



Project Result 1: Policy Paper



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1 INTRODUCTION

1.1 Letter of Transmittal

This policy paper is being compiled with the clear overall objective of contributing towards the inclusion of disadvantaged learners in all fields of education, with particular emphasis on blended learning. With the recent digital transformation, low-skilled people are increasingly at risk of becoming redundant. The Access2Learn project seeks to enhance access to learning with the intent of allowing this sector of society to retain its competitive edge within the labour market.

In light of the above, this policy paper will highlight the problems encountered by low-skilled learners, putting forward recommendations, whilst listing constraints, and the rationale which underlies the analysis conducted.

The ultimate goal of this paper is that of bringing this position to the attention of the European Commission and the National Agencies, at the same time proposing recommendations where action is felt to be required. In this policy paper, where countries are mentioned, these are represented by organisations as follows:

Austria	bit schulungcenter GmbH
Czech Republic	EuroProfis, s.r.o.
Finland	Kainuun ammattiopisto
Malta	Future Focus Institution
Spain	Babel Idioma y Cultura S.L.

1.2 Executive Summary

According to the International Standard Classification of Education (ISCED 3), whose "main purpose is to consolidate secondary education in preparation for tertiary education or to provide skills relevant to employment or both" (International Standard Classification of Education ISCED 2011, p40), a person is considered to be low-skilled when their educational level is below upper secondary education. Such classification may also apply to those who fail to possess the requisite knowledge and as a result, they fail to satisfy the required academic qualifications to secure adequate positions within the workforce.

OECD defines adults with low educational levels as those whose highest qualification is at lower-secondary level (ISCED 0-2) and adults with low cognitive skill levels as those who score at proficiency level 1 or below in the literacy and/or numeracy dimension of the OECD survey of Adult Skills (PIAAC). Reasons that lead an individual to fail to reach this predetermined minimum level of education may be broadly grouped into three. Hence, (i) factors that have to do with the student himself/herself (ii) factors related to the educational system (iii) socio-economic factors. Here we may recognise low digital skills which present an obstacle to adults' societal and economic participation and constitute an additional dimension of low skills. Furthermore, study skills become affected by personal characteristics, such as learning difficulties, cognitive skills, and the ability to use learning equipment. This policy paper purports to outline how low-skilled learners may retain a competitive edge within the world of work if access to learning is facilitated. This paper will focus primarily on blended learning settings where a gap is felt to exist between those who are considered to lack the basic skills to access these learning opportunities and those who are high-skilled.

According to the *Oxford Learner's Dictionaries* blended learning refers to 'a way of studying a subject that combines being taught in class with the use of different technologies, including learning over the internet'. Research conducted within this study, concludes that when dealing with low-skilled learners via blended learning, it is essential to bear in mind two main issues: a) Digital competences, or the lack thereof; b) Understanding these learners in their specific situation/background and comprehending how to empathise with them, as well as how to best build confidence in them themselves.

Throughout the research carried out in the partner countries, it was determined that the below skills are crucial for the successful completion of a blended learning course by low-skilled learners:

- a) Digital skills (problems with hardware and software)



- b) Motivation over a longer period of time
- c) Self-discipline and self-organisation
- d) Preparing productive learning environments
- e) Ability to formulate individual learning objectives
- f) Target language

The prejudice that low-skilled adults are not able to successfully participate in blended learning settings is widespread in some organisations. Therefore, throughout this project, the consortium needs to educate staff and low-skilled learners about the benefits of blended learning. With this in mind, the partners are putting forward the proposal that blending learning is the key to overcoming any limitations that a learner might present us with. Here the possibilities become endless as combinations are explored and adjusted in order to suit particular needs. The advantage of blending learning in this manner lies in the ability to improve the learner experience. Implementation of blended learning has resulted in a reduction of failure rates, improved learning and boosting of engagement by learners. It is proving to be a richer working model for diverse populations of learners, by giving control over path and pace.

1.3 Definition of Blended Learning within this Project

1.1.1. General definition of blended learning

According to the Oxford Learner's Dictionaries blended learning refers to 'a way of studying a subject that combines being taught in class with the use of different technologies, including learning over the internet'. In fact, the term blended learning is generally used for modes of delivery of learning that incorporate both online and in-person tuition where learners spend part of the time learning through face-to-face interaction with a teacher, and part of the time using a digital device to access online courses and resources by themselves or collaboratively inside or outside the classroom. Learning through these two modes can be integrated, complementary, and overlapping and learners have some control over time, place, and pace (Staker & Horn, 2012). This learning method is also sometimes called hybrid learning or mixed-mode learning.



1.1.2. Defining modes of delivery

Synchronous - although learners will be learning from a distance, they will virtually attend a class session, at the same time as the instructor and classmates. This type of class will have a fixed time commitment.

Asynchronous - learning allows learners to learn on their own schedule, within a certain timeframe. Learners can access and complete lectures, readings, homework, and other learning materials. Contrary to the synchronous mode of learning, the format here is one where learners have control over the path and pace at which they engage with content.

Some examples of different modes of delivery include:

1. Discussions - discussion-based classes are where all learners are required to participate and talk.
2. Presentations - a presentation is a spoken communication made by the learner in a prepared and formal way. Learners learn how to prepare material for public presentations.
3. Instructor-led face-to-face training – here learning is facilitated by an instructor in a classroom setting, with person-to-person interaction, offering real-time feedback.
4. Instructor-led online training – here students are able to see, hear and speak with their instructor throughout the class and ask questions at any time. With these sessions, learners do not need to travel for class but can access learning resources via a digital device and internet connection.
5. Practicum – this is a form of on-site training provided at the workplace. Here, trainees are familiarised with the working environment and also get hands-on experience. Where the practicum is in the form of on-site observation, this offers an information-gathering tool for learners. This is the process of recognising and noting people and objects and getting information. The major objective of onsite observation is to get learners as close as possible to the real system being studied.
6. Self-learning – the student will be given the core guidelines which need to be covered in the curriculum, however, it is at the student's discretion to complete the necessary research.

1.1.3. Different ways of application

By bringing together two or more of the above methods, the benefits of blending are brought out, because the required mix can be *made* to fit the needs or specifications of a particular learner, and



in accordance with individual needs. Indeed, there is never the standard rule for a blend, but the selection is made in order to suit the student/s concerned. Blending in fact can be applied on a case-by-case basis, highlighting its valuable characteristic. Therefore, if we are faced with learners who require more of one particular mode of delivery and less of another, this can be tailor-made in accordance with these specific needs.

1.1.4. Implementation

Once the various modes of application are determined, one may also consider ways in which these can be implemented. Possible models may include the following:

1. Rotation for the whole class on a schedule fixed by the tutor – the tutor applies the chosen mode of blended learning within a whole group/class
2. Rotation for a learner on a schedule fixed by the tutor – the tutor applies the chosen mode of blended learning with a learner particularly
3. Rotation for a learner chosen at the learner's own convenience – the learner has the possibility of joining selected modes that are made available

1.1.5. Overcoming limitations

With this in mind, it can be said that blended learning is the key to overcoming any limitations that a learner might present teachers with. Here the possibilities become endless as combinations are explored and adjusted in order to suit particular needs. The advantage of blended learning in this manner lies in the ability to improve the learner experience. Implementation of blended learning has resulted in a reduction of failure rates, improved learning and boosting of engagement by learners. It is proving to be a richer working model for diverse populations of learners, by giving control over path and pace.

1.1.6. Project-specific definition of blended learning

In the context of this project, blended learning is defined as an educational setting that combines online learning with another form of learning in a synchronous or asynchronous environment. It can include different modes of delivery.



In addition to lessons that take place in a classroom with teacher support, which can be face-to-face or online, learners are expected to learn about the contents at home or at their workplace autonomously. It may also include an element of practice where the learner would be able to complement the teaching with on-site training or observation.

In our view, **blended learning is characterised by the fact that a noteworthy part of learning takes place as self-learning with the use of digital devices and in many cases with the support of learning management systems.** Therefore, in this project, we focus on preparing adult learners for this combination of learning modes, but especially for the self-learning part that takes place away from the classroom.

Blended learning may include the blending of any of the above modes of delivery of learning methods.

The combinations that can be derived are various and numerous also because the tutor can decide how much or how little can be used from the selected modes within the blend. The decision would be based on what works best for the case at hand. This type of blending is also very beneficial for different learning needs since the blend can be adjusted in accordance with progression or regression – namely adding more from one mode, or less from another. Learning modes become complementary, creating a truly integrated learning environment

2 ISSUE HISTORY

When talking about the “Issue” within this policy paper, this should be read as “the difficult situation of low-qualified adults relating the participation at blended learning settings”.

2.1 Background of the Issue

With the imposition of restrictions brought about by the Covid19 pandemic, instruction by blended learning was inevitably introduced. Many training institutions in Malta were faced with a situation where one had no choice but to switch to blended instruction via online means. This mode of tuition was made available for all. Mostly all courses available are offered via blended learning – the availability of these courses to low-qualified learners depends on the entry requirements of the course in question. Therefore, it may be said that courses at MQF levels 2 and 3 can all be offered to lower-qualified learners who wish to progress with their studies. The share of the adult population in potential need of upskilling education competences is estimated to range between 65.6 % and 71.5 % of its total adult population (from 154 to 168 thousand adults), depending on the measure of digital competences considered. Low skilling is particularly high among people out of the labour force aged 55-64 and 35-54. They all present on average the highest share of low skilling in education and digital skills. Women account for approximately 48 % to 53 % of the adult population with low education and low digital skills, respectively. Among adult women, the absolute risk of low skilling is higher for education (54 %) as compared to the other skill dimensions. Moreover, the relative risk of low skilling is higher among women out of the labour force (inactive) and among unemployed women in all the skill dimensions considered. The share of Maltese persons aged 15 to 64 having a low level of education decreased from 59.6 % in 2010 to 37 % in 2020.

It may be assumed that in the Czech Republic blended learning is not purposefully addressed to some of the target groups. Blended learning is generally offered in the free educational market and if you are interested you can participate. The central education for the target group of low-qualified people is managed in the Czech Republic by Labour offices and they offer to that target group rather face-to-face courses with national accreditations. Generally, the main problem in the Czech Republic is that it was not given support to e-learning/online/blended learning educational activities especially from public sources due to the fact that is difficult to monitor and prove the realisation. The change is noticed during the Covid19 times but focused rather on private companies and not on the public sphere.

In private companies, low-qualified people are working in the positions of operators and the employers strictly require face-to-face learning for that target group due to their low motivation to study and a big necessity to check their learning process which is simpler to do in personal touch than remotely.

A survey conducted by OGM - Austrian Society for Marketing on behalf of WIFI Vienna clearly marked the openness and acceptance towards blended learning. The range of courses on offer in Austria has also been expanded in a very differentiated manner and is often freely accessible. However, it is not possible to determine more precise figures on how many low-skilled workers take advantage of this offer. AMS Austria promotes the further training of low-skilled and older workers in order to ensure their participation in the labour market. Workers who have completed compulsory schooling or less and whose further training improves their basic knowledge, secures their job, and provides for a change to a higher-value activity in the workplace are eligible to be funded. Different forms of learning are promoted, such as face-to-face courses, live online courses, or online courses.

In Finland, blended learning is traditionally offered specifically to adult learners. It is thought that blended learning is suitable for all adult learners because it enables them to balance studies with work and family life. All adult students are thought to have sufficient self-direction and cognitive skills for blended learning. There is no data or research on how many blended learning courses are offered to adult learners. According to statistics (Aikuiskoulutukseen osallistuminen, Tilastokeskus) in 2017, most adult education was vocational. At that time, 48 % of working Finns participated in training for work-related or occupational reasons. The duration of training is not specified in the statistics.

However, in Spain, blended learning is often not offered because the majority of individuals with low qualifications do not have a high level of participation in them due to several factors:

- Lack of specific digital skills: not knowing how to create an email account, access digital platforms, among others.
- Lack of time to do such a course, since the people to whom it is addressed work long hours, even combine two jobs; or they cannot make it compatible with their personal life, since they usually have children or people in their care, which limits the time they can devote to their training.
- Lack of technical skills, many courses are aimed at people with a certain level of education.

2.2 Current Status of the Issue

Studies have been conducted in Malta with regard to low-qualified adults, where low skilling was considered in the level of education as well as their digital skills. The studies have revealed that although the proportion of low-qualified adults in Malta is still relatively high when compared with the rest of the EU, a gradual improvement over the past 5 years can be recorded. The overall proportion in Malta of adults aged 25 to 64 who have low qualifications was down from 48.9 % in 2017 to 46.7 % in 2018. It has been noted that the incidence of low skilling among adults is higher than those observed on average in the EU28+ countries, both in the level of education and in computer and digital skills. Indeed, the share of adults with low educational attainment levels is particularly high, reaching almost 55 % of the adult population.

No relevant studies related to blended learning and low-skilled students were found in the Czech Republic. Studies are rather focused on e-learning, where this is defined as a separate subgroup of distance education, which also includes education using written texts) as well as postal correspondence. The study considered the advantages and disadvantages of e-learning studies, however not for low-qualified people but generally for adults. Disadvantages include higher start-up costs, higher demands on trainers, the difficulty of written expression, concerns about technology, individual responsibility, unsuitability for some training programmes and limited social contacts.

In Germany, the education gap is widening, as income and prior education often determine who participates in blended learning settings. Within the study, courses were offered specifically for low-skilled learners in a blended learning setting. 45 persons completed a before-and-after questionnaire and an intensive case analysis was conducted for 7 participants. The study showed that the approach of low-skilled learners to e-learning is very different, but the bottom line is that everyone was able to take something away from the setting. Above all, the evaluation of the before-and-after questionnaires clearly shows significant learning successes.

Within the framework of the study by AMS Austria and the Vienna Institute for Labour Market and Educational Research, current approaches and projects for teaching digital skills in labour market-oriented qualification were examined. It was determined in which areas, and for which target groups of labour market-oriented qualification digital competences are taught, with a focus on offers for the low-skilled. In this study, Germany, Estonia, Ireland, Austria, and Switzerland were compared in order to be able to make conclusions and recommendations for possible further developments in Austria.

There are several actors in Finland who study learning difficulties and guidelines for mentoring an adult student with learning difficulties. (www.ohjaan.fi, www.oppimivaikeus.fi) Niilo Mäki Institute produces research-based materials for teachers who meet pupils with learning difficulties, and they have produced videos to help both the pupils and teachers to deal with the questions of online learning, but they do not pay attention to adult learners. It has been found that no research was conducted in Finland about blended learning and low-skilled adults.

In the case of Spain, no detailed studies have been carried out on the access of people with low qualifications to blended learning. However, this type of course is offered to low-qualified people. For example, the State Public Employment Service (SEPE) initially admits to subsidized courses to those people who currently have greater difficulties in entering the labor market, such as women, people over 45 years of age, people under 30 years of age, people with disabilities, the long-term unemployed, people with minimal education or with low academic qualifications. Although there is no specific data available on how many people with low qualifications have taken or are taking the course, it is estimated to be relatively low.

Among the examples of good practices in Spain related to blended learning is the maintenance of employment through the development of technological competencies and skills - KEMP. The KEMP course has emerged as an initiative of the Lifelong Learning Program, specifically as a Grundtvig Project with the aim of meeting the educational challenges of an increasingly aging population by supporting the development of ICT-based learning content, services and practices, and equipping workers with good tools and skills needed to cope with change and be able to stay in the labor market, with a special emphasis on ICT skills. The KEMP training course aims to:

- Promote the importance of lifelong learning in adult workers.
- Improve their technological competencies and skills.
- Reduce resistance to the daily use of ICT-based tools and associated services at work and in the private sphere.
- Raise awareness among older workers of the ways in which ICT and the Internet can make their lives easier, especially their professional lives.

2.3 Importance of the Issue

Throughout this study, it has been determined that various skills are necessary for the effective and successful completion of blended learning. The partners agreed that the below skills are required for blended learning:

- a) Be able to adapt to new situations since technology is constantly evolving
- b) Digital skills
- c) Patience
- d) The teacher needs to be able to understand the difficulties the students might be facing, and adapt accordingly
- e) Be responsible and take ownership of their learning process for blended learning to be effective
- f) Be willing to learn new things
- g) Be able to speak the mother tongue and course language
- h) Be self-motivated
- i) Be able to formulate their own goals
- j) Be able to gather the required information
- k) Self-discipline, including the ability to create a learning space at home without being distracted and managing their time efficiently
- l) Being able to prioritise their studies and goals

3 ISSUE DEFINITION

3.1 Statement of the Issue

There are four known problems that low-qualified people might encounter when trying to join a blended learning. These are (i) inadequate tools designed specifically for adult learners (ii) lack of practitioner know-how (iii) logistical barriers related to Wi-Fi and tool access (iv) resistance. Further to this, other problems that might hinder low-qualified people include a lack of confidence stemming from feelings of incompetence, and also a lack of motivation. One can also add an inability to manage time well and other organisational skills. According to Tikka (2020), the biggest difficulties students face in blended learning are the lack of guidance and interaction, as well as the technical problems brought by information technology.

Moreover, adults with low skill levels find it more difficult to recognise their learning needs and hence are less likely to seek out, and engage in training opportunities. Teaching material may also pose challenges in blended learning. The teaching material that has been transferred from contact teaching directly to online teaching does not necessarily meet the pedagogical needs of blended learning. The material can contain too much information and too many opportunities, which obscures the goal itself and leaves learning superficial. (Hakkarainen 2001.)

The fact that some e-learning programmes are more expensive, means that not everyone can afford them, especially low-qualified people, who are often unemployed. Online learning requires a certain degree of computer literacy and technology that not everyone has. This said, results from the questionnaire have shown that the adult learners who have answered this questionnaire have at least one digital device which they can use to follow an online course, with the majority of the students owning a smartphone. Results show that 42% own a smartphone, 31% own a laptop, 17% own a desktop and 10% own a tablet. Therefore, it can be said that for these learners, the technical barrier would be related to the lack of knowledge about online tools, rather than the lack of digital tools.

In all the focus groups several challenges were discussed. Below is a list:

3.1.1 Technical Challenges

Some trainers noted that at times, they spent more time trying to sort out technical issues rather than focusing on the class content. 'Low-skilled learners are not used to online learning and tend to find it overwhelming to continuously use digital tools instead of analogue tools' such as paper.

Some trainers also have technical difficulties, and therefore require more administrative support to use the digital tools provided. One Austrian participant noted that 'it would not be a gain to offer blended learning from the pedagogical perspective'.

It was also noted that students find it difficult to shift to different platforms according to the module trainer. Whilst the students need to learn how to use the platform, they also need to remember which site is used for which topic. The learners also need to remember how to access the lesson and the work due.

3.1.2 Rapport

It was noted that both trainers and learners struggle to create a good teacher-student relationship since it is more difficult 'to interpret non-verbal communication in online settings.' Additionally, it is often more difficult for low-skilled learners to understand certain instructions and therefore, require more support from the trainer.

The Finnish teachers emphasised how it might be difficult for some students to gain access to the feedback given by the teacher. This would effectively lead to a lack of motivation.

3.1.3 Motivation

The trainers from the Czech Republic noted that it is difficult for them to keep the learners concentrated on the topic and task. The learners must be made aware of the practical uses of their daily work, and how the learning content will be beneficial for them in the long run. The trainers also noted that oftentimes, the learners were encouraged to follow a course by employers, HR experts, and managers.

3.1.4 Demands

It was noted by the Spanish trainers that since there is a lack of peer-to-peer interaction, the students are more focused on the teacher, and are therefore more demanding.

3.1.5 Student background

Since some of the learners come from difficult backgrounds, it is vital for them to meet with their peers and socialise.

3.1.6 Work preparation

Adapting work for online teaching is time-consuming, especially if the learners in the same class are heterogeneous. The teacher needs to identify the needs and strengths of the students to be able to successfully plan blended learning.

The trainers also need to keep in mind that many PowerPoint slides might be boring for the students and should thus encourage online discussions. The discussions can also be mediated using breakout rooms.

Whilst in-person classes can be spontaneous, teaching in an online setting can be more restrictive, and as the Spanish teachers highlighted, ‘both low-skilled, and high-skilled [learners] lose interest and no longer feel obliged to participate since there is a separation between the ‘real world’ and the ‘virtual world’”.

3.2 Statement of Methodology Used in Analysis

To work on this issue, it was necessary to conduct a widespread analysis of the current situation of low-skilled adult learners and their access to blended learning offers within different adult education institutions. To start this analysis, an extensive literature review was implemented according to a structured template.

Based on the findings of this first literature review, a guideline for focus groups was developed, and afterwards, the five partners in the project conducted focus groups with teachers and trainers. The participants of the focus groups teach people from all educational backgrounds and have experience in using blended learning. The goal of this focus group was to find out if there are already teachers/trainers that are conducting blended learning courses with low-skilled adults.

Further to the above, questionnaires were sent out to teachers and trainers, concentrating exclusively on those training low-qualified adults in blended learning settings. This questionnaire consisted of 9 questions and required a maximum of 10 minutes to complete. All data were collected anonymously, in a manner that could not be attributed to any person. The respondents and their

replies were kept confidential. Participants were informed of this confidentiality policy. The results were used to show the importance of and the prerequisites for blended learning as well as to identify which competences are necessary for successful participation in blended learning settings.

Another questionnaire was prepared, this time to be distributed among adult learners. The questionnaire consisted of 14 questions and required a maximum of 10 minutes to complete. As with the other questionnaire, all data was collected anonymously, and could not be attributed to any person. All information was kept confidential, with participants informed of this policy. The results here were used to identify which competences are necessary for successful participation in blended learning settings.

The answers collected were analysed and a report showing the various results was created. The final results are shared within this handbook in the following sections.

As the last step of this analysis, all partner organisations conducted interviews with 3-4 teachers, trainers, and other educational staff. The goals of these interviews were to counteract the prejudice that blended learning is not suitable for low-skilled learners, to present good-practice examples for dealing with this target group and to provide adult educators as well as policy makers with recommendations for alternative actions about offering blended learning to this target group. Some of the examples and recommendations given can be found in the chapters below.

3.3 Identification of Actors Involved: Focus Groups

The Spanish partners conducted the focus groups with 5 teachers and trainers with different levels of teaching experience, including online and in-person teaching. The specialised language teachers are trained in general communications, focusing on different backgrounds and skill levels. The participants of the Spanish focus group also have experience teaching in Latin America and the United Kingdom.

The Austrian partners conducted two face-to-face focus groups at the premises in Vienna, the first one with 4 adult educators, and the second one with 3 adult educators. All of the participants have experience in teaching low-skilled people (especially migrants) in different areas, but most of the teaching is done in German. Many of the participants also train high-skilled adults, and therefore, it was possible to compare low-skilled and high-skilled learners. The trainers have conducted several seminars via distance learning due to Covid19, but only a few of them are offering blended learning

courses to low-skilled adults. This is due to the misconception that low-skilled people do not have the required competences, as well as the motivation to follow these courses.

The Finnish partners have conducted the focus group with 9 staff members from Kainuu Vocational College. The participants have experience with blended learning and producing the necessary teaching material. Their students are adults studying for vocational degrees. Two of the participants are working on projects in which they promote and encourage the applicants to apply and start vocational studies. The focus group was held hybrid via teams. The Padlet platform was used and participants could write down their comments. It was easy to facilitate the discussion because the participants agreed on the importance of the topic. All the participants had previous experiences offering blended learning for low-skilled and high-skilled learners, and thus, had quite a few ideas and comments.

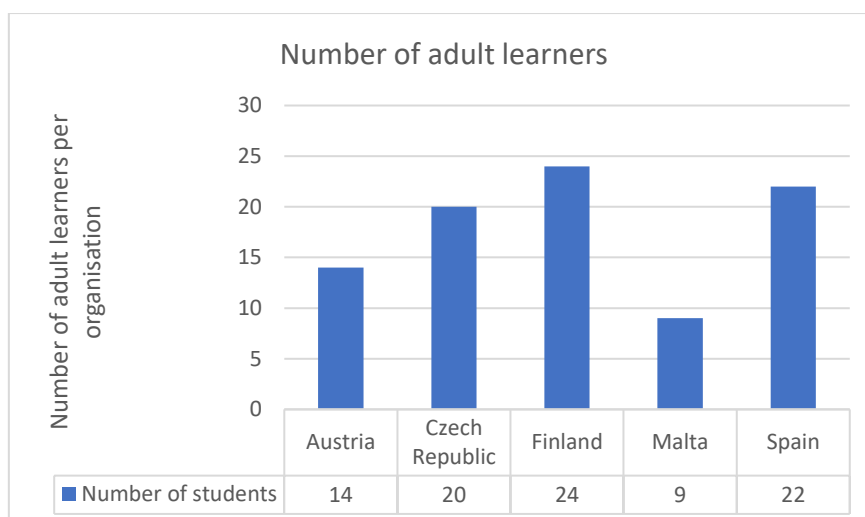
The Czech partners have conducted the focus group with 7 trainers, with experience in production. The target groups of the trainers are the employees of these production companies, from the low-skilled to the top management. The trainers found it difficult to speak about the barriers and challenges of the low-skilled people, because the learning content is not known, thus, the discussion was general. They agreed that the low-skilled learners are rather responsive to the hard skills training needed for their work rather than to the soft skills since they will not use these skills on a daily basis. Generally, the soft skills trainers were more sceptical of the motivation of the target group than the trainers for hard skills.

The Maltese partner conducted the focus group with 5 trainers. The trainers have experience teaching both low-skilled and high-skilled learners and thus, could compare the skills and competences posed by both groups. The trainers agreed that with the right mindset, and a lot of patience, it was possible to reach out to the low-skilled learners and equip them with the skills necessary to follow a blended learning course. The trainers also agreed that although the learners are initially sceptical to follow a blended learning course, once they understand the goals and learning outcomes, they are more motivated to succeed. It was also noted that many of the low-skilled learners had low self-esteem, and thus needed constant encouragement.

3.4 Identification of Actors Involved: Questionnaire for Adult Learners

The number of participating learners per country organisation:



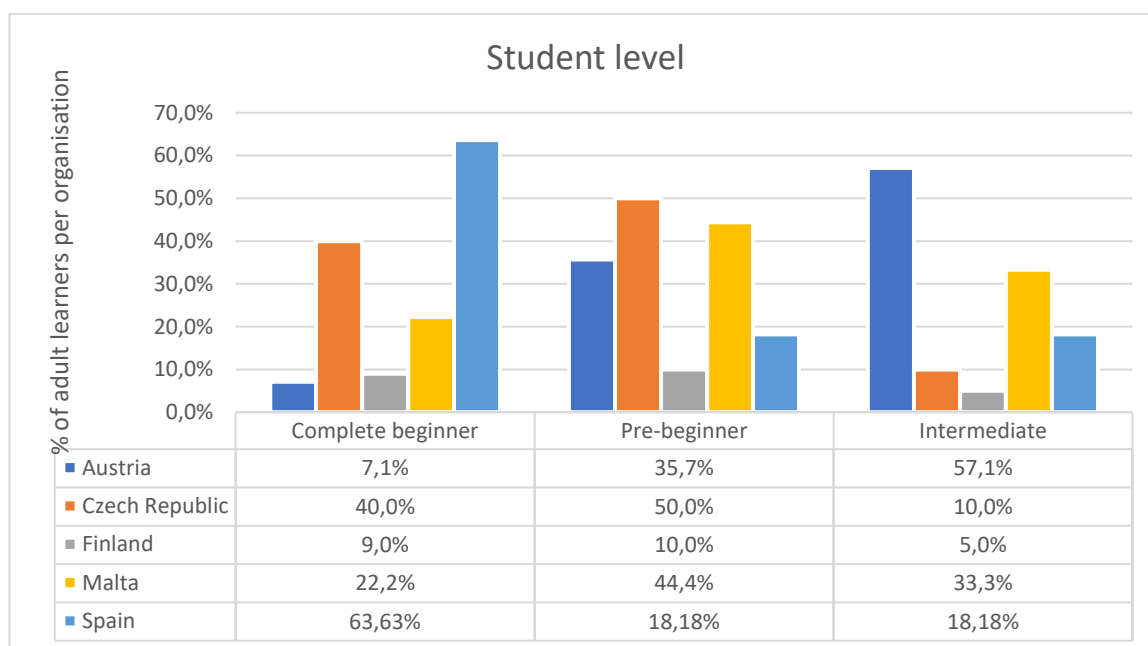


3.4.1 What are the learners currently studying/what do they want to study in future?

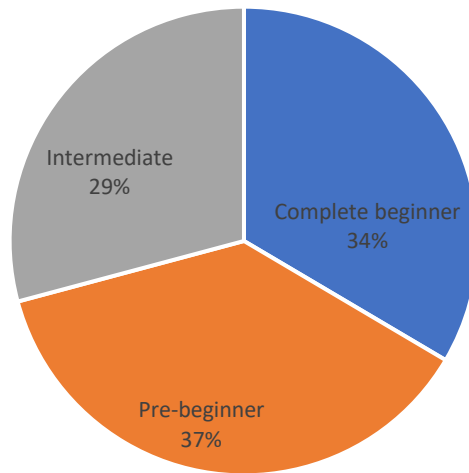
Austria	<ul style="list-style-type: none"> • VET: presentation and sales techniques • Application training • IT course • English course • Qualification for a job course (for people (re-)entering the labour market) • Basic digital skills course • Other courses at bitSC
Czech Republic	<ul style="list-style-type: none"> • IT course (MS Word, Excel etc.) • English course • German course • Foreign languages courses • Goldsmiths and jewellers • Communication skills • Lean processes (QS) • Personal development • Change management • Basic digital skills course • 2 persons do not want to educate
Finland	<ul style="list-style-type: none"> • Vocational Qualification in Education and Guidance • Further Vocational Qualification in education and guidance • Vocational Qualification in Hotel and Restaurant Services • Vocational Qualification in Business and Administration • Vocational Qualification in Tourism • Vocational Qualification in ICT Services

Malta	<ul style="list-style-type: none"> • Accounting • Basic Language Course • Economics • Electronic technician • Law
Spain	<ul style="list-style-type: none"> • English language • Criminology • Programming • Italian language • Hospitality • Mechanics • Canine training • Informatics • Translation • Russian language

3.4.2 What is the current level of the learners in this subject?

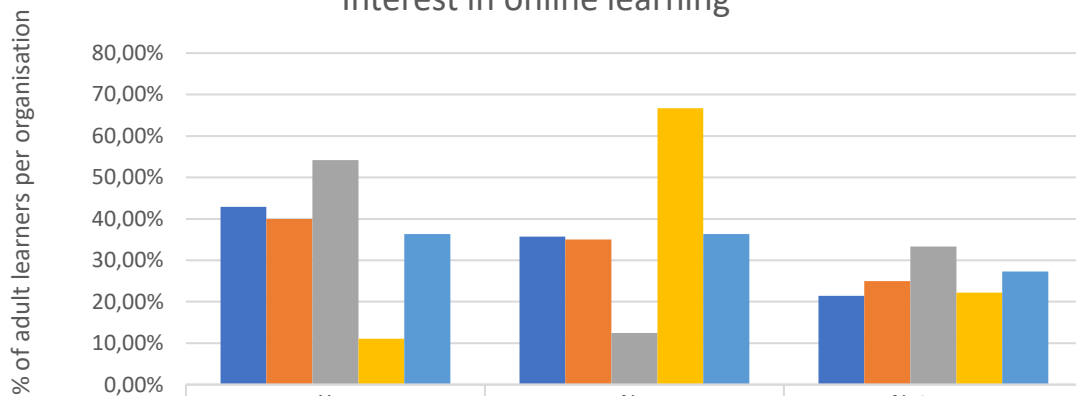


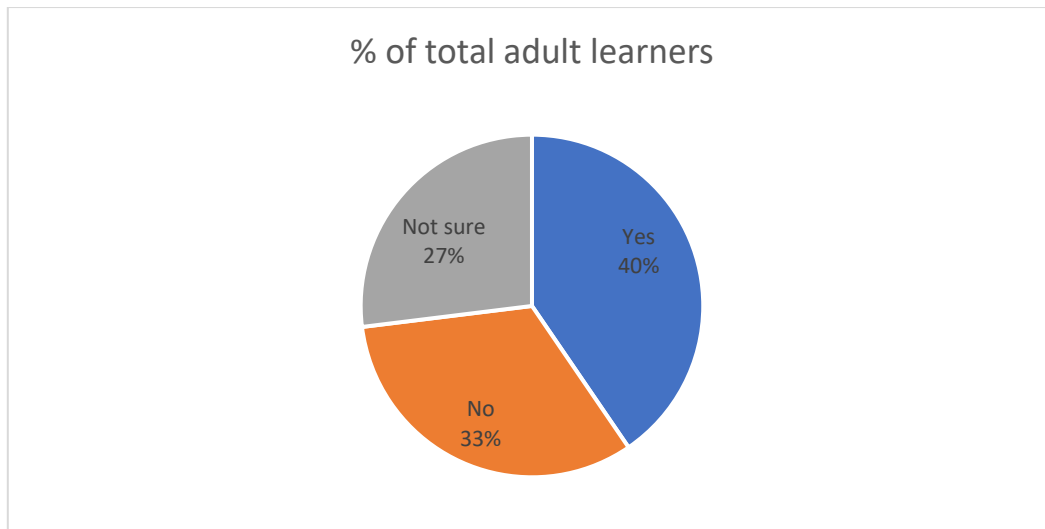
% of total adult learners



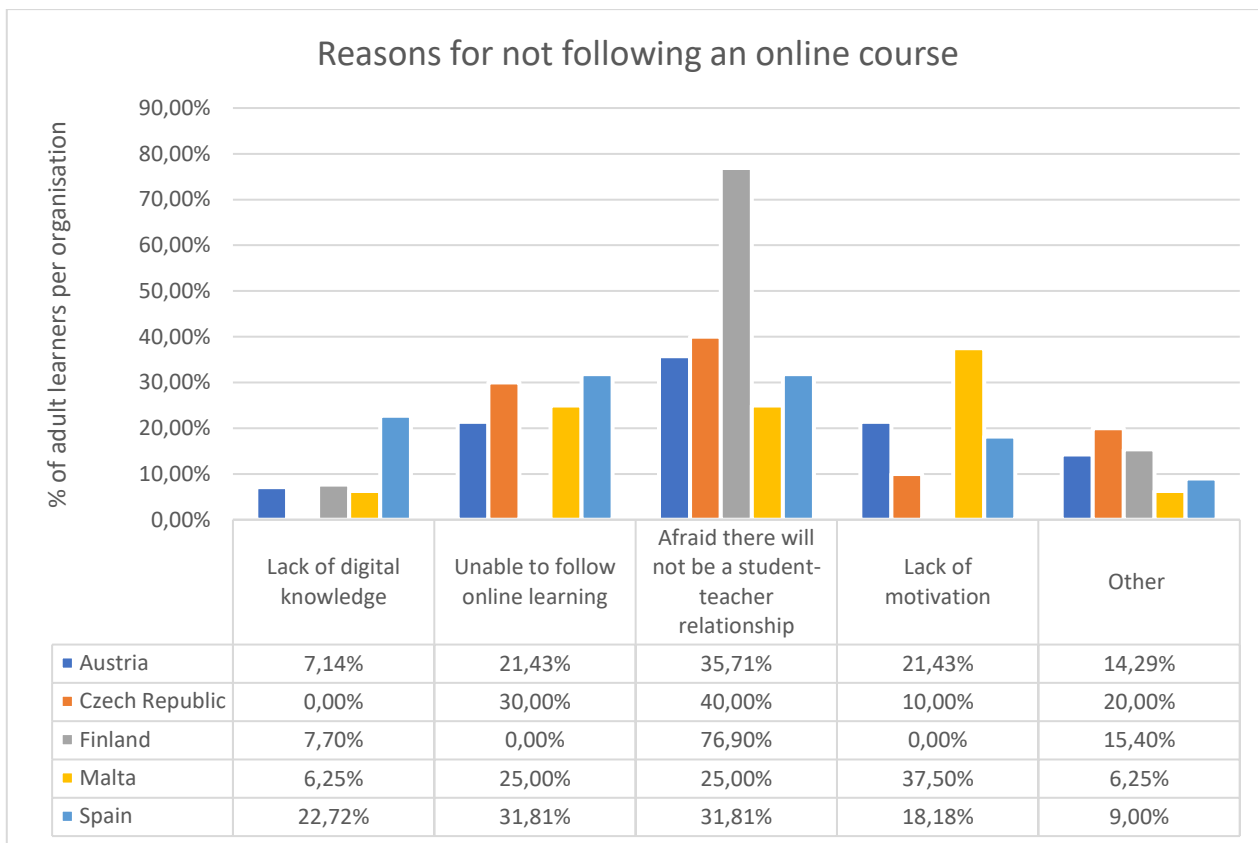
3.4.3 Would the learners like to follow the course online?

Interest in online learning



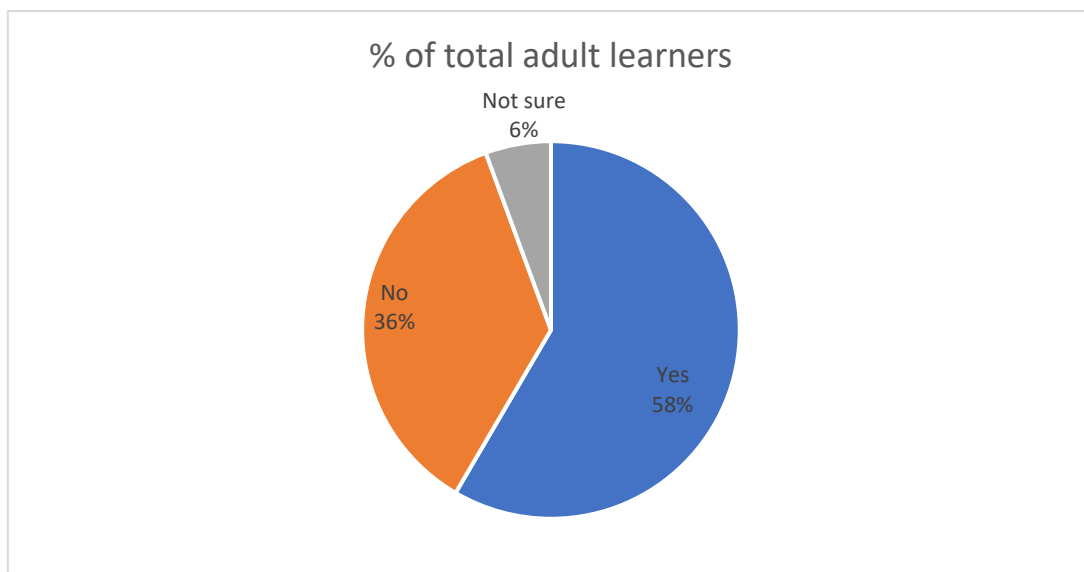
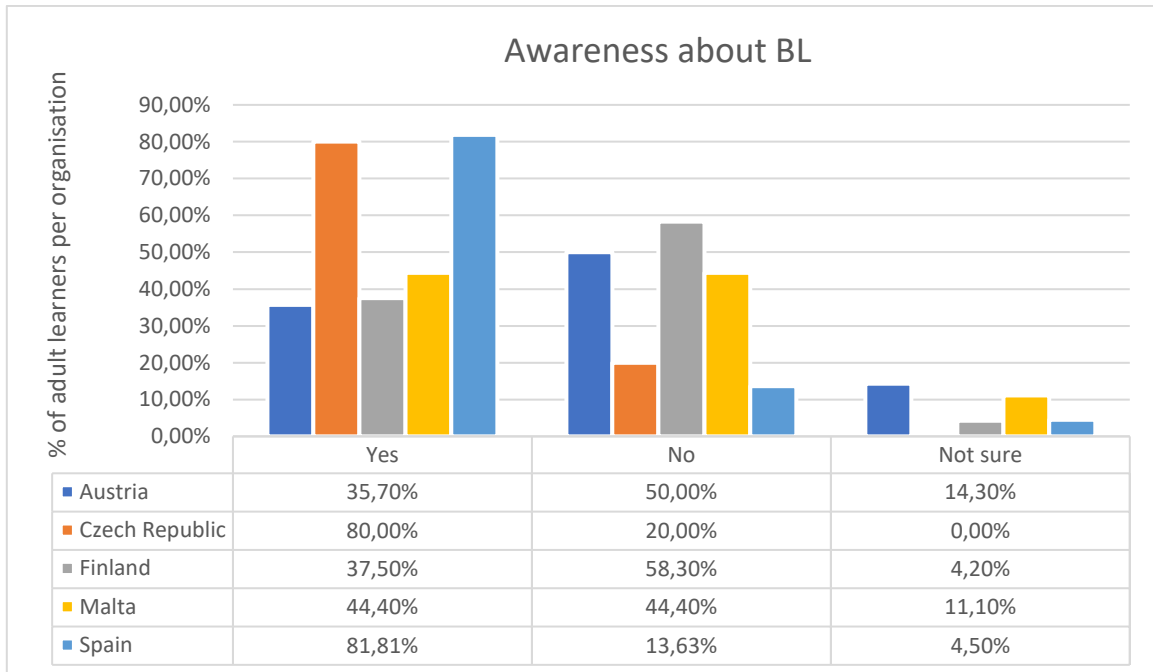


3.4.4 If the learners have answered 'no' to Q3, please give us a reason

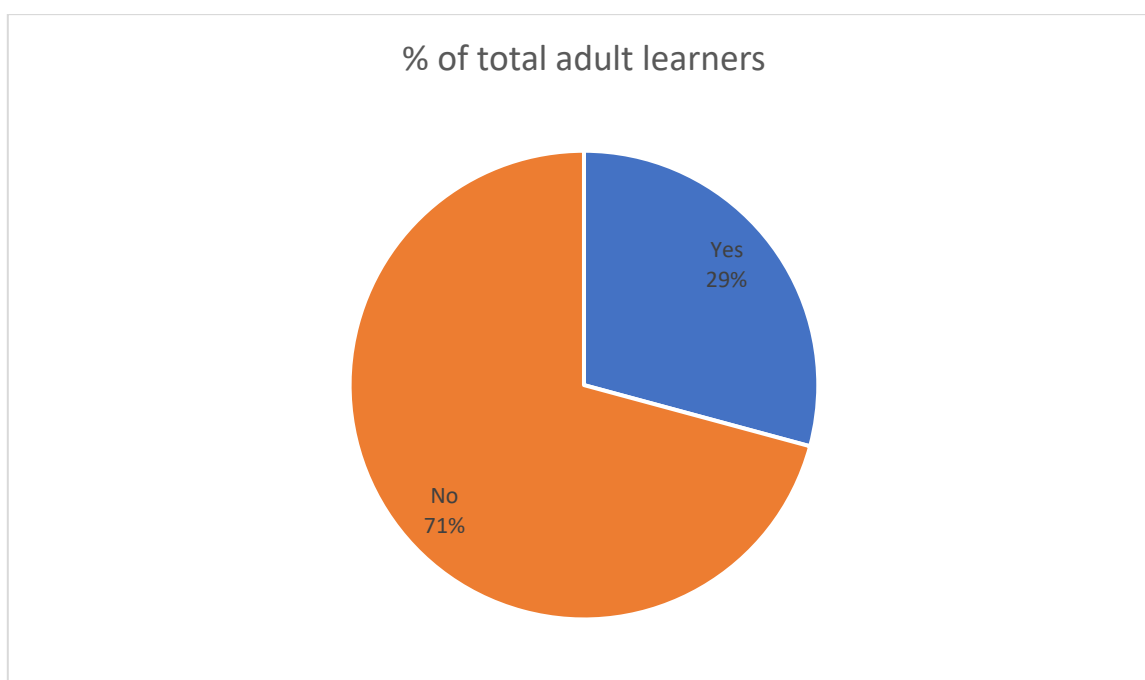
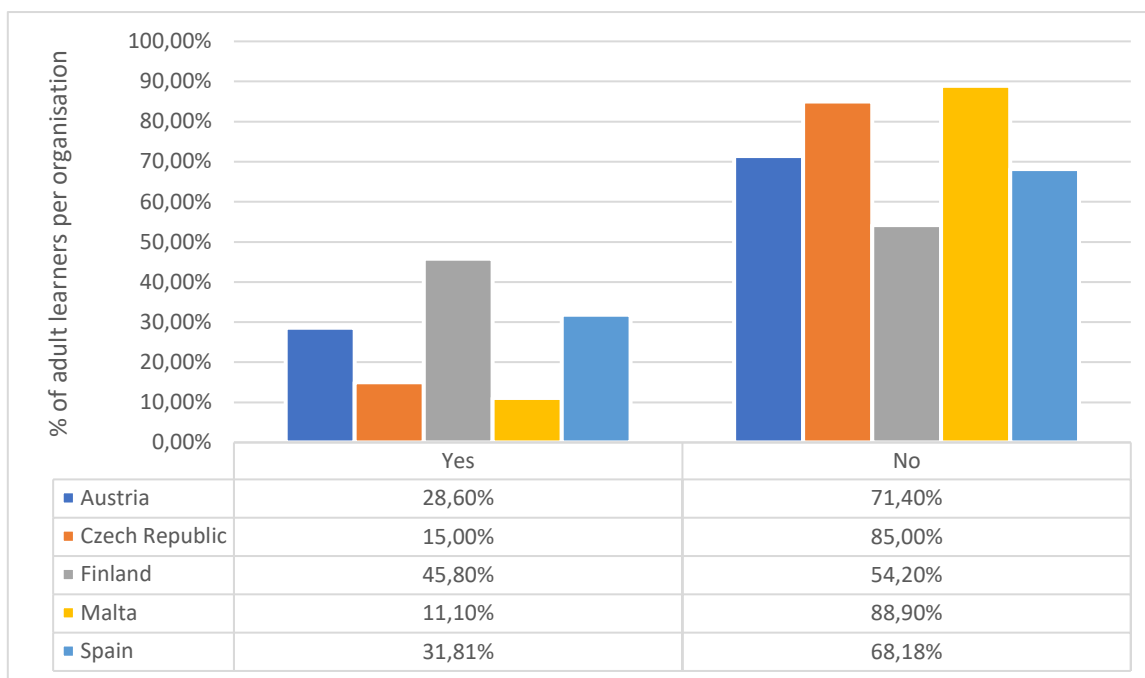


The Maltese learner who marked 'other' noted that they would not like to follow a course online because they don't want to, rather than because they are not able to.

3.4.5 Have the learners heard of Blended Learning?



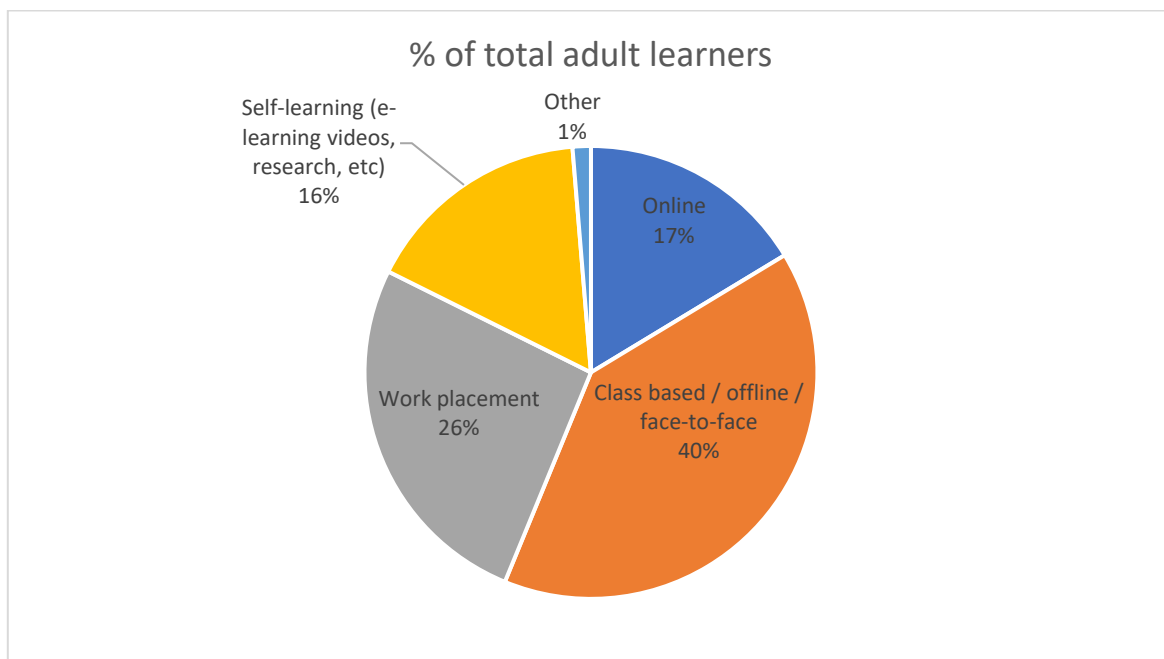
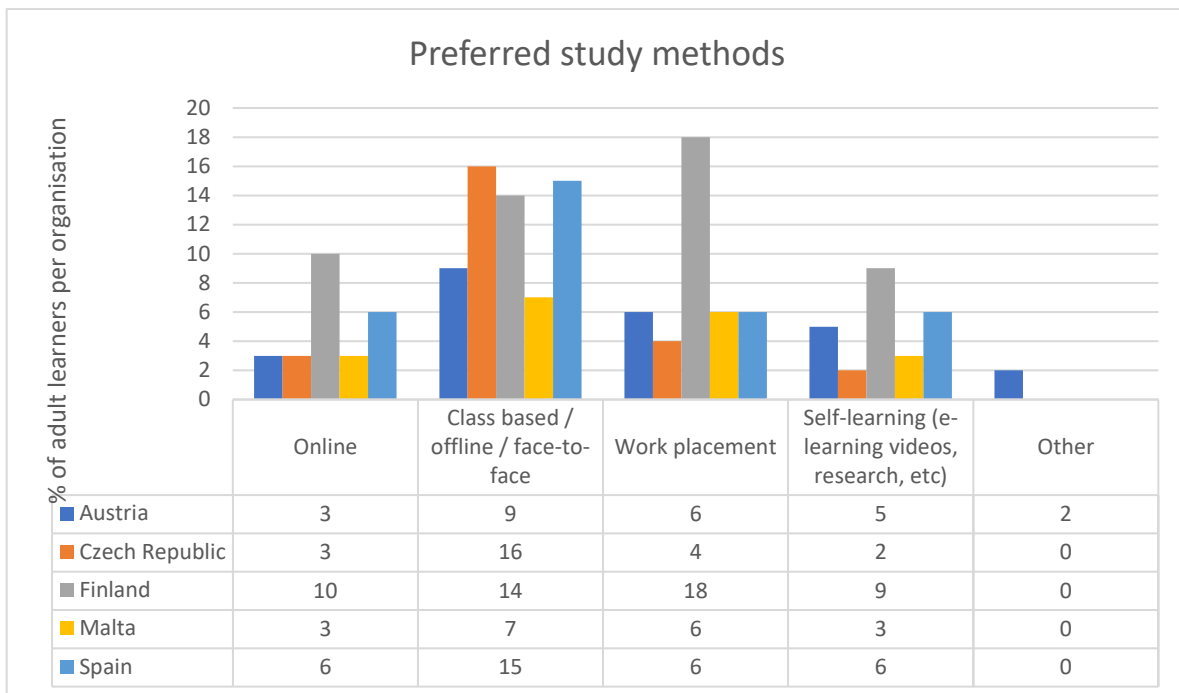
3.4.6 Have the learners participated in a Blended Learning course before?



3.4.7 If the learners answered 'yes' to Q6 above, what are their experiences?

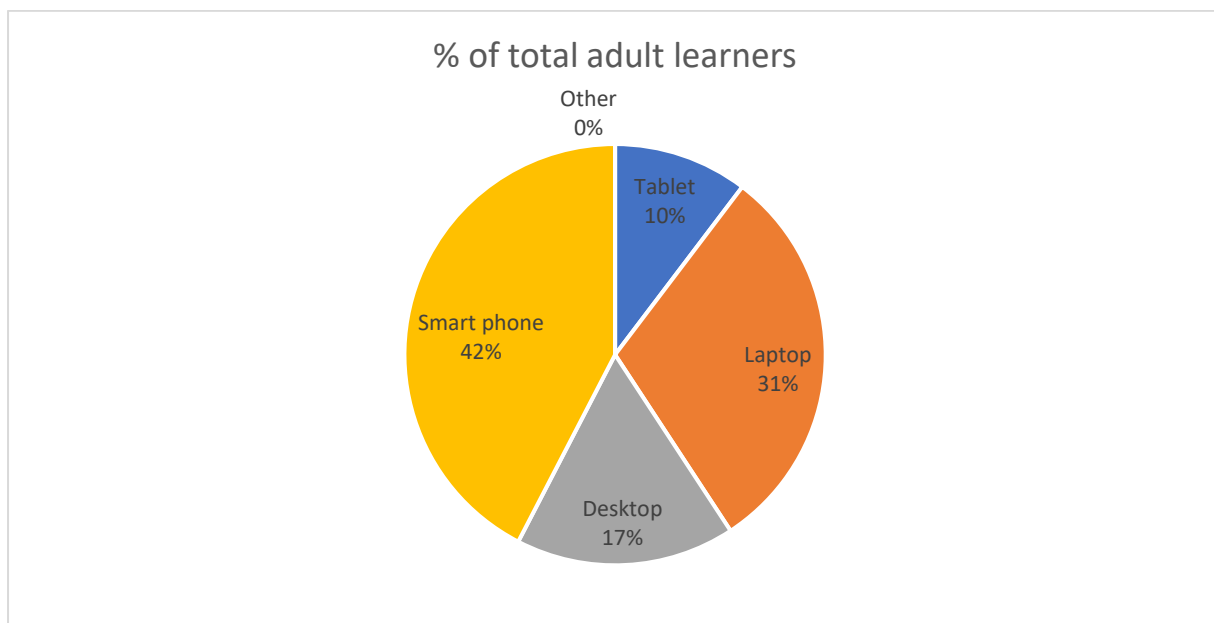
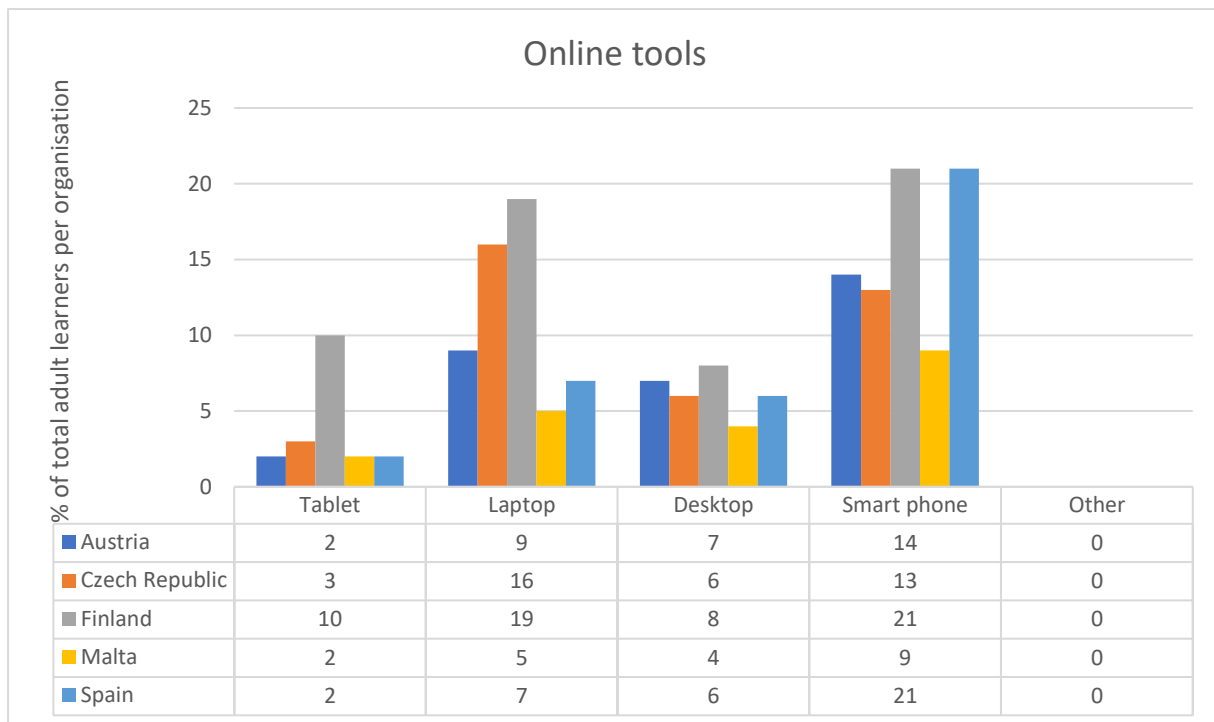
<p>Positive experiences</p>	<ul style="list-style-type: none"> • 'It was good' • 'Comfortable to learn at home' • 'It was fun' • 'Flexible' • 'Studies have been fluent when studying in blended learning settings' • 'In my opinion blended learning has been a suitable way to study for me' • 'Blended learning is a flexible and good way to study, also work-placement sessions support learning' • 'Good and interesting' • 'This was new for me, but I have liked this and, in my experience, I prefer this' • 'When studying at school, it would be good to have the possibility to join online via Teams. It would help in complicating life situations' • 'I find blended learning functional' • 'This form of teaching suited me, in online teaching I could go at my own speed of learning, revisit the material, if I needed advice, I prepared questions for face-to-face teaching' • 'Home environment, I don't have to go anywhere'
<p>Neutral experiences</p>	<ul style="list-style-type: none"> • 'Not too bad. However, can get boring at times'
<p>Negative experience</p>	<ul style="list-style-type: none"> • 'Not very satisfactory, it was very basic' • 'It was not helpful because of a lack of self-discipline in learning on my own' • 'Communication and relationship-building with others was missing' • 'Speed of teaching/learning was too fast, I was not always able to follow the trainer' • 'Unfocused, not as effective – I don't trust this way of learning' • 'Impersonal contact, poor concentration on teaching'

3.4.8 How do the students prefer to study?



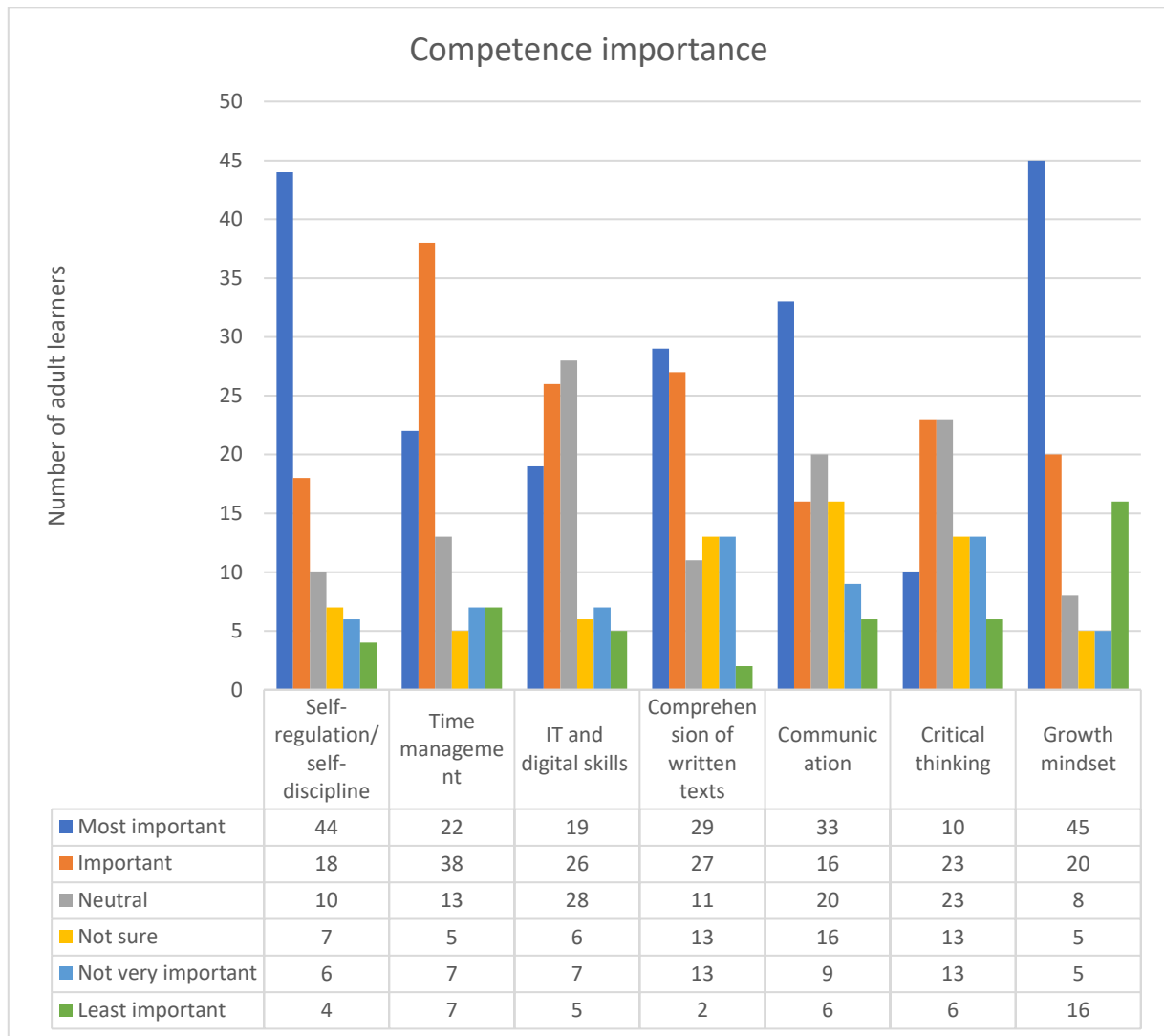
The Austrian learners who selected 'other' noted that they prefer to follow a course if it includes 'learning by doing' and makes use of online forums such as YouTube.

3.4.9 What technology do the learners have that can be used for Blended Learning?



The adult learners who have answered this questionnaire have at least one digital device which they can use to follow an online course, with the majority of the students owning a smartphone. Therefore, it can be said that for these learners, the technical barrier would be related to the lack of knowledge about online tools, rather than the lack of digital tools.

3.4.10 Please rate the competencies according to their importance for blended learning.



The most important competencies are self-regulation and self-discipline, time management, IT and digital skills, and a growth mindset. Whilst 66% of the learners selected 'most important' or

'important' for growth mindset, it could be noted that 26% of the participants do not seem to understand the meaning.

3.4.11 What are the 3 most important competencies required for Blended Learning?

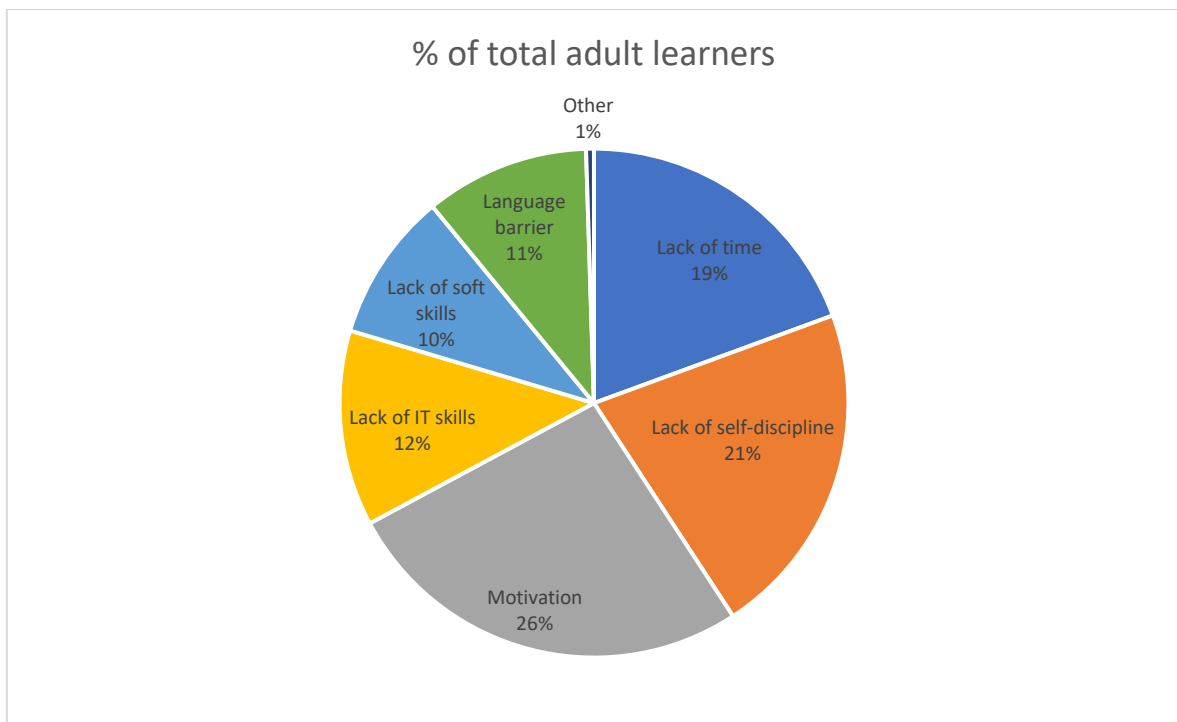
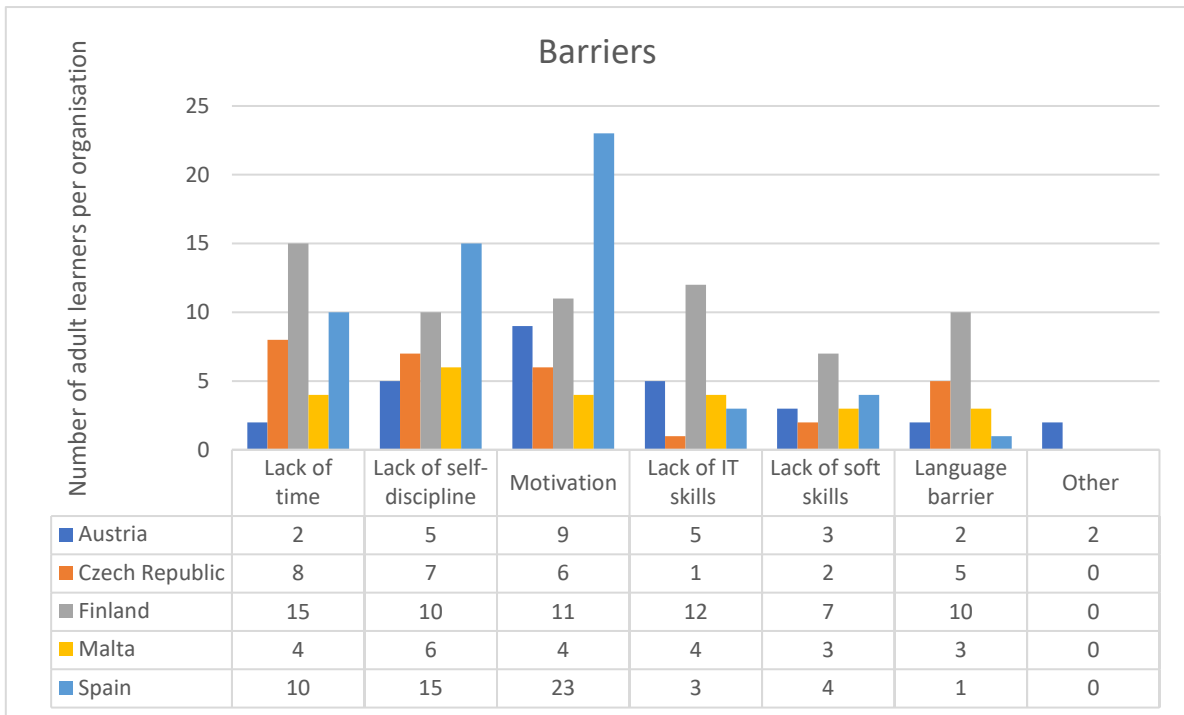
All the partners agreed that the below competencies are the three most important:

1. Self-discipline & self-regulation
2. Time management
3. Digital skills

On the other hand, the below competencies are also important for the students to have:

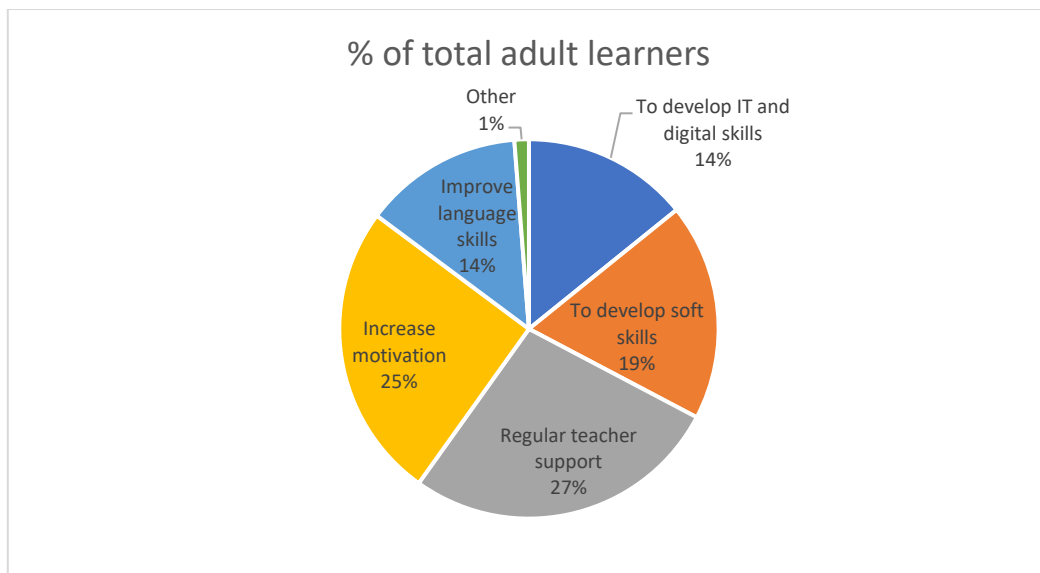
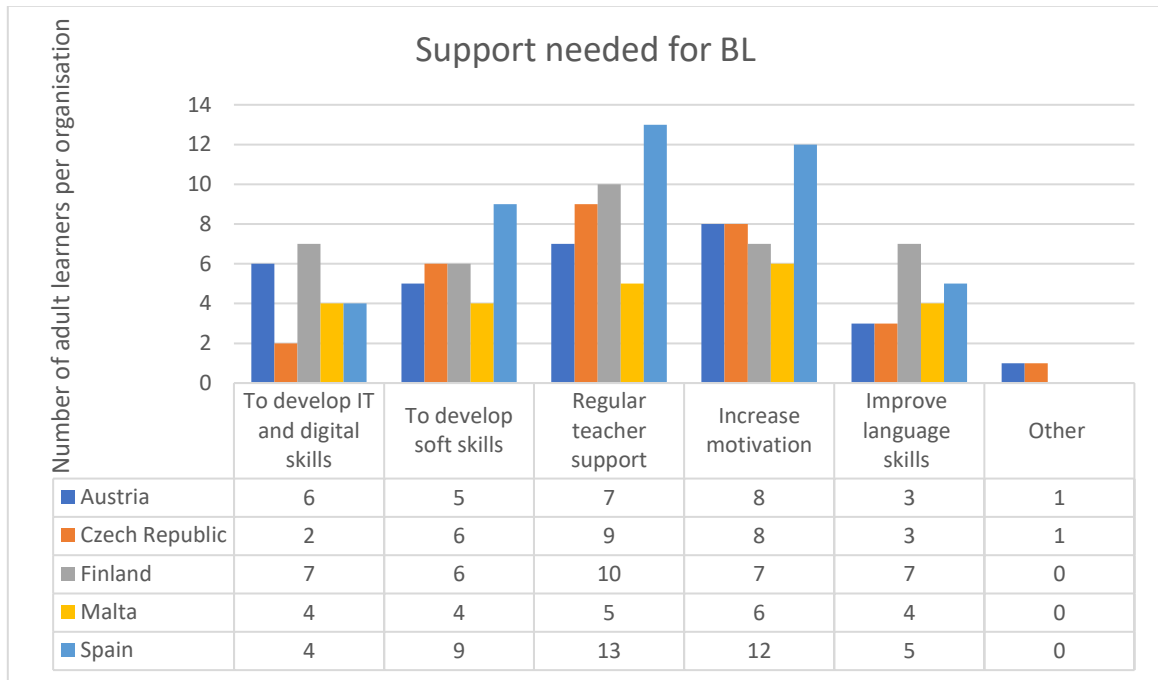
1. Growth mindset (including the courage to learn a new skill/developing and furthering current knowledge/autonomous learning)
2. Concentration
3. Ability to read and understand instructions
4. Motivation
5. Diligence
6. Communication (including the ability to be friends with their peers/group work/ability to ask questions during the lesson)
7. Willingness and ability to work independently
8. Knowledge and awareness of the personal learning style
9. Critical thinking skills
10. Language proficiency
11. Listening skills
12. Ambition
13. Perseverance

3.4.12 Which barriers do learners need to overcome to succeed in Blended Learning?



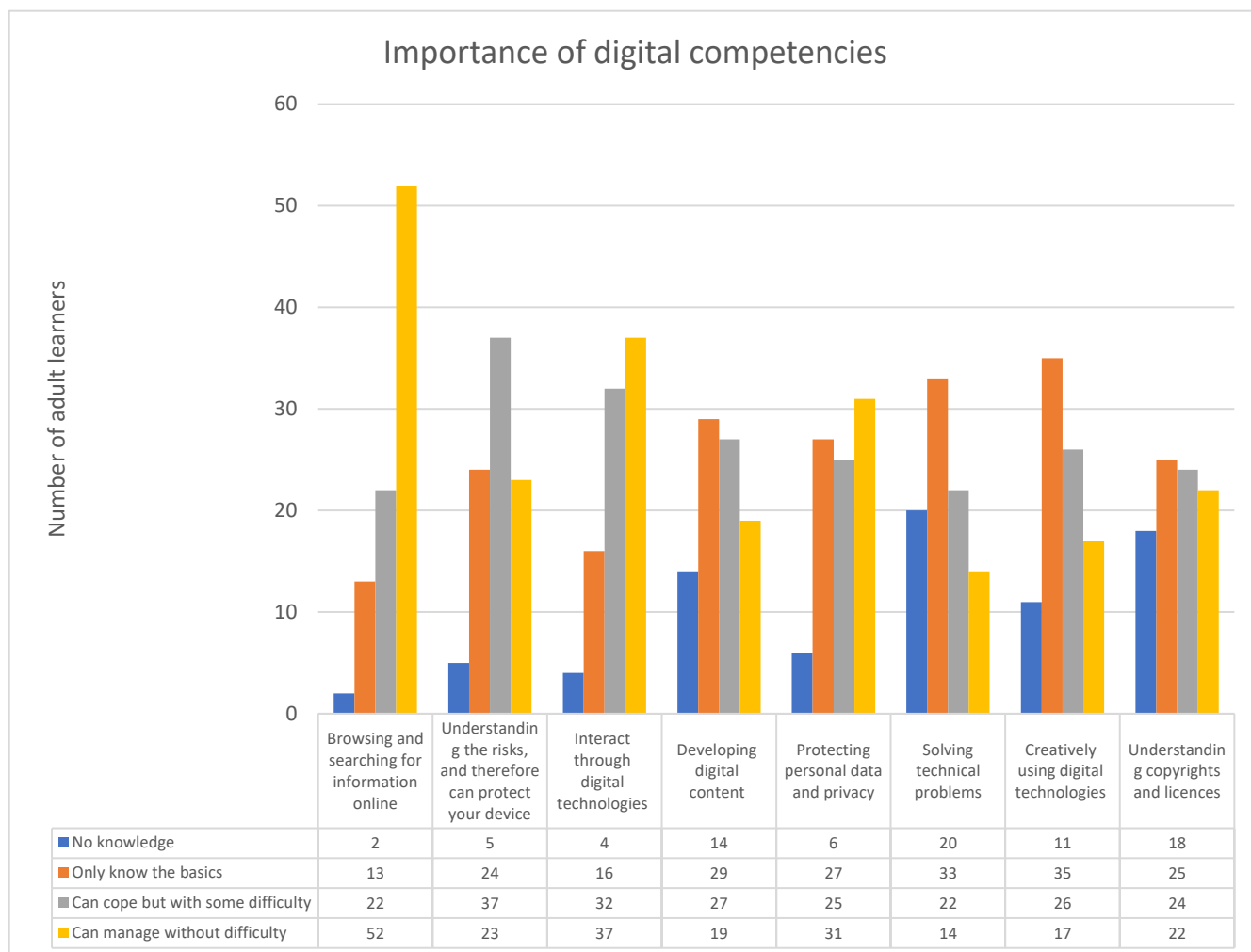
The Austrian learners who selected 'other' noted that before following a blended learning course, they need to overcome issues 'happening in more than one dimension'. Another student noted that they also have problems with their internet connection.

3.4.13 What support do learners need to be able to study Blended Learning?



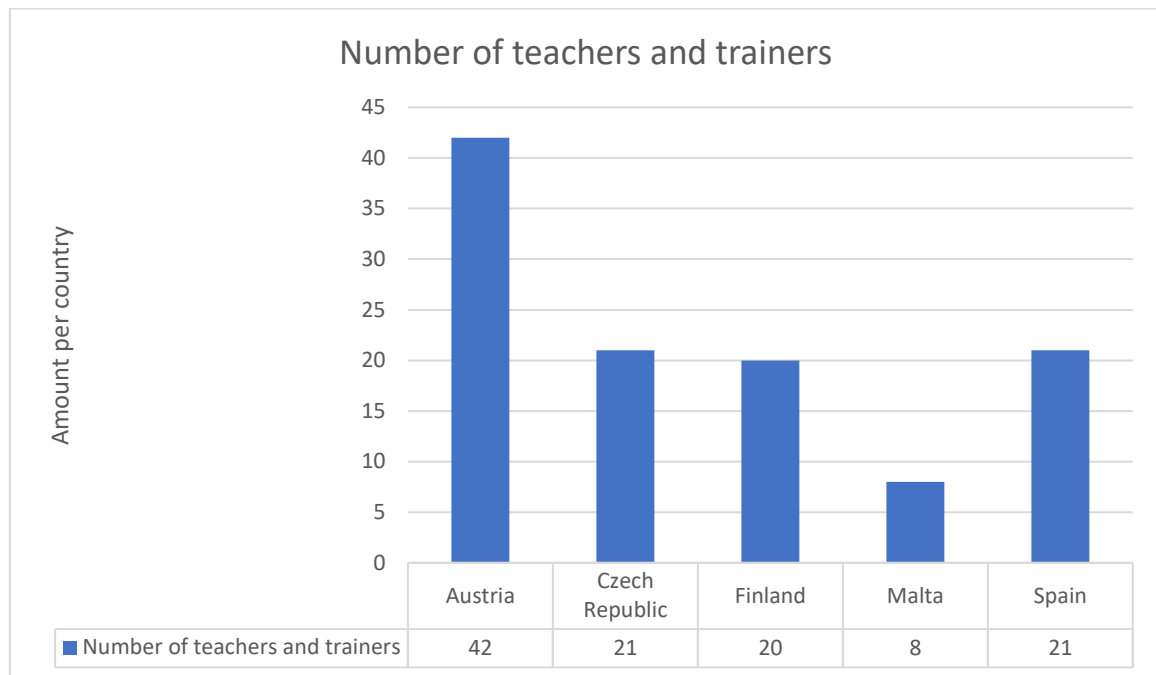
The learners who selected 'other' noted that they need to change their attitude towards blended learning. Whilst the Austrian learner said that this mode of learning is easy, it is not interesting.

3.4.14 How would the learners rate the following digital competencies?

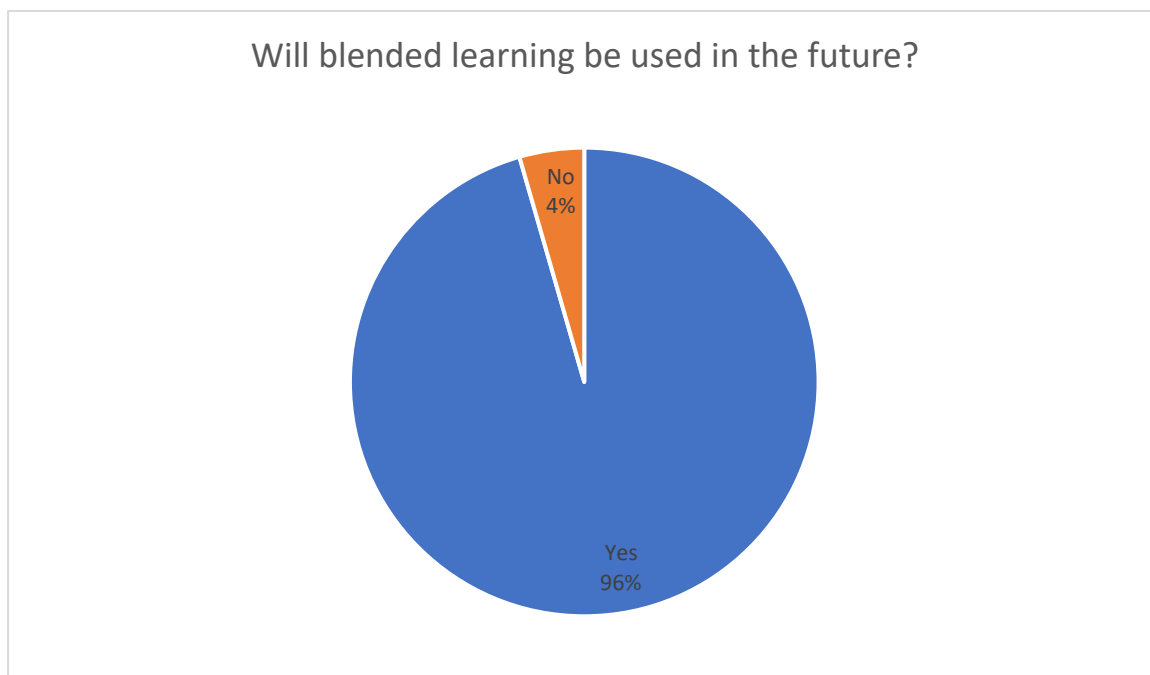
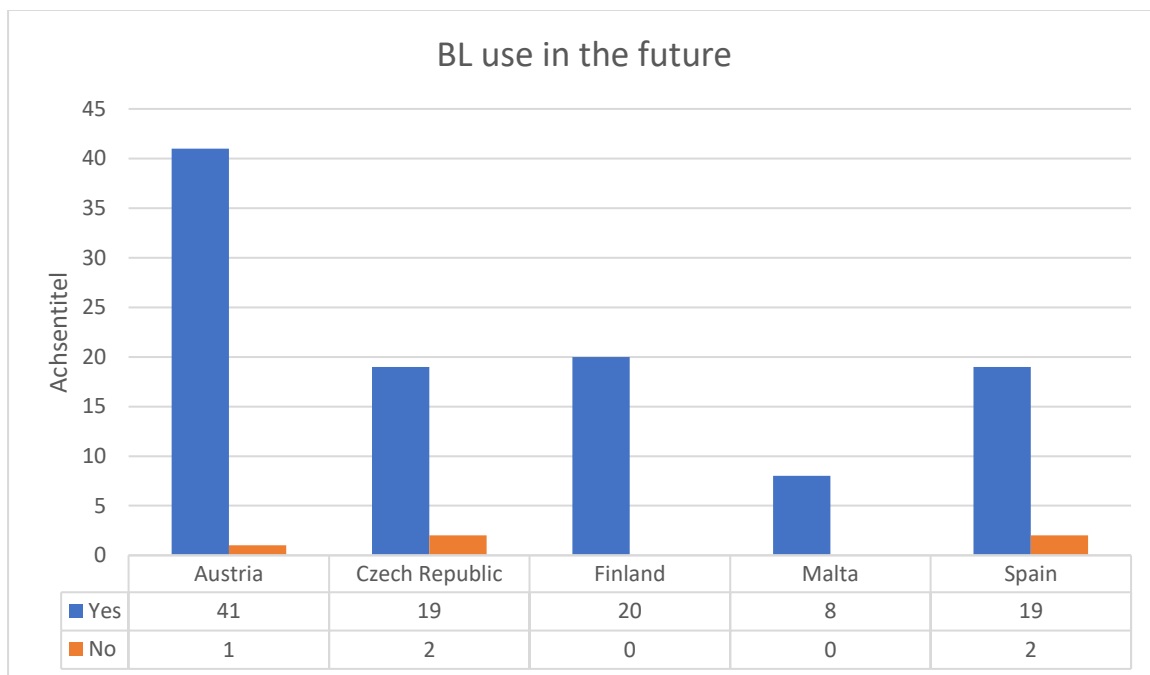


3.5 Identification of Actors Involved: Questionnaire for teachers and trainers

The number of teachers and trainers that participated at this questionnaire:



3.5.1 Do you think that blended learning will be used in the future?



3.5.2 Why did the trainers choose 'yes'?

- 'Facilitates access for people with mobility and transport difficulties, or in cases of illness'
- 'It is very convenient for students and teachers and will therefore continue to be used'
- 'It is very convenient for students because it does not involve moving around, which saves time and money. In addition, the combination with face-to-face classes motivates students more'
- 'Our needs have changed, and we have learned that there are different ways of accessing training that can be better adapted to our needs'
- 'Excellent opportunity for customization and linking the demands of the job to the maintenance of the employee's competences'
- 'Digitalisation will increase, digital services will increase, home office and autonomous working will get more and more important -> adults must be prepared for that'
- 'Young people prefer to work with digital devices; most people possess required equipment'
- 'Mix of classroom-based and online learning has many advantages (e.g.: more motivating and efficient teaching and learning, enhances learning quality)'
- 'Increased flexibility (time and place of learning)'
- 'Will get easier as younger people have higher digital skills for BL'
- 'Individualised learning possible'
- 'Comfortable for teachers'
- 'Good possibility to support further education of adults; easier to learn beside an existing job'
- 'Autonomous learning is promoted (what all adults need)'
- 'Promotes a more intensive engagement with the learning contents as learners have to do more on their own'
- 'Enhances the image of an organisation'
- 'Saves costs, time, and resources'
- 'When using BL methods more often, teachers and learners would be better prepared for other crises like Covid19 where distance learning was necessary
People saw that it works during the pandemic, so it will be more used in future'
- Efficiency
 - Cost
 - Work/teaching
 - Time (since some students need more time to understand certain topics, they can dedicate more time going through the things on their own after the lecture)
- 'Teaching flexibility and adapting to unexpected situations'

- 'Offering additional support to the learners'
- 'A lot of companies use home office or remote access for their employees'
- 'Individual self-study is challenging, many topics are better understood when explained by a lecturer and shared with a group, on the other hand, self-study is less demanding to organise and cheaper - so a combination of both seems like a good approach'
- 'Combined learning is currently a big advantage'
- 'Much more often than not, if one wants to learn something new, one has to educate oneself (for example - I like a 3D printer and want to print on it, after printing a test sample for the first time I want to make something myself - but I don't know how to use any software) ideally one should choose any online tutorial or attend a course'
- 'I think blended learning gives students a great deal of flexibility, individual focus, and pace. Education is a continuous affair, so even in pandemic times it can be a great benefit to learners'
- 'The face-to-face teaching is time and cost-consuming and is changing in nature from lecturing to more of a consultative and mentoring activity. The combined form of training is more effective, building on the information learned and moving from the level of remembering to the level of understanding and application'
- 'Many people are already working from home office, furthermore companies will be looking for efficient solutions and hence will move training to out of office hours. A number of how things need to go in the form of self-study and intensive interaction online hence e-learning can offer'
- 'Students need to be able to search for information from relevant sources''
- 'Saving time and money (on-time), individual time/deadline choice of implementation (of-time)'
- 'Combined learning will benefit the school and the students, strengthen students' responsibility for organising their work and save time for teachers'
- 'It will be increasingly used: for reasons of time efficiency and customization of learning content to groups'
- 'The students' strengths can be considered when studying and choosing the learning method'
- 'In my opinion, blended learning will increase in the future even more. This is because the actual digital leap was taken during the Covid19 pandemic and the capacity to offer blended learning is at a better level. I think that blended learning is more attractive from the learner's point of view than before. Blended learning is flexible and enables combining work and studying'

- 'The study model is not tied to place and time. It is flexible and supports individual teaching'
- 'Allows you to study at your own pace and combine studies and work'
- 'Studying in different life situations is possible. Teachers can use pedagogical methods that involve and participate in students'
- 'The desire, need to study and requirements have expanded'
- 'Gathering students in one place at the same time is not always possible, sensible, or even ecologically desirable. Flexible and individual ways of acquiring skills are increasingly needed to enable learning'
- 'I believe that flexibility in where and when studying takes place has come to stay'
- 'Flexible way to organize training'
- 'Provides an opportunity to study in any life situation'
- 'We need a flexible way to respond quickly to the educational needs of working life and individuals'
- 'A flexible and student-oriented way to implement teaching'
- 'It is versatile and takes better account of the student's personal life situation'
- 'Blended learning enables study days to remain reasonably short in Kainuu where distances are long'
- 'Allows for more individual consideration of different life situation'
- 'Some students want to tailor their own path'
- 'Blended learning provides more opportunities for studies'
- 'Adult students who already have work experience, have earned blended option and are able to study so'
- 'Allows you to study further away from the college'
- 'Varying, allows you to study while working'
- 'Diversifies study opportunities'
- 'Because it's a new way and students will get a more complete learning experience'
- 'This type of learning is an innovative concept which embraces the advantages of the traditional teaching and ICT support learning'
- 'As we embrace an ever-growing digital era, it is expected that blended learning will continue to grow in that it provides for learning that is more convenient and accessible'
- 'Blended learning is here to stay because it is convenient and less time-consuming than going to class'
- 'Convenience and accessibility'
- 'Everything is going online, and this was sped up because of the pandemic. whilst it was

initially considered easier to teach students in person, there are a number of resources which can be used online'

- 'Nowadays everything is online'

3.5.3 Why did the trainers choose 'no'?

- 'There are only some courses where this format is appropriate – not for all learning content'
- 'The high school type of education is the most effective in traditional school attendance, they will learn the habits of getting up on time, coming in and'
- 'Individual self-study is challenging; many topics are better understood when explained by a lecturer and shared with a group'
- 'Not effective enough-direct confrontation with students, feedback...'
- 'In online classes, time is wasted, as well as interrupting the interactive dynamic'
- 'My students hate it. They never participate in online courses'

3.5.4 What challenges do trainers face when offering blended learning to low-skilled adults?

- Digital knowledge
 - Bypassing all teaching duties under the pretext of technology malfunction, easy opportunity to cheat
 - Internet connection
- Language barrier
- Motivation
- Shame/shyness
- Proper time management
- Concentration
- Unsuitable teaching method / unclear assignments
- Lack of interest
- Lack of confidence in teaching mode
- Irresponsibility
- Misunderstanding the assignment
- Not being able to put theory into practice
- Self-discipline
- Learning disabilities

- Adapting the learning material to digital format
- Communication (student-teacher/peers)
- Support (teacher/student with educational institution/peer-peer/teacher-student)
- Lack of student participation
- Self-direction/self-motivation
- Giving quick explanations to learners' questions
- Many adult learners do not have a quiet learning space in their homes, they get distracted more easily
- Third parties could do the work, or tasks are ignored
- Difficult to adjust the teaching speed to the individual needs of the learners
- Learners could get frustrated and demotivated if they have some (technical) problems, they are not used to learn autonomously
- Teaching and learning time must be used for a lot of explanations and the development of competences that are not part of the course

3.5.5 What are the benefits of teaching low-skilled learners through blended learning?

- Possibility to adapt the material to other teaching methods and target group
- Accessibility
- Flexibility and possibility of targeted individual attention
- Efficiently working with modern technologies (shared whiteboards, screen offset, possibility of replay ability).
- Individual approach
- Even students with low qualifications can be of very different levels, the independent study part allows for individual completion of what is needed, so the group is not as burdened by less knowledgeable students (but it is more challenging in terms of individual teacher access)
- Possibilities in repeating learning steps e.g.: multiple repetitions of any parts/lessons of the programme or misunderstood information, adjusting the timetable (e.g. making up missed lessons)
- Possibility of group processing, peer support
- 'In my opinion, one of the big advantages is the time saving on the organisation of training rooms and the possibility to train basically at any time'
- Time flexibility - The possibility of studying during off-hours
- Independence

- Verification of knowledge
- Space to study the material for the face-to-face class, adapting it to your pace and being able to review the information repeatedly.
- Cost savings in the family in the case of commuter students, elimination of many of the responsibilities associated with school attendance, relief in the scope of instruction, proctoring of knowledge can be bypassed by cheating; for teachers, the advantage of not having to admonish with interruptions; better preparation for class and overall well-being
- They will improve their knowledge of the training topic and at the same time improve their IT skills.
- Autonomous working on some contents -> learning is more intensive
- Individual learning is possible
- Learners further develop their digital, personal, and social skills and get a better understanding of technology
- Teachers can use face-to-face lessons for practical exercises
- Possibility to create automated tests that can be corrected by the system
- More learners can be reached at the same time
- Possibility to create videos/screencasts and materials that can be used again and again
- A lot of existing online teaching and learning materials that can be used by everyone, for free
- Learners could get support from their family when learning at home
- Students can watch the recording of the teaching session and return to the subject several times
- If the e-learning environment is carefully constructed, it will enable low-qualified learners to learn potentially better than in traditional face-to-face learning, which is related to time and place
- Makes flipped learning possible
- Low-qualified learners don't have to take the pressure and stress about the speed at which the others are progressing, because they do not know how the others are progressing.
- Convenience from home (especially in cases of illness)
- Saving money on transport and better time management. In some cases, the student's attention is better maintained.

3.5.6 What equipment is required to deliver a blended learning course?

1. Good internet connection

2. Digital equipment
 - a. Laptop
 - b. Phone
 - c. iPad
 - d. Projector
3. Camera
4. Headset
5. Speakers
6. Creative tools
 - a. Padlet
 - b. Kahoot
 - c. Wordwall
 - d. Wordcloud
 - e. YouTube
7. Online classroom
 - a. Teams
 - b. Zoom
8. E-learning platforms
 - a. Moodle
 - b. Emails
 - c. WhatsApp
 - d. Office365
9. Good workstation (quiet for online teaching)
10. Flipchart

3.5.7 What support do educators need to be able to offer blended learning courses?

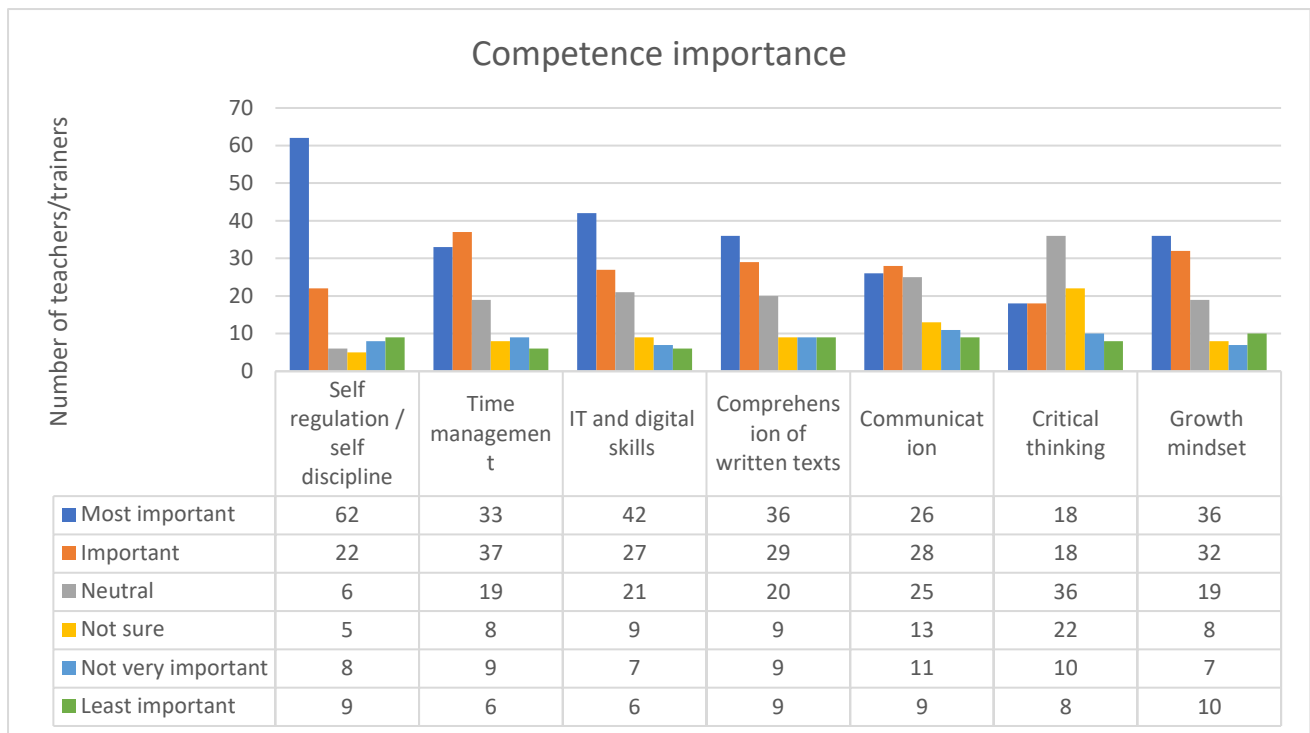
- Student services department to enable easier communication with the students
- IT department in case of technical difficulties with the online platforms, subscriptions to certain sites, learning tools etc
 - Implementing VR (virtual reality) and AR (augmented reality)
- Online workshops about the tools available for blended learning
- Software and hardware provided by the educational institution
- Financial compensation for the preparation of blended learning classrooms

- The work created by the teacher is not to be used by the educational institution or by other teachers without their prior knowledge
- Feedback about their teaching materials
- Creating materials with other colleagues
- Development of digi-pedagogical skills

3.5.8 How can students support each other when it comes to blended learning?

- Build digital learning communities
- Online forums such as WhatsApp, blogs, google docs, Trello, Discord, Edmodo
- Through video conference tools
- Through the exchange of previous experiences
- Sending links and other useful learning materials (especially if someone misses one lesson)
- Through the exchange with others, all learners are much more involved in the learning process
- Facilitated peer groups, breakout rooms, etc
- Sharing interesting questions, best practices, learning materials/successes/results of their work
- Gamification of the process, feedback and group discussions, work samples, sharing of practice and knowledge, etc.

3.5.9 Please rate the competencies according to their importance for blended learning.



3.5.10 What are the 3 most important competencies learners need for blended learning?

All the partners agreed that the below competencies are the three most important:

1. Self-discipline & self-regulation
2. Time management
3. Digital skills

On the other hand, the below competencies are also important for the learners to have:

1. Growth mindset (including the courage to learn a new skill/developing and furthering current knowledge/autonomous learning)
2. Concentration
3. Ability to read and understand instructions
4. Motivation
5. Diligence

6. Communication (including the ability to be friends with their peers/group work/ability to ask questions during the lesson)
7. Willingness and ability to work independently
8. Knowledge and awareness of the personal learning style
9. Critical thinking skills
10. Language proficiency
11. Listening skills
12. Ambition
13. Perseverance
14. Self-organisation
15. Improvisation
16. Emotional intelligence
17. Creativity
18. Challenging their comfort zone
19. Stress management
20. Learning ethic

3.3. Impact of the Issue

In order to assess the impact of the issue under study, the researchers looked into the factors that hinder low-qualified learners from accessing learning. It has been determined that people who have had a positive experience with formal learning in adolescence have more positive attitudes toward learning. Individuals who do not have much experience with formal contexts are more likely to think that informal and workplace learning is more important. The group with a higher level of education places more value on formal learning contexts than the group without a higher qualification. Low-skilled persons without a qualified degree state that they learn more often with media or in the private environment.

The most frequently cited barriers to participation in continuing education were a lack of time and the fact that continuing education measures do not prove useful. The lack of time is more often given as a reason by young people, while the lack of benefits was mentioned more often by persons with a low level of education. People without a qualification have a more negative attitude towards the term and do not consider the future need as important as people who already have experience in formal learning contexts. This makes it important that the learning content offered in informal contexts is modified so that it is also useful for low-qualified people.

4 ALTERNATIVE SOLUTIONS/POLICIES

4.1 Listing of Solutions Considered

In all the focus groups and the interviews conducted for research purposes, a few solutions to the challenges mentioned in the previous section were discussed.

4.1.1 Technical issues

The Finnish teachers noted that an entry-level test is a good way to find out the demands and technical needs of the students. Thus, the teacher and the school would be able to offer the necessary support throughout the selected course.

Another suggestion was that an easy preparatory digital skills online course would be organised to equip the students with the skills required for the successful completion of the course. This course would include a step-by-step guide on how to use the portal, access the learning materials, and upload any work completed.

4.1.2 Rapport

It is important for the learners to feel welcome and safe in a blended learning environment. One way of doing this is by making use of warmup exercises in the first few minutes of the lessons. These can also serve as ice-breaking activities and thus, would make class participation easier for shy learners.

Setting ground rules also helps the students become more aware of the importance of being self-disciplined and self-motivated. These rules also highlight the importance of online etiquette such as joining the session on time, muting the microphone when not engaging in class participation, and switching on the camera.

Learners should also be aware of the support staff. A place, time, and person should be dedicated to each class. During this time, learners can tackle any difficulties they might be facing, and this would make their educational journey slightly easier. The Finnish partners noted some good practices which include open support workshops and one-to-one counselling.

4.1.3 Motivation

The trainers should prepare a list of learning outcomes which are to be reached by the end of the course. This helps the learners understand what is expected of them, and thus helps them stay motivated and focused. The trainers from the Czech Republic also suggested using interactive activities to keep the students engaged. These activities may include warm-up exercises, pictures, discussions, quizzes, online games, case studies, and role-playing typical working situations.

4.1.4 Demands

Low-skilled students require more support from educational institutions. The Spanish partners also noted that since blended courses might be overwhelming for low-skilled learners, it would be more beneficial for them if the sessions were shorter (such as 45-60 minutes long).

On the other hand, all trainers would need access to the educational tools required for blended learning. The trainers would also need to be provided with the necessary training to use the online tools.

4.1.5 Student background

The Finnish trainers highlighted the importance of using different forms of communication when giving out instructions. Low-skilled learners might benefit more from video instructions rather than written instructions for assignments. On the other hand, if written instructions are used, the language and grammar 'should be familiar and clear'.

It is also crucial to keep the student's background in mind. Despite the stigma surrounding poverty, it is of utmost importance that the student can speak to the teacher openly. This would ensure that the students are getting the necessary support they require, such as being provided with computers or tablets, for the successful completion of a blended learning course.

4.1.6 Work preparation

Ideally, learners follow a short course about blended learning before starting the actual course. This would ensure that the course content is covered during the time allocated.

Some trainers also suggested that 'it would be useful to have ready-to-use materials' which can be used during blended learning.

4.2 Comparison of Alternatives

The participants agreed that as far as the technical challenges go, there is no time to deal with these problems in class without interfering with the core content of a course. Therefore, these issues should be dealt with outside of the classroom when possible. The course setting, the materials and tools that will be used and the usefulness of this setting have to be explained in detail. The students need to acquire the related digital skills in order to use the learning platform. Some students enrol for the course with the preconceived idea that they will not be able to complete a blended learning course since they do not know how to use the platform. The students should therefore be taught how to switch on their computer, switch on the camera, and unmute the microphone when necessary.

Teachers must look for new ways to explain the subject content. The trainer should adopt different methodologies which appeal to low-skilled learners. The learners should also be made aware that instead of spending a number of hours at school, they should be spending the same amount of time at home following the blended learning lessons. The trainer should also keep in mind the different learning difficulties the students might have, such as dyslexia. The teacher should compile different assessment methods according to the needs of the student.

Some learners do not feel responsible for their own learning and the trainers commented that it is essential to include students regardless of their situation, background, and learning disadvantages. They also agreed that it is important to offer thoughtful encouragement and empathise with the learners, whilst avoiding complex or ambiguous language. Another crucial aspect is to show learners the benefits of their participation in the course and to keep their motivation high. It could also be beneficial to include interactive content and games where learners can see their success and learning progress.

4.3 Good Practice Examples on Teaching Low-Skilled Adults

During the interviews conducted within this project, the following good practice examples relating teaching low-skilled adult learners were mentioned by teachers, trainers and other educational staff:

Low-skilled learners can benefit if the programmes are outcomes-based, that is, they are given some freedom to achieve the outcomes through formal and informal methods. On-the-job assessment via a traineeship in a company is usually popular with low-skilled adult learners. They can try to put into practice what they have already learned and see what they are doing certain courses for. They also

tend to prefer oral assessment rather than written assessment. If this is not possible, practical role plays and examples can be used. Learning videos or games were also mentioned as good practice. Learning content can be made engaging, and learners have the opportunity to watch individual frequencies more often if needed. As a supplement to the blended method, face-to-face events that provide an introduction to blended learning are a good method. In addition, learners should be provided with a detailed guide so that they know what to expect.

Some general good practices mentioned by the participants included: Boosting self-esteem, showing the learners how to apply knowledge to their lives, showing them how to follow the class using an LMS/the given platform provided, and guiding them so they don't get lost or lose motivation.

Finally, one interviewee stated that it's important to speak the language of the learners, providing feedback and applying an emotional filter, provided that it is not the classic classroom they originally experienced and they need this support. It is important getting these learners involved online and make them feel valued and part of something productive. Personal mentoring sessions have shown to be highly effective as these lead to a personal relationship between the mentor and the student. This leads to greater dedication and eagerness by the student not to disappoint the assigned mentor.

Project work encourages peer-to-peer learning since they need to work together to complete the task. Use the concept of Balint groups in the discussion about blended learning to be aware of the benefits and risks of blended learning. The format of a Balint group is a case presentation (from memory) for about 3 to 5 minutes and a discussion for 1 hour or more. All group discussion is confidential; a safe environment is created to express negative or difficult feelings. The Balint group leader's role is to create a climate of safety, acceptance, and trust; establish and maintain the group's norms by letting each member take a turn speaking; and to promote movement toward the group's task of grappling with the presenter's case. A group leader must understand the group process and make use of his or her personality and style to move the group forward.

Classroom activity is good to create a group of low-skilled adults who can also help and support each other. They should also meet and get to know the tutor face-to-face before embarking on a blended learning programme. The rules and the programme should be explained clearly to them in a way that can be understood.

Personal mentoring and follow-up, practical sessions on industry concepts and training through repeated practice sessions until the student shows the required aptitude. Break-out rooms are also

very beneficial. The teacher can present a case scenario with a set of questions which students have to discuss with colleagues.

Introducing a tool for self-assessment of what has already been learned. The learners can thus see what they have already managed, and the visible learning success has a motivating effect on the learners.

Through discussions with the trainers and the joint assessment of learning success, learners can also have the opportunity to better assess themselves for later units. Likewise, the tasks that are set for the learners and that they complete on their own must be checked regularly.

The participants stated that it depends on the area of study. So, it is essential to tailor activities to build something together, focusing both on the content of the course at hand and the backgrounds of the group of learners.

In the case of the Spanish philosophy teacher, showing the learners that it's not a thing of the past, that it is something of today and applies to what we do and think today. Empowering the learners with the content of the course, regardless of the content.

Fictional case studies are also beneficial. The trainer should prepare the typical situation of the target group and practice with them the reactions – giving them feedback and tips for improvement. The case studies should be combined in face-to-face form in pairs or groups or the case studies in online form (as e-learning) with multiple choice of the suitable solutions followed by the explanation of the best option.

4.4 Constraints

The participating teachers and trainers felt that these low-skilled learners can lack goal-setting skills as well as motivation. The lack of motivation can be directly linked to their belief that the learning process is not enjoyable. Some learners also feel that they are not capable of following a course online because it might lack the structure they are used to. On the other hand, some learners lack the motivation necessary because they are being forced to follow the course by their employers.

The participants also highlighted the need for the learners to have the basic digital skills and resources available to them, inside and outside of the classroom. Another issue mentioned was the language barrier and lack of cognitive competences. Many of the participants of the focus groups

agreed that whilst it is easy to find teachers for the courses, it is difficult to find teachers who can connect with the students via online learning. The Spanish participants noted that due to the virtual barriers, it is even more important 'to be empathetic and create a powerful bond' between the students and teachers. The Finnish and Maltese partners agree with this lack of bond, which would make blended learning counterproductive. Some teachers make assignments too demanding, thus requiring more time to assess, and therefore, creating more work and stress for everyone involved.

The trainers need to be emotionally and mentally prepared to teach low-skilled learners via blended learning. Since it is a new learning environment, both the teachers and the educational institution need to invest more time and resources to facilitate the transition from in-class learning to blended learning. Some of the participants also noted that whilst the trainers spend more time preparing the adapted work (~ 10–20 % more than in a normal classroom setting), they are not paid extra. They also noted that the success rate of the course is simultaneously proportionate to how complex it is to follow, and instructor-led courses are prone to be more successful.

The Finnish participants focused on the pedagogical element of blended learning. Whilst some teachers are more open to change, others are set in their ways, and therefore, will not offer a successful blended learning course. On the other hand, the Czech participants suggested a modular program, in which deadlines are set. This would help both the teacher and the student with the structure of the course.

It was discussed that one of the main differences between low-skilled learners and high-skilled learner is that with low-skilled learners there is a lot of time consumed explaining technical issues not related to the core content of a class. The teachers must also emphasise explanations and set clear goals. This situation leads to frustration and a lack of interest in the courses among the learners. It was also noted that the success of blended learning depends on the age of the participants. Generally, young adults do not have major problems when using digital devices, whereas elderly learners might encounter more problems. Meanwhile, when teaching high-skilled learners via blended learning, teachers can deal with the topic at hand almost immediately.

Whilst according to the Spanish trainers 'low-skilled learners tend to be hungry for new skills and knowledge, despite the need for them to learn in a new way in the digital learning environment', the Austrian focus group participants noted that, 'most of the [low-skilled learners] are following a course 'because they have to' and therefore, they 'are not motivated, and they are not doing the learning at home'.

The trainers from the Czech Republic mentioned that to motivate low-skilled learners, they must be made aware of why they need to know the topic, how it will benefit them, and what the end goal is. It was also highlighted that if the students do not see their learning progress, they will easily lose focus and motivation. Therefore, an IEP, Individual Educational Plan, must be created for each student. Financial motivation also plays an important role in motivation.

The Finnish trainers discussed how low-skilled learners are often under 30 years old. To be able to successfully complete a blended learning course, the learners must overcome certain obstacles such as self-esteem, lack of digital skills or lack of digital devices due to poverty. The challenges they face might also include difficulties to understand written instructions, lack of social skills, and being shy to participate during online sessions.

On the contrary, whilst high-skilled learners can easily adapt to the digital learning environment, the Spanish teachers noted that those learners ‘tend to have an attitude of ‘I already know this’’, and therefore, sometimes, they are not as eager to learn as the low-skilled learners. This observation contradicts the arguments put forward by the Maltese, Austrian and Czech trainers. According to these partners, highly skilled learners are often doing the courses voluntarily and therefore, they can set their own goals. The learners also look at furthering their education as an ‘investment to self-development.

Furthermore, the training companies dealing with migrant students such as bit schulungcenter and Future Focus noted that many migrants were considered as high-skilled in their native country, but because of the language barrier, they are considered low-skilled in the adoptive country.

Whilst some differences can be easily highlighted, the Finnish trainers mentioned that ‘it is impossible to define absolute differences as students are individuals in their challenges and strengths’. On the other hand, as the Austrian trainers noted, ‘All learners, regardless of their qualifications, have to be prepared carefully and with respect of their individual skills for blended learning settings, so that each learner can benefit from this setting’.

5 RECOMMENDATIONS

5.1 Description of Policy Recommendations

A blended learning policy is required to set out the mode of how processes and procedures are planned and brought to bear. For this to take place in a proper and orderly manner, it is important that policy makers ensure that policies cover the following areas:

- a) Internal and external quality assurance processes
- b) Assessment methodology that is valid, fair, and reliable
- c) To build on and improve on knowledge
- d) Provide learning opportunities for all
- e) Increase accessibility to learning

To motivate low-skilled people to continue their studies, it is important to design the learning units in a particularly practical way, as intrinsic motivation can be increased by this. Here, the basic knowledge needed is taught in an online format and the practice then takes place in a face-to-face unit. For continuation, however, it is still important that trainers accompany the study and are available for questions or guidance in both face-to-face and online formats.

The partners suggested the below good practices in relation to blended learning:

- a) Create shorter sessions
- b) Use a lot of inspiring and/or fun videos
- c) Make classes interactive
- d) Use music while they are working on their own
- e) Limit the use of PowerPoint presentations
- f) Colour code presentations
- g) Help them realize that there are other ways to learn
- h) Require entry-level tests
- i) Organise support workshops
- j) Preparatory online course
- k) Encourage the students to participate via activities and group work
- l) Possibility to borrow digital devices from the educational institution
- m) Organise online courses and create awareness of the benefits of online learning

- n) Train the trainers about teaching in a blended learning setting, including creating a good atmosphere in the online classroom, giving clear instructions, maintaining useful e-learning platforms

Some of the partners have also taken part in other projects related to the education of low-skilled learners. The Austrian partners are offering a project called 'Get Started'. It is focusing on 'basic education for low-skilled people in blended learning format'. The students first get an introduction to the course setting and to the digital programmes that will be used. When they are comfortable with this new learning environment, they move on to the course content. The trainers agreed that it worked well since it gave the learners the necessary encouragement and confidence that they are capable of following a blended learning course.

The partners from the Czech Republic have participated in 'CourseEra'. Through this project, they learnt about the Massive Open Online Course, also known as MOOC. This platform enabled low-skilled learners to engage in discussion forums and share their experiences with their peers. The same partners also took part in 'The Second Chance Project', in which students learned about different work environments and associated typical work situations via short videos.

5.2 Rationale for Recommendations

Learners may have low qualification levels, but they may have also gained skills through years of work experience that are equivalent to those associated with formal qualifications. Recognising these skills through validation and certification can benefit these individuals in that it recognises their (informal) learning effort, which can increase motivation and become a stepping-stone to further (formal) learning. Blended learning can provide such individuals with easier access to education so that achieving targets becomes facilitated. This will build up the confidence of low learners resulting in higher participation and increased motivation to further studies.

5.3 Plan for Implementation

For persons to be able to successfully participate in learning that is blended, it would be ideal that the learner has at least little background in basic digital skills. Another competence that should ideally be present among learners is that of self-directedness. The absence of this is commonly found to discourage learners. Other important skills include motivation and desire to learn, time management, and comprehension of written learning texts.

It may be said that ideally, the competencies mentioned need to be intertwined. Additionally, participants must also learn to organise themselves and learn effectively on their own. They need to show flexibility: manage uncertainties; well-being, dealing with/avoiding stress; growth mindset. From the results of the questionnaire, it transpires that the most important competencies are self-regulation and self-discipline, time management, IT and digital skills, and a growth mindset. Whilst 66 % of the learners selected 'most important' or 'important' for growth mindset, it could be noted that 26 % of the participants do not seem to understand the meaning

During the focus groups, it was discussed that for the learners to effectively follow a blended learning course, they first need to be made aware of the different learning methodologies available. This will help the learners identify methods which can benefit them more, and therefore, motivate them to take responsibility for their own education and goal setting.

The Finnish participants noted that blended learning is better accepted since it creates 'equality between the cities and remote areas' since travelling is quite expensive and some 'life situations are too challenging' to attend school daily.

It is one of the roles of educators to make sure that the learners understand the benefits of blended learning since this method will only gain importance in the future. Some of the educators noted that the key benefits of blended learning include setting your own goals, dedicating your time, being able to 'work and study flexibly', and 'combining theoretical studies with learning in the workplace'. Another benefit is the digital knowledge acquired, whilst maintaining the social skills associated with in-class learning.

On the other hand, the trainers discussed the importance that 'educational institutions provide their educational staff and learners with all required support, as well as materials and tools'. The Austrian partners also suggested that if the learners are divided into homogenous groups according to their abilities, the trainers would also be able to dedicate more time to individual attention.

It is crucial for educational institutions to share good practices in relation to blended learning with their educators. This will encourage their trainers to explore different forms of learning, whilst further developing soft skills such as self-discipline, motivation, and digital skills.

The project digidazU - Digital Competences for the World of Work in German as a Second Language of the Intergrationshaus develops online-based self-learning materials. The target group is lowly qualified disadvantaged people with low competences in German as a second language, who are to be facilitated access to the digitalised world of work.

Malta has adopted strategic actions which include the following a) Improve Digital/ICT curricula representing the 21st-century skills and adapting to emergent technologies; b) Piloting a physical digital hub for learners with state-of-the-art technology; c) Improving access to the internet, technology and offering learning solutions such as MOOCs, OERs, Blended and Online Courses for different learners.

In the Czech Republic, the term blended learning encompasses many methods that can effectively influence the learning process and present learning content to the learner through appropriate software. These include a) Skill-driven learning b) Attitude-driven learning and c) Competency-driven learning.

The project Perspective Change 2018 develops methods for use in basic education. BFI Upper Austria and Innsbruck Tyrol are engaged in applying the methods from the collection about basic financial education topics. The development of training methods and teaching materials for use in basic education classes promotes the range of action of trainers and the joy of learning. Digital learning materials and digitally supported learning sequences enable learners to study at their own pace and support their self-learning skills.

Kainuu Vocational College believes that planning is essential in blended learning courses, paying attention to accessibility. Instructions are given both in written and video form. In written instructions, plain language is used. Here there is a collaboration with companies who offer pre-vocational or preparatory courses for unemployed people and jobseekers.

Indeed, in light of the above, it may be pointed out that following analysis of the results brought out in this chapter, learning material was created, keeping in mind the specific requirements that were uncovered. By means of this project, the material has been made available to educational

institutions, with the objective of addressing competences and also with the ultimate aim of providing a solution devised in accordance with the needs explored.

5.4 Provisions for Monitoring/Evaluation

Cooperation between pedagogical staff and employers of low-skilled persons is essential. Moreover, subject-specific learning content can be adapted continuously and prepared by educators to always meet the needs of the participants. Employers can facilitate access to training by providing financial support or time resources on an ongoing basis.

6 CONCLUSION

Offering blended learning courses to low-qualified adults comes with some challenges for both sides, the learners and the teachers/trainers. But during all the research activities that were conducted within this project, it became clear that especially this target group of low-skilled adults has on the one hand a great potential for learning new things and needs on the other hand to be supported to get access to adult education programmes.

Nevertheless, the prejudice that low-skilled learners are not able to participate successfully in blended learning settings is still widespread, and thus, the number of courses offered to these people is very limited. This contributes to the so-called “Matthew effect” – those who began their education successfully continue to do well and those who only have a low level of qualifications do worse due to limited access.

Therefore, it is important that as many further education programmes as possible are offered to these adults in order to close this widening gap between lower- and higher-skilled people. Extending educational offers to diverse target groups and supporting low-skilled learners is beneficial for these adults, but also for the whole economy and society. These people get the possibility to become more self-confident and at the same time more competitive in the labour market.

It has to be mentioned that some educational settings are difficult for low-skilled learners to follow, and blended learning might be one of them. But with sufficient support from educational institutions as well as adult educators, it is possible for these people to successfully participate in blended learning programs, to further educate themselves and to raise interest in and motivation for lifelong learning.

7 REFERENCES

Etäopetuksen hyvät käytänteet 2020. <https://ammattipolku.fi/wp-content/uploads/2020/04/Et%C3%A4opetuksen-hyv%C3%A4t-k%C3%A4yt%C3%A4nteet-kyselyn-koonti.pdf>

Getting Skills Right: Engaging low-skilled adults in learning, OECD, 2019

Gilmour, J. (2020) What are the Challenges of Implementing Blended Learning in Adult Education? [Blog] ProLiteracy <<https://www.proliteracy.org/Blogs/Article/505/What-are-the-Challenges-of-Implementing-Blended-Learning-in-Adult-Education>>

Hakkarainen, Kai 2001: Aikuisen oppiminen verkossa. In the book: Sallila & Kalli (ed.), Verkot ja Teknologia Aikuisopiskelun Tukena. Aikuiskasvatuksen 42. vuosikirja. Kansanvalistusseura ja Aikuiskasvatuksen Tutkimusseura.

International Standard Classification of Education ISCED 2011, page 40.ELET. The way Forward 2020-2030. EARLY SCHOOL LEAVING UNIT Directorate for Research, Lifelong Learning and Employability Ministry for Education (Malta)

Joint Research Center, Arianna Sala Yves Punie Vladimir Garkov Marcelino Cabrera, LifeComp, 2020, https://joint-research-centre.ec.europa.eu/lifecomp_en

Kompetenzen von gering Qualifizierten: Befunde und Konzepte. Hg. Projektträger im DLR. W. Bertelsmann Verlag GmbH & Co KG. Bielefeld 2014.

Kompetenzen von gering Qualifizierten: Befunde und Konzepte. Hg. Projektträger im DLR. W. Bertelsmann Verlag GmbH & Co KG. Bielefeld 2014.

Laitinen, Mikko 2021: Verkko-opetuksen haasteet ammatillisen koulutuksen opetushenkilökunnan kokemina. Jyväskylän yliopisto, Tietotekniikan pro gradu -tutkielma.



<https://de.statista.com/statistik/daten/studie/203892/umfrage/erfolg-versprechende-zielgruppen-fuer-die-e-learning-wirtschaft/#professional>

Lifelong Learning. National Strategy for Lifelong Learning 2020-2030. Directorate for Research, Lifelong Learning and Employability Ministry for Education

Malta National Lifelong Learning Strategy 2020. Ministry for Education and Employment, Malta 2020

Nurminen, Tiina 2008: Ikääntyvien aikuisopiskelijoiden käsityksiä avoimen yliopiston gerontologian opiskelusta. Jyväskylän yliopisto, Terveystieteiden pro gradu –tutkielma.

https://jyx.jyu.fi/bitstream/handle/123456789/18863/1/URN_NBN_fi_jyu-200808205667.pdf

OECD (2019), Getting Skills Right: Engaging Low-Skilled Adults In Learning. (www.oecd.org/employment/emp/engaging-low-skilled-adults-2019.pdf).

Official Statistics of Finland (OSF): Participation in adult education [e-publication].

ISSN=2489-6926. Helsinki: Statistics Finland [referred: 24.2.2022]

http://www.stat.fi/til/aku/index_en.html

Qualifizierte- Kompetenzen von gering Qualifizierten: Befunde und Konzepte. Hg. Projektträger im DLR. W. Bertelsmann Verlag GmbH & Co KG. Bielefeld 2014. Fachkraeftebedarf_WIAB.pdf

S.21 https://www.ams-forschungsnetzwerk.at/downloadpub/AMS_Studie_2021_gering%20

Schiersmann, C., & Strauß, H. C. (2006). Profile lebenslangen Lernens: Weiterbildungserfahrungen und Lernbereitschaft der Erwerbsbevölkerung. (DIE spezial). Bielefeld: W. Bertelsmann Verlag.

<https://doi.org/10.3278/85/0004w>

Schiersmann, C., & Strauß, H. C. (2006). Profile lebenslangen Lernens: Weiterbildungserfahrungen und Lernbereitschaft der Erwerbsbevölkerung. (DIE spezial). Bielefeld: W. Bertelsmann Verlag.

<https://doi.org/10.3278/85/0004w>

Tikka, Laura 2020: VERKKO-OPISKELUN VAHVUUDET JA VAIKEUDET AIKUISOPISKELUSSA Mitä aiheesta on kirjoitettu suomalaisissa sanomalehdissä? Tampereen yliopisto, kandidaatintutkielma.
<https://trepo.tuni.fi/bitstream/handle/10024/120141/TikkaLaura.pdf?sequence=2>

Vychová, Helena: Vzdělávání dospělých ve vybraných zemích EU, VÚPSV, v.v.i. Praha 2008,
https://katalog.vupsv.cz/Fulltext/vz_281.pdf

7.1 Online sources

https://www.f-bb.de/fileadmin/Projekte/Mewa/MeWA_Medienpaed._Konzept.pdf

<https://www.bitschulungscener.at/lernwelt/elp/>

<https://www.integrationshaus.at/de/projekte-programme/bildung/ak-dig-digitale-kompetenzen-von-migrant-innen-fuer-den-arbeitsmarkt>

https://www.bfi.tirol/fileadmin/PDF/Projekte/BFI_Tirol_BFI_OOE_Methodensammlung_Digitales_Lernen_in_BABI.pdf

http://wp.gesob.at/wp-content/uploads/2018_Flyer_allgemein_Perspektivenwechsel2018.pdf

<https://www.blink.it/blog/herausforderungen-blended-learning-erwachsenenbildung>

<https://www.oecd.org/els/emp/engaging-low-skilled-adults-2019.pdf>

<https://clanky.rvp.cz/clanek/c/Z/22753/hybridni-vzdelavani-v-dobe-postpandemicke.html>

<https://net-university.cz/blog/modely-tzv-blended-learningu-uvod-do-problematiky/>

https://www.arbeiterkammer.at/infopool/akportal/FORBA_Endbericht.pdf

<https://www.ecademy-learning.com/ausbildung-digital/blended-learning/>

<https://www.scoyo.de/magazin/familie/erziehung-entwicklung/selbststaendigkeit-von-kindern-foerdern/>

https://www.researchgate.net/profile/Anke-Grotlueschen/publication/320756362_Blended_Learning_for_Less_Qualified_Learners/links/601ae8c045851589397d6760/Blended-Learning-for-Less-Qualified-Learners.pdf

<https://www.elearning-journal.com/2020/03/13/erfolgreiches-blended-learning/>

https://www.f-bb.de/fileadmin/Projekte/Mewa/MeWA_Medienpaed._Konzept.pdf

https://www.researchgate.net/publication/320756462_Blended_Learning_fur_gering_qualifizierte_Lerner

https://www.ams-forschungsnetzwerk.at/downloadpub/2018_WIAB_Digitale%20Kompetenzen_ams-studie.pdf

<https://news.wko.at/news/wien/Lernen-wird-individuell.html>

<https://www.ams.at/unternehmen/personal--und-organisationsentwicklung/qualifizierungsfoerderung-fuer-beschaefigte>

<https://www.danaida.at/> http://www.danaida.at/danaida_leitfaden_smartphone.pdf

https://www.danaida.at/leitfaden_IKT_basis.pdf

<https://www.bitschulungcenter.at/lernwelt/elp/>

<https://www.integrationshaus.at/de/projekte-programme/bildung/ak-dig-digitale-kompetenzen-von-migrant-innen-fuer-den-arbeitsmarkt>

https://www.bfi.tirol/fileadmin/PDF/Projekte/BFI_Tirol_BFI_OOE_Methodensammlung_Digitales_Lernen_in_BABl.pdf

http://wp.gesob.at/wp-content/uploads/2018_Flyer_allgemein_Perspektivenwechsel2018.pdf

<https://wb-web.de/material/methoden/das-aktive-online-lernen-und-lehren-das-stufenmodell-von-gilly-salmon.html>

<https://www.vorwaerts.de/blog/zukunft-arbeit-weiterbildungen-attraktiver>

<https://www.blink.it/blog/herausforderungen-blended-learning-erwachsenenbildung>

<https://jyx.jyu.fi/bitstream/handle/123456789/76970/1/URN%3ANBN%3Afi%3Aju-202107024157.pdf>

https://www.researchgate.net/profile/Anke-Grotlueschen/publication/320756362_Blended_Learning_for_Less_Qualified_Learners/links/601ae8c045851589397d6760/Blended-Learning-for-Less-Qualified-Learners.pdf

<https://de.statista.com/statistik/daten/studie/203892/umfrage/erfolg-versprechende-zielgruppen-fuer-die-e-learning-wirtschaft/#professional>

https://www.researchgate.net/publication/320756462_Blended_Learning_fur_gering_qualifizierte_Lerner

<https://news.wko.at/news/wien/Lernen-wird-individuell.html>

[https://www.panopto.com/blog/what-is-blended-learning/#:~:text=Blended%20learning%20\(also%20known%20as,to%20customize%20their%20learning%20experiences.](https://www.panopto.com/blog/what-is-blended-learning/#:~:text=Blended%20learning%20(also%20known%20as,to%20customize%20their%20learning%20experiences.)

<https://www.oxfordlearnersdictionaries.com/definition/english/blended-learning#:~:text=%5Buncountable%5D,includin%20learning%20over%20the%20internet>

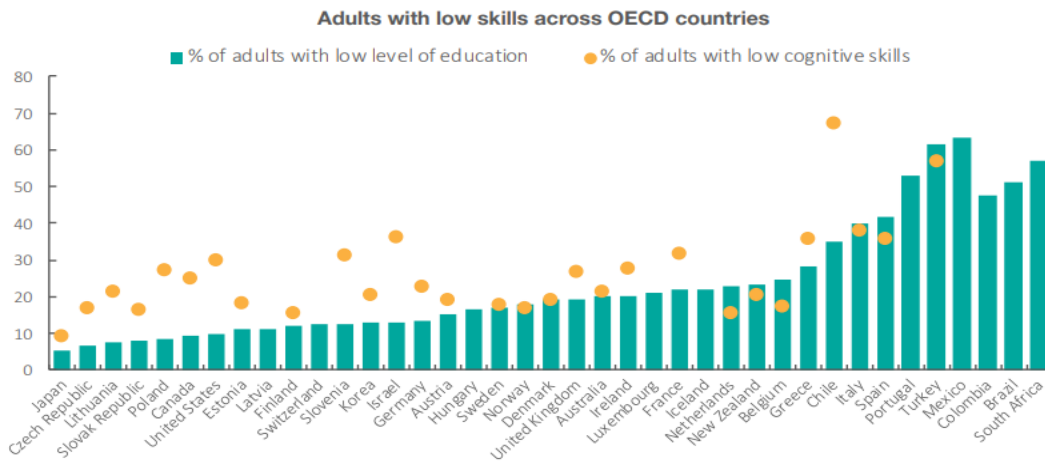
<https://www.edglossary.org/blended-learning/>

<https://www.panopto.com/blog/what-is-a-flipped-classroom/>

<https://www.proliteracy.org/Blogs/Article/505/What-are-the-Challenges-of-Implementing-Blended-Learning-in-Adult-Education>

8 APPENDICES

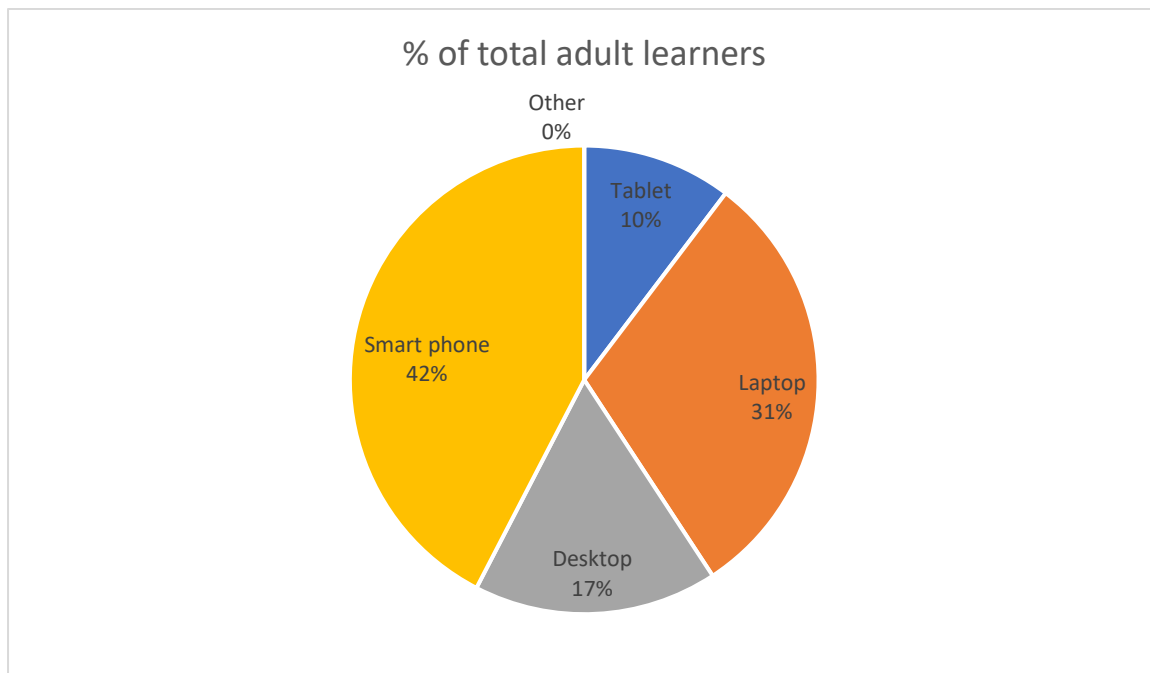
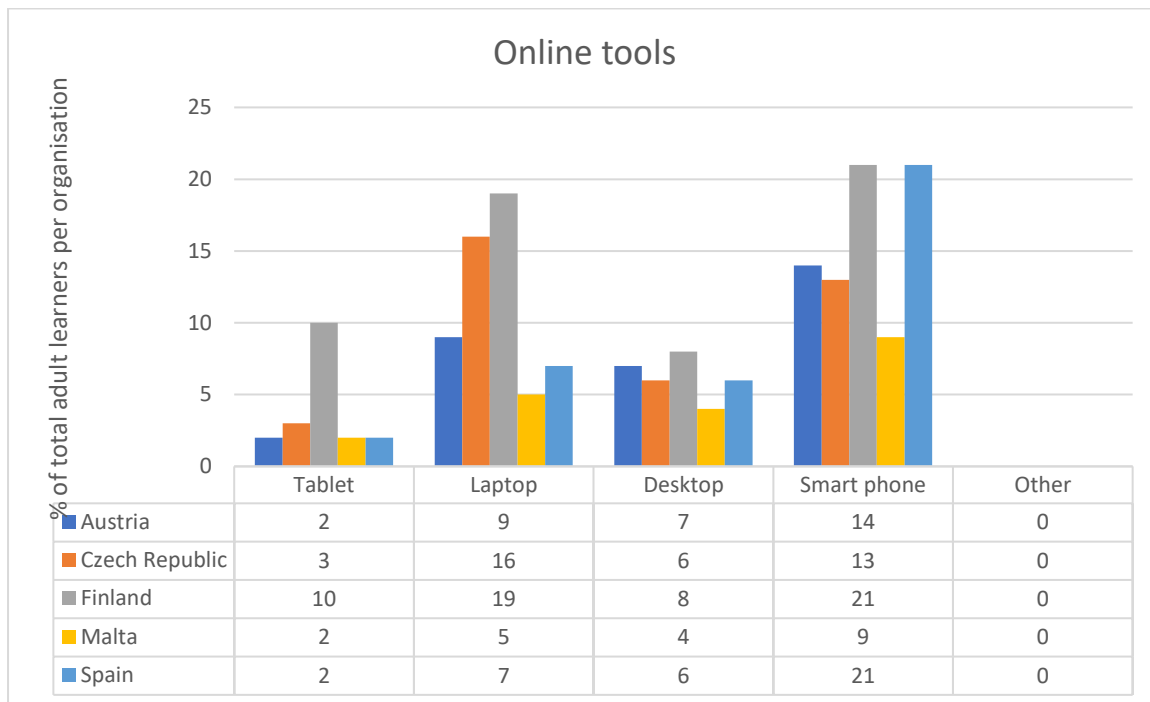
8.1 Annex A



Note: level of education is defined as below upper-secondary education, low cognitive skills is defined as literacy and or numeracy proficiency level 1 or below as assessed by PIAAC. Data for Belgium refers to Flanders only; data for the United Kingdom refers to England and Northern Ireland only; adults aged 25-64; data on cognitive skills are not available for Brazil, Colombia, Hungary, Iceland, Latvia, Luxembourg, Mexico, South Africa and Switzerland. Source: OECD education statistics database (2016), PIAAC (2012).

8.2 Annex B

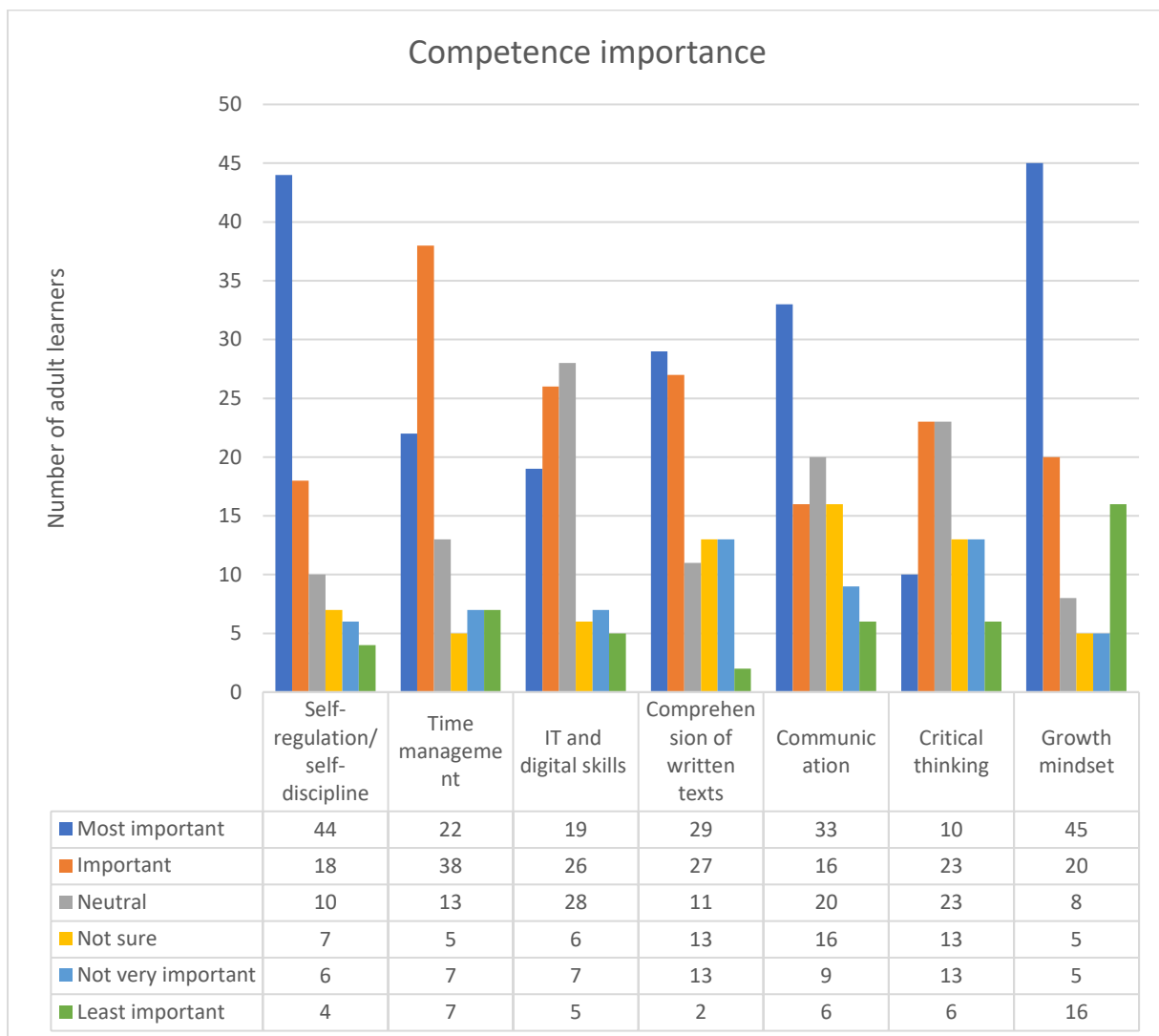
Technology that learners have, and which can be used to follow a Blended Learning course



The adult learners who have answered this questionnaire have at least one digital device which they can use to follow an online course, with the majority of the students owning a smartphone. Therefore, it can be said that for these learners, the technical barrier would be related to the lack of knowledge about online tools, rather than the lack of digital tools.

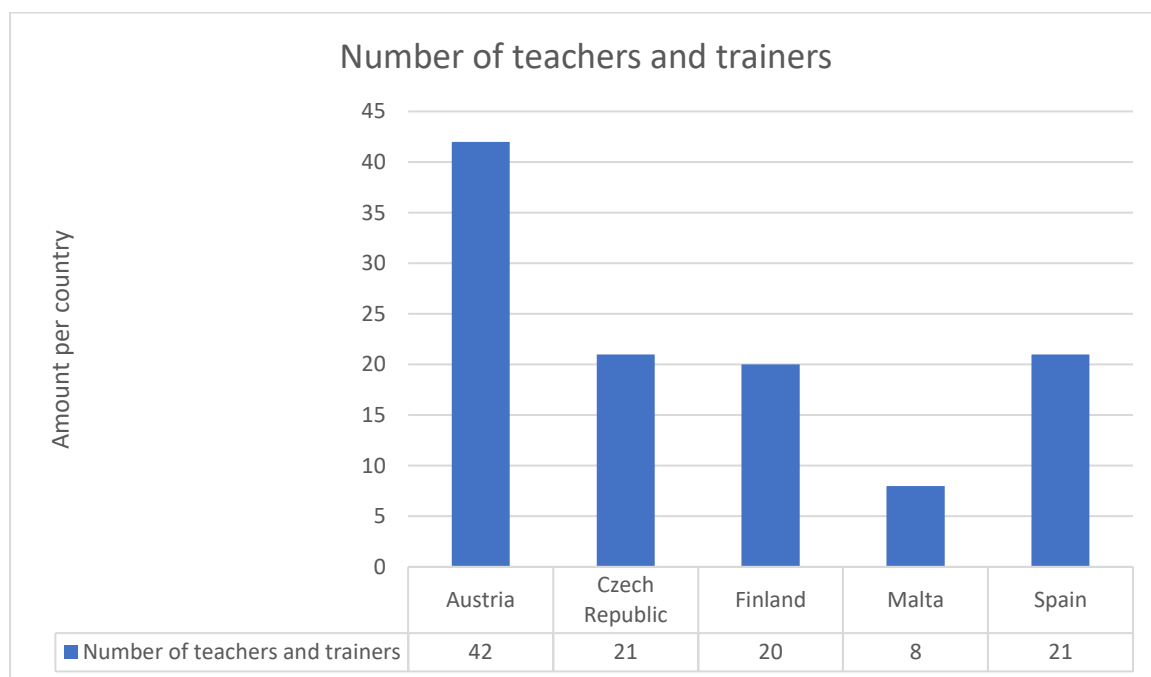
8.3 Annex C

Competencies according to their importance in relation to blended learning (all students)



The most important competencies are self-regulation and self-discipline, time management, IT and digital skills, and a growth mindset. Whilst 66% of the learners selected 'most important' or 'important' for growth mindset, it could be noted that 26% of the participants do not seem to understand the meaning.

8.4 Annex D



The above shows the number per country, of teachers and trainers who participated in the questionnaire.



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