



**Digital
VET**

DIGITAL.VET DIGITAL TEACHING IN VET SYSTEM

IO5

**IO5 – pathway to competence
assessment and self-assessment of
“experts in digital and immersive
teaching for vocational training”**

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First Section

1.1 INTRODUCTION

The Pathway to Competence Assessment and Self-Assessment will be developed within the Project **“DIGITAL TEACHING IN VET SYSTEM” Digital.VET**, which is an international project co-financed by the European Commission within the Erasmus+.

The general aim of the project is to improve the technical preparation of VET trainers and teachers on the use of digital and immersive teaching methods as a support tool for learning, student motivation and the consequent reduction of the drop-out rate, social and digital inclusion.

This procedure establishes how to structure the process of analysis, what evidence gathering, the means and how to evaluate evidence, how to train and supervise evaluators and so on. The Pathway will allow to evaluate the VET trainers and teachers who adopt digital and immersive teaching methodologies **through the approach of competence analysis based on the performance**.

The objective of the assessment is in fact to be sure that VET trainers and teachers who adopt digital and immersive teaching methodologies carry out their tasks according to a default optimum level, so the validation is focused on performance.

The structure of the pathway involves the identification of key activities, divided into sub activities and the elements of the pathway will be the specific working tasks that the operator must master, as being identified from the activity of definition of the professional profile.

The evaluation will be carried out focusing on the competence shown in the performance of professional activities. The aim is the validation of such competence, of the main competence that is needed and shown on the job (working performance). Of course, in addition to the activities, also knowledge and attitudes will be evaluated.

Through this description we will give an overview of:

- the existing frameworks and guidelines for assessment of competence,
- the main guidelines on which we will focus to prepare the assessment tool including:
 - a. the elements – key activities that will be the guide for the construction of the device
 - b. the tools of assessment, focusing especially on the PFI
 - d. the procedure of the assessment
 - e. the qualifications of the evaluators

1.2 THEORETICAL BACKGROUND

It's of high importance to Europe to have skilled and knowledgeable professionals, whose competence extends from formal education to learning acquired in non-formal or informal ways. Professionals must be able to demonstrate what they have learned to use this learning in their career and for further education and training. Therefore the establishment of systems that allow individuals to identify, document, assess and certify (=validate) all forms of learning to use this learning for advancing their career and for further education and training is really important (CEDEFOP, 2014).

Taking into account the importance and relevance of learning outside the formal education and training context, a set of common European principles for identifying and validating non-formal and informal learning were adopted by the European Council. Formulated at a high level of abstraction, these principles identified key issues that are critical to developing and implementing of methods and systems for validation. Since 2004 European guidelines for validating non-formal and informal learning principles have been used in countries as a reference for national developments.

The EU and its member countries have worked for several years on principles and common ideas that help to identify and validate non-formal and informal learning. In the last years there have been developed in a peer-learning process and in strong cooperation with the European Commission and the CEDEFOP the 'European Guidelines on Validating non-formal and informal Learning' (CEDEFOP, 2009).

The European Commission and Cedefop are currently updating the European guidelines for validating non-formal and informal learning. The purpose of the European guidelines is to support policy makers and practitioners in developing and implementing solutions to serve individuals in their validation process. The ambition of the guidelines is to clarify the conditions for implementation, highlighting the critical choices to be made by stakeholders at different stages of the process. The European guidelines were first developed in 2009 and, following the adoption of the Council Recommendation, updated in 2015. The evaluation of the 2012 Recommendation has signalled the importance of the guidelines in promoting a shared understanding to validation in Europe and to support peer learning.

The 2021 update of the guidelines aims at keeping the guidelines relevant in the context of current and future developments such the digital and green transitions and the Covid-19 pandemic, which

require Member States to increasingly tap into the full potential of their citizens. Validation of non-formal and informal learning is as an effective mechanism to deal with this need.

To support the update of the Guidelines, a survey was set up in June 2021. The European Commission has invited all stakeholders to reply to the survey and share their opinions and experiences.

1.3 THE VALIDATION OF COMPETENCE

The evaluation of competence is a **three step process** including **assessment, recognition and validation**, which is one specific form of recognizing former learning.

The term validation is used to express “a process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard” (Council of the European Union, 2012). The concept of competence is based on the definition of ‘key competencies’ as used by the OECD, according to which: “*A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual’s knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating.*” (OECD, 2005, & Rychen/Salganik, 2003). The competence is regarded as an attribute of an individual that can be learned and be more or less developed (OECD, 2003). Another central aspect of the meaning of competence is that it is performance-oriented, which means that having a competence gives somebody the ability to act effectively in a particular situation through the possession of all relevant cognitive and practical skills, pieces of knowledge as well as attitudes, emotions, values and behaviours. Therefore, as competence is visible on performance, that means when a person has to deal with a situation or a problem, the model of competence validation should be based on such situations or problems and define the indicators which make us understand whether the performance is successful or not.

In order to deal with situations and problems, individuals need to be able to use a large range of intellectual, motivational and emotional resources, which are requirements for competent performance. Except for that, individuals should also have the ability to deal with change and uncertainty and make sense of unknown/ non-routine situations and apply or adapt relevant resources to cope with these situations successfully (Weber, et al., 2012).

In general, assessment, recognition and validation can be undertaken to support practitioners and institutions to identify practitioners performance and give a hint on whether a competence is at an adequate level, so as to allow the individual to fulfil a specific activity. The aim also of the evaluation is to assist practitioners in self-reflection and planning for further development, employers in planning development tasks and recruiting processes and training organisations in enriching their programs. According to Evangelista (2008), there are several approaches that can be applied to validate competence.

To recognize and assure jobs are carried out well we define competent the person that is able to do something well or, to a predetermined standard. There are several approaches to assure an occupation is carried out by competent people. For example as competent can be recognised someone:

- Who holds a specific educational qualification
- Who holds a specific experience
- Who holds specific personal features - skills, knowledge, etc.
- **Who can directly prove a good performance in the specific job**

According to the scope of the project “DIGITAL TEACHING IN VET SYSTEM” Digital.VET, in our assessment pathway we’ll pay attention basically on the last approach, the **“performance based approach”** which includes the demonstration of the direct performance by a person in a specific activity.

The last approach seems more effective as:

- focusing on competence without taking into account performance may be misleading, as other methods focus on other criteria and not competence in the sense of the given definition,
- it gives the opportunity to the teachers/trainers to have a close insight into the level of his/her performance and get a hint for reflection and further development.

The end of the validation process is usually followed by certification – “an external assessment recorded in writing which is usually based on an external examination, is output-oriented and is aligned towards professional competences” (Gnahs, 2010) – which takes place on the basis of certain standards. Certification means that a competent and legitimised body confirms that an individual is in possession of the relevant skills, abilities and competences and that these have been assessed in accordance with specific standards (CEDEFOP 2009). Certification always takes place on the basis of the results of the preceding stages there could be given a certificate, if the certifying body has the mandate to do so.

1.4 EXISTING FRAMEWORKS FOR COMPETENCE VALIDATION

In order to make up the assessment pathway, we will take into consideration existing guidelines and frameworks for validation and certification of competence and other learning outcomes. To form the principle guidelines of our tool, the sources on which we paid attention are:

- CEDEFOP, 2009 and 2015: “European Guidelines for validating non-formal and informal learning”
- ISO/IEC 17024, 2003: “Conformity assessment – General requirements for bodies operating certification of persons”
- Improve Guidelines
- EVGP
- MEVOC
- EAF
- NVQ

1.4.1 The CEDEFOP Guidelines for the validation of prior learning

Validation of prior learning as well as the validation of competence is of increasing importance across Europe. Further, the commitment of large numbers of countries to OECD activity in this field and participation in the European Commission’s peer learning cluster indicate that validation is seen as an important element of national policies on education, training and employment.

According to the Council of EU (2012) validation is defined as ‘*a process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard*’. Validation is, first, about making visible the diverse and rich learning of individuals, which takes place outside formal education and training and second, about attributing value to the learning of individuals, irrespective of the context in which this learning took place. Going through validation helps a learner to ‘exchange’ the learning outcomes for future learning or employment opportunities. The process must generate trust, notably by demonstrating that requirements of reliability, validity and quality assurance have been met. These elements of visibility and value will always have to be taken into account when designing validation arrangements, although in different ways and combinations.

1.4.2 The four phases of validation

To clarify the basic features of validation, there are identified **four distinct phases: identification; documentation; assessment; and certification.**

- ‘Identification of an individual’s learning outcomes
- Documentation of an individual’s learning outcomes
- Assessment of an individual’s learning outcomes
- Certification of the results of the assessment of an individual’s learning outcomes, or credits leading to a qualification, or in another form, as appropriate.’ (Council of the EU, 2012).

a.. Identification: Validation necessarily starts with the identification of knowledge, skills and competence acquired and is where the individual becomes increasingly aware of prior achievements. This stage is crucial as learning outcomes differ from person to person and will have been acquired in various contexts: at home, during work or through voluntary activities. For many, discovery and increased awareness of own capabilities is a valuable outcome of the process.

b. Documentation: Documentation will normally follow the identification stage and involves provision of evidence of the learning outcomes acquired. This can be carried out through the ‘building’ of a portfolio that tends to include a CV and a career history of the individual, with documents and/or work samples that attest to their learning achievements. Validation needs to be open to various evidence types, ranging from written documents to work samples and demonstrations of practice

c. Assessment: Assessment is normally referred to as the stage in which an individual’s learning outcomes are compared against specific reference points and/or standards. This can imply evaluation of written and documentary evidence but might also involve evaluation of other forms of evidence. Assessment is crucial to the overall credibility of validation of non-formal and informal learning. Building mutual trust is closely linked to the existence of robust quality assurance arrangements ensuring that all phases of validation, including assessment, are open to critical scrutiny.

d. Certification: The final phase of validation is linked to the certification – and final valuing – of the learning identified, documented and assessed. This can take different forms, but is commonly the award of a formal qualification (or part-qualification) (CEDEFOP, 2015).

With the CEDEFOP 2009 and 2015 publication ‘European Guidelines for validating non-formal and informal learning’ the ‘European Cluster on recognition of learning outcomes’ contributed to this with a set of more elaborated guidelines for validation.

Second Section

2.1 THE FUNDAMENTAL PRINCIPLES AND GUIDELINES

From the conclusion of the CEDEFOP publication, the following fundamental principles and guidelines should be considered:

- The individual is in the centre of the validation.
- Validation must be voluntary.
- The privacy of individuals should be respected.
- Equal access and fair treatment should be guaranteed.
- Stakeholders should be involved in establishing systems for validation.
- The process, procedures and criteria for validation must be fair, transparent and underpinned by quality assurance.
- Systems should respect the legitimate interests of stakeholders and seek balanced participation.
- The process of validation must be impartial and avoid conflicts of interest.
- The professional competences of those who carry out assessments must be assured.

The fundamental principles underpinning validation: (CEDEFOP, 2009).

The individual is in the centre of the validation

The activities of other agencies involved in validation should be considered in the light of their impact on the individual. The CEDEFOP Guidelines state, that everyone should have access to validation and the emphasis on motivation to engage in the process is particularly important(CEDEFOP, 2009).

Validation must be voluntary

The CG practitioner participates in the validation of his competence by free will and voluntarily. Validation if not meant to be proposed as compulsory by a third party for example: employers, public bodies or professional bodies(CEDEFOP, 2009).

The privacy of individuals should be respected

Staff must comply with Data Protection legislation when dealing with personal details. Neither the information given by the participant, nor the information about the validation process or the results shall be given to a third party (CEDEFOP, 2009).

Equal access and fair treatment should be guaranteed

The validating organisation has to make sure that all practitioners who want to take part in the validation procedure have access to it. This includes that the organisation takes action to inform in a transparent and visible way about the opportunity and details of the process. The participant in the validation process shall be treated in a fair manner, which means that he/she is informed before the process about the validation procedure, the requirements, the resources needed and the opportunities, is treated in the same way and under comparable conditions, and that the result of the process is based solemnly on the assessed competence (CEDEFOP, 2009).

Stakeholders should be involved in establishing systems for validation

Cooperation with stakeholders from the field is needed to establish a system of validation for operators. European, national, regional and local different stakeholders shall be involved, at all levels, when an actor starts to establish a system for validation (CEDEFOP, 2009).

The process, procedures and criteria for validation must be fair, transparent and underpinned by quality assurance.

What is said about quality assurance of validation systems is also relevant for the validation process, procedures and criteria as well. However, for these topics certain professional and technical aspects are also of relevance. If a validation system is built, a quality assurance system should be defined that covers a clear commitment to quality criteria on the one hand and procedures for quality assurance and quality development on the other hand. Such procedures should especially include clear responsibilities for quality assurance, defined quality assurance mechanisms, evaluation and feedback structures, frequent revision of processes and procedures, continuing learning and training for involved staff and high transparency for all interested parties about the quality assurance model and actions taken. Quality assurance of the system is a relevant task for all involved stakeholders. For the quality assurance of the validation practices, the CEDFOP

Guidelines proposes in addition the following quality indicators (CEDEFOP, 2009):

- reliability
- validity
- safety, security and confidentiality
- standards/reference points for measuring competence
- sustainability
- visibility and transparency
- fitness for purpose
- cost efficacy

Systems should respect the legitimate interests of stakeholders and seek balanced participation

In the process of building and maintaining validation systems the relevant supporting stakeholders should be involved, as they have an interest in the successful operation of validation. The stakeholders can play an important role in supporting, developing and maintaining the validation of operators and are important links to the various communities served by validation outcomes. The composition of such a committee should be well balanced between types of stakeholders (CEDEFOP, 2009).

The process of validation must be impartial and avoid conflicts of interest

Validation of competence is an opportunity for the individual operator. As stated before validation is undertaken by his or her free choice. The candidate shall not be forced to participate by third parties. “*The interests of the individual are not compromised by the interests of those managing validation and other stakeholders (no conflict of interest)*”. Therefore the organisation of and the validation procedures and involved persons have to be independent and neutral.

The professional competence of those who carry out assessments must be assured

Assessors/assessors have the responsibility to “seek and review evidence of an individual’s learning and judge what meets or does not meet specific standards” . Thus, such persons should be “familiar with the standards and the potentially useful assessment methods that might be used to reference evidence against standards” (CEDEFOP, 2009). In addition, assessors should be professionals in the sector in which they are evaluating operators. “The authenticity of the assessment situation is likely

to be improved when sectoral experts can direct the use of an assessment instrument or judge the outcomes of its use”. Persons who take this role must:

- be familiar with the validation process (validity and reliability);
- have no personal interest in the validation outcome;
- be familiar with different assessment methodologies;
- be able to inspire trust and to create a proper psychological setting for the candidates;
- be committed to provide feedback on the match between learning outcomes and validation standards/references
- be trained in assessment and validation processes and be knowledgeable about quality assurance mechanisms” (CEDEFOP, 2009: 68).

Aside from the fundamental principles in the CEDEFOP publication additional guidelines are also described. The most relevant in terms of validation practise seem to be those that deal with the validation in more practical terms:

- The structure of validation procedures;
- Assessment methods;
- Roles in the Validation Process.

The Structure of the validation procedures

According to CEDEFOP the three processes of information, assessment and external audit can be used to evaluate existing validation procedures and support the development of new validation procedures. To simplify the process for the purposes of this guideline it is suggested that there are **three distinct stages of validation procedures**. First is **orientation of an individual**, a broad area covering all aspects of producing and distributing information, interaction of learners with advisers, counsellors, and other significant actors such as employers. Next is **assessment of individual learning** which covers the whole process of assessment from understanding requirements and standards, identification of learning, searching for evidence, organising it for assessment, and following agreed assessment and validation procedures. Finally is **audit of the validation process** which represents a post validation stage that involves an external, independent review of orientation and assessment.

Assessment methods

The CEDEFOP Guidelines (2015) point out, that methods that are used, have to be adopted, combined and applied in a way which reflects the specificity of the kind validation that will be

undertaken. Thus the validation of CG practitioners' competence needs methods that are fitting. It is generally accepted that the following criteria need to be considered:

- purpose of the validation process;
- breadth of knowledge, skills and competences to be assessed;
- depth of learning required;
- how current or recent are knowledge, skills and competence;
- sufficiency of information for an assessor to make a judgement;
- authenticity of the evidence being the candidate's own learning outcomes.

An important aspect, that should be considered is the type of former learning and competence, that we are dealing with, when looking at operators. Especially the breadth of knowledge, skills and competence needed in this kind of practice, the depth of learning that is required to gather such competence and how current or recent are the knowledge, skills and competence we are dealing with.

Roles in the Validation Process

Effective operation of validation processes depends fundamentally on the professional activity of counsellors, assessors and validation process administrators. The preparation and continuous training of these people is critically important. Networking that enables sharing experiences and the full functioning of a community of practice should be a part of a development programme for practitioners. Interaction between practitioners in a single validation process is likely to lead to more efficient and effective practices that support the individuals seeking validation (CEDEFOP, 2009). Interaction between the different practitioners in a single validation process is likely to lead to more efficient and effective practices that support the individuals seeking validation. Additional roles/functions may be needed or the same person may take on more than one role in different stages of the process. "Each validation process is unique and the roles (functions) can vary (...)" (CEDEFOP, 2009). It seems to be important, that for the practitioner who seeks validation as well as for external actors the quality and transparency of the process is good. Thus training, documentation and information about the involved roles and the related tasks are necessary.

2.2 ISO/IEC 17024 – GENERAL REQUIREMENTS FOR BODIES OPERATING CERTIFICATION OF PERSONS

In addition to the CEDEFOP Guidelines, the ISO norm 17024 is an extra source of information about requirements for validation processes (Evangelista, 2011). This ISO norm states different requirements for organisations operating certification of persons and therefore it can be seen as a set of guidelines in addition to the CEDEFOP guidelines that give an additional base for improving existing validation schemes in the field of career guidance.

According to ISO 2003, the standard ‘has been drawn up with the objective of achieving and promoting a globally accepted benchmark for organizations operating certification of persons. Certification of persons is one means of providing assurance that the certified person meets the requirements of the certification scheme. Confidence in the respective certification schemes is achieved by means of a globally accepted process of assessment, subsequent surveillance and periodic re-assessments of the competence of certified persons. One of the characteristic functions of the personnel certification body is to conduct an examination, which uses objective criteria for competence and scoring.’ (ISO, 17024, 2003)

The ISO norm gives clear regulations on the following points:

- independency and impartiality of certification bodies
- certification scheme(s) has to be developed by a scheme committee appointed by the certification body
- a ‘scheme committee’ is responsible for the development and maintenance of the certification scheme
- the scheme committee shall fairly and equitably represent the interests of all parties
- methods and mechanisms to be used to evaluate the competence of candidates are defined by the certification body in agreement with the scheme committee
- the certification body shall evaluate the methods for examination of candidates.
- examinations shall be fair, valid and reliable.
- appropriate methodology and procedures (such as collecting and maintaining statistical data) shall be defined to reaffirm, at least annually, the fairness, validity,

reliability and general performance of each examination and all identified deficiencies corrected.

- successful completion of an approved training course (by the candidate) may be a requirement of a certification scheme
- the certification body shall examine competence of the candidate, based on the requirements of the scheme, by written, oral, practical, observational or other means

Requirements of ISO (ISO, 17024, 2003).

Certification process and methodology

Appropriate methodology and procedures shall be defined to reaffirm, at least annually, the fairness, validity, reliability and general performance of each examination and all identified deficiencies corrected.

The criteria of assessment/evaluation of the competence should be defined in accordance with international standards and other relevant documents. The certification shall not be restricted by limiting conditions such as undue financial requirements or membership of an association or group.

The ISO norm 17024 foresees a **three step certification process** that consists of application, evaluation (assessment) and decision on certification.

Firstly, the **'Application' step** consists of a **detailed description on the certification process and of the requirement for certification**, applicants' rights and the duties including a code of conduct. Application is documented in an application form, signed by the applicant. In the Evaluation (**Assessment**) **step**, the **certification body confirms that it has the capacity to deliver the requested certification** and the applicant has the required qualification, experience and training specified by the scheme. The competence shall be examined based on the requirements of the scheme by written, oral, practical, observation or other means. The planning and the structure of the examination shall ensure that all requirements are objectively and systematically verified and documented. Documentation shall be done in an appropriate and comprehensible manner and includes information about the performance of the candidate and the results of examination (ISO 17024, 2003).

Decision on certification is the third step that is based on the **information from the evaluation/assessment of the candidate**. Those who make the certification decision shall not have

participated in the examination or training of the candidate. The certification body provides a certificate that has the form of a letter and shall contain, as a minimum, the following information:

- a) the name of the certified person and a unique certification number;
- b) the name of the certification body;
- c) a reference to the competence standard or other relevant documents, including issue, on which the certification is based;
- d) the scope of the certification, including validity conditions and limitations;
- e) the effective date of certification and date of expiry(ISO 17024, 2003: 7).

Assessors/ persons involved in the certification process:

All persons should commit themselves to comply with the rules defined by the certification body. The competence of the persons, the appropriate education, experience and technical expertise shall be identified. The relevant qualification of each individual shall be documented. Assessors have to meet the necessary requirements of the certification body upon applicable and competence standards. To be more specific, they shall:

- be familiar with the certification scheme,
- have knowledge of the relevant examination methods and documents,
- have appropriate competence in the field to be examined,
- are fluent in the language of the candidate and
- are free from any interest that they can impartial and non-discriminatory judgements (assessments).

In case the examiner has any conflict of interest, the certification body has to make sure, that the confidentiality and impartiality of the examination is not compromised (ISO 17024, 2003).

2.3 THE IMPROVE GUIDELINES

The IMPROVE guidelines are developed by the partners of the project IMPROVE *Improving Validation of Not-Formal Learning in European Career Guidance Practitioners* 510640-LLP-1-2010-1-IT-GRUNDTVIG-GMP (2011-2012). These guidelines are mostly focus on validation of current performance of practitioners. According to Improve the validation process of current performance of workers must be performance based. Substantial focus on the assessment procedure must include the direct examination of the work performance of the Candidate and/or on the reconstruction of performance of Candidate at work such as in the Performance Focused Interview (PFI).

The Process and the Elements of assessment

According to the Improve guidelines, the main features that focus on the process and the elements of assessment are the following:

- The assessment process and assessment methodology used must be the same for all Candidates and applied in the same manner by all Assessors, while the validation framework, including its structure, assessment process, roles, scoring system, key terms must be clearly described and freely available.
- The assessment is done through a direct examination of the Candidate (direct contact or mediated contact through videoconference).
- The elements (job main tasks and job tasks) the Candidates have to master must be previously defined through a job analysis, and examination of available documentation on occupations and a pilot study . The results of the investigation have to be discussed and agreed upon among practitioners and other sector stakeholders.
- The evidences that demonstrate mastering of job main tasks should be based on the assessment methods, like Direct observation of the person whilst carrying out his/her work, Professional discussion, PFI Performance Focused Interview, Discussion of case studies, Testimonies from colleagues and supervisors, Testimonies from clients, Examination of documentation produced by the person whilst carrying out his/her work, Examination of portfolio of work, Simulation of job tasks.

- Successful validation cannot be conditional on the possession of an educational qualification, proven experience or attendance of specific training courses, membership of association or group.
- Validation can be initiated by an organization to check the competence of its employees and collaborators or by the practitioner him/her self. In the second case the validation process, and specifically the evaluator, shall guarantee the confidentiality of the results towards third parties.
- The Assessors must be appropriately trained for the validation process and possess a thorough working experience of the main tasks they are assessing, while the quality assurance system of the validation procedure has to include professional supervision among the Assessors and the sharing of their experiences with other Assessors for learning purposes (Improve partners, 2012).

2.4 MEVOC

MEVOC is a framework created through a European project in 2003-2006 (MEVOC website 2011), which allows to get a European Certificate For Career Guidance Counselors and is based on 35 elements.

ECGC is a step towards reaching the aim of the European Lifelong-Learning strategy and the professionalisation of the career guidance sector on a national and international basis. ECGC – European Career Guidance Certificate is developed on the basis of the MEVOC competence standards for career guidance counsellors. The main aim is to develop a standardised and internationally transferable certification system (“ECGC-certificate”) to acknowledge formally or non-formally acquired knowledge/skills/competences of career guidance counsellors that is compatible with the existing training offers.

The Process and the Elements of assessment

MEVOC is a competencies based framework, that is to say the set of features are personal features considered antecedents of performance. The Certificate is based on a three-step examination with respective appropriate examination formats in relation to exam content: Online test(focused on the specialist and methodical knowledge relevant for career guidance counselors), Assessment centre (focused on transversal skills, see a definition below), Written paper focused on theory of educational counselling and career guidance). There is also a Self Assessment-Tool for checking counsellor competences and skills and identifying deficits.

In MEVOC the features that are assessed are:

- *Skills* (i.e. Having the skills to motivate clients or Being able to provide relevant information on specific fields of study/training. The reasons for the two different ways –having the skills and being able are not clear)
- *Knowledge* (Knowledge of formal and informal job application processes)
- *Attitudes* (i.e. Not being afraid of new experiences or changes)

These features, called competence standards, amounts to 35 and are grouped under four main categories: **Education and Career, Counselling Practice, Personality, ICT-Skills**. The Certificate confirms the fulfillment of the quality standards independent of how they were acquired.

2.5 THE NVQS FOR ADVICE AND GUIDANCE

NVQ 3 Advice and Guidance has been developed by Employment NTO, an English organization in charge of developing and maintaining the UK National Occupation Standards for Career Guidance. The framework allows to get an award in Advice and Guidance at several levels of expertise.

The Process and Elements of the assessment

According to ENTO (2006) the assessment should be focused on evidence resulting from main tasks the candidate carries out in their normal workplace role. The choice of the methods for assessment is up to the evaluator. Rather than taking an element by element approach, looking at each of the performance criteria in turn, the assessor encourages candidates to use evidence across as many activities and elements of NVQ as possible. A Functional Map describes the broad work activities that take place across an occupational sector. It describes these work activities in general terms to build up a picture of the type of work that is carried out by individual members of staff. The purpose of an Occupational Map is to identify accepted, broad job roles at all levels (of seniority) within the sector.

ENTO (2006) lists 30 elements (tasks). During the assessment, depending by the NVQ level, some elements are compulsory, some others optional and can be chosen by the candidate. Within each task the required standards of performance and related knowledge and skills for that activity are described in the form of outcomes of effective performance and statements of required knowledge and understanding. Some standards also feature a range of typical behaviours underpinning effective performance. For assessment purposes, each of them is divided in several sub elements (subtasks) with a tree roots structure. Assessment is carried out based on assessment methods agreed with candidate. Usual means are direct observation of the person whilst carrying out his/her work, professional discussion, testimonies from colleagues and supervisors, examination of documentation produced by the person whilst carrying out his/her work.

ENTO lists the following main assessment methods: **Direct observation, Professional discussion, Evidence from others, Questioning and Examination of products of a candidate's work activity**. There are five levels of NVQ ranging from Level 1, which focuses on basic work activities ('Competence that involves the application of knowledge in the performance of a range of varied work activities, most of which are routine and predictable'), to Level 5 for senior management

(Competence that involves the application of a range of fundamental principles across a wide and often unpredictable variety of contexts.

The assessor works in cooperation with a supervisor (Internal verifier) based on the Assessment Centre. External verifiers, employed by the awarding bodies, can review the activity of the Assessment Centres.

2.6 OVERVIEW OF THE METHODOLOGIES FOR ASSESSING COMPETENCE

Taking into consideration the existing guidelines and frameworks that mentioned above, we'll try to get an overview of the main aspects of the process, the methodology and the assessment elements.

Talking about digital and immersive teaching methods, it is obviously that we are dealing with a complex, communicative, highly embedded social service that requires recent and actual knowledge from different fields as well as very fundamental knowledge about communication processes. As discussed in professionalization theory (Mieg, 2005; Singer/Ricard, 2009), such kind of professional tasks require competence that is developed in a long and intensive period of learning – whether formal or informal, while formal learning without practical experience and reflection never can be sufficient. Considering this, the methodology being exerted has to fit into such kind of professional competences.

Thus the methods used in validation of competences and prior learning should fulfil certain criteria such as:

- **validity**: the tool must measure what is intended to measure,
- **reliability**: the extent to which identical results would be achieved every time a candidate is assessed under the same conditions,
- **fairness**: the extent to which an assessment decision is free from bias (context dependency, culture and assessor bias,
- **cognitive range**: does the tool enable assessors to judge the breadth and depth of the candidates learning (or competence),
- **fitness for purpose of the assessment**: ensuring the purpose of the assessment tool matches the use for which it is intended” (CEDEFOP, 2009).

It should be mentioned that the way competence is developed and can be shown by an individual can't be standardised. It is evident, that competence is a combination of knowledge, skills and also emotional and motivational aspects in certain actions. To take this fact into account, validation has to include methods that allow the observation of performance rather than for instance just a self-rating on the bases of competence catalogues. Useful methods for validating competencies and especially teachers/trainers' competencies are:

- **debate**: offers the candidate an opportunity to demonstrate depth of knowledge as well as communicative skills;
- **declarative methods**: based on individuals' own identification and recording of their competences, normally signed by a third party, to verify the self-assessment;
- **interviews** (BEI and PFI): can be used to clarify issues raised in documentary evidence presented and/or to review scope and depth of learning;
- **observation**: extracting evidence of competence from an individual while they are performing everyday tasks at work;
- **portfolio**: using a mix of methods and instruments employed inconsecutive stages to produce a coherent set of documents or work samples showing an individual's skills and competences in different ways.
- **presentation**: can be formal or informal and can be used to check ability to present information in a way appropriate to subject and audience;
- **simulation and evidence extracted from work**: where individuals are placed in a situation that fulfils all the criteria of the real-life scenario to have their competences assessed
- **tests and examinations**: identifying and validating informal and non-formal learning through or with the help of examinations in the formal system.

For the Validation of VET teachers and trainers who adopt digital and immersive teaching methodologies different types of validation-methods should be distinguished in different categories to discuss their purpose, strengths and weaknesses more clearly.

- Methods Type A: Presentation
- Methods Type B: Self and peer Assessment
- Methods Type C: Performance oriented methods

In the process of validation methods of all type can be used and combined. Of course each methodology has its own strengths and weaknesses. In respect of competence theory it came out that methods "type B" enables deeper insight into the operators competence than from "type A", and as well "type C" enables deeper insight than "type A" and "type B". It is recommended, that just methods from type C allow a concrete and valid judgment whether a person is able to perform a certain competence in accordance to a given task (within a certain setting and under given environmental conditions).

Approaches based on assessment of performance proved to be the most reliable based on direct observation or reconstruction of performance, while the others are indirect, based on possession of antecedents that are only probabilistically related to performance. Possession of qualifications and experience are useful shortcuts for a first screening of applicants, but don't suffice for identifying competent workers. Frameworks based on possession of personal features proved to be more mistake prone rather than those based on performance. After reviewing the existing frameworks and guidelines for assessing competence, it comes up that **performance based methodology is proved to be more efficient and on this methodology we are going to focus for the development of our pathway/device.**

Third Section

The PFI Methodology

3.1 THE ELEMENTS FOR ASSESSMENT

In order to go on a validation of competence of operators, we should draw up a list of elements the successful Candidate has to possess or master to achieve validation and a specification of the desired level of attainment of each element. The elements of our assessment will be based on the results of the job analysis that will be carried out in Output 2 *where there will be defined the tasks that are performed in a operators' role. The actions will be identified drawing a flowchart describing how a job is carried out and this way main tasks, tasks and sub tasks are described as a tree root, where combination of simpler actions allow to carry out the more complicate. The job analysis will also allow identifying a hierarchy of tasks, from the most important and general (main tasks) to the minor ones (tasks and sub tasks).* Therefore, in Output 2 there will be described the profile of the Experts in digital and immersive teaching for vocational training. The profile of the expert will be described in terms of key activities/ competences that are common despite the national specificities. For each key activity, there will be defined as well the knowledge and skills, the expert should master in order to obtain qualification.

Our pathway will have a tree root format. It will be consisted of key elements – the basic key activities categorised in several factors- and for each key element, there will be sub – elements, for example the skills and knowldedge that will be needed for each key element, taking into consideration the weight of each key element/activity.

To take an idea, the PFI will be constructed in a way to evaluate the job of an expert in four phases: **1 - Planning of digital VET Teaching process, 2 - Implementation of digital VET Teaching process, 3 - Evaluation of digital VET Teaching process and 4 - Involvement of students and parents in digital VET Teaching process.** Then for each phase there will be questions on how the expert operates the **key activities** of the phase. To make the right questions for each key activity we will focus on the **main actions** and futhermore on the **Knowledge** Required, the **Specific Skills** Required and the **Transversal Skills**.

3.2 TOOL FOR EVALUATION – THE PFI AND SCORING

The tools for collecting evidence related to personal features are numerous, but as our goal is to evaluate performance on the job we will use mainly the **PFI Performance Focused Interview** (the evidence being the answers to the questions of the interviewer).

The PFI can be defined as *a standardized structured professional discussion*, that is to say *an interview conducted between an assessor and candidate (assessed person), in which the candidate describes his/her job tasks and how his/her performance achieves requirements set by standards. In PFI the questions are focused on specific predetermined aspects of performance and all the candidates are asked the same list of questions. However the assessor may ask additional questions for clarification or a better understanding.* In PFI, the evidence are the answers given by the candidate for validation. For each question there will be given the criteria to be considered “under the cut off point”, that is to say, the criteria describes when the level of mastery or behaviour of the Candidate is below the standard, so as all the evaluators use the same format for interview and scoring as well. Referring to the scoring system it should be noted that scoring can be very subjective, that’s why **we should standardize as much as possible the judgment of the different evaluators**, by using a common blueprint, by making evaluation criteria explicit and using cut off questions. A score will be given to each element. The evaluator will inform the participant that he/she will stop the participant answering when he/she is satisfied with the answer. For every element the Evaluator will give a ‘sufficient’ or ‘insufficient’ mark explaining the reason for it. The scale we could use a 3-likert scale: a score between 1 to 3 is given to each applicant. 3 means the evidence collected gives ‘full reliability’ about the capability of the candidate in the main task chosen; 2 means ‘medium reliability’, 1 means ‘low reliability’ about the capability of the candidate. Candidates scoring 1 cannot be accredited.

Score	Meaning and criteria
N/A	Not applicable: Candidate doesn't work in that field
1	not met: Candidate under the cut off in 1 question of the element
2	met: when Candidate is convincing about performance but cannot explain clearly embedded theory and principles
3	very good: when Candidate is convincing about performance and

	can explain clearly embedded theory and principles
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To be successfully validated, the Candidate must give answers above the cut off levels for all the questions within all elements, that is to say that if in one question of one element is under the cut off then the validation of the related main task is considered unsuccessful, as the elements of the PFI are considered fundamental and compulsory for a performance up to the standard in each main task.

3.3 PROCEDURE OF VALIDATION/THE ASSESSMENT PROCESS

In shaping the procedure of the validation we have to consider that **in validation it is necessary to find a good compromise between efficacy and weight of the assessment procedure**. A procedure may be very effective but if it requires significant dedication of time and economic resources it will have minimal possibility to become established and widely implemented. On the other hand, a procedure which requires little time, but is less effective also presents the weakness of minimal utility.

In our case the procedure we propose consists of **three steps: Information of the Candidate, Interview 1 and Interview 2.**

The detailed procedure will be explained in the following sections, but now we can give a general idea about the PFI process:

1. The candidate apply for the evaluation.
2. The Evaluator comes in contact with the Candidate to agree on the timing of the PFI and gives the Candidate additional information on the process.
3. Interview 1: the Evaluator interviews the Candidate on the elements following a Blueprint of questions. One additional evaluator can participate for better evaluation. At the end of Interview 1 the Evaluator sends the Candidate an additional self-assessment questionnaire and asks him/her to assess him/herself in no more than one day.
4. The Candidate sends to the Evaluator the self-assessment questionnaire.
5. The Evaluator examines the Questionnaire filled by the Candidate, adding his/her scores and comments together.
6. Interview 2: Evaluator and Candidate discuss the results of interview 1 and compares the Evaluator's questionnaire with the self-assesment questionnaire.

The interviews should be conducted face to face, but if it's impossible to meet in person the candidates the interviews can be counductet by Skype. In this case, the annexes will be filled in and signed by Evaluator and Candidate and sent by e-mail.

3.4 THE EVALUATORS

The evaluators play a really important role in the evaluation process. That's why the evaluators must:

- be **appropriately trained** for the validation process and possess a thorough working experience of the main tasks they are assessing.
- declare any possible **conflict of interest** and must withdraw themselves from any assessment in which impartiality and confidentiality cannot be assured.
- be **familiar with the validation process** (validity and reliability);
- have **no personal interest** in the validation outcome (to guarantee impartiality and avoid conflicts of interest);
- be **familiar with different assessment methodologies**;
- be **able to inspire trust** and to create a proper psychological setting for the candidates;
- be **knowledgeable about quality assurance** mechanisms (CEDFOP, 2009: 68).

The quality assurance system of the validation procedure has to include **professional supervision** among the evaluators and the sharing of their experiences with other evaluators for learning purposes. In each assessment, we could use two evaluators, or we could record the assessment interview and a second evaluator could review the scoring of those elements where the score is 2.

The role of an evaluator is to:

- Carry out the PC according to the procedure
- Examine the feedbacks of the Candidates on the PC (including on the Assessors' behavior and expertise)
- *help the Candidate to draw a Plan for Improvement*
- Keep a register of Candidates and PFI results of every Candidate

3.5 THE PFI

The pathway to be implemented within the project aims to describe the procedure/pathway for the assessment and self-assessment of the VET teachers and trainers who adopt digital and immersive teaching methodologies.

It is a document/guideline that describes assessment methodology and tools and defines how to build up the analysis process, which evidence is to be collected, which tools must be used, how to assess the evidence, how to train and supervise evaluators and so on.

The pathway implemented within the project will allow to assess VET teachers and trainers' competences by adopting a PERFORMANCE- BASED approach. In fact, validation aims to guarantee that VET teachers and trainers who adopt digital and immersive teaching methodologies carry out their tasks according to an optimum pre-defined level, meaning that validation is focused on performance.

The main tool selected for the collection of evidence showing the good command of job tasks is the **Performance-Focused Interview – PFI**.

PFI is a structured Professional Discussion in which all VET teachers and trainers must answer the same questions focused on pre-defined aspects of the work experience.

In the following units there will be presented the process of producing the interview, the blueprint of questions, the handouts to candidates, the evaluation form and the self-assessment instrument.

A detailed procedure will be presented and there will be described:

- the tools that will be used in order to collect the evidences of PFI (tables, annexes, etc..)
- the formulas that will be adopted in order to calculate the scoring of PFI, the comparison between external and self-evaluation, etc..
- the general criteria adopted in order to establish the final results
- some examples in order to make easier the realization of testing phase.

This output represents the second and final version of the device, elaborated according to the results of testing phase carried out by all partners, that gave us the possibility to improve the tools

used in order to conduct a Performance Focused Interview. The summary of all collected feedbacks and the recommendation for improvements are summarizing in the following sections.

3.5.1 PILOT TESTING AND FEEDBACK

All partners carried out the pilot testing of PFI, as foreseen in the project, and so we have gathered the main outcomes and participants' comments of the pilot testing carried out in each partner country and we obtained the following information:

ITALY:

Involved Target groups: VET teachers, VET trainers and experts in digital and immersive teaching

Number of involved people: 35

Feedback of participants:

Italian participants declared that the PFI (Performance Focused Interview) could be a very useful tool for the evaluation and the assessment of the teachers using digital and immersive tools in VET System, because it is based on the actual performances that the worker carries out in his daily job. Moreover, the time dedicated to the interviews help the teacher/trainer/expert to reflect upon his work and his attitude towards the training beneficiaries. Additionally, it is a way to think about the teacher/trainer/expert's personal skills and the instruments and tools offered by the VET System. The main problems that they noticed are:

- The questions of PFI and self assessment have to be explained because sometimes they are not clear for everyone;
- The structure and order of the questions could be improved
- The duration of the interview is too long;
- It was very time-consuming to collect the data.

POLAND:

Involved Target groups: VET teachers, VET trainers, experts in digital and immersive teaching for VET

Number of involved people: 30

Feedback of participants:

Polish participants of the competence and self-assessment study of experts in digital and immersive teaching in the field of vocational education positively assessed the PFI (Performance Focused Interview) questionnaire presented to them. They found it as a useful tool for assessing and evaluating the level of knowledge and experience of teachers and trainers using digital and immersive tools in the field of VET training. The questionnaire is extensive in its structure, which was assessed both positively and negatively. It is based on practical experience gained in the daily work of VET teachers and trainers.

An additional advantage of the questionnaire is that it gives the VET teachers and trainers the opportunity to evaluate their work so far and to consider if it corresponds to the real needs and expectations of VET training participants. It also allows to assess whether the tools, techniques and teaching methods used by the teacher / trainer are properly matched to the specificity of the training and its participants.

However, the main disadvantages of the questionnaire are:

- unclear, incomprehensible structure
- incomprehensible abbreviations used
- incomprehensible purpose of some questions
- too many questions, too long questionnaire
- it takes too long to complete the whole questionnaire
- the structure of the last part has to be improved – it is not logical.

SLOVENIAN:

Involved Target groups: VET teachers, VET trainers and experts in digital and immersive teaching, teachers of the practice,...

Number of involved people: 30

Feedback of participants:

The PFI tool (Performance-Focused Interview) was generally well received by a group of respondents. Emphasis was placed on VET teachers who use digital and interactive tools and methods in their daily teaching process and are motivated to acquire new knowledge and advance in the teaching process.

The following is a summary of important information obtained from the surveyed teachers regarding PFI..

- It is important to get a full overview of the teaching process - from the preparation phase to the implementation process and the final self-assessment.
- In terms of final (self)assessment and / or (self)evaluation, the tool was well received; monitoring the level of improvement by repeating the interview at the end of each school year or even twice a year,
- Can be used (in part or in full) as a tool in the annual interview with your Head at work or in any other similar case
- Wide range of applications in different fields of education or educational topics. The questions are not so specific and can be easily adapted.

Below we have given some challenges that we were able to identify through conducting interviews:

- Due to open questions, the interview process can be time consuming.
- For those who did the research, the data collection process takes too much time.
- The last set of questions regarding family communication and integration may be too much to cover the essence of the interview; It's more about philosophy.
- Such tools already exist and are more focused on the individual as well as the school level (SELFIE tool...).
- Some issues are very similar, while others are not clear enough. There are also questions that have a wide range of possible answers, making it difficult to give a proper assessment.

SPAIN:

Involved Target groups: VET Teachers, VET Trainers and Experts in Digital and Immersive Teaching for VET.

Number of involved people: 30

Feedback of participants:

The Spanish respondents have given positive feedback regarding this tool (Performance Focused Interview -PFI- tool).

VET teachers who are making use of some digital tools in their daily work have participated.

Regarding the opinions of the respondents, we can summarize them as follows:

- A self-assessment tool is considered useful for improving the digital skills of VET teachers.
- It can serve to personalize teaching through digital tools with respect to the educational needs of their students.
- It can also be used to evaluate the work they usually do with respect to teaching their students using digital tools.
- Regarding the questionnaire, there was a majority of the respondents who considered that it was too long, which led to the use of too much time to fill it out.
- The range of responses to some questions is too wide to have to concentrate on a few alternatives.
- It is necessary to improve the wording of some questions that are ambiguous.
- The self-assessment process and the calculation of the score should be simplified since it has been somewhat complex.

In general, the opinions are positive regarding the development of a self-assessment tool but, on the contrary, the majority opinion is that the length and, therefore, the time dedicated to completing the tool should be reduced and more should be done. Easy to calculate the score.

PORTUGAL:

Involved Target groups: VET teachers, VET trainers and experts in digital and immersive teaching

Number of involved people: 33

Feedback of participants:

The Portuguese participants considered that the PFI (Performance Focused Interview) can be a very useful and important method to increase the effectiveness and the evaluation, and the assessment of the teachers using digital and immersive tools in VET System and contribute to a greater efficiency in training and assessment. The teachers had the opportunity to reflect on topics, such as:

- Digital learning establishes a new mindset: digital tools and skills.
- The learning process becomes more time efficient.
- Teachers can better personalize learning to the needs of individual students.
- Tries to understand how each candidate can add value in the future.

Portuguese teachers recognize the importance of differentiated instruction, however had some difficult and identified some main problems, specially:

- The time dedicated to the interviews is too long.
- The questions of PFI and self-assessment are not clear. Most of teachers considered complex and unintuitive questions.

In many cases, many reflection questions. This process required a lot of time explaining and consequently lot of time to collect the data.

3.5.2 RECOMMENDATION FOR IMPROVEMENT

According to the feedbacks collected by all involved participants in all partner countries, we are now able to declare that the PFI device and the tools planned by DIGITAL.VET partnership are considered very useful for the evaluation and the assessment of the VET teachers and trainers who adopt digital and immersive teaching methodologies, but, in order to make easier the process, it needs that the evaluators adopt some specific recommendations when he/she has to conduct an interview.

We noticed that all partners collected very similar feedbacks from participants they involved in testing phase, that we can summarize as follow:

1. The questions of PFI (both external and self evaluation) sometimes are difficult to understand
2. The structure and order of the questions should be more flexible and adaptable
3. It needs to identify the participants' profession and/or job field before starting the interview
4. The questionnaire is too long because many questions are not applicable

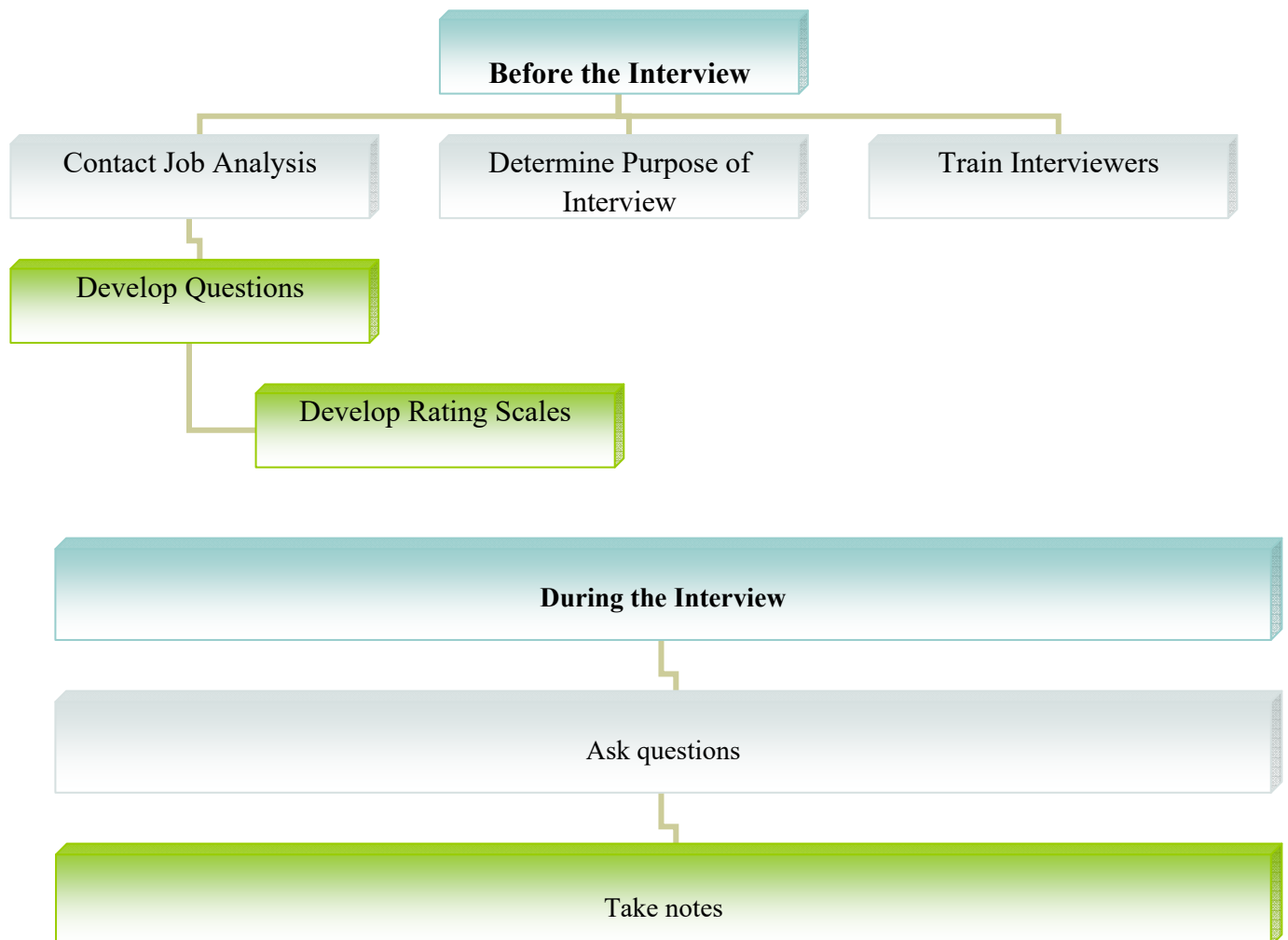
So, recommendation that the interviewers/evaluators have to follow during the PFI process are the following:

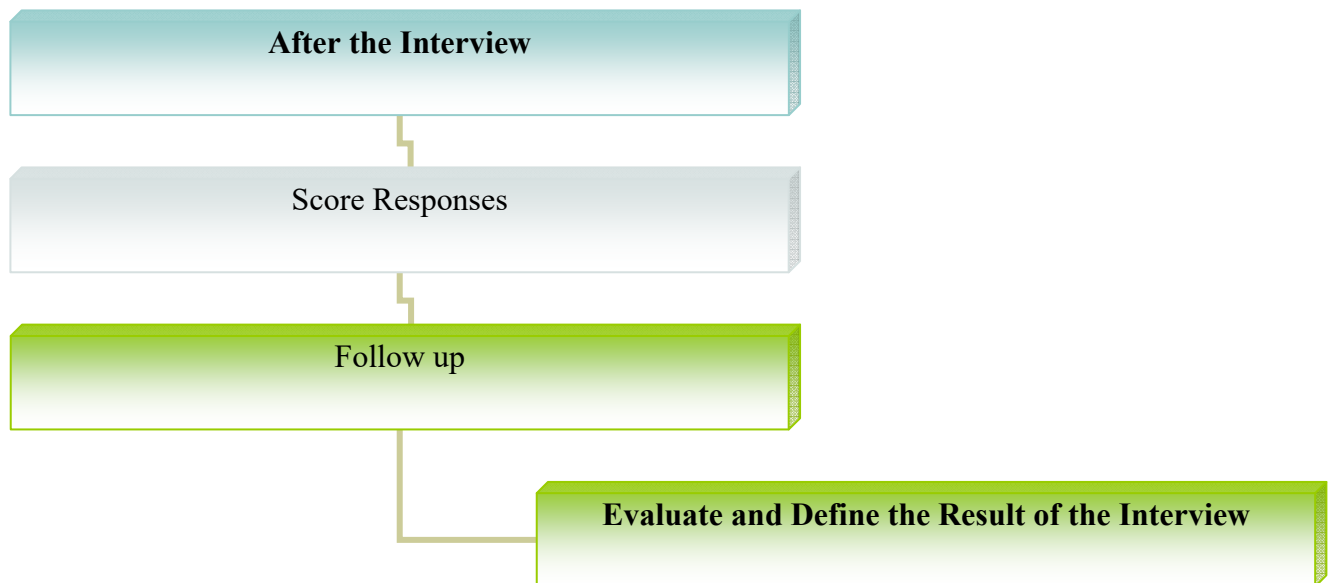
1. The interviewer/evaluator has to re-phrase and explains the questions to the participants. He have to be sure that participants perfectly understood the meaning of the questions, so the PFI questions (Annex A) has to be considered as a general guide in order to conduct the interview. Moreover, the perfect place where PFI should be conducted is the participants' working place. In this case, the evaluator should only observe the participants and give him an evaluation on the basis of his working performance. If the direct observation is not possible, the evaluator has to assist the participants both during the external and self evaluation, in order to better explain the questions.
2. The interviewer/evaluator can change the order and the structure of the PFI interview according each specific situation. The final aim is to evaluate working performance of the participants, so it doesn't matter the order that the evaluator chooses to follow, it's important that all activities connected to the participants' job are verified and evaluated.

3. If the interviewer/evaluator knows the participants' job field (and so he indicates as N/A some questions) and if he is able to evaluate them through the observation on their working place, the PFI will be not a long procedure.

3.5.3 THE INTERVIEW PRODUCTION PROCESS

In order to product the Performance Focused Interview, we followed several steps, according to the following schema.





3.5.4 THE PFI QUESTIONS

Activity Phase: 1 - Planning of digital VET Teaching process				
WPKA	QUESTIONS	SCORING		
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1. Do you know at least two digital technology tools for teaching?	01.	N/A	1 2 3
	2. Can you use at least two digital technology tools and devices that support learning?	02.	N/A	1 2 3
	3. Could you list two improvements to learning provided by digital tools and devices?	03.	N/A	1 2 3
	4. What digital tools, devices and resources can be you use in immersive teaching?	04.	N/A	1 2 3
	5. Do you know at least two resources that can be used in immersive teaching?	05.	N/A	1 2 3
KA 2 - Definition of objectives to be achieved for students	6. Do you know at least three learning objectives?	06.	N/A	1 2 3
	7. Could you adopt methodologies or tools for the definition of students objectives ?	07.	N/A	1 2 3
	8. Could you adopt methodologies to determine what students want to know or do by the end of the course?	08.	N/A	1 2 3
KA 1 - Definition of the studies program and of the educational path of the students: needs analysis	9. How does the role of technology change the teaching learning environment? Reflect and give examples	09.	N/A	1 2 3
	10. Which needs do you analyse for defining the use of technologies to support learning and teaching?	10.	N/A	1 2 3

	<p>11. Could you list at least two improvements provided by digital tools in the teaching processes, from curriculum preparation?</p> <p>12. Which are the best content areas to be used for the immersive teaching? Reflect and give examples</p> <p>13. In your opinion, how assessment will improve teaching/learning and methodology in classrooms? Reflect and give examples</p>	<p>11. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/></p> <p>12. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/></p> <p>13. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/></p>
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Activity Phase: 2 - Implementation of digital VET Teaching process		
WPKA	QUESTIONS	SCORING
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	1. Do you know at least two tools to create an effective educational video?	01. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
	2. Which are the specific resources where you can find information about preparation of video lessons and exercises related with Immersive teaching? Reflect and give examples	02. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
	3. Which tools and exercises are most useful for the training cycles or field of studies you provide and why? Reflect and give examples	03. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
	4. Which improvements to the teaching/learning process can be provided by interactive video technology?	04. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
	5. Do you know at least two Immersive exercises and tips for the preparation of video	05. <input type="text" value="N/A"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>

	lessons?													
KA 7 - Organization and implementation of targeted activities and pathways, management of learning progression	<div>6. Could you list at least two improvements provided by digital tools in the teaching processes, from implementation in the classroom?</div> <div>7. How do you plan to manage, teach and model digital and immersive skills during the learning process? Reflect and give examples</div> <div>8. Which data dashboards are available in the technology tools and applications you use to help plan assessments for students with different learning needs? Reflect and give examples</div>	<div>06. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div> <div>07. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div> <div>08. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div>	N/A	1	2	3	N/A	1	2	3	N/A	1	2	3
N/A	1	2	3											
N/A	1	2	3											
N/A	1	2	3											
KA 5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	<div>9. Which improvements to the learning experience and the know how of the students, can be provided by immersive learning tools?</div> <div>10. What additional supports or resources are available for students to address any learning loss that may have occurred and to mitigate future learning loss? Reflect and give examples</div> <div>11. Do you know at least two methodologies to metegate problems related to the low access to digital devices of your students?</div>	<div>09. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div> <div>10. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div> <div>11. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></div>	N/A	1	2	3	N/A	1	2	3	N/A	1	2	3
N/A	1	2	3											
N/A	1	2	3											
N/A	1	2	3											

Activity Phase:								
3 - Evaluation of digital VET Teaching process								
WPKA	QUESTIONS			SCORING				
KA 8 – Monitoring, verification and evaluation of the results achieved by students	1.	Do you know at least two tools to monitor the efficacy of the personalized learning paths?		01. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3				
	2.	What are the subjects you usually consider within your monitoring activities?		02. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3					
3.	How do you monitor the feedback and assess student in progress? Reflect and give examples		03. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3					
KA 9 - Drafting final evaluation of students	4.	Do you know at least two tools to evaluate immersive teaching and what are the methodologies?		04. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3				
	5.	In case of referral how do you ensure that all students achieve the learning outcomes? Reflect and give examples		05. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3					
6.	Do you know at least two tools to evaluate that studentsare able to use what they have learned in a new situation?		06. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3					

Activity Phase:								
4 - Involment of students and parents in digital VET Teaching process								
WPKA	QUESTIONS			SCORING				
KA 6 - Involve students in the learning process	1.	How might you support your students full participation at home? Reflect and give examples		01. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3				
2.	In case of dropout, do you know at least two additional supports or resources to re-		02. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3					

	engage students in learning path?					
	3. Do you know at least two methodologies to support students, parents, and families when they are stuck with classwork?	03. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3			
KA 10 - Information and involvement of parents	4. In a digital learning environment, what tools and resources can help you plan effective communications with parents and families? Reflect and give examples	04. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
	5. How can you intentionally plan positive messages to parents and families, ensuring we are not only communicating when there is an issue or problem? Reflect and give examples	05. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
6. Do you know at least two tools to track communications to—and responses from—parents and families?	06. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3			

3.5.5 HANDOUT TO CANDIDATES BEFORE THE INTERVIEW

Before the interview, the candidates could be given the following handouts:

1. “We are going to ask you questions about your experiences and qualifications and how you deal with various situations.
2. The questions of the interview have been designed to assess the competencies needed to succeed in the position of a VET teacher and trainer who adopts digital and immersive teaching methodologies
3. All applicants will be asked the same questions and will be evaluated against the same criteria. After you have given your response, interviewers may ask you follow-up questions to clarify any points in your answer.
4. In answering the questions, you may describe work situations and how you handle them.
5. We would like you to tell us what you did in each situation, even if it was a team effort.
6. In response to each question, you should be as specific and detailed as possible in describing the situation or problem, what you actually did, what you thought about, wanted, or felt, who was involved, what your contribution was, and what the outcome or result of your actions were.
7. Once we have finished with all the questions, you will be given a self assessment questionnaire which you have to fill in, so as for you to have the chance for self reflection and in a second step for comparing the results”.

3.5.6 COMPARISON OF RESULTS OF EVALUATION AND SELF- ASSESSMENT

At this point we want to find out the relationship between the response options that each assessor assigned in the respective key activities with the response options that teachers and trainers assigned in these same key activities

In order to compare the external and self-evaluation, a Comparison coefficient will be calculated, will be used in order to analyze the obtained results. The value of "Comparison coefficient" can express a weak or high relation between the evaluators' evaluation and the candidate's opinion, according to the following criteria:

☞ $CC = (-1,5 > - 2)$ or $(1,5 > 2)$ Translated by a weak relationship;

☞ $CC = (-0,5 > - 1)$ or $(0,5 > 1)$ Translated by a moderate relation;

☞ $CC = (-0,4 > 0,4)$ Translated by a high relation

3.5.7 THE EVIDENCE OF THE PFI PROCESS

Summarizing the process that will be done and the evidences that we should collect in order to realize an optimum PFI process, we can say that:

1. The PFI starts with **Interview n. 1**. In this interview there will be assessed the following elements according to the Phases that came up from O2.

PHASES
<p align="center">Phase 1 - Planning of digital VET Teaching process</p> <p align="center">Elements</p> <p>KA4 - Selection of tools and devices needed for digital and immersive teaching</p> <p>KA2 - Definition of objectives to be achieved for students</p> <p>KA1 - Definition of the studies program and of the educational path of the students: needs analysis</p>
<p align="center">Phase 2 - Implementation of digital VET Teaching process</p> <p align="center">Elements</p> <p>KA3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes</p> <p>KA7 - Organization and implementation of targeted activities and pathways, management of learning progression</p> <p>KA5 - Transfer of know-how to students for the correct use of digital and immersive learning tools</p>
<p align="center">Phase 3 - Evaluation of digital VET Teaching process</p> <p align="center">Elements</p> <p>KA8 – Monitoring, verification and evaluation of the results achieved by students</p> <p>KA9 - Drafting final evaluation of students</p>
<p align="center">Phase 4 - Involvement of students and parents in digital VET Teaching process</p> <p align="center">Elements</p> <p>KA6 - Involve students in the learning process</p> <p>KA10 - Information and involvement of parents</p>

2. During this interview, the evaluators have to **analyze the work activities** of evaluated teacher/trainer, by doing an observation of each key activity that he does in order to carry on his job. The document that the evaluator should use when he realizes this analysis is the already shown document **"THE PFI QUESTIONS"**. In this documents, all key activities individuated and classified thanks to our IO2 are listed. For each key activity, this document foresees a list of questions that the evaluators have to do in order to understand wich is the level of skills and competences owned by the evaluated teacher/trainer. This document also foresees the cut off points, that can help the evaluators in their analysis. It is necessary because **this kind of evaluation could be very subjective and only the creation and the adoption of a common blueprint gives us the possibility to make the PFI a "mathematical" evaluation.**

For each question of each key activity a cut off point is foresees.

For example:

WPKA	QUESTIONS	CUT OFF POINTS
KA6 - Involve students in the learning process	<ol style="list-style-type: none"> How might you support your students full participation at home? Reflect and give examples In case of dropout, do you know at least two additional supports or resources to re-engage students in learning path? Do you know at least two methodologies to support students, parents, and families when they are stuck with classwork? 	<ol style="list-style-type: none"> Cannot give any example Cannot mention any situation or the way he/she said that handled the situation is not convincing Cannot list at least two additional support Cannot list at least two methodologies

3. The evaluators have to **allocate a score to each question foreseen for each key activity.**

PFI methodology foresees that each key activity has to be evaluated thank to the analysis of single question/performance that should allow the evaluator to understand which is the level of competence that the evaluated operator owns concerning that specific key activity. It also foresees that the evaluators have to allocate a precise score (from 1 to 3) to each evaluated question/performance, by filling in the **ANNEX A - INDIVIDUAL EVALUATION FORM**. The allocation of scores will be done following the following scoring system:

- **score N/A: Not Applicable**
- **score 1: not met.** Candidate under the cut off in 1 question of the element
- **score 2: met.** when Candidate is convincing about performance but cannot explain clearly embedded theory and principles
- **score 3: very good.** when Candidate is convincing about performance and can explain clearly embedded theory and principles

The allocation of scores has to be done for each question of each key activity. For example:

WPKA	QUESTIONS	SCORING				
KA6 - Involve students in the learning process	1. How might you support your students full participation at home? Reflect and give examples	01. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
	2. In case of dropout, do you know at least two additional supports or resources to re-engage students in learning path?	02. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3			
3. Do you know at least two methodologies to support students, parents, and families when they are stuck with classwork?	03. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3			

4. The evaluators have to do a **summary of all allocated scores for each key activity.**

PFI is an evaluation that refers all key activities individuated within the profile of the Expert in Digital and Immersive Teaching for Vocational Training. It means that evaluators have to allocate scores from 1 to 3 to each foreseen question/performance for each foreseen key activity. The elaborated document foresees a different number of questions/performance to be evaluated for each key activity, and so, the final score obtained by each evaluated operator will be calculated according to the following formula:

n. of allocated scores for question 1 + n. of allocated scores for question 2
+ n. of allocated scores for question "N".

It means that for each key activity a maximum score will be foreseen, according to the number of questions that will be evaluated concerning that key activity. At the end of the PFI, evaluators have to do the sum of all allocated scores for each key activity and they have to fill in the following table, that is the final part of **ANNEX A - INDIVIDUAL EVALUATION FORM**:

For example.

If the evaluation done for Key activity n. 1 is the following:

WPKA	QUESTIONS	SCORING				
KA4 - Selection of tools and devices needed for digital and immersive teaching	1. Do you know at least two digital technology tools for teaching?	01. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
	2. Can you use at least two digital technology tools and devices that support learning?	02. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
	3. Could you list two improvements to learning provided by digital tools and devices?	03. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3			
4. What digital tools, devices and resources can be you use in immersive teaching?	04. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3			
5. Do you know at least two resources that can be used in immersive teaching?	05. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3			

evaluators have to do the sum of all allocated score:

WPKA	QUESTIONS	SCORING
KA4 - Selection of tools and devices needed for digital and immersive teaching	1	2
	2	3
	3	3
	4	2
	5	3
	TOT.	13
	AVERAGE (TOT. SCORE / N. OF QUESTIONS)	13/5 = 2,60

and finally they have to fill in the "Obtained score" table with the calculated result for KA4:

OBTAINED SCORE	
KA 4 (5 items x 3 max scoring)	13/15

Of course, the same process has to be done for all other evaluated key activities.

5. The evaluators have to **establish if the evaluated teacher/trainer passed the PFI.**

When evaluators calculate the obtained score for each key activity and fill in the foreseen table, they have to define the final result of PFI, by filling in the **ANNEX B - PFI RESULT**. According to the general principle in the field of evaluation, DIGITAL.VET partnership decided that the threshold that each operator has to reach in order to pass the PFI is **80%**. It means that if the evaluated teacher/trainer obtains at least 80% of maximum score for each key activity, assessors can evaluate successfully his performance within that specific key activity.

The result is linked to the single key activity: it means that if the operator reaches the threshold for KA1, but he doesn't reach it for KA2, evaluators will certify that he passed the PFI for KA1 and didn't pass the PFI for KA2.

In fact, if the PFI is used as final exam at the end of formal or not formal learning, it's possible to link each key activity to a fixed number of ECVET points (according to the duration of learning path, the typology of learning outcomes etc..). In this case, the evaluators can allocate to the evaluated teacher/trainer just the ECVET points foreseen for the key activities for which he reached the threshold.

In our case, the evaluators have to calculate if the score obtained by each operator reaches the threshold or not. In order to do this, they have to fill in the table "PFI RESULT".

Annex B: PFI RESULT (passed in case of 80% of results)

Activity Phase: 1 - Planning of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1.	15		<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 2 - Definition of objectives to be achieved for students	6.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	7.			
	8.			
KA1 - Definition of the studies program and of the educational path of the students: needs analysis	9.	15		<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	10.			
	11.			
	12.			
	13.			
TOTAL SCORE		39		

Activity Phase: 2 - Implementation of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	1.	15		<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 7 - Organization and implementation of targeted activities and pathways, management of learning progression	6.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	7.			
	8.			
KA 5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	9.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	10.			
	11.			
TOTAL SCORE		33		

+

Activity Phase: 3 - Evaluation of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 8 – Monitoring, verification and evaluation of the results achieved by students	1.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	2.			
	3.			
KA 9 - Drafting final evaluation of students	4.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	5.			
	6.			
TOTAL SCORE		18		

Activity Phase: 4 - Involvement of students and parents in digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 6 - Involve students in the learning process	1.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	2.			
	3.			

KA 10 - Information and involvement of parents	4.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	5.			
	6.			
TOTAL SCORE		18		

TOTAL SCORE (KA'S SCORES)	
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Evaluators' signatures: _____

In this table, they have to put, for each key activity, the sum of obtained scores (column B). Then, they have to compare the obtained score with the foreseen threshold (column C) and:

- if the obtained score is **higher than the threshold**, the result will be positive and the evaluators will put a cross on **YES**
- if the obtained score is **lower than the threshold**, the result will be negative and the evaluators will put a cross on **NO**

For example.

If evaluators know (according to the example before) that the "Obtained score" for KA1 is 12/15, they have to fill in the **ANNEX B - PFI RESULT** the section concerning the KA1 as follow:

Activity Phase: 1 - Planning of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1.	15	...	<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 2 - Definition of objectives to be achieved for students	6.	9	...	<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	7.			
	8.			

KA1 - Definition of the studies program and of the educational path of the students: needs analysis	9.	15	12	X YES if $B > 12$ (80% of 15) <input type="checkbox"/> NO if $B < 12$ (80% of 15)
	10.			
	11.			
	12.			
	13.			
	14.			
TOTAL SCORE		39		

Then, they have to do the sum of each score calculated for each key activity foreseen in each phase as follow:

PHASE	WPKA	SCORING
Activity Phase: 1 - Planning of digital VET Teaching process	4	
	2	
	1	
TOT.		

PHASE	WPKA	SCORING
Activity Phase: 2 - Implementation of digital VET Teaching process	3	
	7	
	5	
TOT.		

PHASE	WPKA	SCORING
Activity Phase: 3 - Evaluation of digital VET Teaching process	8	
	9	
TOT.		

PHASE	WPKA	SCORING
Activity Phase: 4 - Involvement of students and parents in digital VET Teaching process	6	
	10	
TOT.		

and put these results in the ANNEX B - PFI RESULTS - **section TOTAL SCORE of each phase:**

Activity Phase: 1 - Planning of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1.	15	---	<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 2 - Definition of objectives to be achieved for students	6.	9	----	<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	7.			
	8.			

KA1 - Definition of the studies program and of the educational path of the students: needs analysis	9.	15	---	<input type="checkbox"/> YES if B > 12 (80% of 15) <input type="checkbox"/> NO if B < 12 (80% of 15)
	10.			
	11.			
	12.			
	13.			
	14.			
TOTAL SCORE		39	---	

Finally, they have to calculate the sum of all obtained score as follow:

PHASE	WPKA	SCORING
Activity Phase 1 - Planning of digital VET Teaching process	4	
	2	
	1	
Activity Phase 2 - Implementation of digital VET Teaching process	3	
	7	
	5	
Activity Phase 3 - Evaluation of digital VET Teaching process	8	
	9	
Activity Phase 4 - Involvement of students and parents in digital VET Teaching process	6	
	10	
TOT.		

and put the calculated score in the following part of table "PFI RESULT" (the last part):

TOTAL SCORE (KA'S SCORES)

6. With this activity, **the first part of PFI process is complete.**
7. The second part of PFI starts soon after the first part, when the evaluators ask to the candidates to **fill in a self-evaluation questionnaire**, elaborating according to the **ANNEX C - SELF – ASSESSMENT INSTRUMENT**, in order to express their opinion about the level of performances that they think to own within each individuated key activity. So, for each key activity, they have to allocate to themselves a score from 1 to 3, according to the following criteria:

1: low performance

2: medium performance

3: high performance

In this case, no questions are asked in order to evaluate the key activities because teachers/trainers can't evaluate themselves in an objective way, so they have just to give a general opinion about their professional performances.

For example, in order to do a self evaluation of key activities concerning the Activity Phase 1 - Planning of digital VET Teaching process, they have to fill in the following table:

KA	SCORING				
KA 4 - Selection of tools and devices needed for digital and immersive teaching	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA2 - Definition of objectives to be achieved for students	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA1 - Definition of the studies program and of the educational path of the students: needs analysis	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		

6. In no more than one day, the candidates complete their self-evaluation and send it to the evaluators.
7. The evaluators have to do a **comparison between their external evaluation and candidates' self evaluation**.

This activity is very important, especially for the candidate, because it gives him the possibility to understand if he underestimates or overrates his professional performance. In order to compare the external and self-evaluation, a **Comparison coefficient will be calculated**, that will be used in order to analyze the obtained results. The value of "Comparison coefficient" can express a weak or high relation between the evaluators' evaluation and the candidate's opinion, according to the following criteria:

☞ Comparison Coefficient (CC) = Evaluator's score (average) - Candidate's score

☞ $CC = (-1,5 > -2)$ or $(1,5 > 2)$ Translated by a weak relationship;

☞ $CC = (-0,5 > -1)$ or $(0,5 > 1)$ Translated by a moderate relation;

☞ $CC = (-0,4 > 0,4)$ Translated by a high relation.

In order to analyze this comparison, evaluators have to fill in the following table:

<i>Element/ Units</i>	<i>Score (self- assessment) A</i>	<i>Score (Evaluation) B</i>	<i>CC coefficient</i>
Activity Phase: 1 - Planning of digital VET Teaching process			
KA4 - Selection of tools and devices needed for digital and immersive teaching			
KA2 - Definition of objectives to be achieved for students			

KA1 - Definition of the studies program and of the educational path of the students: needs analysis			
Activity Phase: 2 - Implementation of digital VET Teaching process			
KA3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes			
KA7 - Organization and implementation of targeted activities and pathways, management of learning progression			
KA5 - Transfer of know-how to students for the correct use of digital and immersive learning tools			
Activity Phase: 3 - Evaluation of digital VET Teaching process			
KA8 - Monitoring, verification and evaluation of the results achieved by students			
KA9 - Drafting final evaluation of students			
Activity Phase: 4 - Involvement of students and parents in digital VET Teaching process			
KA6 - Involve students in the learning process			
KA10 - Information and involvement of parents			

where they have to precise, for each key activity:

- the results of self-evaluation done by candidates (according to Annex C) in column A
- the results of PFI (according to Annex B) in column B
- the CC coefficient, calculated by using Bivariate Correlation of the SPSS software

8. In order to complete the PFI process, the evaluators meet again the candidate for **Interview n. 2**. During this interview, they discuss about the results of PFI and about the comparison between external and self-evaluation.

4. CONCLUSIONS

The PFI could be an useful evaluation System, in order to allocate a certificate/qualification/ECVET points after a non-formal or informal learning path.

The most important difficulties that we could find in the use of this device are the differences among the National or Regional Laws in the field of Identification, Validation, Certification and Recognition of Professional Qualification existing in the Partner Countries.

The " **PATHWAY TO COMPETENCE ASSESSMENT AND SELF-ASSESSMENT** " and its procedures have been tested, shared and validated during the development of Erasmus+ Project Digital.Vet. Then, after the end of the project, the results of the testing phase will be analyzed in order to understand the strong points of this procedure and the eventual problems.

The **added value** that will allow the achievement of project goals and the creation of a *Good Practice* is the individuation of a **Process for Certification and Recognition of competences** requested to the VET trainers and teachers who adopt digital and immersive teaching methodologies. This Process will represents an added value when the PFI will allow the allocation of ECVET Points, and so the recognition of Educational and Vocational Training credits.

ANNEXES

Annex A - Individual Evaluation Form

Candidate to be assessed:.....

Date of Interview:.....

Name of evaluator.....

Candidate's Signature

Evaluator's Signature

Candidate's job field

Give your marks to the elements that follow according to the following criteria:

Score	Meaning and criteria
N/A	Not applicable: Candidate doesn't work in that field
1	Not met: Candidate under the cut off in 1 question of the element
2	Met: when Candidate is convincing about performance but cannot explain clearly embedded theory and principles
3	Very good: Candidate is convincing about performance and can explain clearly embedded theory and principles

Activity Phase:						
1 - Planning of digital VET Teaching process						
WPKA	QUESTIONS	SCORING				
KA 4 - Selection of tools and devices needed for digital and immersive teaching	6. Do you know at least two digital technology tools for teaching?	01.	N/A	1	2	3
	7. Can you use at least two digital technology tools and devices that support learning?	02.	N/A	1	2	3
	8. Could you list two improvements to learning provided by digital tools and devices?	03.	N/A	1	2	3
	9. What digital tools, devices and resources can be you use in immersive teaching?	04.	N/A	1	2	3
	10. Do you know at least two resources that can be used in immersive teaching?	05.	N/A	1	2	3
KA 2 - Definition of objectives to be achieved for students	9. Do you know at least three learning objectives?	06.	N/A	1	2	3
	10. Could you adopt methodologies or tools for the definition of students objectives ?	07.	N/A	1	2	3
	11. Could you adopt methodologies to determine what students want to know or do by the end of the course?	08.	N/A	1	2	3
KA 1 - Definition of the studies program and of the educational path of the students: needs analysis	14. How does the role of technology change the teaching learning environment? Reflect and give examples	09.	N/A	1	2	3
	15. Which needs do you analysy for defining the use of technologies to support learning and teaching?	10.	N/A	1	2	3
	16. Could you list at least two improvements provided by digital tools in the teaching processes, from curriculum preparation?	11.	N/A	1	2	3
	17. Which are the best content areas to be used for the immersive teaching? Reflect and give	12.	N/A	1	2	3

	<p>examples</p> <p>18. In your opinion, how assessment will improve teaching/learning and methodology in classrooms? Reflect and give examples</p>	<p>13. <table border="1"><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table></p>	N/A	1	2	3
N/A	1	2	3			

Activity Phase:						
2 - Implementation of digital VET Teaching process						
WPKA	QUESTIONS	SCORING				
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	6. Do you know at least two tools to create an effective educational video?	01.	N/A	1	2	3
	7. Which are the specific resources where you can find information about preparation of video lessons and exercises related with Immersive teaching? Reflect and give examples	02.	N/A	1	2	3
	8. Which tools and exercises are most useful for the training cycles or field of studies you provide and why? Reflect and give examples	03.	N/A	1	2	3
	9. Which improvements to the teaching/learning process can be provided by interactive video technology?	04.	N/A	1	2	3
	10. Do you know at least two Immersive exercises and tips for the preparation of video lessons?	05.	N/A	1	2	3
KA 7 - Organization and implementation of targeted activities and pathways,	9. Could you list at least two improvements provided by digital tools in the teaching processes, from implementation in the classroom?	06.	N/A	1	2	3
	10. How do you plan to manage, teach and model digital and immersive skills during the learning process? Reflect and give examples	07.	N/A	1	2	3

management of learning progression	11. Which data dashboards are available in the technology tools and applications you use to help plan assessments for students with different learning needs? Reflect and give examples	08. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3			
KA 5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	12. Which improvements to the learning experience and the know how of the students, can be provided by immersive learning tools?	09. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3		
	13. What additional supports or resources are available for students to address any learning loss that may have occurred and to mitigate future learning loss? Reflect and give examples	10. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3			
14. Do you know at least two methodologies to metegate problems related to the low access to digital devices of your students?	11. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3			

Activity Phase:								
3 - Evaluation of digital VET Teaching process								
WPKA	QUESTIONS			SCORING				
KA 8 – Monitoring, verification and evaluation of the results achieved by students	7.	Do you know at least two tools to monitor the efficacy of the personalized learning paths?		01. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3				
	8.	What are the subjects you usually consider within your monitoring activities?		02. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3					
9.	How do you monitor the feedback and assess student in progress? Reflect and give examples		03. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3					
KA 9 - Drafting final evaluation of students	10.	Do you know at least two tools to evaluate immersive teaching and what are the methodologies?		04. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
	N/A	1	2	3				
	11.	In case of referral how do you ensure that all students achieve the learning outcomes? Reflect and give examples		05. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3					
			06. <table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3	
N/A	1	2	3					

	12. Do you know at least two tools to evaluate that students are able to use what they have learned in a new situation?	
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Activity Phase:						
4 - Involmt of students and parents in digital VET Teaching process						
WPKA	QUESTIONS	SCORING				
KA 6 - Involve students in the learning process	7. How might you support your students full participation at home? Reflect and give examples	01.	N/A	1	2	3
	8. In case of dropout, do you know at least two additional supports or resources to re-engage students in learning path?	02.	N/A	1	2	3
	9. Do you know at least two methologies to support students, parents, and families when they are stuck with classwork?	03.	N/A	1	2	3
KA 10 - Information and involvement of parents	10. In a digital learning environment, what tools and resources can help you plan effective communications with parents and families? Reflect and give examples	04.	N/A	1	2	3
	11. How can you intentionally plan positive messages to parents and families, ensuring we are not only communicating when there is an issue or problem? Reflect and give examples	05.	N/A	1	2	3
	12. Do you know at least two tools to track communications to—and responses from—parents and families?	06.	N/A	1	2	3

Annex A.1 - Obtained score calculation

Activity Phase 1 - Planning of digital VET Teaching process

WPKA	QUESTIONS	SCORING
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1	
	2	
	3	
	4	
	5	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 2 - Definition of objectives to be achieved for students	6	
	7	
	8	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 1 - Definition of the studies program and of the educational path of the students: needs analysis	9	
	10	
	11	
	12	
	13	
	TOT.	
	AVERAGE	

Annex A.2 - Obtained score calculation

Activity Phase 2 - Implementation of digital VET

Teaching process

WPKA	QUESTIONS	SCORING
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	1	
	2	
	3	
	4	
	5	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 7 - Organization and implementation of targeted activities and pathways, management of learning progression	6	
	7	
	8	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	9	
	10	
	11	
	TOT.	
	AVERAGE	

Annex A.3 - Obtained score calculation

Activity Phase 3 - Evaluation of digital VET Teaching process

WPKA	QUESTIONS	SCORING
KA 8 – Monitoring, verification and evaluation of the results achieved by students	1	
	2	
	3	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 9 - Drafting final evaluation of students	4	
	5	
	6	
	TOT.	
	AVERAGE	

Annex A.4 - Obtained score calculation

Activity Phase 4 - Involvement of students and parents in digital VET Teaching process

WPKA	QUESTIONS	SCORING
KA 6 - Involve students in the learning process	1	
	2	
	3	
	TOT.	
	AVERAGE	

WPKA	QUESTIONS	SCORING
KA 10 - Information and involvement of parents	4	
	5	
	6	
	TOT.	
	AVERAGE	

Annex B: PFI RESULT (passed in case of 80% of results)

Activity Phase: 1 - Planning of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 4 - Selection of tools and devices needed for digital and immersive teaching	1.	15		<input type="checkbox"/> YES if $B > 12$ (80% of 15) <input type="checkbox"/> NO if $B < 12$ (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 2 - Definition of objectives to be achieved for students	6.	9		<input type="checkbox"/> YES if $B > 7$ (80% of 9) <input type="checkbox"/> NO if $B < 7$ (80% of 9)
	7.			
	8.			
KA1 - Definition of the studies program and of the educational path of the students: needs analysis	9.	15		<input type="checkbox"/> YES if $B > 12$ (80% of 15) <input type="checkbox"/> NO if $B < 12$ (80% of 15)
	10.			
	11.			
	12.			
	13.			

TOTAL SCORE	39		
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Activity Phase: 2 - Implementation of digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	1.	15		<input type="checkbox"/> YES if $B > 12$ (80% of 15) <input type="checkbox"/> NO if $B < 12$ (80% of 15)
	2.			
	3.			
	4.			
	5.			
KA 7 - Organization and implementation of targeted activities and pathways, management of learning progression	6.	9		<input type="checkbox"/> YES if $B > 7$ (80% of 9) <input type="checkbox"/> NO if $B < 7$ (80% of 9)
	7.			
	8.			
KA 5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	9.	9		<input type="checkbox"/> YES if $B > 7$ (80% of 9) <input type="checkbox"/> NO if $B < 7$ (80% of 9)
	10.			
	11.			

TOTAL SCORE		33		

Activity Phase: 3 - Evaluation of digital VET Teaching process				
WPKA	QUESTIONS	<i>TOTAL SCORE (A)</i>	<i>OBTAINED SCORE (B)</i>	<i>RESULT Threshold = 80% (C)</i>
KA 8 – Monitoring, verification and evaluation of the results achieved by students	1.	9		<input type="checkbox"/> <i>YES if B > 7 (80% of 9)</i> <input type="checkbox"/> <i>NO if B < 7 (80% of 9)</i>
	2.			
	3.			
KA 9 - Drafting final evaluation of students	4.	9		<input type="checkbox"/> <i>YES if B > 7 (80% of 9)</i> <input type="checkbox"/> <i>NO if B < 7 (80% of 9)</i>
	5.			
	6.			
TOTAL SCORE		18		

Activity Phase: 4 - Involvement of students and parents in digital VET Teaching process				
WPKA	QUESTIONS	TOTAL SCORE (A)	OBTAINED SCORE (B)	RESULT Threshold = 80% (C)
KA 6 - Involve students in the learning process	1.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	2.			
	3.			
KA 10 - Information and involvement of parents	4.	9		<input type="checkbox"/> YES if B > 7 (80% of 9) <input type="checkbox"/> NO if B < 7 (80% of 9)
	5.			
	6.			
TOTAL SCORE		18		

TOTAL SCORE (KA'S SCORES)	
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Evaluators' signatures: _____

ANNEX C - Self – Assessment Instrument

Candidate:.....

Date of Self-evaluation:.....

Candidate's Signature

Please check on what degree you perform in each of the following activities as an expert in digital and immersive teaching for vocational training, according to the following criteria:

1: low performance

2: medium performance

3: high performance

KA	SCORING				
KA 4 - Selection of tools and devices needed for digital and immersive teaching	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA2 - Definition of objectives to be achieved for students	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA1 - Definition of the studies program and of the educational path of the students: needs analysis	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		

KA	SCORING				
KA 3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA7 - Organization and implementation of targeted activities and pathways, management of learning progression	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		
KA5 - Transfer of know-how to students for the correct use of digital and immersive learning tools	<table><tr><td>N/A</td><td>1</td><td>2</td><td>3</td></tr></table>	N/A	1	2	3
N/A	1	2	3		

KA	SCORING			
KA8 - Monitoring, verification and evaluation of the results achieved by students	N/A	1	2	3
KA9 - Drafting final evaluation of students	N/A	1	2	3

KA	SCORING			
KA6 - Involve students in the learning process	N/A	1	2	3
KA10 - Information and involvement of parents	N/A	1	2	3

Candidate's signature: _____

ANNEX D - COMPARISON BETWEEN evaluation and self- assessment

Comparison Coefficient (CC) = Evaluator's score (average) - Candidate's score

☞ CC = (-1,5 > - 2) or (1,5 > 2) Translated by a weak relationship;

☞ CC = (-0,5 > - 1) or (0,5 > 1) Translated by a moderate relation;

☞ CC = (-0,4 > 0,4) Translated by a high relation.

<i>Element/ Units</i>	<i>Score (self- assessment) A</i>	<i>Score (Evaluation) B</i>	<i>CC coefficient</i>
Activity Phase: 1 - Planning of digital VET Teaching process			
KA4 - Selection of tools and devices needed for digital and immersive teaching			
KA2 - Definition of objectives to be achieved for students			
KA1 - Definition of the studies program and of the educational path of the students: needs analysis			
Activity Phase: 2 - Implementation of digital VET Teaching process			
KA3 - Didactic-methodological design: preparation of video lessons and related exercises for immersive learning purposes			
KA7 - Organization and implementation of targeted activities and pathways, management of learning progression			
KA5 - Transfer of know-how to students for the correct use of digital and immersive			

learning tools			
Activity Phase: 3 - Evaluation of digital VET Teaching process			
KA8 - Monitoring, verification and evaluation of the results achieved by students			
KA9 - Drafting final evaluation of students			
Activity Phase: 4 - Involvement of students and parents in digital VET Teaching process			
KA6 - Involve students in the learning process			
KA10 - Information and involvement of parents			



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