tools to communicate with students, to get feedback from students and to work with different online learning platforms.

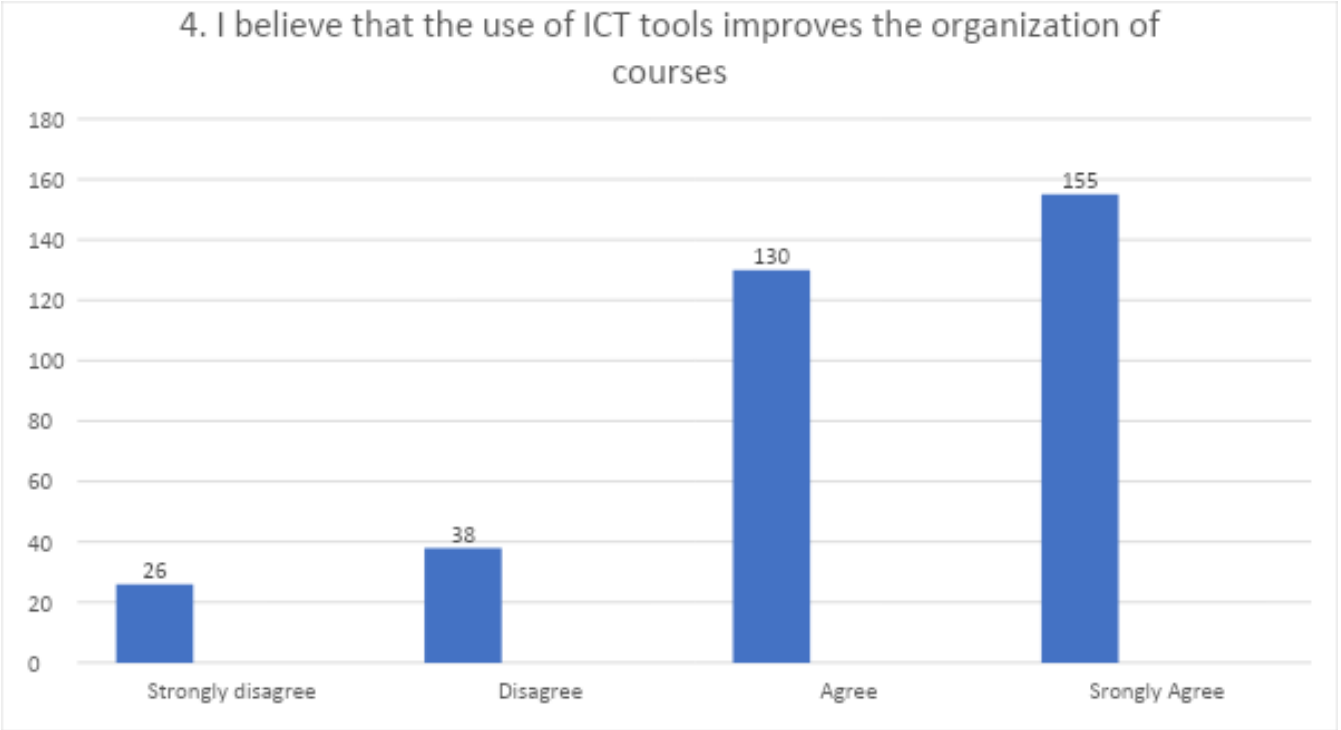
In survey's respondents' overall experience, trainers use ICT tools for teaching purposes quite rarely. If the ICT tools are used, they are most often used for organizing webinars (using zoom, skype or MS Teams), for communicating during learning process via Social media (Facebook, Skype, YouTube), for organizing classroom activities using online calendars and different communication tools (google calendar, outlook calendar or doodle) and for sharing tutorials with students, using cloud storage platforms (google drive or one drive). Use of smartphones and tablets during lectures is also common.

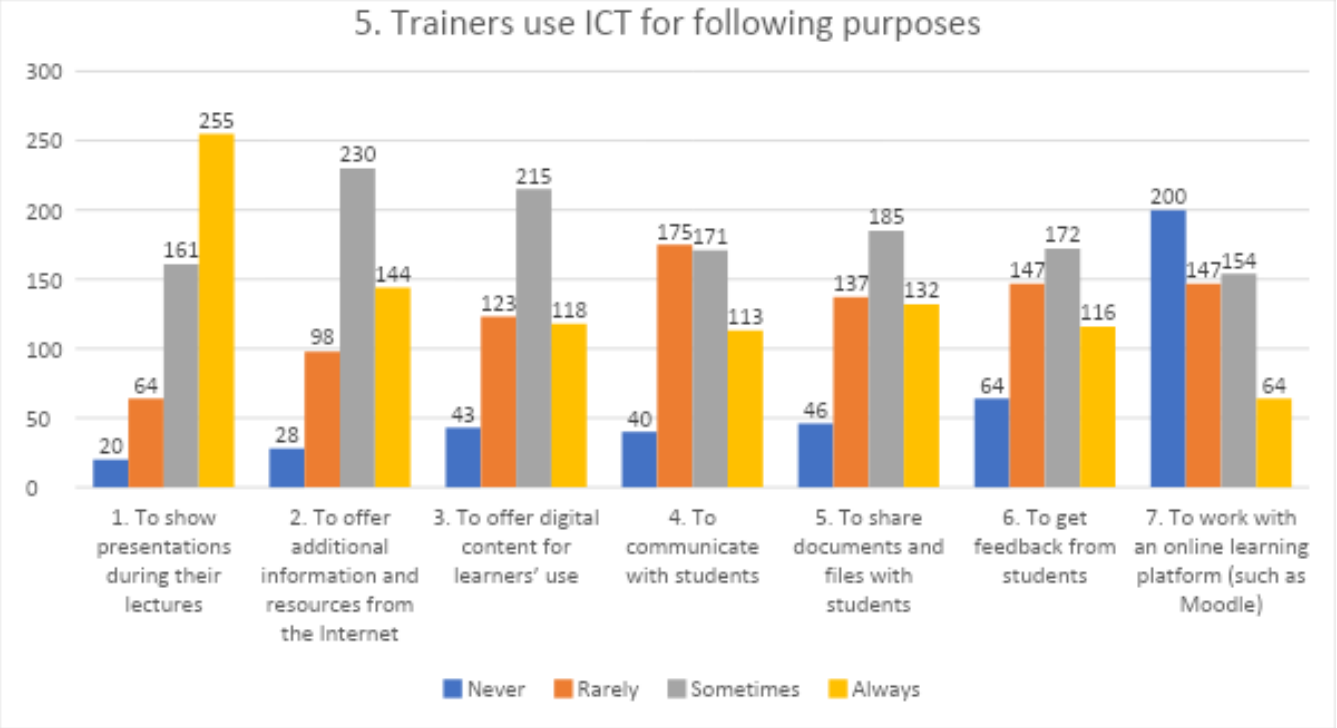
Less often trainers use tools that promote student collaboration. If they are used, Facebook and Kahoot are most common. Trainers quite rarely use online presentation tools to make interactive presentations for lectures. If such tools are used, Prezi.com, Infogram, Mentimeter or Piktochart are most popular amongst these tools. Similar situation is with web-based data visualization and infographic platforms – trainers don' t use such tools too often. However, when they are used, Infogram and Piktochart are common choices. Use of e-learning platforms are also undiscovered area. When questioned about different e-learning platforms, respondents replied that in their experience trainers don't use them, but when do, only Moodle is mentioned.


1. Have you attended an adult learning or VET course :
450
400
350
300
250
200
150
100
50
0
423
76
1
Yes
No

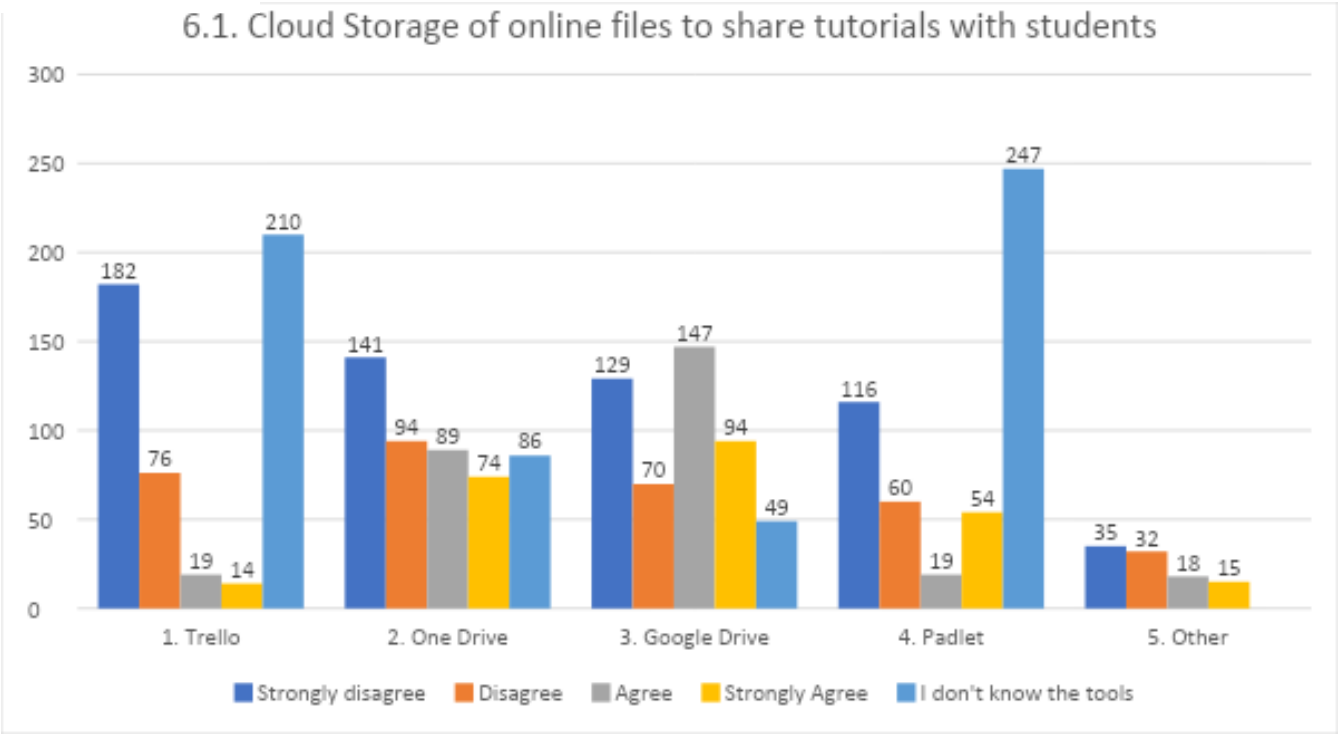

2. In my personal experience of taking adult learning or VET course, I pay attention to these aspects
450
400
350
300
250
200
150
100
50
0
408
274
270
Organisation of the course
Use of interactive methods
Use of digital tools

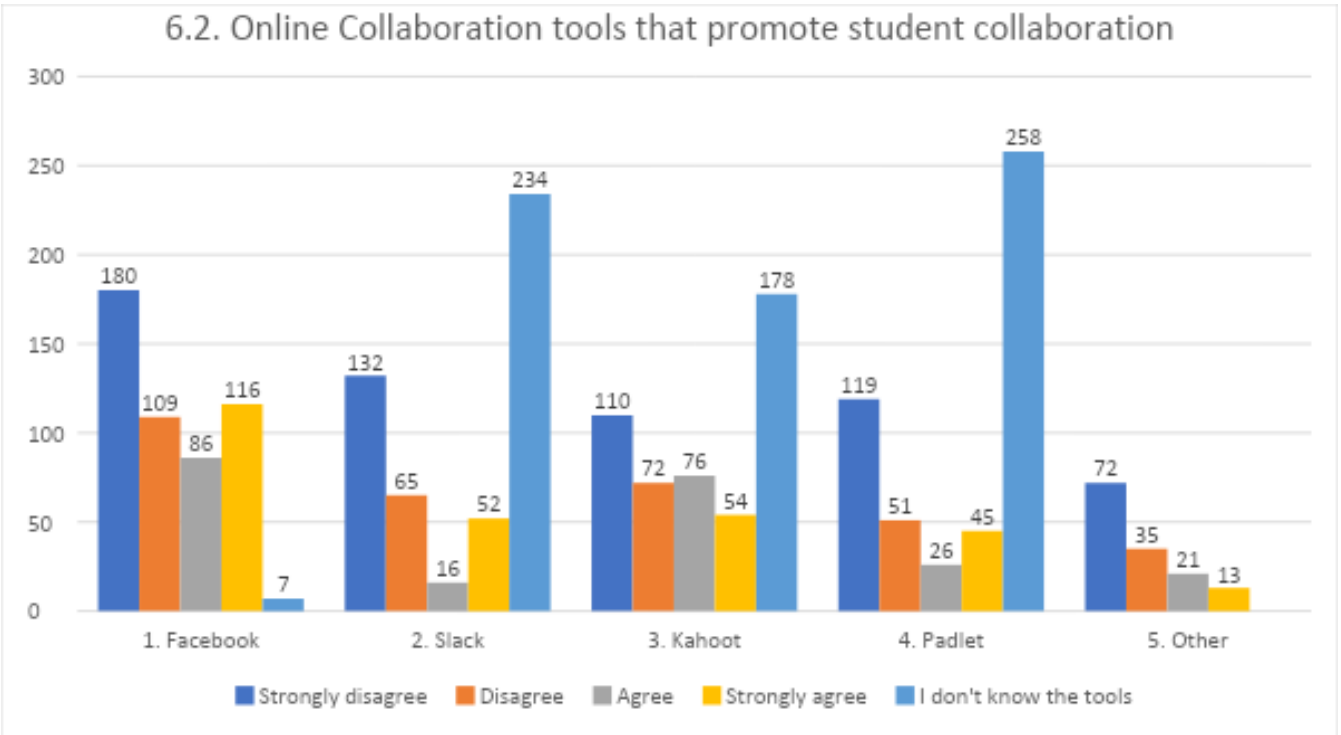

3. What is the most relevant aspect of choosing the VET course (You can choose more than one answer) :
400
350
300
250
200
150
100
50
0
375
312
186
337
308
184
Quality of teaching
Interaction between learners and trainers
Interactin between learners
Adequate learning materials
Possibility of developing new competencies and skills at my workplace
ICT availability in the premises of VET and adult education institutions

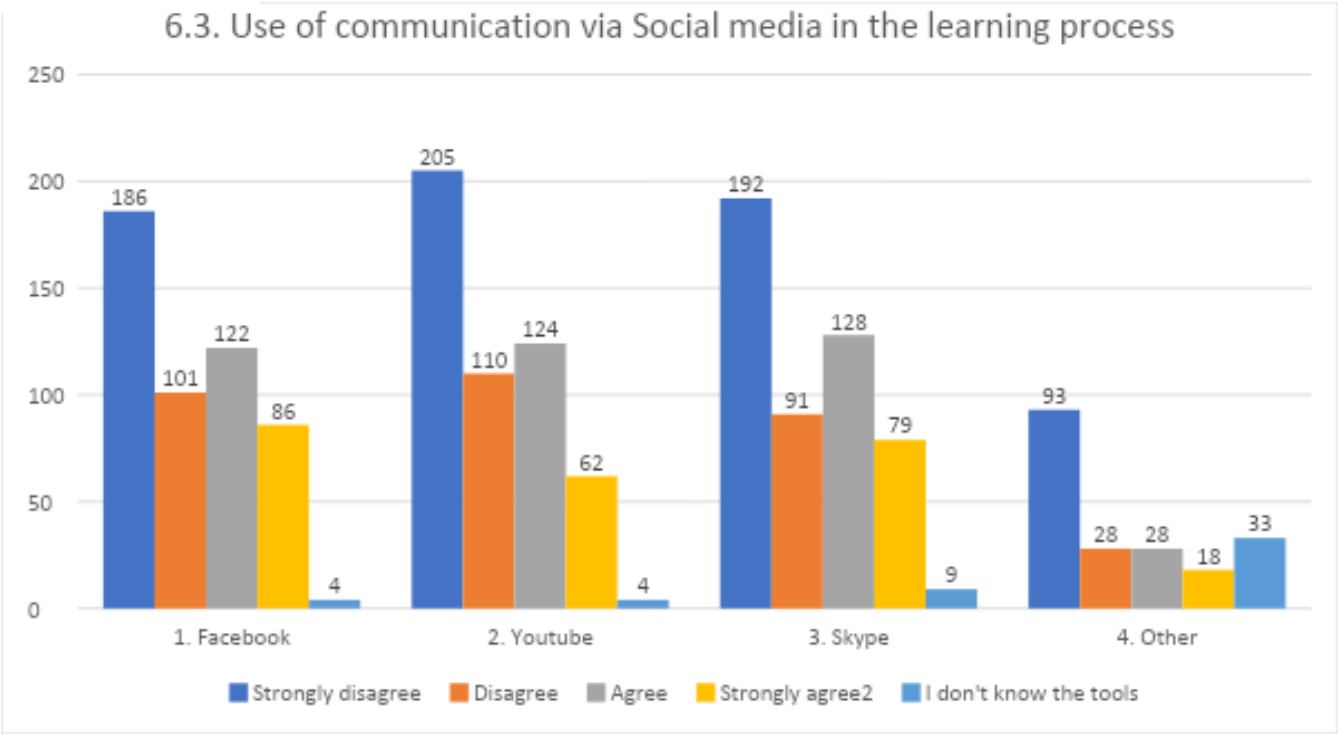

4. I believe that the use of ICT tools improves the organization of courses
180
160
140
120
100
80
60
40
20
0
26
38
130
155
Strongly disagree
Disagree
Agree
Srongly Agree

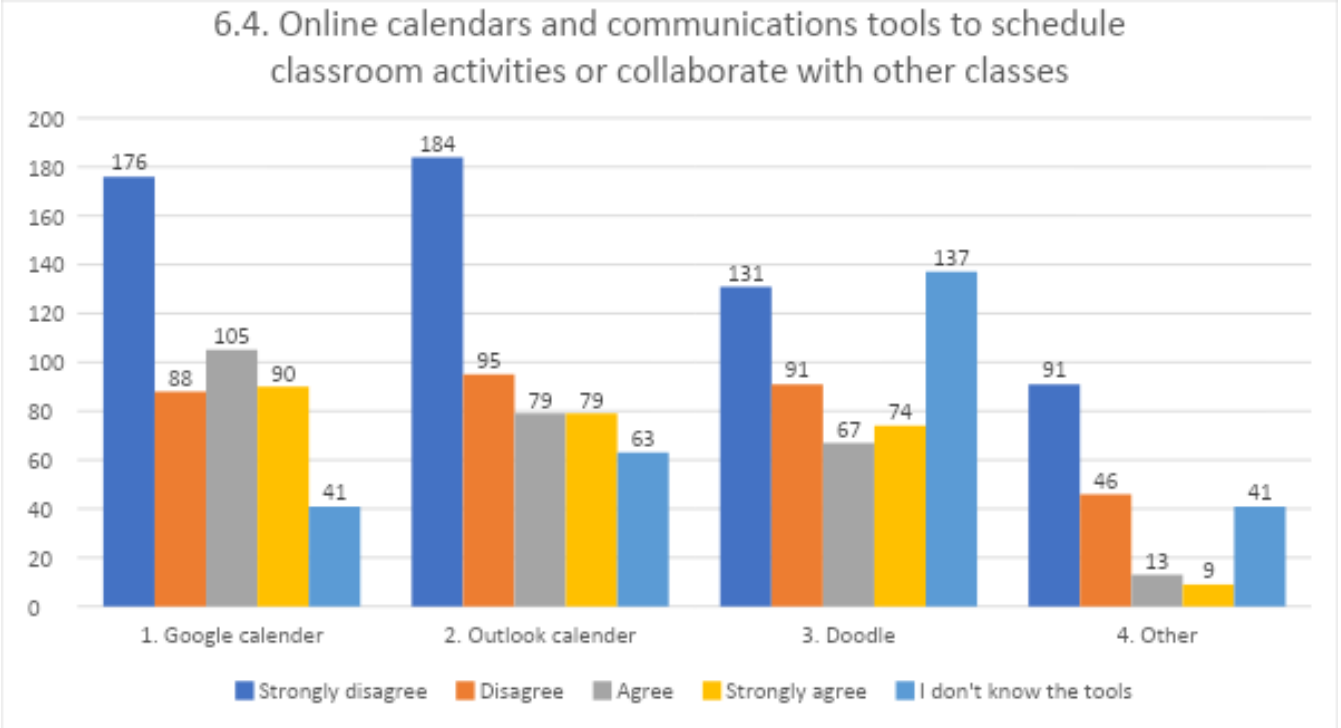


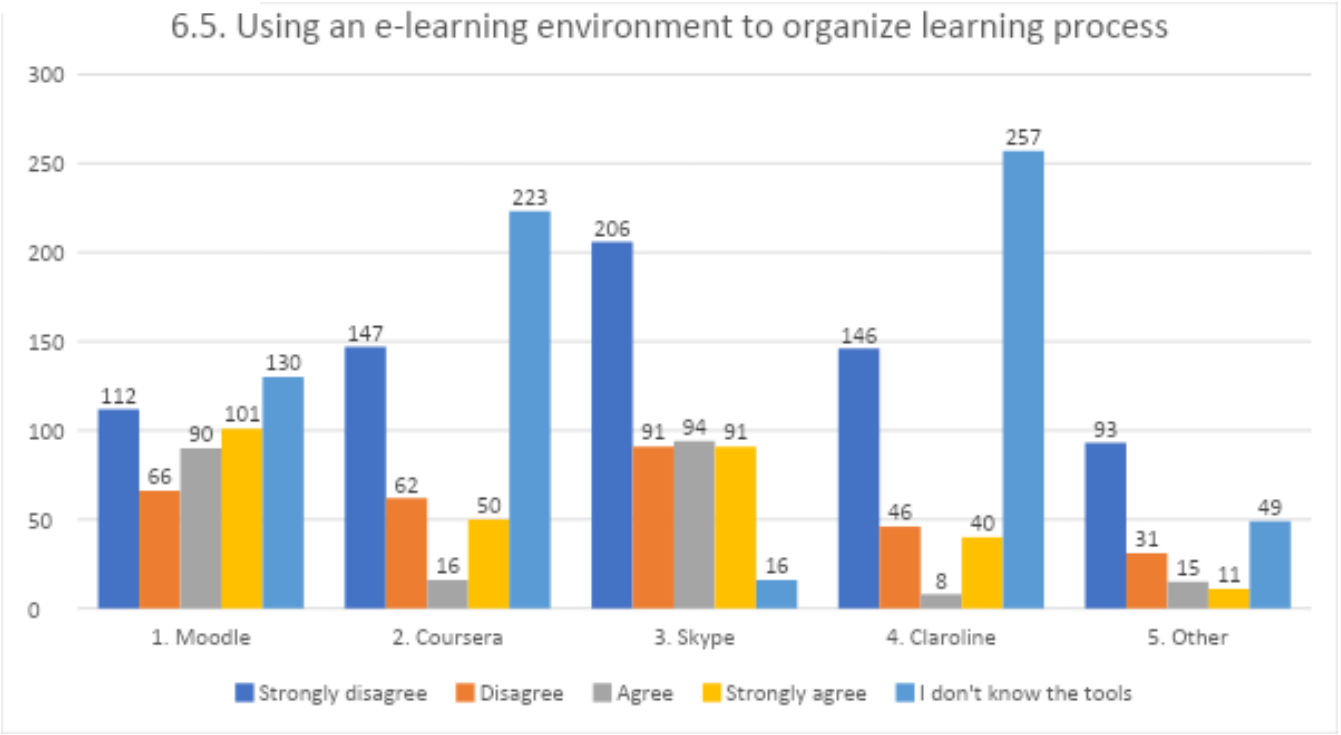

6. In my experience, trainers use these ICT tools for teaching purposes:

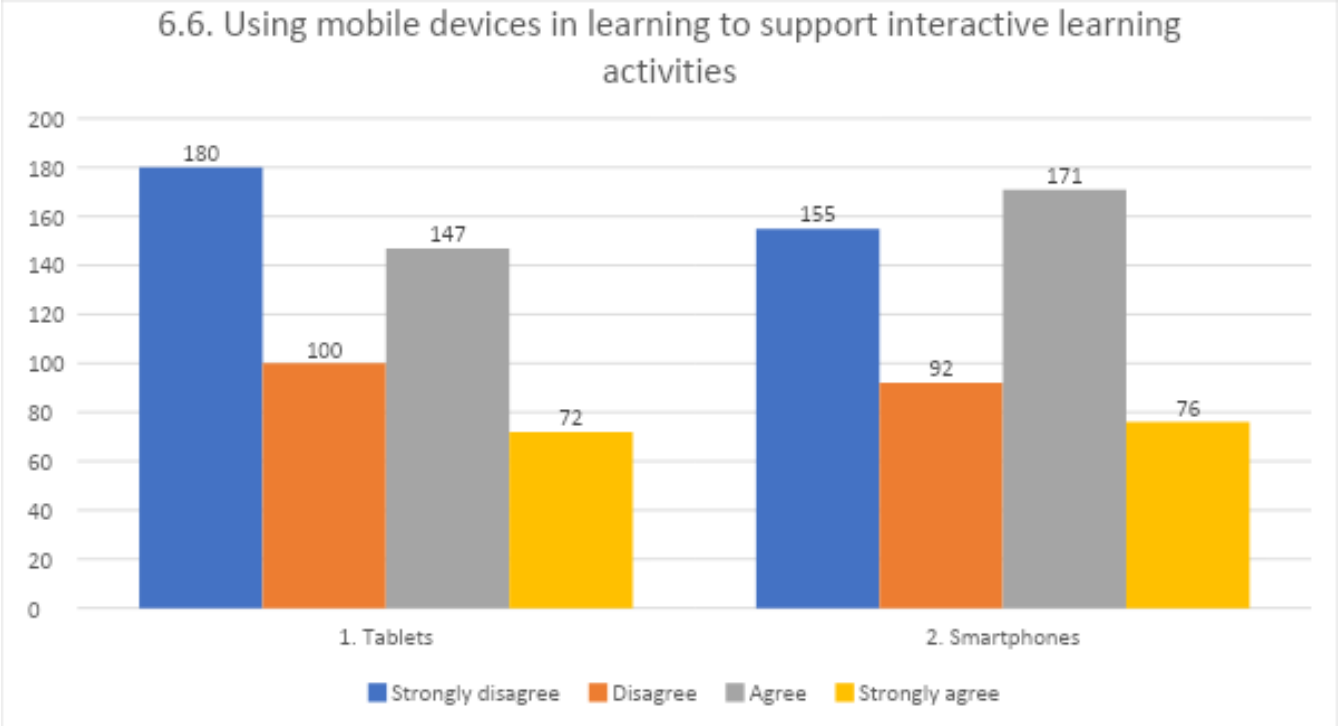

6.1. Cloud Storage of online files to share tutorials with students
300
250
200
150
100
50
0
182
76
19
14
210
141
94
89
74
86
129
70
147
94
49
116
60
19
54
247
35
32
18
15
1. Trello
2. One Drive
3. Google Drive
4. Padlet
5. Other
Strongly disagree
Disagree
Agree
Strongly Agree
I don't know the tools

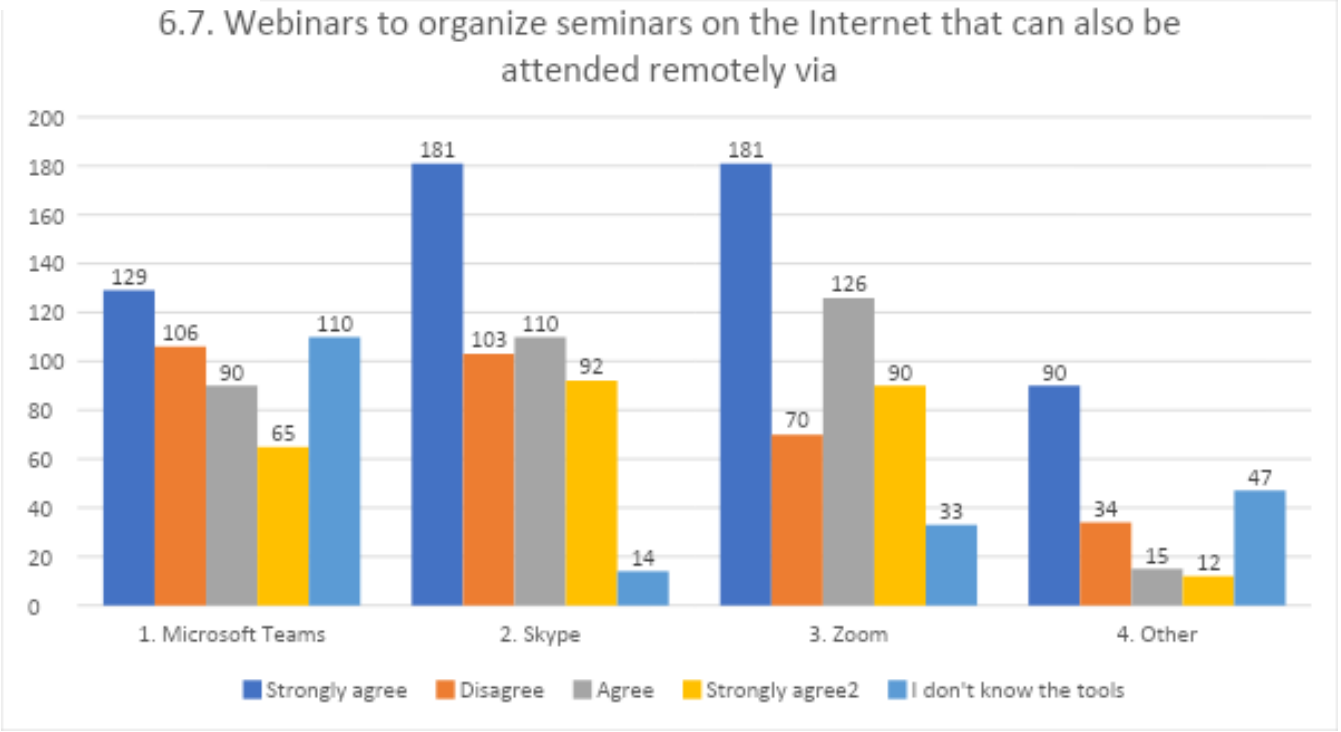

6.2. Online Collaboration tools that promote student collaboration
300
250
200
150
100
50
0
180
109
86
116
7
132
65
16
52
234
110
72
76
54
178
119
51
26
45
258
72
35
21
13
1. Facebook
2. Slack
3. Kahoot
4. Padlet
5. Other
Strongly disagree
Disagree
Agree
Strongly agree
I don't know the tools

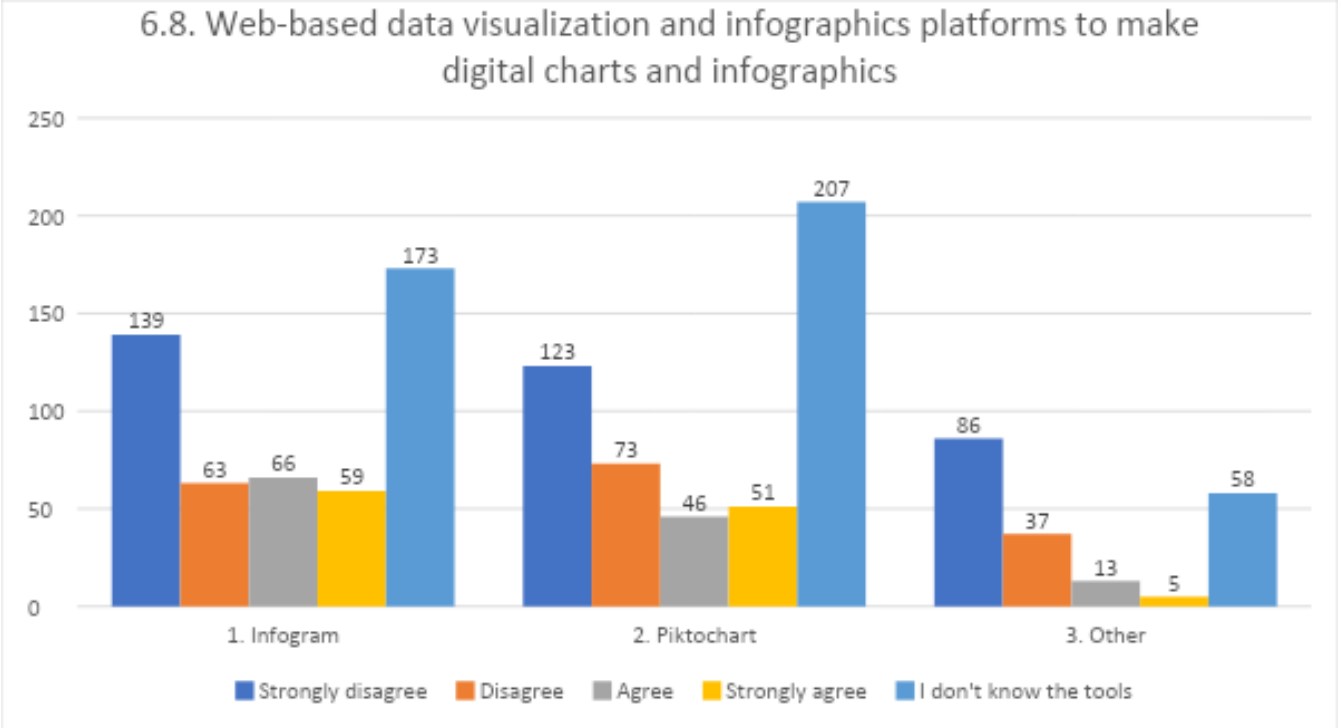

6.3. Use of communication via Social media in the learning process
250
200
150
100
50
0
186
101
122
86
4
205
110
124
62
4
192
91
128
79
9
93
28
28
18
33
1. Facebook
2. Youtube
3. Skype
4. Other
Strongly disagree
Disagree
Agree
Strongly agree2
I don't know the tools

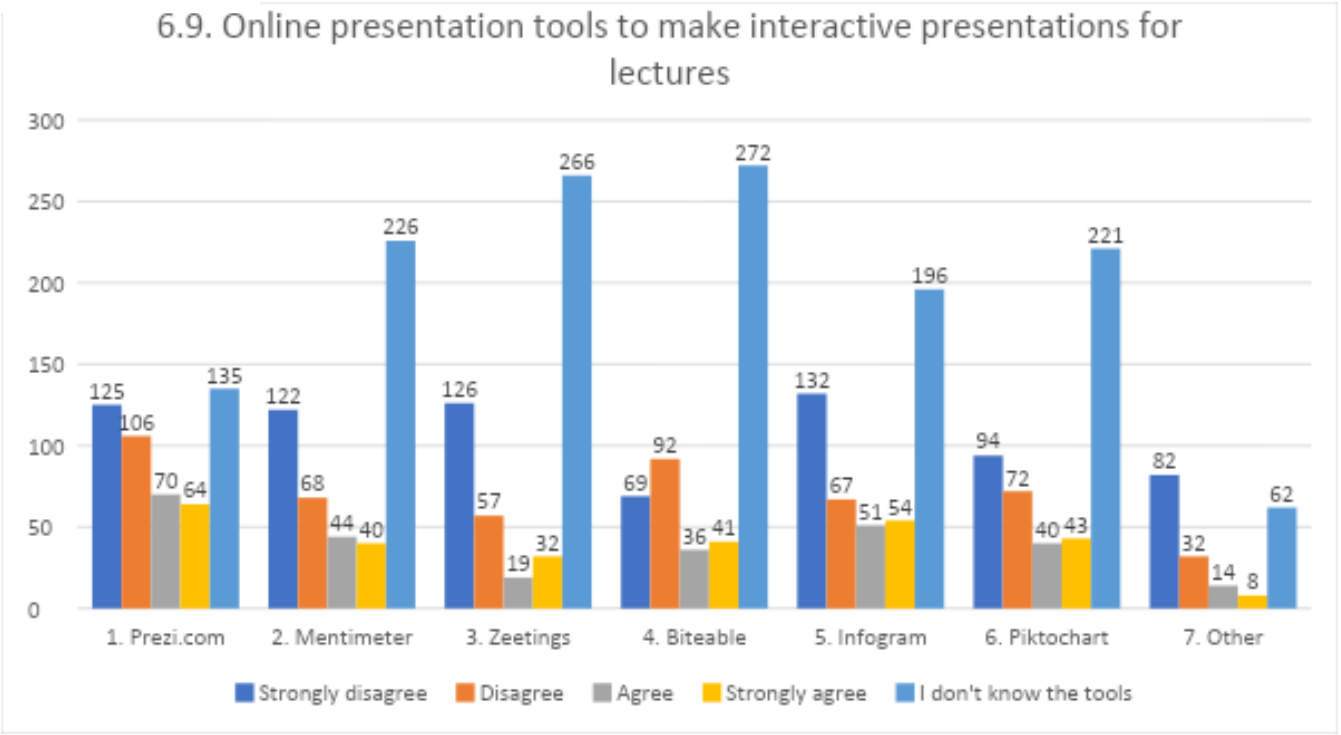

6.4. Online calendars and communications tools to schedule classroom activities or collaborate with other classes
200
180
160
140
120
100
80
60
40
20
0
176
88
105
90
41
184
95
79
79
63
131
91
67
74
137
91
46
13
9
41
1. Google calender
2. Outlook calender
3. Doodle
4. Other
Strongly disagree
Disagree
Agree
Strongly agree
I don't know the tools

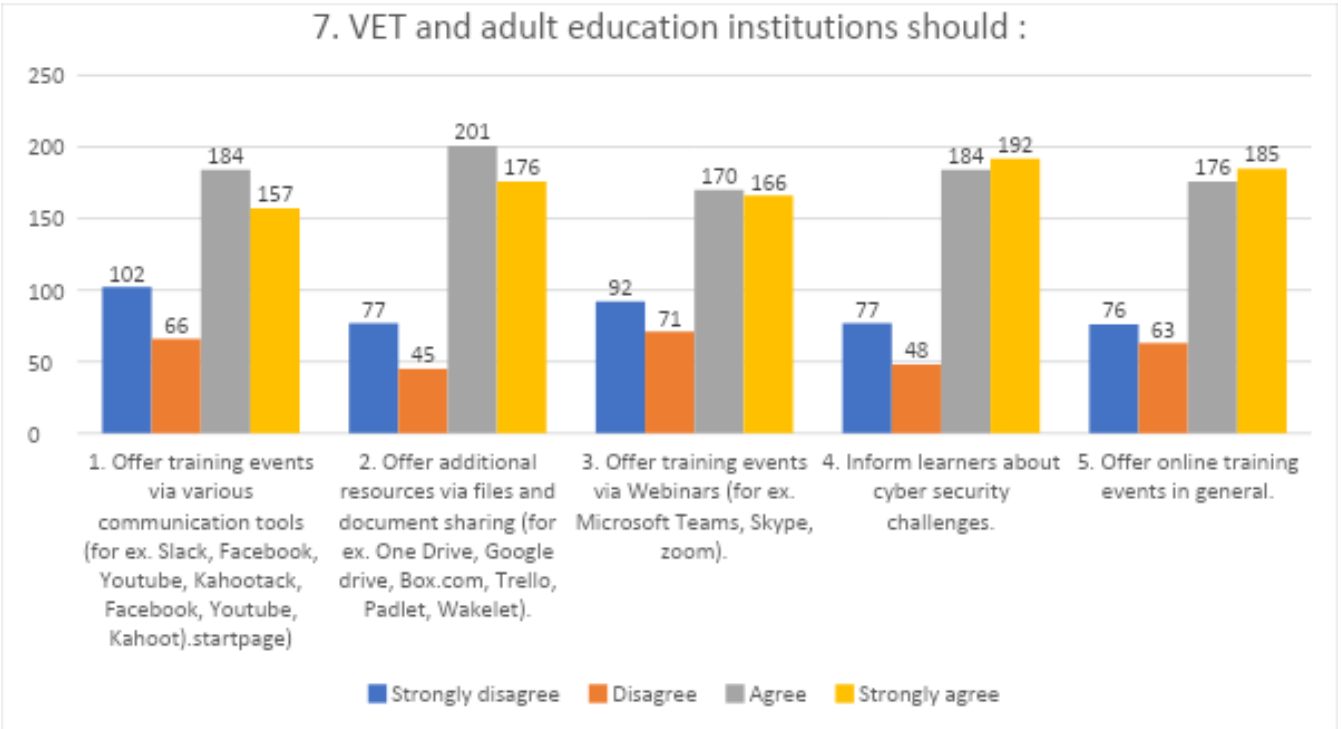

6.5. Using an e-learning environment to organize learning process
300
250
200
150
100
50
0
112
66
90
101
130
147
62
16
50
223
206
91
94
91
16
146
46
8
40
257
93
31
15
11
49
1. Moodle
2. Coursera
3. Skype
4. Claroline
5. Other
Strongly disagree
Disagree
Agree
Strongly agree
I don't know the tools

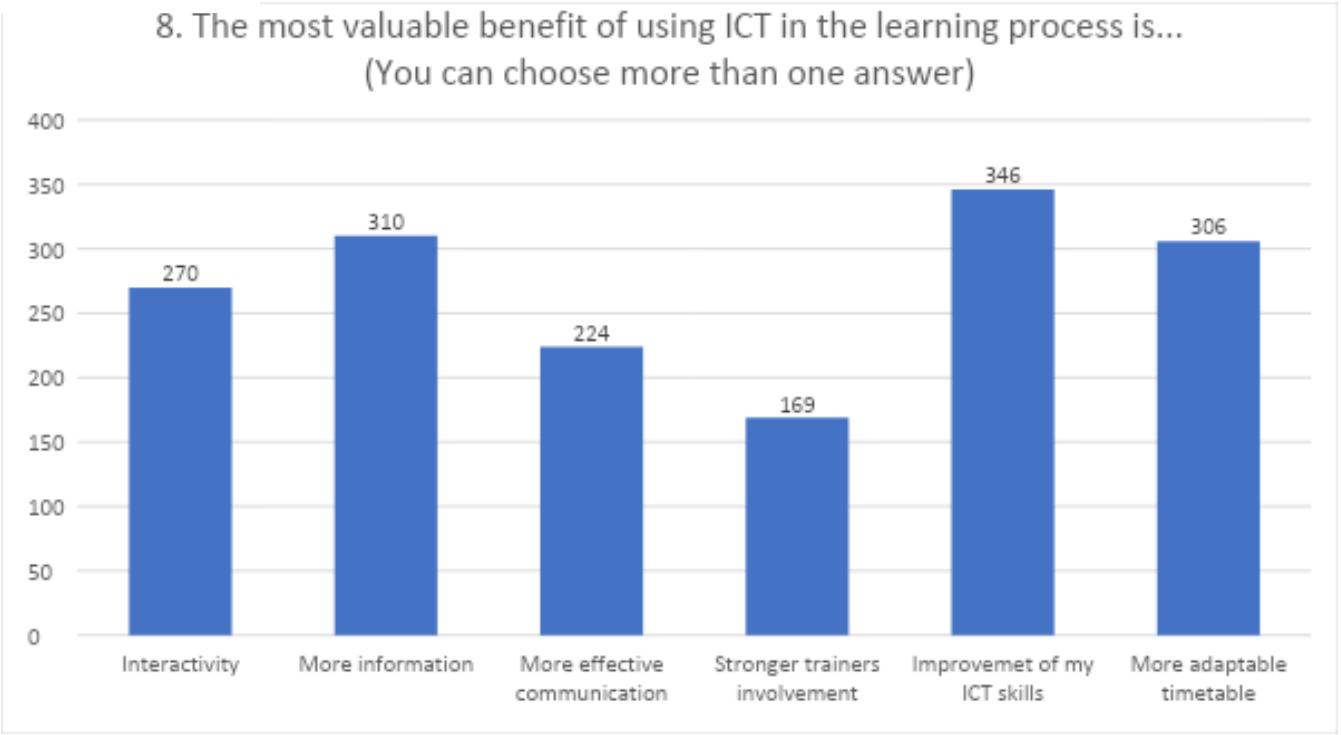

6.6. Using mobile devices in learning to support interactive learning activities
200
180
160
140
120
100
80
60
40
20
0
180
100
147
72
155
92
171
76
1. Tablets
2. Smartphones
Strongly disagree
Disagree
Agree
Strongly agree

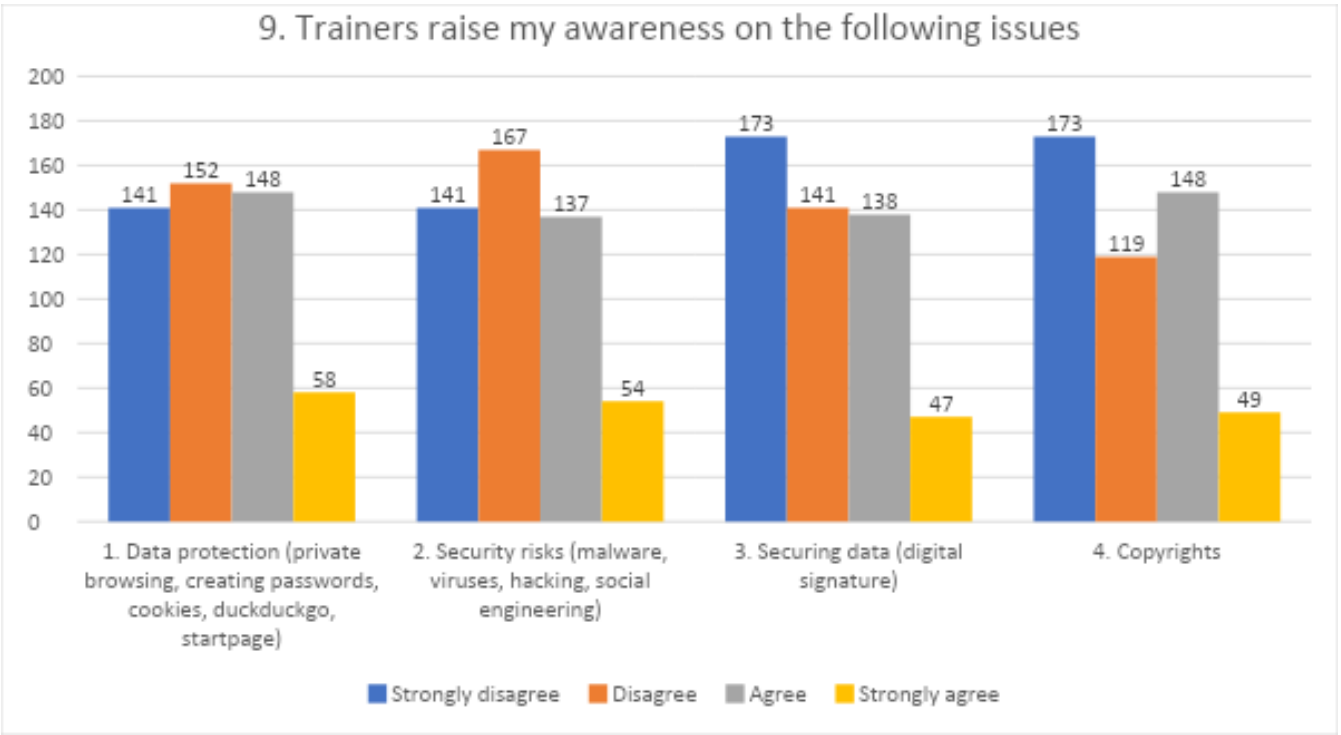

6.7. Webinars to organize seminars on the Internet that can also be attended remotely via
200
180
160
140
120
100
80
60
40
20
0
129
106
90
65
110
181
103
110
92
14
181
70
126
90
33
90
34
15
12
47
1. Microsoft Teams
2. Skype
3. Zoom
4. Other
Strongly agree
Disagree
Agree
Strongly agree2
I don't know the tools

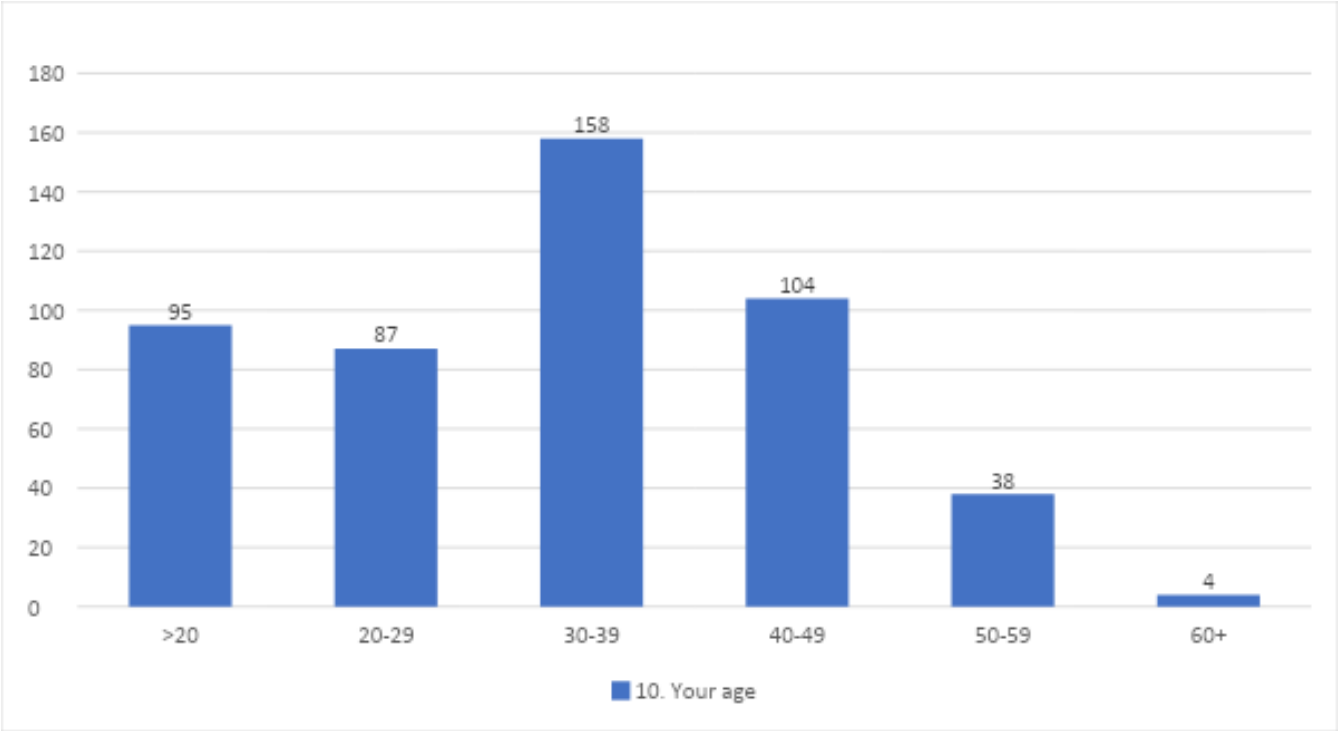

6.8. Web-based data visualization and infographics platforms to make digital charts and infographics
250
200
150
100
50
0
139
63
66
59
173
123
73
46
51
207
86
37
13
5
58
1. Infogram
2. Piktochart
3. Other
Strongly disagree
Disagree
Agree
Strongly agree
I don't know the tools

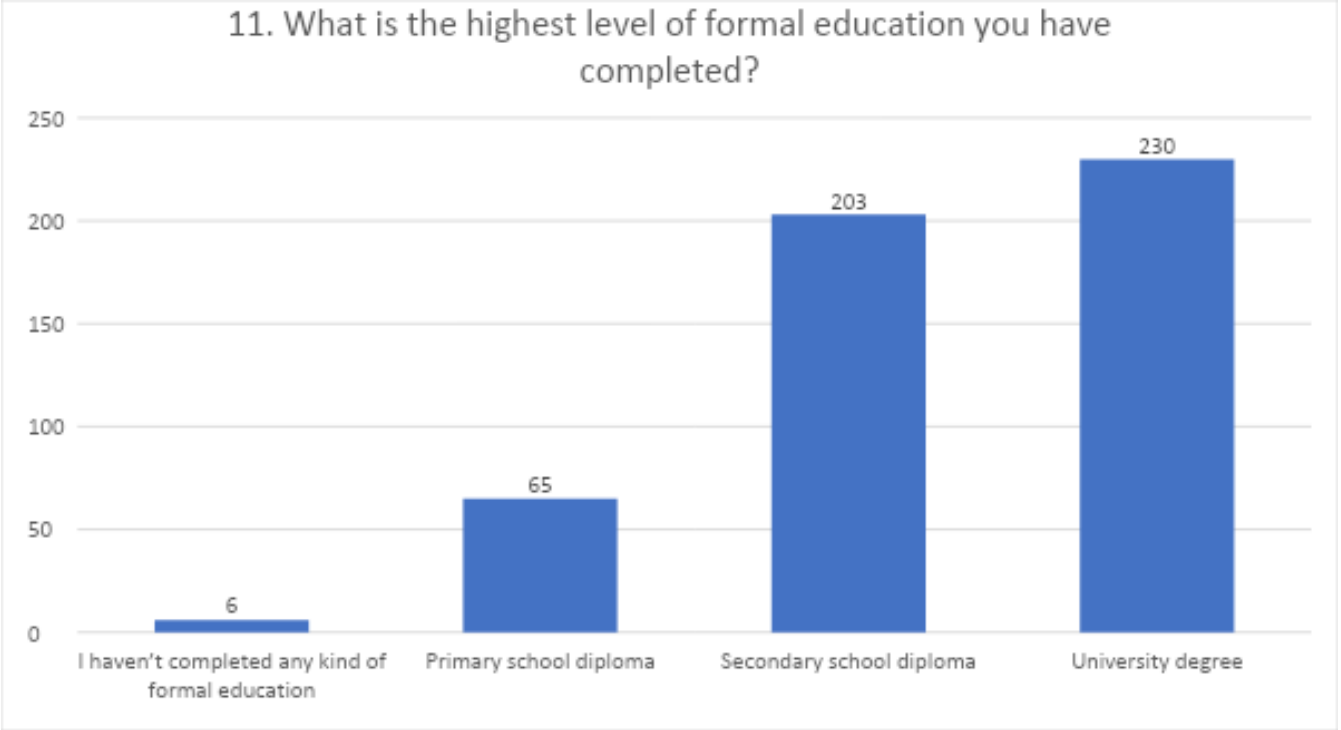

6.9. Online presentation tools to make interactive presentations for lectures
300
250
200
150
100
50
0
125
106
70
64
135
122
68
44
40
226
126
57
19
32
266
69
92
36
41
272
132
67
51
54
196
94
72
40
43
221
82
32
14
8
62
1. Prezi.com
2. Mentimeter
3. Zeetings
4. Biteable
5. Infogram
6. Piktochart
7. Other
Strongly disagree
Disagree
Agree
Strongly agree
I don't know the tools


7. VET and adult education institutions should :
250
200
150
100
50
0
102
66
184
157
77
45
201
176
92
71
170
166
77
48
184
192
76
63
176
185
1. Offer training events via various communication tools (for ex. Slack, Facebook, Youtube, Kahootack, Facebook, Youtube, Kahoot).startpage)
2. Offer additional resources via files and document sharing (for ex. One Drive, Google drive, Box.com, Trello, Padlet, Wakelet).
3. Offer training events via Webinars (for ex. Microsoft Teams, Skype, zoom).
4. Inform learners about cyber security challenges.
5. Offer online training events in general.
Strongly disagree
Disagree
Agree
Strongly agree


8. The most valuable benefit of using ICT in the learning process is...
(You can choose more than one answer)
400
350
300
250
200
150
100
50
0
270
310
224
169
346
306
Interactivity
More information
More effective communication
Stronger trainers involvement
Improvemet of my ICT skills
More adaptable timetable


9. Trainers raise my awareness on the following issues
200
180
160
140
120
100
80
60
40
20
0
141
152
148
58
141
167
137
54
173
141
138
47
173
119
148
49
1. Data protection (private browsing, creating passwords, cookies, duckduckgo, startpage)
2. Security risks (malware, viruses, hacking, social engineering)
3. Securing data (digital signature)
4. Copyrights
Strongly disagree
Disagree
Agree
Strongly agree


180
160
140
120
100
80
60
40
20
0
95
87
158
104
38
4
>20
20-29
30-39
40-49
50-59
60+
10. Your age


11. What is the highest level of formal education you have completed?
250
200
150
100
50
0
6
65
203
230
I haven't completed any kind of formal education
Primary school diploma
Secondary school diploma
University degree