



From skill to certification

Creation of models and instrument for the
development of shared standards of skill
within the system of
“education-training-employment”



1. TRANSPARENCY AND “SKILLS”

The “Certiskills” project intends to test and perfect, by agreement among partners in six European countries (Spain, Great Britain, Luxembourg, Italy, Romania, Bulgaria) a model for the management of the chain of training in vocational skills with a view to the **integration of the systems of education-training-employment**.

The model proposed by the partners provides for a technical structure that, after analyzing the professional skills required by the enterprises and organizations, develops models of certification of those skills and defines training credits. Naturally the model foresees methods and instruments for the training project, coherent with the “*skill-based*” approach.

Upon conclusion of the project, which is still in progress, the partners will define the **best practices** to adopt to ensure **reciprocal recognition**:

- of professional profiles, described by their skills;
- of the learning outcomes of training programs;
- of the “certification” of skills acquired in any way (with formal or informal training, without formal training)

The project takes account of the process, now under way at the European level, tending towards “**transparency**” which means “*to give visibility to the knowledge and skills acquired by individuals*”¹ and should provide a contribution of good practice with particular reference to the compilation of the “Supplement to the Diploma” and “Supplement to the certificate”, as well as certification of skills however acquired.

The first result achieved by the partners consists of establishing a univocal definition of the “skill”, as well as the elements that compose and represent it. At this point it seems appropriate to outline the main features of this definition.

By **professional skill** we mean the mobilization of knowledge that every individual uses to obtain an output, a professional result, recognized/recognizable as adequate and valid with respect to an explicitly or implicitly required activity, in the sphere of a relationship of exchange. The skill therefore belongs to the individual and is objectified by the concrete realization of an output.

On the technical plane of method, the partners agreed that a professional skill should be:

- *named* using a verbal expression whose syntax consists of the construction “*To be able to ...*” followed by a verb whose object is the output/result;
- *described* through the indication of the operations that make it possible to achieve the professional output/result; these operations are not only executive and should also permit later identification of the “elements” of the skill;
- *analyzed and broken down* into its constituent “elements” which are identified as “knowledge”, “capabilities” and “behaviors”.

As regards the **process** of verification, description and analysis of skills, the partners agreed that they should be verified by the organization/enterprise that requests them and valorizes them in its work. They should be confirmed by Top performers/experts in the profession and should always define the output to be guaranteed.

¹ Proposal of the Europass decision presented to the Commission on 17/12/03

2. FROM COMPETENCE TO STANDARDS FOR COMPETENCE

Through the verification and description of skills, as defined above, it is possible to represent professional profiles and figures, company positions, etc. It is also possible to identify the knowledge necessary for the exercise of a profession.

The first good practice established by the six partners was the method to be used to verify and describe the skills of professional profiles, equipped with working formats, instruments and methods. Each of the partners produced “**Dictionaries of skills**” and these were compared to verify the concrete “recognizability” of the profiles.

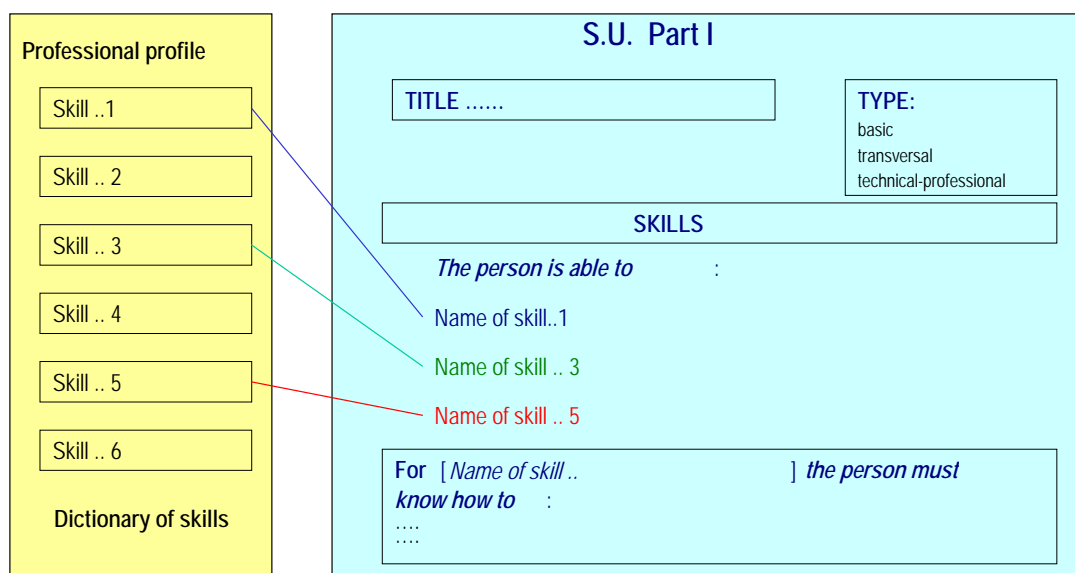
From the developments in progress at the European level² and, as regards Italy, also at the national level, there is a clear orientation for the definition of **standards of competence** that would make it possible to group skills into “**Skill Units – S.U.**” viewed as a uniform and coherent set of skills.

The S.U., which focus on results (*output/outcomes*), are characterized by a level of reference, by a set of skills which refer to activities or tasks, by methods of evaluation and validation.

Now that we can count on the detail of verification of skills listed in the Dictionaries, it is easier for the partners to frame a model of S.U. complete with the descriptors of the levels of mastery. As a second **good practice** the partners then agreed on the methods of definition of the descriptors that represent the **standards of competence** required by the labor market.

As can be seen from figure 1, the first part of the S.U. indicates: the complete set of skills, which can easily be drawn from the relative Dictionaries, and the knowledge that is the reference also for the training projects and for certification of acquired skills. In this part, in addition to listing the names of the “aggregate” skills, it is necessary to define the “**Know-how**” to guarantee the result, the output required by the exercise of the individual skills

Fig. 1



The second part: “**definition of level**” (see Fig. 2), lists the results that show whether the person possesses the aggregate skills listed making up the S.U. The second part also identifies the **descriptors of the levels of mastery**, that is, the situations that illustrate and therefore confirm and

² See also: Declaration of Copenhagen –November 30, 2002 and the working document entitled “Enhanced European Cooperation in Vocational Education and Training, the Copenhagen Process” – *First Report of the Technical Working Group on Credit Transfer in VET*, October 2003.

make it possible to assess the skills that make up the S.U. In addition, the **indicators** necessary to express an evaluation of the skills and level of mastery are defined.

Fig. 2

S.U. Second Part

DEFINITION OF LEVEL

To be able to :

Name of skill ..1

Name of skill .. 3

Name of skill .. 5

<p style="text-align: center; color: blue;"><i>The person must know how to:</i></p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p style="text-align: center; color: blue;"><i>The indicators are:</i></p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
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The **descriptors of the level of mastery** (the person must know how to ..) represent the situations that require the skills and therefore make it possible to verify them. In a technical-professional sphere, situations that require a “product” will be privileged, analogous to the definition of the skills indicated within the project. The product, the output, must be as similar as possible to the output required of real working processes and should be significant of the range of critical aspects that may arise.

The **indicators** should be viewed also as contributions to the formulation of the tests for verification and/or certification of the skills, however acquired. It is advisable to provide an indicator for every descriptor, taking care to ensure objectivity of verification and the possibility of defining the relative indices that define the threshold values of acceptability.

It is easy to see that the contents of the S.U. can be a complete source of structured information that defines sets of standards for skills.

3. FROM THE STANDARD OF COMPETENCE TO THE TRAINING STANDARD

A third area of good practice that the partners intend to perfect has to do with training standards (Training Units – T.U.) coherent with the “*competence based*” method adopted and tested to produce the dictionaries of skills and Skill Units.

The **technical structure of the T.U.** (training standard) requires demonstration:

- of the **learning goals**, defined according to the knowledge, ability and behavior involved (“elements” which are listed in the **dictionaries of skills**). It should be noted that the methods of testing and describing the skills makes it possible, also, to dispose of the elements of competence in an organic manner, as verified also in the working world and sufficiently stable in time;
- of the **learning situations**, preferably divided into general categories: assisted learning (in the classroom, workshop, etc.), individual study, experience of real work (internships, apprenticeships, etc.);
- of the **timing** (workload for the participants) assigned to the various training situations;
- of the criteria for assigning the **training credits** and relative quantification;
- of the types of tests, instruments, subjects and **methods of testing and evaluation**.

The Training Units (**training standards**) and the Skill Units (**standards of competence**) are the standards “**of the system**”: that make it possible to share among countries, areas, educational subsystems, vocational training and actual jobs the “reference points” of the learning paths (formal, not formal, informal). The developers of learning programs for the training organizations that wish to offer programs to meet the “standards” can define all the elements in the details of the training program, based on univocal references.

The participants in training programs structured in this way will be able to receive, in a manner that is recognizable even in transnational contexts, all the information relative to their training, the results achieved and the skills acquired.³

As regards **training credits**, the “Certiskills” project intends to experiment with the model created by the European Credit Transfer System (ECTS) where, conventionally, a credit is assigned for student learning in the measure of 25 hours (personal study, classroom study, workshop, internship etc.). It is possible that during the period of experimentation additions may be made to the criteria of assignment of training credits, but the critical point remains the mutual recognizability of the credit. The process now going on in many European countries and within the EU still has not defined the conditions for recognition of training credits *tout court*, and we are not in a context of bilateral recognition.

³ See also CEDEFOP: The Europass Certificate Supplement

4. FROM STANDARDS TO CERTIFICATION OF SKILLS

Alongside experimentation with the model of representation of the standards, the partners intend to develop shared procedures and instruments for the certification of skills however acquired. The first stage of this process will include:

- verification of the procedures in use and/or foreseen in the six countries of the partnership, either defined by the institution, or the subject of agreements, conventions, etc.;
- analysis of the best procedures in use at the European level;
- definition of the conditions and technical specifications to guarantee mutual recognition of the results of the systems of certification.

In the second stage the partners plan to develop the technical structure of the system of evaluation of skills and the formats for the certification of the results. The final stage of the project will define the methods of organization of the “system of certification” consisting of:

- standards and rules for validation of the evaluators;
- codes of ethics for the evaluators;
- modes of involvement of the social partners, the enterprises, individuals, training organizations, the schools and the universities.

On the **technical plane of method** the contents of the S.U. are taken as the basic reference, with particular regard to the descriptors and indicators.

It should also be noted how the entire process of certification implies two separate subprocesses: the **verification/evaluation** of the skills and their **certification**.

The former can be seen as a procedure of a **technical nature**, though subject to the limits imposed by its rules and modes, regarding the process of ascertaining the possession of skills by an individual; the latter is a **function of the system** as it is the action whereby a legally “responsible” person certifies the possession of the skills in question by the individual.

For this reason the partners intend to develop and experiment with the system of certification on two levels:

- the **technical structure** of evaluation;
- the definition of the subjects “responsible” for certification (structures and persons).

As regards the first aspect, the partners plan to develop the technical instruments that, on the basis of the contents of the S.U. and the most consolidated test methods, ensure objectivity and evidence of the outcomes of evaluation.

As regards the second aspect, this takes as its reference the logic and standards adopted in the ISO sphere for the accreditation of the structures and persons responsible for certifying systems, products, etc.

At the current time, when there are no rules and/or specific standards on the subject of the certification of skills, the best works indicate the **certification by the second party** as the most suitable model, as it has been borrowed from the processes developed in the sphere of ISO⁴. In the context of quality certification, this type of certification identifies that type of recognition that is issued to a producer directly by the client or by an organization that represents the client system: the recognition is based on requisites defined by the client. It may also be possible, considering the value

⁴ Verification and certification *by the first party* occurs when the organization making the control makes exclusive reference to the *supplier system*: there are organizations that represent suppliers which define the requisites and verify them.

Verification and certification *by the second party* occurs when the organization making the evaluation makes exclusive reference to the *client system*: in this case the organizations that represent the clients define the requisites and verify them.

Finally, we can speak of *third party verification and certification* when the organization that performs the evaluation does not refer either to the suppliers or the clients, but is an impartial organization recognized by both and accredited for activities of certification at a higher level (e.g. international): this is the case, for example, of *ISO 9000*

of a “system” governed by institutions, to introduce other elements also relative to a type of **certification by a third party** that would foresee a third party, *super partes* with respect to both suppliers and clients, capable of evaluating the quality of the supplier and the supply, and thus to assign points and ratings on the subject.

The possibility of experimenting with a model of certification that takes account of both types has shown that at the local level it is easier to assign the responsibility for certifying skills directly to the subjects that use them (and that thus represent the “demand” for the skills), as well as to establish impartial bodies to which the task of defining the procedures, standards and persons (for example prestigious individuals from the professional point of view) for certifying skills can be given.

Considering the public nature of the subjects governing the system, capable therefore of creating tables of negotiation among the social partners, and implementing on a territorial basis possible rules and/or standards capable of better defining the roles, responsibilities and reciprocal recognition of certification, we think it should be possible to adopt methods which also provide for the accreditation of persons with “expert” functions and/or structures capable of guaranteeing strict adherence to proper rules of evaluation.

5. TOWARDS INTEGRATION OF THE “SYSTEM” AND AMONG “SYSTEMS”

The good practices tested and being experimented in the sphere of the “Certiskills” project will make it possible to dispose of “product”, databases and instrument which should be useful or even essential for the integrated management of the system of: “Education-Employment-Training”.

Taking “competence” as the focus of the system, it is easy to appreciate, even from this brief outline, the coherence and advisability of mutual recognizability “among systems”.

1. The **Employment Centers**, disposing of the **bank of skills** and of the Dictionaries of Competence, can guarantee a high qualification of their services, with particular reference to the services of **orientation and matching**. The orientators will be better able to guarantee programs of definition of professional goals for young people, people who wish to improve their career situation and people returning to the labor market. Disposing also of training offers (S.U. bank) defined on the basis of standards shared by the “system”, facilitates the identification of the learning programs most suitable for the acquisition of skills required on the labor market.

The service of mediation between supply and demand on the labor market, considering that the enterprises require skills and the workers offer skills, can count on instruments that simplify the presentation of those skills offered/requested on the labor market. It is possible, indeed, to provide a “*competence based*” matching service that would improve the precision of the supply and demand of skills, rather than basing them on statements of qualifications, profiles, etc. which are not nearly as appropriate, in their current form, to represent the substance of the exchange within the labor market. The gradual development of “certification of skills” also appears to be a further element of quality for the matching service as it overcomes the level of personal statements and makes the professional offer of the persons and their valorization more objective; the companies can count, on the other hand, on a highly structured pre-selection validated in its results.

2. The **Training Organizations and the Educational System** can work together to develop vocational training and scholastic programs coherent with the standards of competence and thus with the training standards (T.U. bank) adopted at the level of the “system”. They can thus guarantee transparency to the programs of learning and “certification” of the outcomes through methods and contents that are both shared and recognizable.
3. The **individuals** can count on a clear definition of the skills possessed and “certified”, they can plan for modular courses of “lifelong learning” and are facilitated in the valorization of their professional capacity even in contexts different from those to which they belong.
4. The **enterprises/organizations** can count on the definition of standards of competence defined with their own contribution and in reference to their own working processes. This condition ensures scholastic and vocational training services in support of labor, coherent with its needs, and facilitates the recruitment of personnel through better evaluation of the skills they possess.