SUGGESTED METHODS OF ASSESSING FORMAL, NON-FORMAL, AND INFORMAL LEARNING IN ADULTS

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ABSTRACT
The assessment of formal, non-formal, and informal learning in adults where it is integrated with the accreditation of prior learning has become widespread throughout Europe, leading to the need to organize procedures at a European level. In this article, we present research that took place in four different countries (Greece, Iceland, Denmark, and Italy) where we studied the current legal status in these countries, recorded the views of stakeholders from all sides, used tools, and submitted a comprehensive proposed methodology. The overall aim was to explore innovative ways to access higher education following an alternative path and provide a new tool for the recognition of prior experiential learning for people with fewer opportunities. In this article, we present a part of this research for accreditation of previous experiential learning focusing on suggested methods of assessing formal, non-formal, informal learning in adults’ for entering higher education taking into account the needs of the target group as mentioned and described by the participants themselves.

KEYWORDS: Formal, non-formal, informal learning, adults’ education, assessment.

1. INTRODUCTION
The importance and the right of lifelong learning are emphasized in the European Pillar of Social Rights (principle 1). “All people should have continuous access to quality education and training and a selection of opportunities for skills development reflecting their needs at all times” (European Parliament, 2017). In addition, the need for recognition of previous experiential learning, as a result of formal, non-formal and informal learning, has been identified starting with the Bologna process, where in Berlin 2003, during the Conference of Ministers responsible for Higher Education, urged Higher Education Institutions to enhance the possibilities for lifelong learning at higher education level.
including the recognition of prior learning. They emphasized that “such action must be an integral part of the higher education activity.” The commitment followed, as a result of the Conference of Ministers, to remove obstacles to the recognition of prior learning for the purposes of providing access to higher education programs and facilitating the award of qualifications on the basis of prior learning, as well as encouraging higher education institutions to improve their capacity to recognize prior learning (European Parliament, 2015). Studying at Higher Education Institutions, also provides students the opportunity to participate in mobility programmes, enhancing their experiences as European citizens (Raikou & Karalis, 2010). During Paris Communiqué in 2018, Ministers have committed to adopting transparent procedures also when it comes to recognition of prior learning (European parliament, 2018). The result of recognition is certification. Certification can be described as a formal confirmation and recognition of the knowledge and qualifications acquired, which validates the success of participating in a training activity or the result of an examination in the form of a certificate or diploma (Galata, 2009). The whole process concerns almost exclusively adults and mainly adults with fewer opportunities.

2. **Assessment of prior experiential learning**

2.1 **Adults’ Education – Formal, Non-formal, Informal learning**

One of the four strategic objectives of the Council conclusions of May 12, 2009 for European cooperation in education and training is promoting equity, social cohesion and active citizenship. In this spirit, it is clearly recommended in the Member States to adopt measures where education and training will be affordable and available to all citizens irrespective of their personal, social, or economic circumstances. The Council Resolution on a renewed European Agenda for Adult Learning (2011) points out that member states have to “develop a new approach to adult education and training which focuses on learning outcomes and learner responsibility and autonomy” and “encourage the development of effective lifelong guidance systems, as well as integrated systems for the validation of non-formal and informal learning”. Additionally, it is recommended to promote inclusive education for all learners, notably by facilitating the transition between various educational pathways and levels and enabling the provision of adequate educational and career guidance.

According to UNESCO, adults’ education refers to the organized educational programs provided and tailored to the needs of people outside the formal school and university system (Rogers, 1999). When adults come to a training process, they have some characteristics and needs that the trainer/facilitator cannot ignore if he/she wants to have positive results. According to Rogers (1999):

- Participants are by default adults.
- They are in an evolving development process, not at the beginning of a process.
- They bring with them a set of experiences and values.
- They come to education with given intentions.
- They come with expectations regarding the learning process.
They have competing interests.
- They have already developed their own learning models.

People with fewer opportunities are people that are at a disadvantaged position because they face one or more of the situations and obstacles mentioned in the non-exhaustive list below (Erasmus+, 2022) in order to participate in an education procedure:
- Disabilities.
- Health problems.
- Barriers linked to education and training systems.
- Cultural differences.
- Social barriers.
- Economic barriers.
- Barriers linked to discrimination.
- Geographical barriers.

The above characteristics are common regardless of the educational level of the individual. The guidelines for quality provision in Cross-border Higher Education of OECD/UNESCO encourage and emphasized to: 1) the inclusion of cross-border higher education in the regulatory frameworks of countries, 2) the coverage of all forms of cross-border higher education, 3) student and customer protection, 4) transparency in procedures, 5) information access and dissemination, 6) collaboration (Vincent-Lancrin e.g. 2012). On the other hand, adults have qualifications that include knowledge, skills, and abilities and are the result of their formal, non-formal, and informal learning. Coombs (1968) was the first to distinguish the three types of learning activities. Formal education is clearly the highly institutionalized, chronologically graded, and hierarchically structured "education system", which extends from the first school education to the higher studies of the university. Non-formal education is an organized, systematic educational activity, which is implemented outside the framework of the formal system, in order to provide selected types of learning to specific groups of the population. Informal education is the lifelong process by which the individual acquires and accumulates knowledge, skills, attitudes, and perceptions from everyday experiences at home, at work, from the example and attitudes of family and friends. traveling, reading newspapers and books or on the radio and in the cinema. The whole of learning, the outcome of these 3 types can be assessed for reasons either professional (e.g. better opportunities in the labour market) or educational (e.g. continuing education in the formal education system) depending on the needs of the interested party.

2.2 Adult’s Needs

Needs are innate in the individuals that are, they are created at birth and their origin is both instinctive as well as cultural and psychosocial. The unsatisfied needs of people motivate them, that is, they urge him to act as Maslow has mentioned. The categorization and prioritization of needs by Maslow contribute to the connection of educational needs with other important human and social needs. The satisfaction of biological needs (food, clothing, etc.) and the need for security (protection from various
risks) are paramount. Then it is necessary to satisfy the need for social integration and acceptance (social needs) and the need for self-esteem (self-respecting, recognition, etc.). The cognitive needs, the aesthetic needs, and the needs of self-realization follow (Maslow, 1943).

Educational needs are related to the deep awareness of the lack of educational goods and changes in the social environment, they can be distinguished into conscious and non-conscious. But even when the level of awareness of needs is high, the expression of needs is not always explicit. In many cases, even when the target population is deeply aware of their educational needs, they are unable to express them explicitly. They can express them in an indirect and suggestive way. Thus, the needs are distinguished into a) conscious and explicit, which are projected in an indirect way b) conscious and non-explicit, and c) into latent and obviously non-explicit (Vergidis, 1999). Educational needs are a continuous process that stems from the socio-economic, political, and cultural reality and has constantly adjustable planning (Vergidis, 2013). In the present study, the need of the participants is to continue the formal education at the tertiary level. Due to the fact that the specific participants have some peculiarities (age, previous learning experience, knowledge in a specific subject due to professional occupation) coming to a process of recognition of prior learning, they expect the parameters to correspond to exactly these conditions. At this point we have to notice that in all European countries even the way of entering in higher universities is different a common factor at European level is that the candidate has to have a high school diploma.

2.3 Assessing prior learning in adults
The basic features of accreditation of prior experiential learning consist of four distinct phases: identification, documentation, assessment, and certification. In this article, we will investigate the suggested types of assessment. Assessment is referred to as the activity in which learning outcomes are compared with specific standards. This can refer to assessing written and documentary evidence but might also involve the assessment of other forms of evidence. In any case, assessment is crucial to the overall credibility of validation of non-formal and informal learning (Cedefop, 2015). We have to point out that there is scepticism about the reliability and validity of such procedures. In order to address such perceptions, which make sense due to process innovation, both processes, methods, and tools must be transparent and reliable. Quality assurance at all stages of validation, including assessment, is the key to success. This is special mention by the Council of European Union “The recommendation asks the Member States to assure that ‘transparent quality assurance measures in line with existing quality assurance frameworks are in place that supports reliable, valid and credible assessment methodologies and tools’” (Council of EU, 2012, p. 3, point 3f).

Many of the tools and methods used for assessing prior experiential learning are based on, or similar to, those used in formal education and training. As validation is about capturing diverse individual learning experiences, assessment tools need to be designed to capture and assess the learning specific to each individual and the context in which this learning took place taking into account the special needs of adults (Cedefop 2015). Especially the learning outcomes of each adult, which are most often
the result of the work experience and daily life, may require more than one tool to be used for assessment. For example, written exams, as usual in typical education, in combination with practice exams. Other assessment tools such as practice demonstrations, simulations, or data collection from previous practices are also popular in adults assessing. In any case, in order to design a valid and reliable prior learning assessment process, the following points have been taken into account:

- assessment type adapted according to adults’ needs and characteristics of the specific team,
- assessment type needs to be valid and reliable,
- the assessment indicators to be suitable for recording previous learning of the specific learning object,
- the assessment process and tools have been communicated to the participants.

At this point we have to mention that the assessment process may take some time as the whole process of accreditation of prior learning is not an easy way to obtain credit, especially trying to demonstrate how prior learning and experience equate to the desired learning outcomes (Murray 1994).

### 2.4 Methodology

The methodology followed was first to identify the target group. The research took place in the frame of Accreditation of Prior Experiential Learning in European Universities (APELE) project, funding by the Erasmus+ programme of the European Union from October 2019 to October 2021 with a time extension until March 2022 due to Covid 19 crisis. Due to Covid 19 situation, contact with official organizations such as the Ministry of Education, regional education directorates e.t.c., where we would be able to directly contact people with these special characteristics, was difficult. Using online tools, we managed during the lockdown (1/2020 -5/2020) period to inform the community, experts of the field, organizations responsible or in close contact with people with fewer opportunities including migrants, directories of educations, local authorities, chambers, associations, and socio-cultural organizations.

The research took place at the same period in the four countries (Iceland, Denmark, Italy, and Greece) from 5/2020 until 11/2020. Due to Covid-19 situation, some face-to-face meetings was were cancelled and online meetings took place. The tool was a structured questionnaire that included the following parts:

- Demographics Data,
- Professional Situation,
- Recognition process (Assessment, Recognition, Certification),
- Investigating Educational Needs for study in higher education.
The questionnaire consisted of closed-ended and open-ended questions where respondents had to grade on a five-point Likert type scale (very bad - bad - ok - good - very good). This tool was preferred where the respondent would maintain his anonymity and answer with free will and without time pressure or other external factors.

The target group consisted of adults with fewer opportunities and more specifically people with educational difficulties, cultural differences, and geographical obstacles, including migrants (European Commission, 2014) who wish to follow an accreditation of experiential learning for entering higher education. We chose this group as it’s a common issue in Europe in the last decades. This target group will help us a lot in our research where their feedback and point of view are significantly important. They are adults, which means that they will come to such a procedure with specific expectations and requirements (Karalis, 2013). All participants faced obstacles for different reasons, and they wish to validate their prior experiential learning in order to be able to participate in the typical education system in the country where the research takes place. More specifically the majority of them would like to enter in higher education.

The total sample was 51 people from all countries (10 Iceland, 15 Denmark, 8 Italy, 18 Greece) where 49% was men and 51% woman while 63% were 31-40 years old, 18% were 41-50 years old and 19% were 21-30 years old. Also, 72% were married with children. The average of working experience was between 10-15 years. Unfortunately, a significant percentage of the participant’s work is suspended at the time where the research took place due to the pandemic situation of Covid 19. The common factor for all participants was that due to different obstacles they faced difficulties in entering higher education. The majority of the sample didn’t know about accreditation of prior experiential learning and for some of them, it was the first time be informed about such a procedure.

3. Results and Discussion
All respondents agreed that the process should be implemented in the local/national language in each country and some of them claim that maybe it’s better to implement in English. They are also positive to follow a national language program, for people they are not familiar in a satisfactory level, with local language. Considering the type of assessment, the participants had to choose from a list that was not exhaustive (table 1).
Table 1

<table>
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<tr>
<th>If you participate in the process which type of assessment do you believe is more suitable?</th>
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<tbody>
<tr>
<td>Examination (written or oral)</td>
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<tr>
<td>Practice exams</td>
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<tr>
<td>Portfolio of the experiences</td>
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<tr>
<td>On-site observation</td>
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<tr>
<td>Simulation with work samples</td>
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<tr>
<td>Interview</td>
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<tr>
<td>Self-Assessment Questionnaire</td>
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<td>Pre-survey with interviews</td>
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The majority expressed the opinion that this has to be done in a practical way like on-site observation, practice exams, and simulation with work samples (graph 1). As researchers in the field of Adults’ Education indicate, this outcome of the research was expected as adults learn differently, have previous experiences, expectations, and requirements. The participants show a greater preference for practical ways where it is possible to assess their technical and practical skills and abilities gained from work experiences.

Graph 1: Suitable type of assessment

They claim that since their abilities are the result of lifelong learning through work and everyday life a corresponding way of assessment would be appropriate in order to show their qualifications. Let’s see some answers where they support their choice:
• I think that only if they put me on a computer and ask me to make some spreadsheets, they will see what I can do.
• I have cared for so many old people for so many years that only in a practical way, perhaps orally, could I prove that I am good and capable.
• I have cultivating for so many years that I consider that I have more knowledge than the fresh students in the agriculture department, but I can only prove it orally and practically. Not to write exams at this age.
• It is easy way to show my skills during a simulation.
• I am a car mechanic and the only way to check my knowledge is the evaluator to see with on-site observation how I fix a car.
• My profession is mostly practical. Would be nice to have some practical exam.
• On site observation is useful to show personal knowledge and skills acquired during the life and during the work experiences.
• I think it is easiest for the evaluator to see what I am able to do with practical exam. It is hardest to do that with a written exam.

Types of assessment that are characterized in a practical way are not only desirable by the target group. They also consider that this enhances the reliability and validity of the process. The sample claim that with the practical way they can prove their knowledge, and no one can dispute the outcome. Especially if there are a committee of at least 3 examiners then reliability and validity are enhanced at a high level. From their point of view at their age, a different way of assessment would not give reliability and validity outcome as for example reading and learning from a book and writing word by word that maybe take a high score grade but that does not mean that knowledge has been acquired.

We quote the most representative answers regarding quality assurance of practical assessment types:
• I’m 53-year-old. I’m doing farming. I can plow, prune, etc. but I cannot describe it on paper (written exams). Only orally. So, it will be objective and fair for me.
• It will be also reliable if the evaluator is having the corresponding specialty.
• In my age I’m afraid that writing exams is not an option. So, if the evaluator wants to check my qualifications, he has to ask me and see me doing my job. It will be valid and reliable procedure if the criteria are how I’m doing the job and not how can I describe it.
• A committee from 3 evaluators checking peoples’ qualifications with practical way is valid.
• As an adult I will not participate in an APEL procedure if I have to write exams. It’s not reliable for our age.
• Practice exams is the most valid and reliable procedure. You may write them because you have learned them word by word. But if you are not doing it you do not know anything.
• If an individual can demonstrate his knowledge and skills in exams, interviews and through self-assessment and these three methods play together, I believe it gives a fairly clear picture
of what he has to offer and therefore his skills can be assessed from these ways. Using different tools for assessment enhances reliability.

- Generally, I am more confident showing my skills and approach to tasks than presenting them in a verbal discussion. I think this type is reliable and valid because this is the situation closest to a workplace.
- I prefer on-side observation because it shows more of me as a person and my skills. On side observation, It is valid and reliable because you can’t fake skills in this kind of situation.

At this point, we have to mention that the answers of the participants are in their own words without any intervention from us. From the above findings, we observe that there is a general aversion in the traditional school way of assessment which is the written examination and tests as only 5% support it. This traditional way is familiar and socially recognized as valid and reliable and can be linked to specific standards much more straightforwardly than some other methods. But during the inventory of 2014 for Cedefop, some countries pointed out that traditional assessment methods like written exams and tests, measure relatively superficial knowledge and learning, but skills, abilities, and competencies acquired through non-formal and informal learning there is difficulty in recording them. In cases, where practical skills and competencies are essential, the potential of tests to assess competencies is more limited (Cedefop, 2015).

On the other hand, methods focusing on the practical way like practice exams, on-site observation, work simulation samples are preferable from the sample of the current research as 71% vote positive for these types (27% practice exams, 24% simulation with work sample, 20% on-site observation). Using observation for assessment of prior learning the advantage is that different abilities and skills can be assessed simultaneously, and the measurement results are valid. Also, it’s a fair way for participants to unfold their qualifications as they avoid the stress of an examination in a traditional way. Likewise in a simulation, the scope is to place the participant in conditions close to real-life scenarios. Observation can be part of simulations as with this way the participant can be put in various contexts and with this to increase the validity of the procedure. The reliability and fairness of simulations are often considered high (Cedefop, 2015).

An interview is a tool of conversational type of assessment in adults and 8% of the sample prefer this type for assessment. With an interview, the assessor finds a way to extract further pieces of information of the candidate and many time this is a valuable tool as a supporting function, especially regarding outcomes from informal and non-formal learning. Interviews also have a higher grade of validity than traditional examinations and written tests as they enable dialogue and, in this way, misunderstandings can be avoided. However, they can be less reliable, valid, and fair as the interview outcome can be affected by the capabilities of the person doing the interview, his/her experience and personal characteristics, facilitation skills, and knowledge of the assessed objectives. In any case, participants explained that this type of assessment is well suited to identify the level of motivation for entering HE.
Portfolio of the experiences 8%, self-assessment questionnaire 4% and pre-survey interviews 4% were also the less popular choices. We can justify low preference rates as these methods are not well known to a wide audience even, they are widespread beyond research and the academic community. The portfolio is often confused with the CV. But the portfolio is something wider as it shows skills, capabilities and knowledge learned and describes the theoretical and practical attitudes. A Self-Assessment Questionnaire (SAQ) is designed as a self-validation tool. This is sometimes difficult for the candidate if there is not a supervisor or if he/she is not familiar with such a procedure. When a researcher chooses to do a pre-survey this helps to avoid the exposure of candidates to potential problems such as lack of clarity that might threaten the validity and reliability of the study. It minimizes errors and increases the response rate. Interestingly, one participant mentioned that she would prefer an interview because some people might not be able to express themselves well in writing but that she still thinks that it is important to have a method of accreditation that ensures that the aspiring candidates are able to follow the procedure (for example through written tests).

4. Recommendations
This process has given us the opportunity for further reflection and research. Some of the topics which are based on the views of the participants that could be proposed for further research are:

- Indicators and benchmarks that promote reliability and validity in adult assessment procedures.
- Alternative approach of prior learning assessment methodology.
- Approach and deepen research on portfolio implementation.
- Recording innovative methods of assessing prior learning in all Member States of the European Union.
- Practical issues like the financial needs of the participant, place, for joining an assessment procedure.
- Place, time, and duration of the procedure.
- Characteristics of the evaluators.
- Organization, institution responsible for assessment procedure.

The above list is not exhaustive as different objects and stimuli can be combined and promote a new research look.

5. Conclusion
The current research focused on the record of an alternative path, for people with fewer opportunities, to entering in Higher education. Adults have specific characteristics when participating in an educational process. They also have specific requirements and expectations. Especially when an assessment procedure refers to prior experiential learning, we notice the below concussions: As adults they are strongly advocating for diversity from teacher-centered standards where assessment should not be a written test but a practical type of assessment like on-site observation, practice exams, simulation with work samples. The type of assessment should be adapted each time both to the needs
of the participants and to the object of the learning outcomes, while practical types of assessment enable candidates to express their full potential.

It seems to emerge from the answers of respondents a greater aptitude to demonstrate one's skills and professional experience through practical tests. These types of assessment (practical) will be valid and reliable as the participant can prove their qualification face to face. Also, it is considered valid and reliable if the evaluator has the corresponding specialty. And the validation is boosted if there is a committee consisting of at least 3 evaluators. The lack of knowledge of the other assessment methods (Portfolio of experience, pre-survey with interview) could be enhanced. It could be useful in the phase of elaboration and implementation of the assessment activities to strengthen the information and explanation phase of the different methodologies, focusing in particular on the innovation methods (like portfolio e.g).

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REFERENCES
