



EMPOWER ADULT EDUCATORS TO SUPPORT DIGITAL SOCIAL INCLUSION

Cooperation partnerships in adult education

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Digital Landscape: Perspectives of Trainers and Learners on Adult Digital Social Inclusion



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About the publication

Digital Landscape: Perspectives of Trainers and Learners on Adult Digital Social Inclusion

This research constitutes a component of WORK PACKAGE N°2: Digital Involvement and Skills Development Toolkit, developed by the DigIN Consortium within the “Empower Adult Educators to Support Digital Social Inclusion [DigIN]”, Project number 2022-1-PL01-KA220-ADU-000088404.

The work package focuses on the analysis of the most successful tools and instruments, as well as improvements resulting from input from adults and educators. The competence map of the digital facilitator working with adults is very innovative and urgent because educators require digital educational methods adapted to digital proficiency level.

Our project is aimed at the following target groups:

Educators and Adult Education Professionals: These individuals are seeking to enhance their digital skills in order to effectively adapt to the digital education landscape amidst the ongoing digital transformation. They require digital competencies and a diverse toolbox of instruments to create engaging and active learning experiences, improve the quality of existing programs, and ensure learners achieve their desired learning outcomes.

Adults Aged 55+: This group requires digital skills in order to access support services, schedule medical appointments, participate in welfare activities, and stay safe while navigating the online world. They require easily accessible tools to assess their own digital competency levels, as well as engaging courses to help them become digitally competent.

Adult Education Organizations: These institutions require initiatives that empower adults to become active technology users. The innovative digital education ecosystem provides educators with the opportunity to create, update, share, adapt, and reuse attractive educational programs, fostering a dynamic learning environment.

The partnership is:



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1. Introduction

During April-May, 2023 we conducted two surveys with the goal of analysing digital social inclusion and measuring differences between adult learners' and adult educators' opinions. UJI led the researchers in the design and analysis of an online survey. Research was conducted in all the partner countries (Poland, Spain, The Netherlands and Türkiye) in order to assess older adult learners and adult educators' involvement in digital non-formal learning activities.

Data was gathered based on two sources: desk research (presented in a separate document "Digital competence map for adult educators) and survey. 245 valid surveys were obtained from the group of learners and 144 valid surveys from the sample of trainers (adult educators). The survey results helped formulate a digital competence map for adult educators.

The research was carried out taking into account the needs of the target group. Our project is aimed at the following target groups:

Educators and Adult Education Professionals: These individuals are seeking to enhance their digital skills in order to effectively adapt to the digital education landscape amidst the ongoing digital transformation. They require digital competencies and a diverse toolbox of instruments to create engaging and active learning experiences, improve the quality of existing programs, and ensure learners achieve their desired learning outcomes.

Adults Aged 55+: This group requires digital skills in order to access support services, schedule medical appointments, participate in welfare activities, and stay safe while navigating the online world. They require easily accessible tools to assess their own digital competency levels, as well as engaging courses to help them become digitally competent.

Adult Education Organizations: These institutions require initiatives that empower adults to become active technology users. The innovative digital education ecosystem provides educators with the opportunity to create, update, share, adapt, and reuse attractive educational programs, fostering a dynamic learning environment.

1. Quantitative Analysis (Methodology and Findings)

The data collection tool Google Forms was used for the quantitative empirical analysis of this study. Two different questionnaires were done depending on the group analysed. One form was addressed to trainers and the other to learners. The questionnaire, which was initially developed jointly in English, was translated and adapted for understanding in each of the countries studied: Poland, Spain, Türkiye, and the Netherlands. From there, convenience sampling was carried out by distributing the questionnaires digitally.

Once all the observations had been collected, a single database was generated for each group (learners and trainers) and the data obtained was reviewed and cleaned.

In the next phase, statistical analyses were carried out using SPSS v29 software, applying frequency analysis for univariate treatment, and contingency table analysis with the chi-square statistical test for bivariate analyses.

The chi-square test will help us to examine whether the two variables included in the contingency table are independent or not. The test will determine that there is dependence between the variables when the Pearson's chi-square statistic shows values below 0.05 (95% confidence level). In other words, there is a relationship between the variables analysed. Or, in our specific case, it reveals that there is a different distribution of responses depending on the country.

The main results obtained from the statistical treatments are shown below.

1.1. Methodology-Technical details of the research

The following table 1 shows the main technical characteristics of the fieldwork.

The research was aimed at both learners and trainers. The data collection method was through a free and self-administered electronic survey. 245 valid surveys were obtained from the group of learners and 144 valid surveys from the sample of trainers. The geographical distribution of the respondents is Poland, Spain, Türkiye and The Netherlands. The sampling procedure used was convenience sampling. The Google Forms tool was used. The link to the questionnaire was distributed by digital media (mail, WhatsApp, social networks, etc.).

With the sample obtained and taking a 95.5% confidence interval, the sampling errors for each group are $\pm 6.39\%$ ($p=q=0.5$; confidence level=95.5%) for the Learners and $\pm 8.33\%$ ($p=q=0.5$; confidence level=95.5%) for the Trainers. The field work took place during the month of May 2023.

Table 1: Technical sheet

Technical sheet	
Scope of the study:	Learners and trainers involved in digital education
Method of data collection:	Free structured self-administered survey
Sample size:	245 Learners and 144 trainers involved in digital education
Sample location:	Poland, Spain, Türkiye and The Netherlands
Sampling procedure:	Convenience sampling. Questionnaire of google forms distributed by digital media (mail, whatsapp, social networks, etc).
Sampling error:	$\pm 6.39\%$ ($p=q=0.5$; nivel de confianza=95.5%) Learners $\pm 8.33\%$ ($p=q=0.5$; nivel de confianza=95.5%) Trainers
Questionnaire:	Structured questionnaire with closed questions
Date of fieldwork:	May 2023

1.2. Findings of digital social inclusion: Learners

This section analyses the data referring to the group of learners. A total of 14 questions are addressed, which are analysed by country to see whether perceptions are homogeneous across the sample or whether there are different opinions and sensitivities.

Table 2 shows the results in relation to the countries from which responses have been obtained. There is a fairly balanced distribution between the 4 participating countries of between 20% and 30% representation.

Table 2: Country of origin

RESPONSES	FREQUENCIES	%
Poland	72	29,4
Spain	59	24,1
Türkiye	63	25,7
The Netherlands	51	20,8
Total	245	100,0

In Table 3 we can see the distribution of the sample by age. We can say that the range with the highest level of representation is 55-59 years old. As age increases, the number of participating individuals decreases. This maintains a certain logic, given the distribution of the population pyramid itself, which tends to have fewer individuals as ages become more advanced.

Table 3: What is your age range?

RESPONSES	FREQUENCIES	%
55-59 years old	97	39,6
60-64 years old	37	15,1
65-69 years old	41	16,7
70-74 years old	42	17,1
75-79 years old	16	6,5
80 years and older	12	4,9
Total	245	100,0

Table 4 shows the educational level of the people who participated in the research. There is a good representation of all the levels presented. It is normal that there are fewer people with a Doctoral degree level, since in a normal population, it tends to be the same way. We also have 13 people who have preferred not to reveal their level.

Table 4: What is the highest level of education that you have completed?

RESPONSES	FREQUENCIES	%
Elementary school	42	17,1
Secondary school	42	17,1
Vocational school/ High school	48	19,6
Bachelor's degree	45	18,4
Master's degree	44	18,0
Doctoral degree	11	4,5
Prefer not to say	13	5,3
Total	245	100,0

In Table 5 we can see the current employment status of the people participating in the study. We can see that there is a high percentage of pensioners (44.5%), something normal in the age ranges on which this work focuses. There is good representation of people who work, as well as those who are currently unemployed.

Table 5: What is your current employment status?

RESPONSES	FREQUENCIES	%
Unemployed	18	7,3
Part-time (30 hours or fewer in a week)	28	11,4
Full-time	47	19,2
Self-employed	39	15,9
Pensioner/Retired	109	44,5
Unable to work	4	1,6
Total	245	100,0

In Table 6 we see that around half of the respondents have participated in an activity or training to improve their digital skills. This is a fairly positive number, but there is still a lot of progress to be made in this regard, since it would be desirable for them to be 100%.

Table 6: Have you ever participated in an activity or training to improve your digital skills?

RESPONSES	FREQUENCIES	%
Yes	119	48,6
No	126	51,4
Total	245	100,0

Furthermore, in Table 7 there are quite a few differences between the countries studied. Poland and Spain are the ones that show the highest level of participation in an activity or training to improve your digital skills. However, this data should be analysed with some caution. Perhaps the population of Türkiye and the Netherlands may have a higher level of skills and that means that they do not require these training and improvement activities.

Table 7: By Country

RESPONSES	Poland	Spain	Türkiye	Netherlands
Yes (%)	66,7	69,5	34,9	15,7
No (%)	33,3	30,5	65,1	84,3
Total	100,0	100,0	100,0	100,0

Table 8 shows the level of digital literacy of the respondents. It seems that most of the respondents fall into a middle zone (Basic user and Independent user). It is important to note that 14.7% of the people who responded stated that they had not used the computer yet. This indicates that there is really a lot of room for improvement.

Table 8: What is your level of digital literacy?

RESPONSES	FREQUENCIES	%
Complete beginner: I have not used the computer yet	36	14,7
Basic user: able to search, use a mobile phone or e-mail, share files and content online	79	32,2
Independent user: able to use different search engines to find information online and use online services such as public services, e-banking, online shopping, Word/Excel	91	37,1
Proficient user: able to assess the validity of information online, actively uses a wide range of communication tools, produces multimedia content in different formats, use digital platforms, tools and environments	39	15,9
Total	245	100,0

At country level (Table 9) we can see that there are significant differences in the distribution of responses. Spain and Türkiye are the ones that show the highest level of Complete beginner users. For their part, Poland and Netherlands are the countries that show the highest concentration of Independent users.

Table 9. By Country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Complete beginner: I have not used the computer yet	5,6%	23,7%	23,8%	5,9%	,000*
Basic user: able to search, use a mobile phone or e-mail, share files and content online	20,8%	35,6%	28,6%	49,0%	,000*
Independent user: able to use different search engines to find information online and use online services such as public services, e-banking, online shopping, Word/Excel	50,0%	18,6%	33,3%	45,1%	,000*
Proficient user: able to assess the validity of information online, actively uses a wide range of communication tools, produces multimedia content in different formats, use digital platforms, tools and environments	23,6%	22,0%	14,3%	0,0%	,000*

*There are differences between countries at a confidence level of 95%.

Regarding the type of devices and internet used, (Table 10a) we can see that the Smartphone is the device that prevails over the rest with 90.2% use by those surveyed. The least used is the Tablet with 30.2%. The fact that Smartphones have been growing in size and capacity has relegated the Tablet to a less predominant place.

Table 10a: What kind of devices and internet do you use?

RESPONSES	% Yes
Laptop or desktop computer	67,8
Smartphone	90,2
Tablet	30,2
Fixed internet connection by cable or wifi	58,8
Mobile internet connection by data or hotspot	50,2
None of the above	3,7

At country level in relation to the kind of devices and internet used (Table 10b), we observe that the general pattern is not maintained in the same way in all countries. Although it is true that the smartphone is the most prevalent device, for example in Poland it is surpassed by the laptop or desktop computer by very little difference.

Table 10b. By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Laptop or desktop computer	88,9%	59,3%	54,0%	64,7%	,000*
Smartphone	84,7%	91,5%	90,5%	96,1%	,207
Tablet	33,3%	25,4%	39,7%	19,6%	,095
Fixed internet connection by cable or wifi	47,2%	78,0%	42,9%	72,5%	,000*
Mobile internet connection by data or hotspot	27,8%	78,0%	27,0%	78,4%	,000*
None of the above	4,2%	8,5%	1,6%	0,0%	,085

*There are differences between countries at a confidence level of 95%.

In relation to daily digital activity, (Table 11a) we can see that Video calls and messaging with family members and friends is the predominant activity with 76.7% of affirmative responses. The activity with the lowest level of monitoring would be Online games (19.2%) and Participating in online training (20.0%)

Table 11a: What is your daily digital activity about?

RESPONSES	% Yes
Videocalls and messaging with family members and friends	76,7
Online shopping	53,1
Online games	19,2
Reading online newspaper	55,9
Using social networks	65,3
Using mobile apps (scheduling medical appointments, online banking, paying bills, etc.)	60,4
Working	24,9
Participating in online training	20,0

If we analyse the daily digital activity by country (Table 11b) we can see that a certain uniformity is maintained in the responses, although not all the countries carry out the activities presented with the same level of intensity. For example, when installing and using mobile apps, Türkiye shows 33.3% of affirmative answers, compared to nearly 70% of the rest of the countries analysed.

Table 11b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Videocalls and messaging with family members and friends	61,1%	84,7 %	69,8%	98,0%	,000*
Online shopping	56,9%	44,1 %	52,4%	58,8%	,385
Online games	25,0%	6,8%	25,4%	17,6%	,028*
Reading online newspaper	48,6%	67,8 %	49,2%	60,8%	,087
Using social networks	58,3%	76,3 %	63,5%	64,7%	,189
Using mobile apps (scheduling medical appointments, online banking, paying bills, etc.)	69,4%	69,5 %	33,3%	70,6%	,000*
Working	22,2%	37,3 %	22,2%	17,6%	,079
Participating in online training	19,4%	28,8 %	22,2%	7,8%	,051

*There are differences between countries at a confidence level of 95%.

In Table 12a, we asked about who they get help from when they have problems using digital applications. The majority of those surveyed (78.8%) responded that they receive help from Family members, this being the reference group. Friends are next with 52.7%. And in last place are Educators/Trainers with 13.9%.

Table 12a: Who do you get help from when you have problems using digital applications?

RESPONSES	% Yes
Family members	78,8
Friends	52,7
Colleagues	38,8
Educators/Trainers	13,9

At country level (Table 12b), we could say that the results are generally maintained, but there are certain differences that should be highlighted. Friends have great relative importance in Spain and in the Netherlands with more than 70% of affirmative answers. Furthermore, it is also notable that in Spain, 30.5% declare receiving help from Educators/Trainers.

Table 12b. By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Family members	70,8%	93,2 %	65,1%	90,2%	,000*
Friends	36,1%	71,2 %	38,1%	72,5%	,000*
Colleagues	34,7%	39,0 %	34,9%	49,0%	,369
Educators/Trainers	4,2%	30,5 %	12,7%	9,8%	,000*

*There are differences between countries at a confidence level of 95%.

Regarding what digital issues they usually get help from others (Table 13a), we observed that Online banking is the issue with the highest level of affirmative responses with 43.7%. Where the lowest level of problems exists is in Writing an email (14.7%). Actually, most of the issues shown are around 30-40%, which denotes an important need in terms of providing digital skills to a large part of the population surveyed.

Table 13a. On what digital issues do you usually get help from others/family members?

RESPONSES	% Yes
Online banking	43,7
Paying bills	34,7
Sending and receiving messages	28,2
Using social media websites	31,0
Creating an account	31,8
Writing an email	14,7
Online shopping	36,3
Scheduling medical appointments	35,5
Finding credible information sources	29,8

At the country level (Table 13b), the general pattern is basically maintained, but there are some notable issues that need to be commented on. Online banking is especially problematic in Spain, where 61.0% of respondents have stated that they need help from others. Also notable are Online shopping in Poland with 51.4%, Scheduling medical appointments in Spain with 54.2% and Finding credible information sources in Spain and the Netherlands with 49.0%.

Table 13b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Online banking	38,9%	61,0%	36,5%	39,2%	,022*
Paying bills	34,7%	45,8%	31,7%	25,5%	,149
Sending and receiving messages	34,7%	20,3%	42,9%	9,8%	,000*
Using social media websites	27,8%	25,4%	42,9%	27,5%	,130
Creating an account	41,7%	35,6%	20,6%	27,5%	,053
Writing an email	26,4%	10,2%	15,9%	2,0%	,001*
Online shopping	51,4%	28,8%	30,2%	31,4%	,018*
Scheduling medical appointments	37,5%	54,2%	19,0%	31,4%	,001*
Finding credible information sources	22,2%	49,0%	22,2%	49,0%	,004*

*There are differences between countries at a confidence level of 95%.

In relation to which is most important when looking for information online (Table 14a), the majority (74.7%) respond that Easy to understand. In second place is Accurate information with 63.7%, followed in third position by Easy to access (53.9%). The least important question in this case is the Design of the website with only 14.3%.

Table 14a. Which of the following is most important to you when looking for information online?

RESPONSES	% Yes
Easy to understand	74,7
Accurate information	63,7
Easy to access	53,9
Design of the website	14,3

At country level (Table 14b), we find some differences to the general pattern shown in the previous table. Easy to understand appears affirmatively 91.5% in Spain and 88.2% in the Netherlands, while in the rest of the countries it is not so important. Netherlands also stands out in relation to Accurate information with 82.4% and Easy to access with 76.5%.

Table 14b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Easy to understand	52,8%	91,5%	73,0%	88,2%	,000*
Accurate information	58,3%	50,8%	66,7%	82,4%	,005*
Easy to access	62,5%	22,0%	55,6%	76,5%	,000*
Design of the website	13,9%	1,7%	22,2%	19,6%	,007*

*There are differences between countries at a confidence level of 95%.

In order to differentiate a good source from a bad source when looking for information online (Table 15a), the majority (54.3%) try to be sceptical. Also with 38.4% affirmative answers, examine the source's and author's credentials and affiliations. In general, all the options shown in the tables have a considerable level of monitoring. In this sense we can say that it is a key issue when defining the ideal digital skills for the group studied.

Table 15a. How do you differentiate a good source from a bad source when looking for information online?

RESPONSES	% Yes
I try to be skeptical	54,3
I examine the source's and author's credentials and affiliations	38,4
I check the date of the news	31,8
I check if the publisher of the source is reputable	31,0
I check the domain name	20,0
I search for additional information to back up what I've found	35,5
I try to avoid articles/news from anonymous authors	36,7

At the country level (Table 15b), some differences are observed from the general pattern shown in the previous table. Certainly trying to be sceptical is the most important option on average for all countries, standing out especially in Türkiye (63.5%). Furthermore, the option “I search for additional information to back up what I’ve found” stands out in Poland with 58.3% of affirmative responses.

Table 15b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
I try to be skeptical	50,0%	55,9 %	63,5%	47,1%	,281
I examine the source's and author's credentials and affiliations	33,3%	55,9 %	36,5%	27,5%	,011*
I check the date of the news	50,0%	8,5%	31,7%	33,3%	,000*
I check if the publisher of the source is reputable	36,1%	16,9 %	39,7%	29,4%	,035*
I check the domain name	34,7%	10,2 %	15,9%	15,7%	,002*
I search for additional information to back up what I’ve found	58,3%	37,3 %	20,6%	19,6%	,000*
I try to avoid articles/news from anonymous authors	34,7%	20,3 %	25,4%	72,5%	,000*

*There are differences between countries at a confidence level of 95%.

In Table 16a, we can see what kind of digital tools they use to a greater extent. Communication applications (WhatsApp, Skype, Zoom, etc.) stand out with 73.5%. In second and third place are Information search engines (Google, Bing, DuckDuckGo, etc.) with 69.4% and Web browsers (Chrome, Firefox, Safari, etc.) with 63.3% respectively. The least used digital tool, with 29.4% of affirmative answers, would be Online learning applications (Moodle, Coursera, Khan Academy, etc.), this is a relevant issue regarding the planning of digital skills and the use of tools digital by the population analysed.

Table 16a. What kind of digital tools do you use?

RESPONSES	% Yes
Web browsers (Chrome, Firefox, Safari, etc.)	63,3
Information search engines (Google, Bing, DuckDuckGo, etc.)	69,4
Social networks (Facebook, Twitter, Instagram, etc.)	46,9
Communication applications (WhatsApp, Skype, Zoom, etc.)	73,5
Office applications (Word, Excel, PowerPoint, etc.)	37,6
Cloud storage applications (Google Drive, Dropbox, OneDrive, etc.)	40,0
Online learning applications (Moodle, Coursera, Khan Academy, etc.)	29,4

At the country level (Table 17b), there are quite a few differences if we analyse the information in a disaggregated manner. For example, in Poland 81.9% marks Web browsers (Chrome, Firefox, Safari, etc.) as the most used option. Due to his art in Spain, there are Communication applications (WhatsApp, Skype, Zoom, etc.), Cloud storage applications (Google Drive, Dropbox, OneDrive, etc.) and Online learning applications (Moodle, Coursera, Khan Academy, etc.), the three options with 91.5% affirmative responses. In the case of Türkiye, Communication applications (WhatsApp, Skype, Zoom, etc.) are the most prominent option with 58.7% affirmative responses. Finally, in the Netherlands, the most used digital tool is Information search engines (Google, Bing, DuckDuckGo, etc.) with 84.3% of affirmative responses of use.

Table 17b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Web browsers (Chrome, Firefox, Safari, etc.)	81,9%	64,4 %	42,9%	60,8%	,000*
Information search engines (Google, Bing, DuckDuckGo, etc.)	73,6%	66,1 %	55,6%	84,3%	,008*
Social networks (Facebook, Twitter, Instagram, etc.)	50,0%	76,3 %	21,2%	66,7%	,000*
Communication applications (WhatsApp, Skype, Zoom, etc.)	69,4%	91,5 %	58,7%	76,5%	,001*
Office applications (Word, Excel, PowerPoint, etc.)	50,0%	37,3 %	28,6%	31,4%	,051
Cloud storage applications (Google Drive, Dropbox, OneDrive, etc.)	29,2%	91,5 %	23,8%	15,7%	,000*
Online learning applications (Moodle, Coursera, Khan Academy, etc.)	16,7%	91,5 %	9,5%	54,5%	,000*

*There are differences between countries at a confidence level of 95%.

In Table 18a, the needs and expectations for the use of digital tools in daily activities are analysed. 65.3% of those surveyed stated that “I need to improve my confidence and safety when using digital tools.” Therefore, security in digital media is revealed as a key factor. However, it must be taken into account that none of the options is below 50% affirmative responses. In this sense, we could say that all of them have been identified as very important elements when planning training sessions in digital skills.

Table 18a. What are your needs and expectations for the use of digital tools in your daily activities?

RESPONSES	% Yes
I need to develop or update my digital knowledge or skills	53,9
I need to improve my confidence and safety when using digital tools	65,3
I need to be more motivated in using digital tools	51,0
I need to receive more support or technical assistance when using digital tools	60,0
I need to adapt or customize the digital tools to my needs or preferences	51,0

Table 18b analyses the differences that exist between the different countries. Although all the issues raised are important in all the countries analysed, there are some issues that we could highlight. For example, in Spain, 71.2% of respondents state that they need to receive more support or technical assistance when using digital tools. In the case of Türkiye, it is important to highlight that “I need to improve my confidence and safety when using digital tools”, “I need to be more motivated in using digital tools”, “I need to receive more support or technical assistance when using digital tools” and “I need to adapt or customize the digital tools to my needs or preferences”, have all been marked with an 85.7% affirmative response. In Poland, and the Netherlands, confidence and safety when using digital tools appears to be the most important issue, as was the case in Table 11.2.14 with the added information.

Table 18b. By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
I need to develop or update my digital knowledge or skills	48,6%	62,7%	49,2%	56,9%	,335
I need to improve my confidence and safety when using digital tools	55,6%	49,2%	85,7%	72,5%	,000*
I need to be more motivated in using digital tools	27,8%	54,2%	85,7%	37,3%	,000*
I need to receive more support or technical assistance when using digital tools	50,0%	71,2%	85,7%	29,4%	,000*
I need to adapt or customize the digital tools to my needs or preferences	27,8%	54,2%	85,7%	37,3%	,000*

*There are differences between countries at a confidence level of 95%.

1.3. Findings of digital social inclusion: Trainers

This section analyses the data referring to the group of trainers. A total of 12 questions are addressed, which are analysed by country to see whether perceptions are homogeneous across the sample or whether there are different opinions and sensitivities.

In Table 19, we can see the distribution of the sample of trainers by country. The total membership is made up of 144 people, of which 34.7% correspond to Poland, 23.6% to Spain and Türkiye, and 18.1% to Netherlands.

Table 19: Country of origin

RESPONSES	FREQUENCIES	%
Poland	50	34,7
Spain	34	23,6
Türkiye	34	23,6
Netherlands	26	18,1
Total	144	100,0

In relation to what kind of digital inclusion initiatives they carry out or implement (Table 20a), we observe that all the actions have a good affirmative response rate, with the most cited being the most cited with 35.4% Digital literacy courses for older adults.

Table 20a. What kind of digital inclusion initiatives do you carry out or implement in your organization?

RESPONSES	% Yes
Digital literacy courses for older adults	35,4
Programs to provide access to devices and internet for people in poverty or social exclusion	31,3
Digital public services to facilitate the management of procedures and rights	21,5
Distance education platforms for adults	32,6
Non-formal learning activities using digital tools	32,6

If we analyse the results by country (Table 20b), we see that this order of priorities can change depending on the country. In Poland, programs to provide access to devices and internet for people in poverty or social exclusion prevail with 44.0%. In Spain, the most marked option is digital public services to facilitate the management of procedures and rights with 44.1%. In Türkiye, digital literacy courses for older adults are the most cited with 35.3%. In the case of the Netherlands, the most mentioned option is non-formal learning activities using digital tools with 65.4% of affirmative responses.

Table 20b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Digital literacy courses for older adults	36,0%	41,2 %	35,3%	26,9%	,724
Programs to provide access to devices and internet for people in poverty or social exclusion	44,0%	26,5 %	26,5%	19,2%	,100
Digital public services to facilitate the management of procedures and rights	24,0%	47,1 %	2,9%	7,7%	,000*
Distance education platforms for adults	40,0%	44,1 %	20,6%	19,2%	,054
Non-formal learning activities using digital tools	24,0%	20,6 %	32,4%	65,4%	,001*

*There are differences between countries at a confidence level of 95%.

In reference to the segment of the population to which the activity is directed in the centres studied (Table 21a), we can see that the most outstanding option is people over 55 years old with 55.6%. It should also be noted, in this case, that all the groups of people presented in the study have a high response rate, so none of them should be neglected when planning training in digital skills.

Table 21a: What kind of population does your organization serve?

RESPONSES	% Yes
People over 55 years old	55,6
People with physical or mental disabilities	20,1
Migrants or refugees	32,6
Unemployed or low-income people	39,6
Young adults	42,4

If we study the results by country, (Table 21b) we see that in this case the aggregate pattern is maintained in general terms. However, although the order of the elements is more or less maintained, it is important to highlight that not in all countries the results are shown with the same intensity.

Table 21b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
People over 55 years old	36,0%	64,7 %	52,9%	84,6%	,000*
People with physical or mental disabilities	26,0%	17,6 %	14,7%	19,2%	,607
Migrants or refugees	28,0%	32,4 %	17,6%	61,5%	,003*
Unemployed or low-income people	34,0%	47,1 %	26,5%	57,7%	,059
Young adults	42,0%	58,8 %	38,2%	26,9%	,088

*There are differences between countries at a confidence level of 95%.

Table 22a provides the results on the level of digital competence as an educator or facilitator. In this case, most of the sample declares itself as Intermediate with 46.5%, or Advanced with 31.9% respectively. It is important to highlight that no one declares themselves, in this sense, as null competition.

Table 22a. What level of digital competence do you have as an educator or facilitator?

RESPONSES	FREQUENCIE S	%
Basic: I can use the most common digital tools to communicate, search for information and perform simple tasks	31	21,5
Intermediate: I can use a variety of digital tools to create, share and collaborate on digital content, as well as solve problems and protect my online security and privacy	67	46,5
Advanced: I can use complex and specialized digital tools to design, develop and evaluate digital projects, as well as innovate and adapt to technological changes	46	31,9
None: I cannot use any digital tool or do not have access to them	0	0,0
Total	144	100,0

If we study the results by country, (Table 22b) we see that there are some variations between countries, although it is true that, in general terms, the Intermediate level, together with the Advanced level, are the ones that present the greatest predominance with 62% of the affirmative answers in the worst case scenario which is, in this case, Poland.

Table 22b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Basic: I can use the most common digital tools to communicate, search for information and perform simple tasks	38,0%	5,9%	23,5%	7,7%	,002*
Intermediate: I can use a variety of digital tools to create, share and collaborate on digital content, as well as solve problems and protect my online security and privacy	40,0%	44,1%	55,9%	50,0%	
Advanced: I can use complex and specialized digital tools to design, develop and evaluate digital projects, as well as innovate and adapt to technological changes	22,0%	50,0%	20,6%	42,3%	
None: I cannot use any digital tool or do not have access to them	0%	0%	0%	0%	

*There are differences between countries at a confidence level of 95%.

Table 23a provides the results on the devices and internet used. It should be noted that all the options have a good affirmative response rate. It is also important to note that 22.9% of those surveyed state that they use all the options presented. The laptop or desktop computer remains the most used option with 62.5% and the Tablet with 20.1% as the least used.

Table 23a: What kind of devices and internet do you use for your work?

RESPONSES	% Yes
Laptop or desktop computer	62,5
Smartphone	59,0
Tablet	20,1
Fixed internet connection by cable or wifi	47,9
Mobile internet connection by data or hotspot	40,3
All mentioned above	22,9

If we analyse the results by country, (Table 23b) it is observed that there are certain differences between the values offered. In Poland, the Smartphone is the most used device with 50.0%, while in the rest of the countries the laptop or desktop computer remains the digital tool with the highest level of use.

Table 23b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Laptop or desktop computer	44,0%	76,5 %	61,8%	80,8%	,003*
Smartphone	50,0%	64,7 %	58,8%	69,2%	,354
Tablet	24,0%	2,9%	20,6%	34,6%	,018*
Fixed internet connection by cable or wifi	22,0%	70,6 %	55,9%	57,7%	,000*
Mobile internet connection by data or hotspot	34,0%	70,6 %	11,8%	50,0%	,000*
All mentioned above	26,0%	23,5 %	23,5%	15,4%	,773

*There are differences between countries at a confidence level of 95%.

Table 24a shows the results related to the digital content used. Although all the options presented have a good response rate, they stand out above the other Presentations (slides, infographics, posters, etc.) with 72.9% and Written texts (documents, emails, messages, etc.) with 68.8% of affirmative answers. In last place with 19.4% of the responses would be Games (simulations, gamification, virtual or augmented reality, etc.)

Table 24a. What kind of digital content do you use for your work?

RESPONSES	% Yes
Written texts (documents, emails, messages, etc.)	68,8
Images (photos, graphics, maps, etc.)	65,3
Audios (podcasts, recordings, music, etc.)	42,4
Videos (tutorials, lectures, interviews, etc.)	66,7
Presentations (slides, infographics, posters, etc.)	72,9
Games (simulations, gamification, virtual or augmented reality, etc.)	19,4

At the country level, (Table 24b) we find some differences, especially in terms of the level of intensity with which the content is used. In Poland and in Spain, Presentations (slides, infographics, posters, etc.) continue to prevail. However, in Türkiye the most prominent option with 79.4% of affirmative answers is Images (photos, graphics, maps, etc.). Finally, in the Netherlands the most valued option is Written texts (documents, emails, messages, etc.) with 96.2% of the responses affirmative.

Table 24b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Written texts (documents, emails, messages, etc.)	46,0%	88,2 %	61,8%	96,2%	,000*
Images (photos, graphics, maps, etc.)	42,0%	70,6 %	79,4%	84,6%	,000*
Audios (podcasts, recordings, music, etc.)	42,0%	20,6 %	47,1%	65,4%	,006*
Videos (tutorials, lectures, interviews, etc.)	52,0%	82,4 %	64,7%	76,9%	,019*
Presentations (slides, infographics, posters, etc.)	66,0%	91,2 %	55,9%	84,6%	,003*
Games (simulations, gamification, virtual or augmented reality, etc.)	30,0%	14,7 %	5,9%	23,1%	,041*

*There are differences between countries at a confidence level of 95%.

Table 25a shows the results related to the digital tools used. Web browsers (Chrome, Firefox, Safari, etc.) and Communication applications (WhatsApp, Skype, Zoom, etc.) have a percentage of affirmative responses of 55.6% and 54.2% respectively. The least selected option, in this case, has been Social networks (Facebook, Twitter, Instagram, etc.) with 29.2%, which is not really a figure that we can consider low.

Table 25a. What kind of digital tools do you use for your work?

RESPONSES	% Yes
Web browsers (Chrome, Firefox, Safari, etc.)	55,6
Information search engines (Google, Bing, DuckDuckGo, etc.)	50,0
Social networks (Facebook, Twitter, Instagram, etc.)	29,2
Communication applications (WhatsApp, Skype, Zoom, etc.)	54,2
Office applications (Word, Excel, PowerPoint, etc.)	49,3
Cloud storage applications (Google Drive, Dropbox, OneDrive, etc.)	41,7
Online learning applications (Moodle, Coursera, Khan Academy, etc.)	30,6

Regarding the results at the country level, (Table 25b), we found some significant differences. In Poland it is Social networks (Facebook, Twitter, Instagram, etc.), the most marked option with 64.0%. In Spain Web browsers (Chrome, Firefox, Safari, etc.) with 97.1% the option prevails. In the case of Türkiye with 79.4% Information search engines (Google, Bing, DuckDuckGo, etc.). Finally, in the Netherlands, also Information search engines (Google, Bing, DuckDuckGo, etc.) with 88.5% of affirmative responses in this case.

Table 25b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Web browsers (Chrome, Firefox, Safari, etc.)	48,0%	97,1 %	67,6%	69,2%	,001*
Information search engines (Google, Bing, DuckDuckGo, etc.)	36,0%	79,4 %	79,4%	88,5%	,001*
Social networks (Facebook, Twitter, Instagram, etc.)	64,0%	29,4 %	0,0%	84,6%	,000*
Communication applications (WhatsApp, Skype, Zoom, etc.)	54,0%	85,3 %	64,7%	80,8%	,010*
Office applications (Word, Excel, PowerPoint, etc.)	54,0%	64,7 %	64,7%	84,6%	,072*
Cloud storage applications (Google Drive, Dropbox, OneDrive, etc.)	48,0%	85,3 %	20,6%	42,3%	,000*
Online learning applications (Moodle, Coursera, Khan Academy, etc.)	18,0%	85,3 %	17,6%	11,5%	,001*

*There are differences between countries at a confidence level of 95%.

Table 26a shows the results related to the problems or difficulties encountered by trainers when using digital tools for teaching. We actually found a very homogeneous distribution of responses. We interpret this as meaning that all the problems shown are of great importance. However, the biggest problem seems to be Lack of knowledge or skills to use digital tools with 46.5% of the responses affirmative.

Table 26a. What kind of problems or difficulties do you encounter when using digital tools for teaching?

RESPONSES	% Yes
Lack of access or quality of internet connection	36,8
Lack of adequate or updated devices	41,0
Lack of knowledge or skills to use digital tools	46,5
Lack of confidence or security when using digital tools	41,0
Lack of motivation or interest in using digital tools	36,8
Lack of support or technical assistance when using digital tools	36,8
Lack of adaptation or accessibility of digital tools to personal needs or preferences	35,4

At the country level, (Table 26b) we find some differences. In Poland, Lack of knowledge or skills to use digital tools and Lack of motivation or interest in using digital tools stand out with 46.0% in both cases. In Spain, Lack of adequate or updated devices prevails with 73.5%. However, in Türkiye the most prominent option with 67.6% of affirmative answers is Lack of access or quality of internet connection. Finally, in the Netherlands, the option most often mentioned is Lack of confidence or security when using digital tools with 57.7% of the responses affirmative.

Table 26b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Lack of access or quality of internet connection	28,0%	47,1 %	67,6%	15,4%	,001*
Lack of adequate or updated devices	24,0%	73,5 %	64,7%	11,5%	,000*
Lack of knowledge or skills to use digital tools	46,0%	64,7 %	64,7%	42,3%	,119
Lack of confidence or security when using digital tools	38,0%	52,9 %	64,7%	57,7%	,092
Lack of motivation or interest in using digital tools	46,0%	23,5 %	64,7%	15,4%	,000*
Lack of support or technical assistance when using digital tools	28,0%	50,0 %	64,7%	46,2%	,009*
Lack of adaptation or accessibility of digital tools to personal needs or preferences	18,0%	58,8 %	64,7%	7,7%	,000*

*There are differences between countries at a confidence level of 95%.

Table 27a shows the results related to the solutions or resources used to overcome the problems using digital tools. Although all the options presented have a good response rate, Search for information or tutorials stands out especially with 63.9%, followed by Ask for help or advice from family, friends or colleagues with 53.5%.

Table 27a: What kind of solutions or resources have you used to overcome the problems or difficulties when using digital tools for your work?

RESPONSES	% Yes
Search for information or tutorials on	63,9
Ask for help or advice from family, friends or colleagues	53,5
Participate in digital training courses or workshops	36,8
Use simpler or adapted digital tools	38,2
Use safer or more reliable digital tools	35,4
Use more fun or attractive digital tools	27,8

At the country level, (Table 27b) we find some differences. In Poland, Use simpler or adapted digital tools stands out with 52.0%. In Spain, Search for information or tutorials prevails with 88.2%. The same occurs in Türkiye with 61.8%. Finally, in Netherlands, the option most often mentioned is also Search for information or tutorials, in this case together with Ask for help or advice from family, friends or colleagues, with 69.2% of the responses affirmative in both cases.

Table 27b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Search for information or tutorials on	46,0%	88,2%	61,8%	69,2%	,001*
Ask for help or advice from family, friends or colleagues	32,0%	76,5%	50,0%	69,2%	,000*
Participate in digital training courses or workshops	40,0%	52,9%	29,4%	19,2%	,041*
Use simpler or adapted digital tools	52,0%	50,0%	8,8%	34,6%	,000*
Use safer or more reliable digital tools	38,0%	50,0%	29,4%	19,2%	,078
Use more fun or attractive digital tools	34,0%	50,0%	2,9%	19,2%	,000*

*There are differences between countries at a confidence level of 95%.

Table 28a shows the results related to the benefits or advantages obtained using digital tools. In this case, all the options presented have a good response rate, always above 40%. It could be highlighted, although not with much difference over the other options, Facilitate communication and collaboration with others with 63.2%.

Table 28a: What kind of benefits or advantages have you obtained from using digital tools for your work?

RESPONSES	% Yes
Improve the quality and efficiency of your work	59,0
Expand the opportunities and resources for your work	56,3
Facilitate communication and collaboration with others	63,2
Increase satisfaction and recognition for your work	42,4
Develop new digital competencies and skills	42,4
Develop new digital competencies and skills	55,6

At the country level, (Table 28b) we find some differences. In Poland, Increase satisfaction and recognition for your work stands out with 54.0%. In Spain, Facilitate communication and collaboration with others prevails with 82.4%. The same occurs in Türkiye with 70.6%. Finally, in the Netherlands, the option most often mentioned is also Facilitate communication and collaboration with others, in this case together with Improve the quality and efficiency of your work with 73.1% of the responses affirmative in both cases.

Table 28b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Improve the quality and efficiency of your work	42,0%	67,6 %	64,7%	73,1%	,022*
Expand the opportunities and resources for your work	42,0%	70,6 %	58,8%	61,5%	,061
Facilitate communication and collaboration with others	40,0%	82,4 %	70,6%	73,1%	,000*
Increase satisfaction and recognition for your work	54,0%	41,2 %	32,4%	65,4%	,185
Develop new digital competencies and skills	44,0%	79,4 %	52,9%	50,0%	,012*
Develop new digital competencies and skills	30,0%	44,1 %	44,1%	23,1%	,202

*There are differences between countries at a confidence level of 95%.

Table 29a shows the results related to challenges or risks faced when using digital tools. In this case, all the options presented have a good response rate, always above 40%. One could highlight, although not with much difference over the other options, Difficulty managing information and avoiding excess or misinformation with 61.1%.

Table 29a: What kind of challenges or risks have you faced when using digital tools for your work?

RESPONSES	% Yes
Difficulty balancing time and space between work and personal life	56,3
Difficulty maintaining attention and concentration on work	46,5
Difficulty managing information and avoiding excess or misinformation	61,1
Difficulty protecting your online security and privacy	55,6
Difficulty coping with stress or anxiety from using digital tools	42,4
Difficulty avoiding dependence or addiction to digital tools	45,1

At the country level, (Table 29b) we find some differences. In Poland, Spain and Türkiye, Difficulty managing information and avoiding excess or misinformation remains the most selected option. Finally, in the case of the Netherlands, the option most often mentioned is Difficulty balancing time and space between work and personal life, with a score of 38.5% of affirmative answers.

Table 29b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
Difficulty balancing time and space between work and personal life	40,0%	38,2 %	50,0%	38,5%	,728
Difficulty maintaining attention and concentration on work	42,0%	64,7 %	8,8%	34,6%	,000*
Difficulty managing information and avoiding excess or misinformation	54,0%	70,6 %	52,9%	34,6%	,052
Difficulty protecting your online security and privacy	40,0%	35,3 %	44,1%	42,3%	,895
Difficulty coping with stress or anxiety from using digital tools	32,0%	67,6 %	29,4%	3,8%	,000*
Difficulty avoiding dependence or addiction to digital tools	26,0%	14,7 %	29,4%	30,8%	,430

*There are differences between countries at a confidence level of 95%.

Table 30a shows the results related to the needs or expectations regarding the use of digital tools at work. Again, all the options presented have good response rates. I need to learn or update my digital knowledge or skills stands out above the others with 68.8% of the responses affirmative. In last place with 54.2% of the answers are affirmative.

Table 30a: What kind of needs or expectations do you have regarding the use of digital tools for your work?

RESPONSES	% Yes
I need to improve my access or quality of internet connection	37,5
I need to acquire or renew my digital devices	47,9
I need to learn or update my digital knowledge or skills	54,2
I need to increase my confidence or security when using digital tools	39,6
I need to motivate or interest myself more in using digital tools	34,7
I need to receive more support or technical assistance when using digital tools	48,6
I need to adapt or customize the digital tools to my needs or preferences	43,1

At the country level, (Table 30b) we found some differences, although not many. In Poland and the Netherlands, I need to learn or update my digital knowledge or skills stand out with 50.0% and 53.8% respectively. In Spain, the most answered option is I need to adapt or customize the digital tools to my needs or preferences with 64.7%. In the case of Türkiye, the most prominent options are I need to increase my confidence or security when using digital tools, I need to motivate or interest myself more in using digital tools, I need to receive more support or technical assistance when using digital tools and I need to adapt or customize the digital tools to my needs or preferences with 67.6% of the responses affirmative in all cases.

Table 30b: By country

RESPONSES BY COUNTRY (% Yes)*	Poland	Spain	Türkiye	Netherlands	Chi-Square
I need to improve my access or quality of internet connection	44,0%	17,6%	58,8%	23,1%	,001*
I need to acquire or renew my digital devices	48,0%	41,2%	58,8%	42,3%	,463
I need to learn or update my digital knowledge or skills	50,0%	61,8%	52,9%	53,8%	,762
I need to increase my confidence or security when using digital tools	24,0%	35,3%	67,6%	38,5%	,001*
I need to motivate or interest myself more in using digital tools	36,0%	17,6%	67,6%	11,5%	,000*
I need to receive more support or technical assistance when using digital tools	40,0%	52,9%	67,6%	34,6%	,033
I need to adapt or customize the digital tools to my needs or preferences	30,0%	64,7%	67,6%	7,7%	,000*

*There are differences between countries at a confidence level of 95%.

2. Recommendations

Our main recommendations, based on the results obtained, would be:

- Try to infer, through a focus group of members of the multinational research group, what are the reasons why the level of **participation** in training plans is **not higher**. In addition, try to study the **reasons** that lead to the **differences** between **countries**. Developing training plans that are perceived as useful and attractive by learners is a first step to achieve a high level of participation.
- Try to develop **activities** based on the **smartphone** as the **main device**, since it is the most used by the group of learners. Both the materials and the methodologies should try to focus on the smartphone as the main work device.
- On the other hand, learners claim to be very familiar with video calls and messaging apps (WhatsApp, Skype, Zoom, etc.). This is favorable for developing **effective training** programs **using** these common **applications** that students are already familiar with.
- It will also be important to teach learners problem solving strategies themselves. That is, to be **self-taught** in a certain way. This is based on **tutorials** or **information** available **remotely** that can help them solve a specific situation.
- It is interesting to see that the device most used by **trainers** is the **computer** while for **learners** it is the **smartphone**. It is obvious that each device has some characteristics and particularities that make them suitable for different uses and situations. It is interesting to study when and in what **situations** to use each of them to maximize the usefulness of the training programs.
- The **trainers** also state that they find **limitations** in terms of **knowledge** or **skills** to use digital tools. In other words, before starting the planning and development of training programs for learners, it will be necessary to design **training activities** for the **trainers** themselves. In this way it will be possible to maximize the effectiveness of the subsequent training actions on the learners.
- It is also important to help **trainers** to **manage information** and avoid excess or **misinformation**. It is necessary to **maximize** the use of **time** in order to find a reasonable **balance** between **work** and **personal life**.

3. Conclusions

In terms of **learners**, the sample is fairly balanced across countries, which helps us to draw interesting conclusions. The general profile is over 55 years of age and with different levels of education and employment status. This leads us to think that the results may be representative for a normal general population. The level of **participation** in **digital training** programmes is **not homogeneous** across countries. The **Netherlands** has the **lowest** percentage of participants and **Poland** and **Spain** the **highest**. **Türkiye** would be in an **intermediate** position. In general, the respondents attribute a **basic level of digital knowledge and skills** to themselves.

The most widely used device is the **smartphone** with quite a difference over the rest. It is also a pattern that is maintained in all the countries analysed. The most daily activities are **video calls** and **messaging** with **family** members and **friends**. And it is family and friends who normally provide **help** on these digital issues to those surveyed. **Online banking** is where the highest level of **help** is **required**, although there are many other issues such as online **shopping** or **paying bills**.

Regarding the **search for information**, **simplicity** is one of the main requirements **demand**ed and that it comes from **reliable sources**.

The most common communication applications such as **WhatsApp**, **Skype**, or **Zoom**, are the ones with the **highest** level of **use**.

Respondents largely acknowledge that they have needs when it comes to improving their digital skills. Elements such as **security** in digital environments and the need for **technical support** in the event of problems that may arise stand out.

Regarding the part of the research related to the **trainers**, there is a good balance in terms of the representation of the countries, with Poland being the one that has completed the most surveys. A variety of training initiatives have been carried out in all countries. In this sense, there is a good balance, so the sample can be taken as representative in this sense. These trainers have had a relationship with different groups with inclusive needs, most of them being over 55 years of age. The trainers have manifested themselves with a **mostly medium** and **advanced level of digital competence**.

The devices most used by trainers are Laptop and desktop **computer**, although the **smartphone** also has a high level of use.

A **wide variety** of digital content is used for the work of the trainers in their training activities. The presentations in **slides, texts, images** and **videos** stand out above the rest. This distribution would **not** be the **same** in **all countries**.

There is a **high level** of **use** of **digital tools** by **trainers**. These tools are very varied and their level of use is different depending on each country.

The main **problem** reported by trainers when developing their digital training activities is the **limitation** in terms of **knowledge** or **skills** to use **digital tools**. On the other hand, they highlight their **self-taught** function when facing problems or difficulties when using digital tools for their work.

The main **advantage** attributed to digital tools is to **facilitate communication** and **collaboration** with others and improve the quality and efficiency of their work.

The trainers have also spoken about the **challenges** they must face. **Difficulty managing** information and **avoiding excess** or **misinformation** is the main challenge faced by this group. Aspects related to **security** and **balancing time** and space between **work** and **personal** life have also proven to be very important for this group.

Finally, in relation to the needs or expectations regarding the use of digital tools in their work, trainers have highlighted **the need to learn** or **update** their **digital knowledge** or skills over the rest of the issues.

In general, we can conclude that this project is indeed of interest and topical, given the responses of the groups analysed. And we would highlight as the main need the development of effective training and guidance programs to be able to take advantage of the available digital media.

References

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Annex 1: Findings

Below, the findings, recommendations, and conclusions that the experts and authors of the report have identified after a comprehensive reading of the document are presented in their entirety.

Findings (full version of experts and authors)

1. **Data Collection Method:** The study used Google Forms to collect quantitative data through questionnaires for both trainers and learners in multiple countries, including Poland, Spain, Türkiye, and the Netherlands. Convenience sampling was employed to distribute digital questionnaires through various means, such as email, WhatsApp, and social networks.
2. **Sample Size and Error:** The study gathered 245 valid surveys from learners and 144 from trainers. Sampling errors were $\pm 6.39\%$ for learners and $\pm 8.33\%$ for trainers, with a 95.5% confidence level. The data collection took place in May 2023.
3. **Digital Skills Training:** Around 48.6% of respondents had participated in activities or training to improve their digital skills. Poland and Spain had the highest participation rates, while Türkiye and the Netherlands had lower rates, possibly indicating varying levels of digital skills.
4. **Digital Literacy:** Most respondents fell into the middle digital literacy levels, with a significant number at the "Basic user" and "Independent user" levels. A notable 14.7% reported having never used a computer, highlighting room for improvement.
5. **Employment Status:** The majority of respondents were pensioners/retired individuals (44.5%), while others were either employed, self-employed, part-time workers, or unable to work.
6. **Devices and Internet Usage:** Smartphones were the most commonly used devices (90.2%), followed by laptops/desktop computers (67.8%). The tablet had the lowest usage (30.2%). Country-wise variations existed, with laptops being more prevalent in Poland.
7. **Daily Digital Activities:** Video calls and messaging with family and friends were the most common digital activities (76.7%), while online games and online training participation were less frequent (19.2% and 20.0%, respectively). Significant country-level variations were observed.
8. **Sources of Help for Digital Problems:** Family members were the primary source of help for digital problems (78.8%), followed by friends (52.7%). Educators/trainers were less commonly

sought for assistance (13.9%). Variations were noted among countries, with friends playing a more significant role in Spain and the Netherlands.

9. **Digital Issues Requiring Help:** Respondents sought help for various digital issues, with online banking being the most common (43.7%). Writing emails had the lowest reported need for assistance (14.7%). Variations were seen between countries, with online banking being particularly problematic in Spain.
10. **Criteria for Evaluating Online Information:** "Easy to understand" was the most important criterion when evaluating online information (74.7%), followed by "Accurate information" (63.7%). Country-wise variations indicated different priorities.
11. **Differentiating Reliable Sources:** The majority of respondents (54.3%) indicated that they try to be skeptical when differentiating between good and bad online sources. Other methods, such as checking credentials or affiliations, also had substantial affirmative responses.
12. **Preferred Digital Tools:** Communication applications like WhatsApp, Skype, and Zoom were widely used (73.5%). Information search engines (69.4%) and web browsers (63.3%) were also popular choices. However, online learning applications were less commonly used (29.4%).
13. **Needs and Expectations:** Respondents expressed various needs and expectations regarding the use of digital tools. The most common need was to improve confidence and safety when using digital tools (65.3%). These needs varied by country, with Spain emphasizing the need for more support and technical assistance.
14. The sample consists of 144 trainers from various countries, with Poland being the largest contributor (34.7%), followed by Spain and Türkiye (23.6% each), and the Netherlands (18.1%).
15. Digital inclusion initiatives carried out by trainers include digital literacy courses for older adults (35.4%), programs to provide access to devices and the internet for disadvantaged individuals (31.3%), digital public services (21.5%), distance education platforms (32.6%), and non-formal learning activities using digital tools (32.6%).
16. The priority of these initiatives varies by country. In Poland, programs to provide access to devices and the internet are the most common (44.0%), while in Spain, digital public services are prominent (44.1%). Türkiye focuses on digital literacy courses for older adults (35.3%), and the Netherlands emphasizes non-formal learning activities using digital tools (65.4%).

17. Trainers often serve a diverse population, with a significant emphasis on people over 55 years old (55.6%). Other groups served include people with disabilities (20.1%), migrants or refugees (32.6%), unemployed or low-income individuals (39.6%), and young adults (42.4%).
18. Regarding digital competence, most trainers consider themselves at the intermediate level (46.5%), while others see themselves as advanced (31.9%). No one reported having no digital competence.
19. Commonly used devices for work include laptops or desktop computers (62.5%), smartphones (59.0%), fixed internet connections (47.9%), mobile internet connections (40.3%), and a combination of these options (22.9%).
20. Digital content used for work includes written texts (68.8%), images (65.3%), videos (66.7%), presentations (72.9%), and games (19.4%).
21. The choice of digital tools varies by country, with web browsers (55.6%) and communication applications (54.2%) being the most commonly used.
22. Trainers face various challenges when using digital tools, with the most common issue being a lack of knowledge or skills (46.5%). Other challenges include difficulties with internet access, device adequacy, confidence, motivation, support, and tool adaptation.
23. To overcome these challenges, trainers often search for information or tutorials (63.9%) and seek help from family, friends, or colleagues (53.5%).
24. The advantages of using digital tools in their work include improving work quality and efficiency (59.0%), expanding opportunities and resources (56.3%), facilitating communication and collaboration (63.2%), increasing satisfaction and recognition (42.4%), and developing new digital competencies and skills (55.6%).
25. Trainers also face risks, such as difficulty balancing work and personal life (56.3%), maintaining attention and concentration (46.5%), managing information (61.1%), protecting online security and privacy (55.6%), dealing with stress or anxiety (42.4%), and avoiding dependence or addiction (45.1%).
26. Their needs and expectations concerning digital tools at work include improving internet access (37.5%), acquiring or renewing digital devices (47.9%), learning or updating digital knowledge or skills (54.2%), increasing confidence and security (39.6%), enhancing motivation and interest (34.7%), receiving more support and technical assistance (48.6%), and adapting tools to personal needs or preferences (43.1%).

Annex 2: Recommendations

Recommendations (full version of experts and authors)

2. The study revealed varying levels of digital skills, usage patterns, and needs among learners and trainers in Poland, Spain, Türkiye, and the Netherlands. Digital skills training and support should be tailored to address the specific challenges and needs identified in each country. Bridging the digital divide, improving digital literacy, and promoting safe online practices are essential for fostering digital social inclusion. The findings underscore the importance of continued efforts to enhance digital skills and ensure equitable access to digital resources across different age groups and regions.
3. The study highlights the importance of digital inclusion initiatives carried out by trainers across different countries. While there are commonalities in the challenges faced and the benefits gained from using digital tools, there are also notable differences based on country-specific priorities and preferences. Trainers play a crucial role in serving diverse populations, including older adults, people with disabilities, migrants, refugees, and others. Addressing the digital competence and support needs of trainers can lead to more effective and inclusive digital inclusion programs. Overall, the findings emphasize the significance of digital skills in the field of education and the need for continuous training and adaptation to meet the evolving digital landscape.
4. In conclusion, the text emphasizes the importance of a comprehensive digital competence map for adult educators and the significance of professional competence, ethical standards, confidentiality, respecting boundaries, and promoting a safe and respectful learning environment in the realm of digital education. To ensure the success of digital education for adults, it is crucial for educators, institutions, and technology providers to prioritize continuous professional development, establish clear policies, invest in accessibility and equity, protect data privacy, ensure content quality, and promote ethical behaviour and digital well-being. Embracing these principles contributes to a more digitally competent, responsible, and inclusive society.
5. In conclusion, digital literacy is paramount for adult educators in the contemporary educational landscape. The DigComp framework and the digital competence map provide a structured overview of the skills and knowledge areas needed to navigate the digital realm effectively. Continuous learning and adaptation are essential, given the ever-evolving digital landscape. Adult educators must not only possess digital competencies but also promote

engagement, inclusivity, and responsible online behaviour among learners. By doing so, educators can create meaningful and enriching learning experiences in the digital age, empowering adult learners to thrive in the digital world and contribute to their personal and professional growth.

6. In conclusion, andragogy serves as a framework for addressing the unique characteristics and needs of adult learners in educational settings. Digital competence is an integral part of andragogy, and adult educators must possess advanced digital competencies to effectively engage and guide adult learners in digital environments.
7. The competencies framework within the andragogical dimension encompasses essential skills related to curriculum planning, assessment implementation, empowerment of colleagues and learners, and reflection on the learning experience. These competencies collectively enable adult educators to create meaningful, engaging, and effective learning experiences for adult learners in the digital age.
8. Lifelong learning competence is crucial for adult educators to stay updated on teaching methodologies and technology, fostering flexibility and adaptability in their approach. Furthermore, the ability to motivate and engage adult learners, promote inclusivity, and consistently reflect on teaching methods contributes to the overall competence of adult educators.
9. Ultimately, the combination of subject knowledge, andragogical expertise, interpersonal skills, and advanced digital competencies equips adult educators to provide meaningful and effective learning experiences, creating a positive impact on the diverse needs of adult learners in the digital era.
10. The introduction of a proficiency level determination framework for adult educators in digital matters is a significant step towards enhancing the quality and effectiveness of digital education in adult learning contexts.
11. By combining the Eurostat framework with the DigIN project's competence map, the framework provides a more comprehensive and nuanced assessment of adult educators' digital competencies, including the introduction of an intermediate proficiency level.
12. The proposed indicators cover a wide range of competencies related to digital education for adult educators, addressing professional qualifications, professional behaviour, communication, teamwork, digital tools management skills, digital content creation skills, and digital and lifelong learning skills.

13. This framework and set of indicators can be valuable tools for institutions and organizations to assess, improve, and support the digital skills and competencies of adult educators, ultimately benefiting adult learners in the digital education landscape.
14. To determine proficiency levels, a specific range of values has been proposed: between 1 and 1.4999 is considered Basic level, between 1.5 and 2.4999 is considered Intermediate level, and between 2.5 and 3 is considered Advanced level. These ranges provide clear criteria for assessing and categorizing educators' digital proficiency.



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