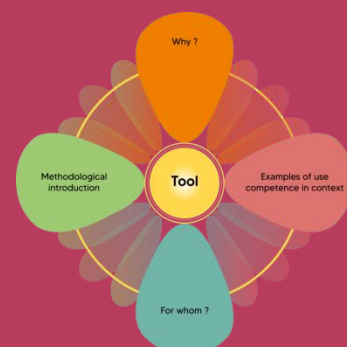
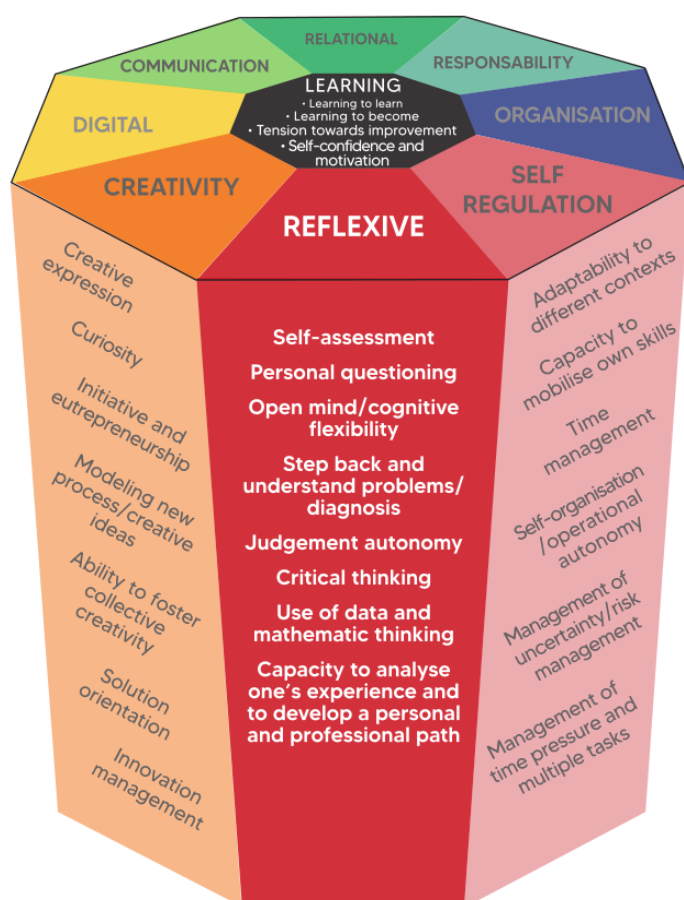




edenhub
Space of Collective Intelligence

A Toolkit – and Guidebook- for the joint development of Transversal Competences



Co-funded by the
Erasmus+ Programme
of the European Union

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INTRODUCTION

This guide was produced within the ERASMUS+ Project Ed-En Hub between November 2021 and May 2023. The aim of the project was to address the difficulty in developing Transversal Competences (TC) in formal education. Transversal Competences are more and more relevant in the labour market, in recruitment and career development. Individuals need Transversal Competences to build the necessary resilience in times of rapid change. The project addresses this challenge by proposing a strategic approach that increases the cooperation between education & enterprises.

While it refuses a purely adequation approach, it proposes a mutual interest agreement between the three parties: the learner, education, and training institutions, and enterprises. Transversal competences enhance a person's recruitment opportunities, career and labour mobility, and overall flourishing now and in subsequent phases of their life. Transversal Competences are also crucial to work, to collaborate and to innovate on the job. They also have a huge potential to innovate the way teaching is delivered and assessment is conducted within formal education and training. In summary, they contribute to a better quality of education and training, which is an important benefit for all three parties involved.

This guide provides a reference model, tools, and methods to define, identify, develop, and assess transversal competences in a collaborative way.

It is a Toolkit for the Joint Development of Transversal Competences.

The conception of the **Toolkit Design** is based on the contribution of all partners, with a specific input of CIS - Scuola per la gestione d'impresa Team - for giving coherence to the "Toolkit design" document central in all the project, and different contributions from IUT Lumière Université Lyon 2 and Trouver/ Créer concerning methodological contents about Transversal Competences.

The definition and **Mapping of Transversal Competences** was a very committing activity involving all partners and allowing them, with the coordination of CIS, to contribute to its design and development.

The development of **Guidelines for the analysis of skills requirements** was done with the substantial input of Trouver/Créer, offering its methodological expertise to propose a phased and open-ended analysis of transversal competences owned and required by individuals and enterprises.

CIS, with the view of Trouver / Créer and IUT Lumière Université Lyon 2, is the main contributor to **Guidelines for the design and implementation of innovative learning paths**.

IUT Lumière Université Lyon 2 coordinated the work of Trouver/ Créer and CIS towards the timely completion of the development of **Identification and evaluation instruments**.

ED-EN HUB APPROACH ABOUT TRANSVERSAL COMPETENCES

Concerning the design of the Toolkit, discussions with all partners led to exchanges on methodological aspects related to the identification, development, and assessment of competences (whether technical or transversal). This led us to identify the Activating Vocational and Personal Development (ADVP in French) approach as a consistent one. This approach invites the individuals to know how to 'become' through his or her experiences. Therefore, the Toolkit includes both solutions such as processes or tools, benchmarks and recommendations enabling the actors of the system to build their own solutions, in terms of processes, grids, content and approaches.

Toolkit and updated tools are available here: <https://edenhub.eu/index.php/io-1/>

COMPETENCE IN THE CONTEXT

The ED-EN Hub project deals with competences, more than skills, as competences are defined as "a combination of skills, knowledge, and aptitude" (EU, 2019, p.5) and imply assessment and certification issues. In the EQF system, the framework for defining Learning Outcomes states that "skills are described in terms of what the learner is able to do" and "competences are described in terms of what the learner is ready to do". But in our approach, competence does not depend on a 'state' but rather on a 'process'. A competence is necessarily situated, contextualised, and unfolds during an activity. Competence is dynamic, attached to an individual, and deployed in a situation, and not a static and abstract state or element. Competence is the "ability to mobilise" resources in order to accomplish a given task. It is important when working on competences, specifically on Transversal Competences, to identify that these are *situated* and exist *in context*, not in an abstract way. This argument is supported by the project to work in co-design with companies.

By competence, we mean "knowing how to act in a situation (in a family of situations); by creating a combination of internal (personal) and external (from one's environment) resources" (Le Boterf, 2017, p.3). Therefore, "being competent" is being able to act with relevance in a work situation (activity or project to be carried out, the problem to be solved, the event to be faced, and so on). It means implementing a relevant professional practice while mobilising an appropriate combination of resources (knowledge, skills, behaviour, aptitudes)" (Le Boterf, 2011, p.27).

According to Le Boterf (2011) being able to act professionally is not only a result of knowledge and interpersonal skills - it is necessary to have professional experiences in order to encounter different situations. This is reinforced by the experiential approach named ADVP (activating vocational and personal development. Experiences must be prepared, lived, and processed in order to integrate them (how did I act to adapt to unknown or unforeseen elements, use of aids, taking initiatives or risks, and so on) in order for people to evolve in their way of thinking and acting, and ultimately to become autonomous in doing all that.

Our framework during the entire project was a rigorous and prudent approach of Transversal Competences. We had a scientific approach, not rooted in a particular discipline, with a systematic anchoring with technical competences. We worked focusing on problematic professional situations, such as, entering the job market, career transitions, retraining, mobility, and human resources shortages. The project partners considered the affordance principles and acknowledged the importance of context, emotions, and self-confidence, as well as job satisfaction.

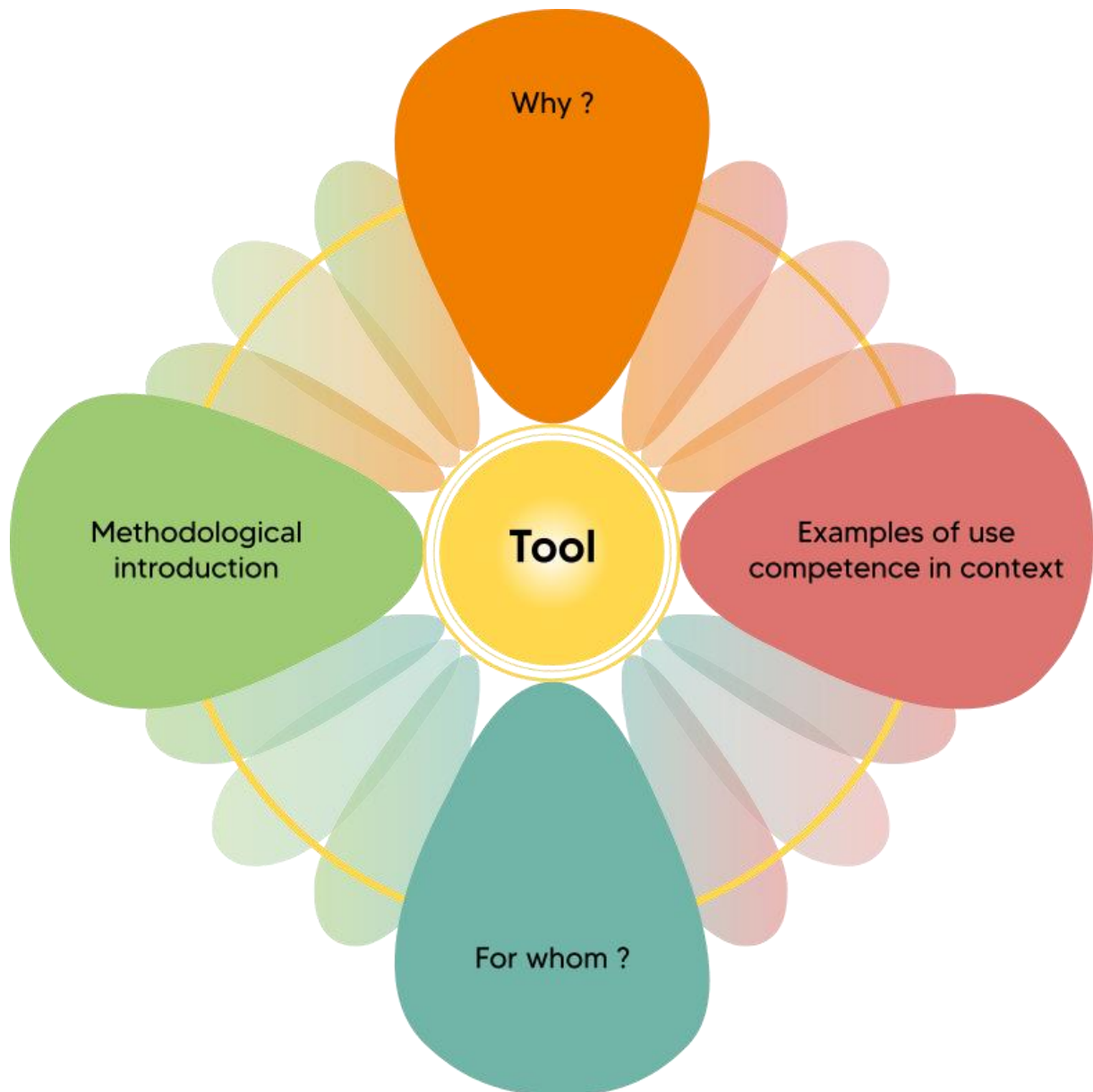
As a result, we progressed a methodology and tools for a collaborative (**E**ducation-**E**ntreprise) approach to Transversal Competences development, with dedicated access for users. This methodology and these tools can be used throughout the training/coaching process.

HOW ARE TOOLS PRESENTED IN THIS GUIDEBOOK?

This conception of Transversal Competences in a process has led us to define an important methodological point characterised in the figure below. Tools alone are not sufficient. They need to be used in conjunction with the competence approach developed in this project, and the experience engineering that this implies.

Each tool was therefore systematically analysed according to the following four questions:

1. Why? What are the stakes of the tool? For what purpose?
2. For whom? What are the target audiences and their characteristics?
3. What are the methodological instructions?
4. Are there examples of the use of competences in context?



TC MAP

HISTORY OF AN OCTAGON

The Competence Map proposed is derived from the synthesis of several existing models and classifications to represent Transversal Competences, Fusion Skills, Key Competences for Lifelong Learning, Life Skills, Transformation Skills, and Digital Skills.

In this project we will mainly use the term competence, according to the EQF terminology, to include knowledge, skills, and other elements (autonomy, responsibility, ethics) concurring to a complex learning outcome.

All partners were able to express their views on which competences should be included in the mapping exercise, starting from those emerging from recent surveys and existing classifications used in France, in the EU and internationally. Partners' brainstorming and stakeholders' consultations also took place in this phase to consolidate the synthesis picture. Referencing tables (called "Rosetta Stones") were built to show the comprehensive coverage of other classifications of competences, and terminological issues were addressed by proposing a project glossary that can be found at the end of this guide.

Eight groups of competences were identified after both comparing existing schemes (AEFA, RECTEC, OECD Transformation Competencies, NESTA transferable Skills, Skills Builder, EU Key Competences for Lifelong Learning, DQ Digital Intelligence, CEDEFOP/IPTS LifeComp) and adding the results of the partners brainstorming exercise. To these eight groups, the Learning Group was added and represented at the centre of the octagon as a condition for the development of all the other competences with full awareness of learning intentionality and learner's responsibility to strengthen her/his capacity to plan and manage learning processes.

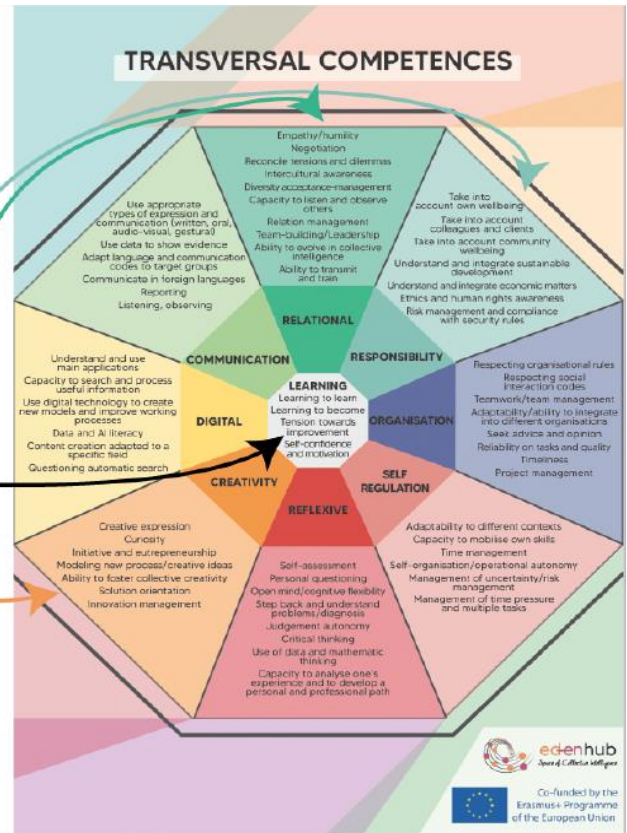
The map of Transversal Competences was conceived to be applied to Levels 4,5 and 6 of EQF. The following graphs, known within the partners' consortium as "Rosetta Stones", link the octagonal scheme to the other reference competences frameworks that were used to build the Ed-En Hub Framework.



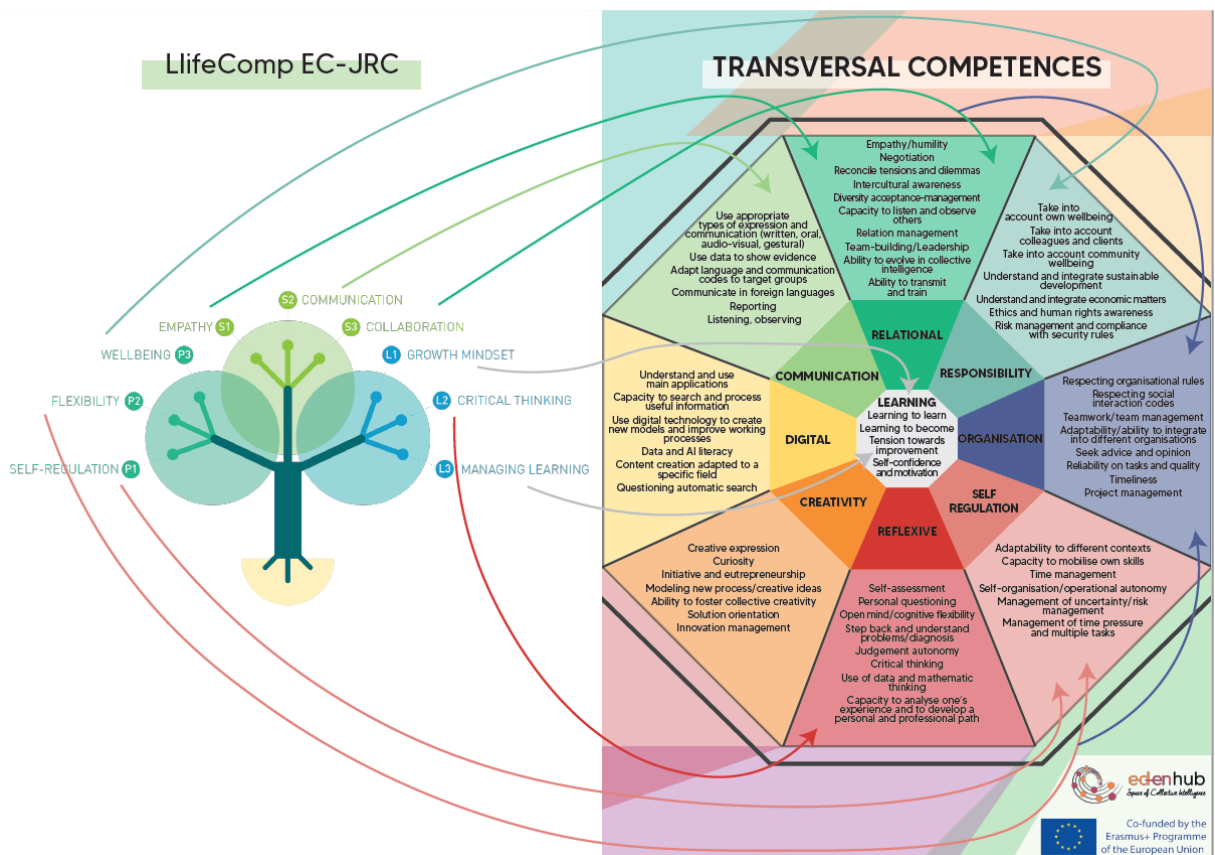


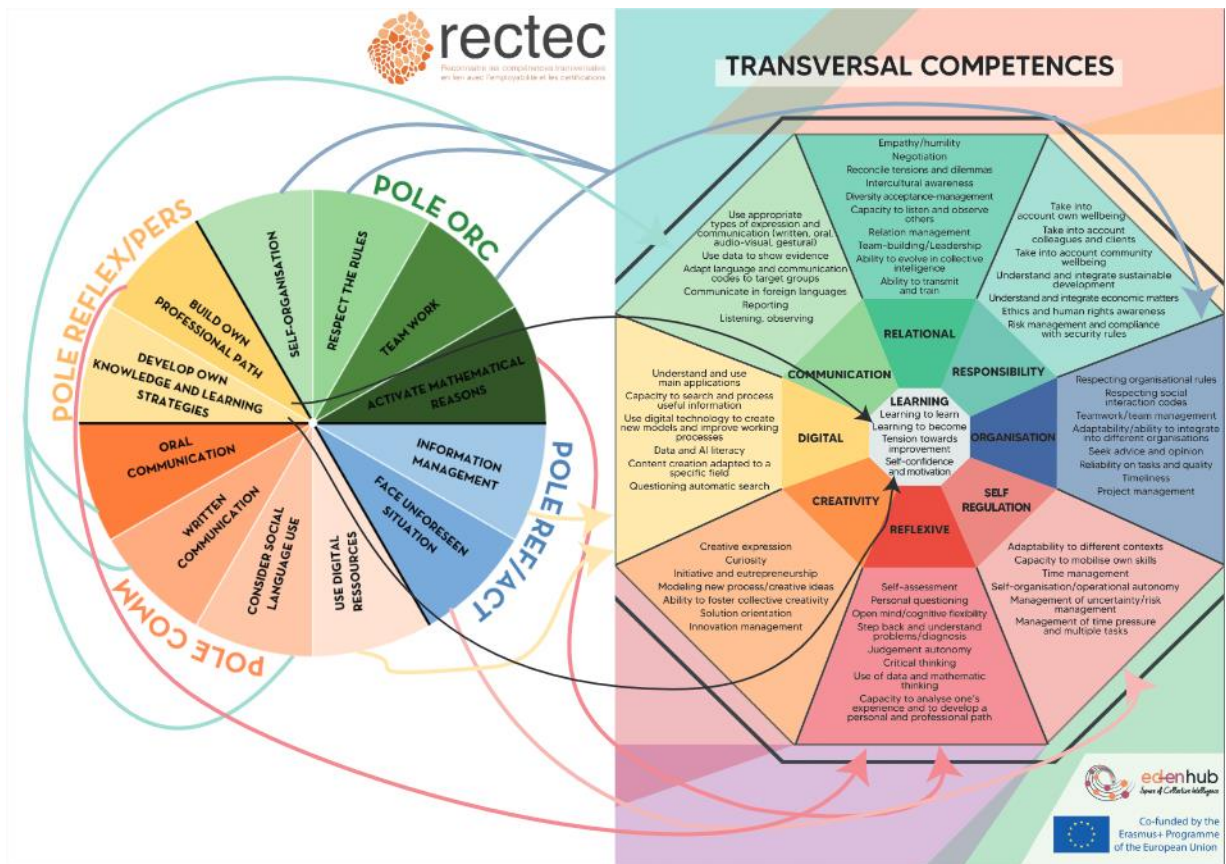
OECD Learning Compass 2030

- **LEARNER AGENCY**
- **CREATING NEW VALUE**
- **RECONCILING TENSIONS AND DILEMMAS**
- **TAKING RESPONSABILITY**



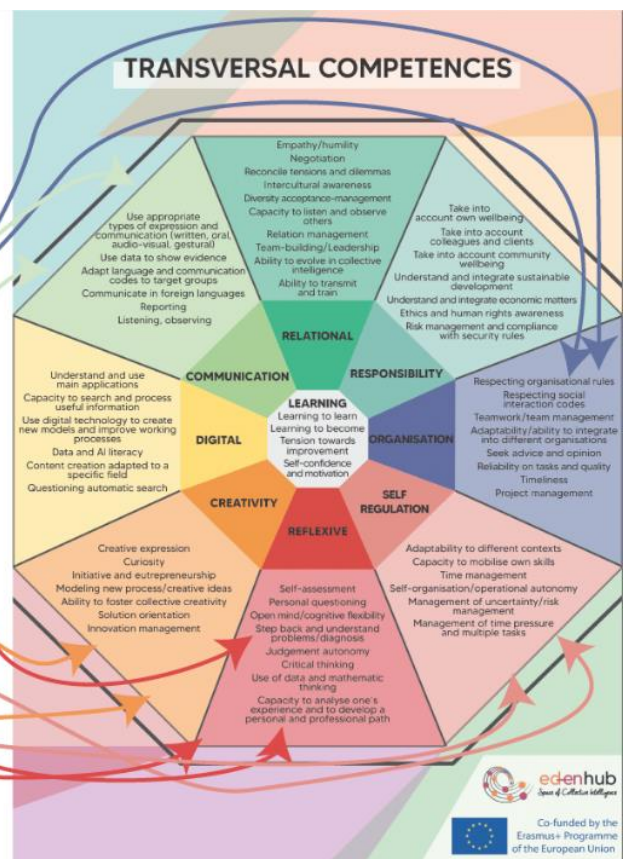
LlifeComp EC-JRC





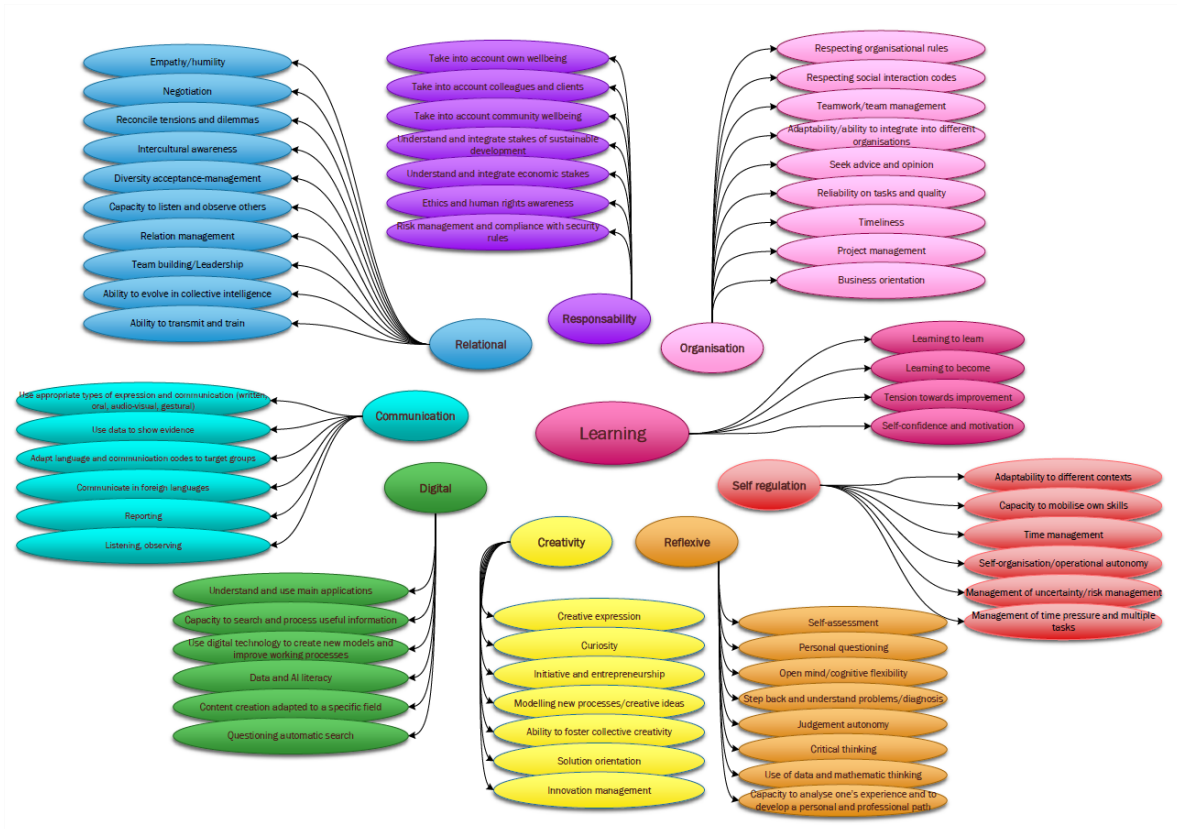
NESTA
Top 12 T-SKILLS
UK Employers

1. ORAL COMMUNICATION/PRESENTATION SKILLS
2. COLLABORATION AND TEAMWORK
3. INITIATIVE
4. PROBLEM SOLVING
5. ORGANISATIONAL SKILLS
6. ADAPTABILITY/FLEXIBILITY
7. INDEPENDANT WORKING / AUTONOMY
8. WRITTEN COMMUNICATION
9. CRITICAL TIMING
10. RESILIENCE
11. CREATIVITY
12. ANALYSIS AND EVALUATION SKILLS

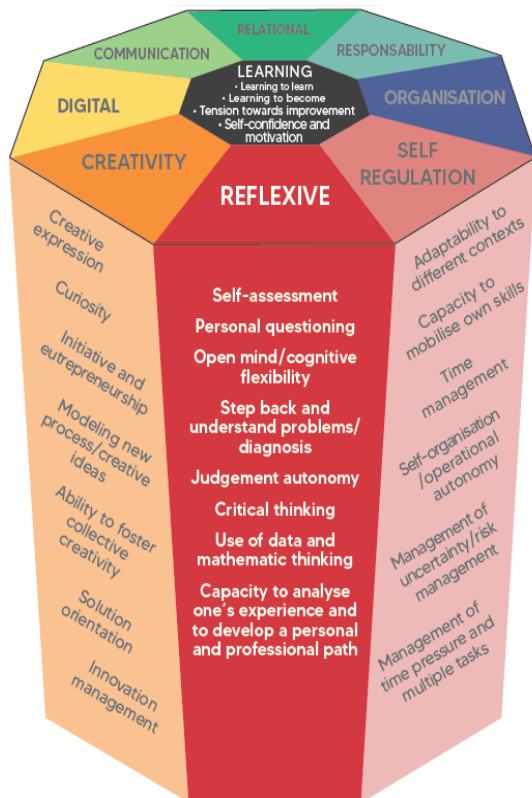




ED-EN Hub draft

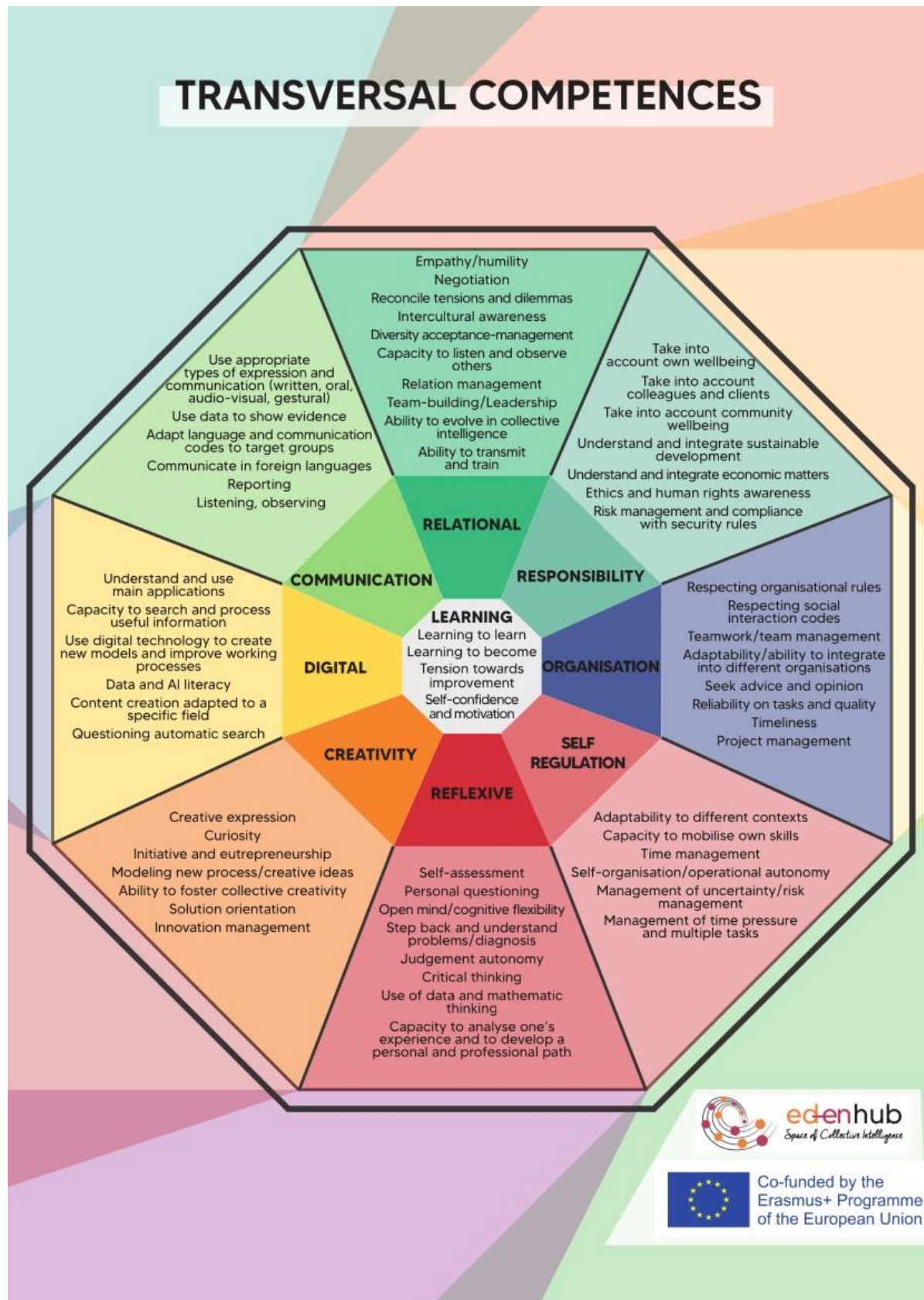


3D version





Final Octagon



WHY?

Why ?

The Octagon Transversal Competence Framework was developed to offer a synthesis of the many possible and available representations of the field of Transversal Competences. When addressing a new (and not so well-structured) field, which has a recognised growing importance and multiple actors concurring to establish new definitions and structures, a natural temptation is to restart from a *tabula rasa* and create a new classification, hoping that it will be naturally imposing on others for its clarity and/or exhaustiveness. Ed-En Hub intended to avoid this temptation by building on existing classifications and trying to find common elements on which a synthesis can be drawn, referring to existing systems in a transparent way. The “Rosetta Stones” tables describe how each competence in the octagon is related to existing frameworks of competences (in particular AEFA/RECTEC, OECD, LIFECOMP, NESTA, DQ).

FOR WHOM?

For whom ?

This question leads to the identification of the target audience for which the Ed-En-Hub platform will be deployed. The importance of Ed-En Hub is rooted in the capacity for its outputs to be used to determine the skill scope, the training scope and the training and assessment model. While the issue of diploma levels is important to consider, it is not reduced to this because the project's main scope is VET and LLL. The project aims to address emerging skills in an uncertain context (VUCA) with rapid changes in the labour market and society, and different specific and vulnerable targets groups are to be considered. What is important for Ed-En Hub is that the EQF applies to all types of education, training, and qualifications, from school education to academic, professional, and vocational. It is a Lifelong Learning framework, promoting the validation of non-formal and informal learning and covering all types of qualifications from those acquired at the end of compulsory education, to the highest qualifications and including vocational qualifications. As far as the choice of level is concerned, it will be necessary to choose by considering: the HR needs of the economy, the social demand, and the specificities and expertise of the partners (that operate at all levels, from secondary to higher education). Specific targets (including more disadvantaged and vulnerable learners) are to be integrated, including populations with low levels of qualification, or not selected on academic criteria, or with educational difficulties. This includes specifically:

- Learners who have not been mainly recruited for their pedagogical excellence, or who are in reorientation, or in continuing education (the case of the student profiles present at the IUT Université Lumière Lyon 2),
- Employees who are experiencing difficulties in mastering “key skills”, to work towards their inclusion in projects for the development of the organisation and the evolution of jobs,
- Refugee populations, to address the problem of the professional downgrading of migrants, language training (also under the “job” aspect), integration and validation of skills.

Concerning all vulnerable target groups, the eight European key competences for Lifelong Learning (LLL) are fundamentals. Regarding all these elements, our choice is to mainly consider the Levels from 4 to 6 that correspond to an important employment level for enterprises with technical aspects, an attractive VET level and important level for professional career. The integration of lower levels (Level 3) remains important to study more vulnerable populations, especially workers with problems of illiteracy. It can be part of the project either as a particular target to be studied or as a pre-requisite or pivotal level on which to act.

Methodological
Introduction

METHODOLOGICAL INTRODUCTION

- This competences map is a synthesis of several existing models of competences frameworks (Transversal and Transferable Competences, Fusion Competences, Key Competences for Lifelong Learning, Life Competences, Transformation Competences, Digital Competences, etc). Its purpose is to facilitate dialogue and cooperation between actors (companies, training organisations) to support them in the joint development of TC training paths.

Given the dynamic nature of competency needs, no framework can ever be exhaustive. The inbuilt flexibilities of the Ed-En Hub framework means that it can be fed by users according to their professional sectors and the managerial culture of their companies. Users can devise other TCs or remove them. It will therefore evolve over time and according to the actors and their specificities.

NB: The tool should be used to support reflection. It requires a prior phase of inventory work by the user. The tool acts as a reminder, a concrete aid to effectively capture and adapt to complexity.

Before discovering the tool, users are led to analyse their own needs on TC, group them by major themes, and establish a first list of TC they want to work on.

The use of the competences map is itself broken down into two parts. The first part (looking at the main area of the octagon) activates a re-questioning of the inventory of competences through a confrontation between the groupings previously made and this classification.

It shows the main categories of generic competences. “Learning to learn” is located in the centre of the model, as it represents a meta-competence where each person draws on their own experiences. It is the ability to mobilise, by combining them, operational competences around an objective. It is thus both generic and operational.

This meta-competence and the other TC enrich each other through actions. These actions need time to be analysed. The meta-competences give the means for doing that.

This virtuous circle puts the person in a pro-active and reflexive approach which also applies to transferability and professionalisation.

It is thanks to the Transversal Competences that professional competences become transferable. Including “Learning to learn” allows the development of reflexivity on one's experiences, including professional ones, which facilitates the transfer of know-how and competences acquired in one context to another context.

The second part, looking now the whole octagon with all TC listed in their corresponding categories, goes deeper into the TC, and needs careful and exhaustive reading. On the basis of a deep understanding of the TC, the user might choose to add or delete TC according to the context. In this curation process, representations are enlarged, and change is stimulated. This process, in and of itself, becomes a tool for the other activities that will follow, such as needs analysis, assessment, training and guidance.

Tool

TOOL

Respecting this methodology, the learner is exposed to lists of questions.

WITHOUT THE OCTAGON

- Do you need a definition of what a TC is? (link to the glossary)
- Can you make a list of some TC you activated yesterday / linked to your needs?

SHOWING ONLY THE CENTRE PART OF THE OCTAGON

- What is your initial reaction to the discovery of this map?
- Do you find yourself here in relation to what you have already expressed?
- How does this map echo your questions/experiences?
- How does it enrich your representations?
- Is there a generic TC category that you think is missing?
- Which generic category would you like to explore further?

SHOWING THE OPERATIONAL COMPETENCES OF A SINGLE CATEGORY

- What is your first reaction when you see this list?
- Are there any competences listed here that you think are important to add to your previous inventory?
- Are there any TC you have yourself listed that are not present in this list?
- We can try to see if they might not be in another category.

SHOWING ALL CATEGORIES

- For the TC you consider important, would you like to check that they are listed in the octagon's segments?
- What is your first reaction when you see this list?
- Are there any competences listed here that you think are important to add to your inventory?
- Are there any competences you yourself have listed that are not present in this list?
- Are you satisfied with the list you have now? Does it suit your context? (change things if you think it is not)

EXAMPLE OF USE COMPETENCES IN CONTEXT

Examples of use
competence in contexte

STRUCTURING PROJECTS

To build on existing resources and practices, to experiment tools, methods, and guides, Ed-En Hub identified experience situations where it is possible to consider professional context for the TC.

One structuring project is apprenticeship (dual learning) because of the search for an effective collaboration between education and enterprise aimed at training a competent and employable professional. More specifically, apprenticeships require building together formative experiences in companies. So, in the case of apprenticeship, it is important to consider the necessity to:

- List different types of company contexts to be proposed to the student according to the level of the degree, the profession/occupation and the student's project.
- Describe how the student can, alone or with the help of a tutor, make the best use of the context to enhance the experience.
- Propose to initiate the evaluation at the start of the process through exchanges between the teacher, the professional and the student, then through a contract specifying the objectives of the evaluation, the criteria and methods of evaluation, the expected deliverables, project reviews providing regular updates.

In the case of apprenticeships, evaluation is multiple and concerns not only the student but also the process put in place to support him/her. It is based on academic practices and the principles implemented in companies. Evaluation is proposed in both dimensions - individual and collective - and it encourages reflexivity. It allows students to learn from others - teachers, professionals, and students, and to be enriched by the experiences of all students, to situate oneself and to take a step back, by taking the stress off or being stimulated.

Beyond Apprenticeship, different contexts could be considered as structuring projects, such as short or long cycle operations, manual or intellectual work, multi-skilled and non-skilled work, working alone or in a team, expectations in terms of innovation, repetition, required quality level, controlled or uncontrolled work, versatility or not, expected level of performance and responsibility.

Some examples considered included:

- Projects tutored at school
- Company tutored projects
- Junior company
- School abroad projects
- Leisure projects at school
- Games about creating a mini company tutored by teachers and professionals
- Students engaged in collaborative research answering technical questions proposed by the company and dealt with in the school's laboratories and/or workshops

GUIDELINES FOR THE ANALYSIS OF SKILLS REQUIREMENTS

GENERALITIES

A set of instruments is presented, helping individuals but also companies/organizations and training centres to discover if, and at what level of performance, they need to identify and improve their Transversal Competences. The tools have different degrees of complexity, from self-assessment tests, mainly intended to develop awareness in individual employees, to articulated instruments for organisational analysis to be collectively used by enterprises to detect competences requirements that have not yet become evident.

As previously mentioned, each tool is describing with the “Methodological Daisy”.

The need to identify and develop TC arises mainly in problematic situations (innovation, ‘blocking’, recruitment difficulties, career advancement and so on). This tool is intended to facilitate self-diagnosis by identifying and integrating the required TC. Therefore, it promotes the engagement of actors in a recurrent use process.

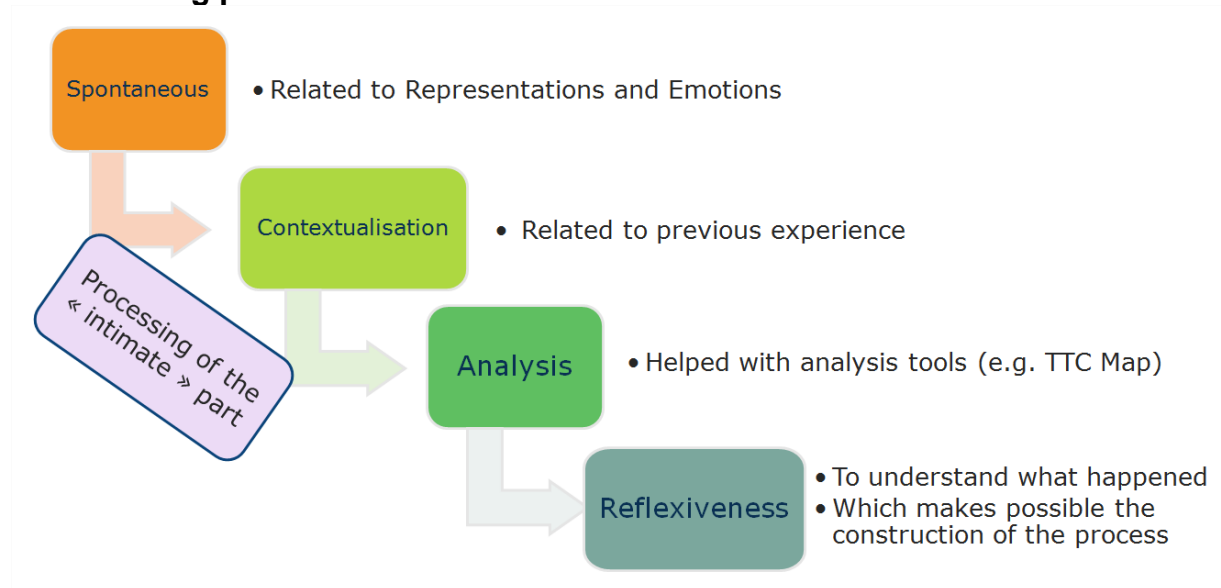
A distinction must be made between the context in which the actors are and the situations they face. For the same type of actor, depending on the situation, TC needs are not expressed in the same way. Context is important because TC, like other competences, can only be activated and identified through action.

Concerning the individuals (students, apprentices, people in work transitions and anyone who needs to reflect on their qualifications), the process proposed is based on the four working phases described on the following page. It consists first of all in exploring the way a person spontaneously asks oneself the question of one’s competences, starting from oneself, one’s representations, one’s ideas of one’s competences. Then, the TC Octagon is used to compare the person with a reference framework, either because one can find one’s way, or because it is hoped that this will open the door to new skills. If the skill has not been listed, this will allow feeding the TC Octagon. The tool must serve to awaken and question. The initial phase should provoke astonishment that makes you want to go further.

The first phase is always done without explanation. The explanations come as you progress through the activity.



Four working phases model



IDENTIFICATION OF INDIVIDUALS NEEDS

Why ?

WHY

Awareness of a need is a condition for individual motivation to undertake a competence development path. That is why one section of the Toolkit develops a solid methodologically approach that serves different purposes, including to conduct a general self-assessment of transversal competence, to detect specific learning needs in one or more TC areas, to prepare for an employment interview and/or for a career development path.

For whom ?

FOR WHOM

The process presented in the model which follows is proposed for individuals who, having a general understanding of the importance of Transversal Competences, want to recognise their strengths and relative weakness in this domain, following a methodologically sound approach with or without the support of specialised professionals. Following the exercise, they may decide to strengthen some of their transversal competences and find other instruments in the Toolkit, which will help them to do so.

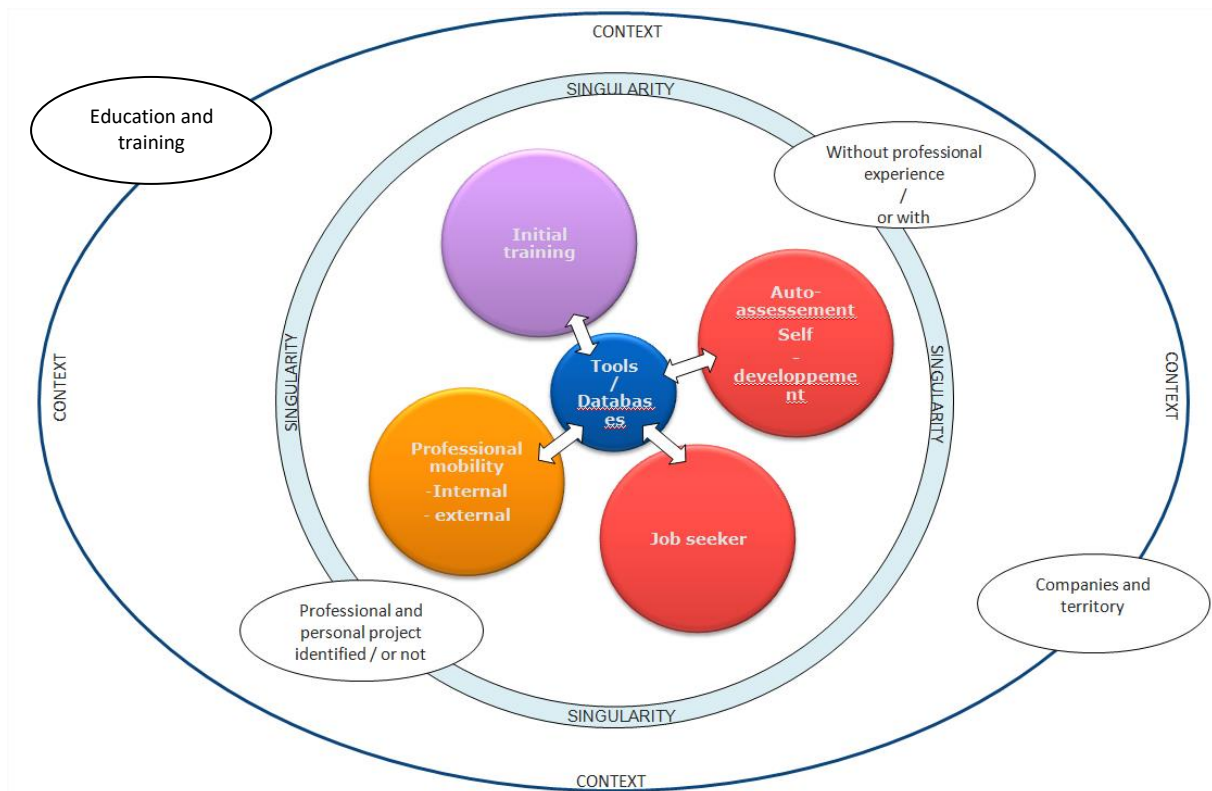
Methodological introduction

METHODOLOGICAL INTRODUCTION

The individual can have three types of positioning:

- Be in initial or lifelong training
- Be looking for a job / in professional mobility
- Need to know more about themselves

One may or may not already have professional experience. One may or may not have a defined professional and personal project. One's context includes one's territory, training organisations and companies.



Tool

TOOL

Self-assessment of competences in several phases

STEP 1: Ask the person, on paper, to revisit a typical period of work (day, week, project time, etc.) and to list the competences used, excluding professional competences.

OBJECTIVE: Elicit the representations of one's competences

STEP 2: Ask the learners to select **five** competences from the list and for each:

- Describe several contexts in which it has been implemented (e.g., what I am/was doing at school, what I have experienced during my internships, apprenticeships or work experiences, my actions in life in general - association, hobby, interest, sport, and so on)
- Imagine a situation where it could be implemented in another company or trade
- Consider what would facilitate this implementation

OBJECTIVE: Raising awareness of transversality and transferability

STEP 3: Present the competence octagon and take the activity of using the competence octagon

OBJECTIVE: Raise awareness of the range of possible competences

STEP 4: Select from the list of competences other competences that the person had not thought of but feels one has.

OBJECTIVE: Raising awareness of the extent of one's own competences

STEP 5: Using the competence octagon, the person chooses the ones he/she wishes to develop:

- Which of my identified competences are useful for my project? (My own actions at work, my place, and actions in the work group)
- What competences need to be developed?
- What new competences do I need to acquire?
- What competences do I find unattainable? (what do I base this on?)

OBJECTIVE: Prepare to set in motion TC learning

STEP 6: Building a pathway to acquire new competences including:

- What is my personal and professional development plan: guidance pathway (Is it a question of lifelong guidance) or other collaborative activities (offered on the platform or not)?
- How does my journey to acquire new competences fit into this project?
- What steps are envisaged to progress along this pathway (training, experience, others)?

IDENTIFICATION OF COMPANIES NEEDS

Why ?

WHY

Enterprises may become aware of a gap in transversal competences of their staff - at all levels - when collaboration does not work smoothly, when coordination is difficult, when not sufficient quality or innovation is perceived, and in many other circumstances. Ed-En Hub identified situations in which Human Resources Departments or, in small enterprises, entrepreneurs would want to check the availability and needs of transversal competences.

FOR WHOM

For whom?

As explained above, this approach is proposed to Human Resources Departments and Entrepreneurs or managers who wish to take Transversal Competences into serious consideration within recruitment, career, and talent development and/or mobility processes.

Methodological introduction

METHODOLOGICAL INTRODUCTION

The company can have three types of needs:

- Recruiting staff considering TC
- Developing individual and collective human resources
- Supporting the employability and external mobility of its employees

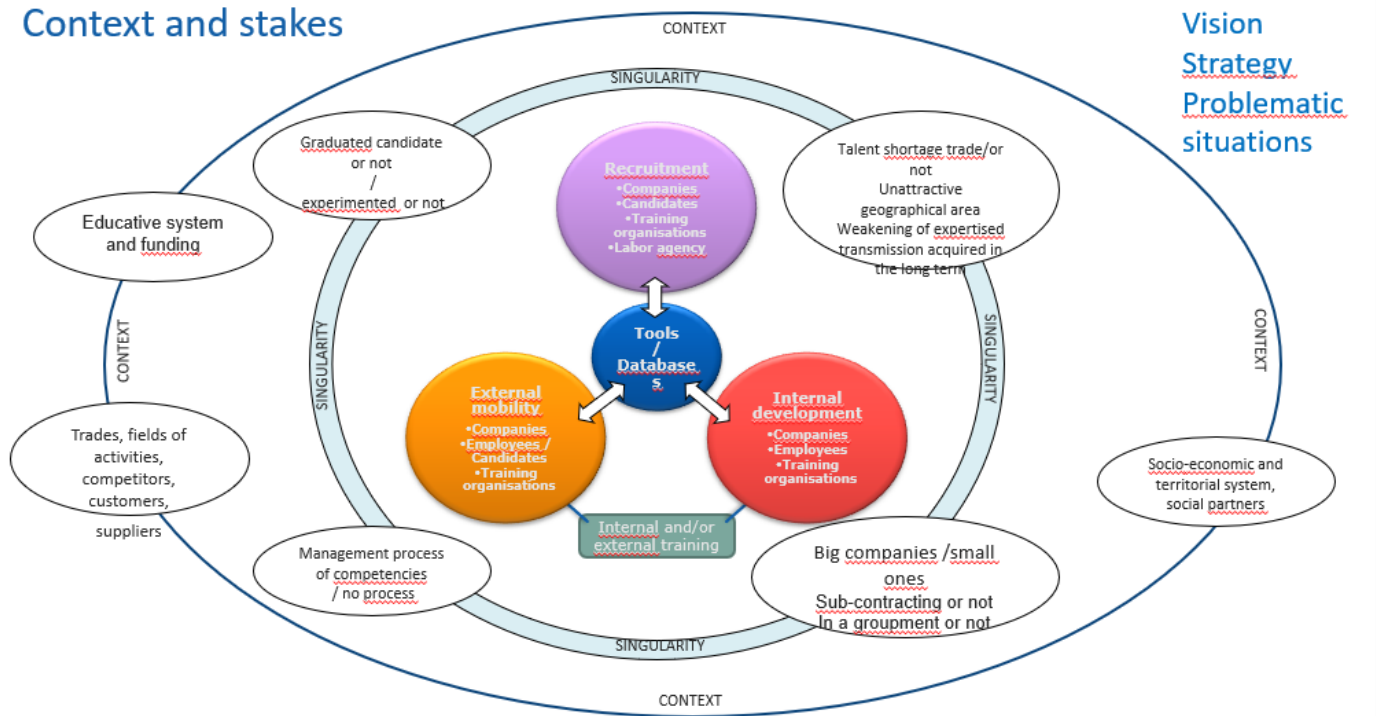
It can take place in four different types of contexts, including:

- Having candidates with proven competences (diploma, certification, etc.) or not or those candidates with experienced or not
- Encountering recruitment difficulties (shortage of talent, unattractive geographical area, weakening of the transmission of expertise acquired over the long term
- Being a large or small company, a subcontracting enterprise or not, being part of a consortium or not
- Having developed competence management processes or not.

The enterprise's environment includes its territory, training and financing organisations, its socio-economic ecosystem (sectors of activity, competitors, clients, suppliers, social partners, changes in demand and professions, productive restructuring, changes in the relationship to work, etc.).



Context and stakes



Vision
Strategy
Problematic
situations

Tool

TOOL

Identify problematic situations and find out how TC can address them.

Analyse what has already been done on the subject of TC, find out if other frameworks have been used.

Find complementarities with the use of the platform.

QUESTIONS TO ANSWER:

- Why are TC interesting for you?
- Why are they important in your context?
- What have you already done, experimented on this subject?
- Does revisiting your needs through the TC help you to clarify them?
- What are you wanting from the platform (digital and/or local hub) in terms of TC training to facilitate information, exchanges, collaborations, experience sharing, or something else?
- How could you contribute to the platform?

Rather than defining your needs on the basis of a predetermined set of competences, we invite you to process your needs and thinking in three steps:

STEP 1:

SPONTANEOUS THINKING

- What are the specificities (your values, market, products, competitors, organization...) of your company context that makes Transversal Competences should be all or part of the solution?
- What actions have you already undertook so (recruitment, internal or external mobility, or other?)

CONFRONTATION WITH THE SCHEME “CONTEXT AND STAKE”

- How did you find the nuances of your context?
- Is there anything important to you that should be added?
- From the initial scheme, could you develop your own scheme?

Suggested avenues to inform the analysis process:

- Impact of individual and collective competences on projects or actions successes or failures
- Consideration of younger employees changing expectations
- Consideration of new competences that youngers can and wish to implement
- Successful recruitments
- Recruitment failures
- Required competences to promote employees' competences and their development, motivation, and variance
- Annual interviews, analysis, and staff reviews

STEP 2:

SPONTANEOUS THINKING

List spontaneously TC you think you need for your company compared to problematic situations you previously identified.

CONFRONTATION WITH TC OCTAGON

- Confront competences listed in the previous step to the TC octagon of the platform using the TC octagon tool.
- Complete or modify your competences needs using the TC octagon.
- Would you like to propose changes on the TC octagon?
- Build your own map with TC you want to work on. Rely them to the contextual elements of the scheme you made in previous step.
- This classification can be general and/or declined through roles or trades.

You have just developed an approach which consists of moving from an intuitive inventory to an organised and prioritised action-oriented classification.

STEP 3:

After the first two steps, what actions can you decide to start with regarding which problematic situations (cf step 1) and mobilising which TC (cf step 2)?

- How and with whom are you going to work?
- What resources do you need?
- Explore with them what the platform can offer (information, putting people in touch, and so on).

ABOUT COLLABORATION WITH EDUCATION, ED-EN HUB PROPOSES A QUESTIONNAIRE TO THINK ABOUT

- What could be good for your company?
- Do you have exchanges with training centres to collaborate about TC needs?

IF YES:

- How does this collaboration work?
- Manifestation of your own needs?
- Participation in the development of teaching contents?
- About content and progress of the periods in the company?
- Participation of your company in trainings?

IF NO:

- Would it be interesting for you to have this kind of collaboration?
- What TC did you develop, or you would like to?
- What is the main TC that should be the subject of a collaboration with training centres, regarding your future prospects (products, competitors, market, technology, organisation, and so on)
- Using the TC octagon, how could you refine and classify your TC needs which can be a collaboration subject with training centres?
- Advancement, internal mobility, assessment; how are agility and adaptability identified?
- Identification of transferability through TC knowledge.

IDENTIFICATION OF TRAINING CENTERS NEEDS

Why ?

WHY

Education and training institutions usually focus on knowledge and technical skills in their curricula. Even when transversal competences are foreseen as learning objectives, disciplinary timetables and classic assessment strategies do not allow much room for TC to be properly developed and given sufficient attention. The suggested process is intended to support curriculum designers and teachers to get familiar with TC and ways to recognise them and include them in existing curricula/study programmes, particularly exploring the possibility to collaborate with enterprises in project-based and work-based learning.

FOR WHOM

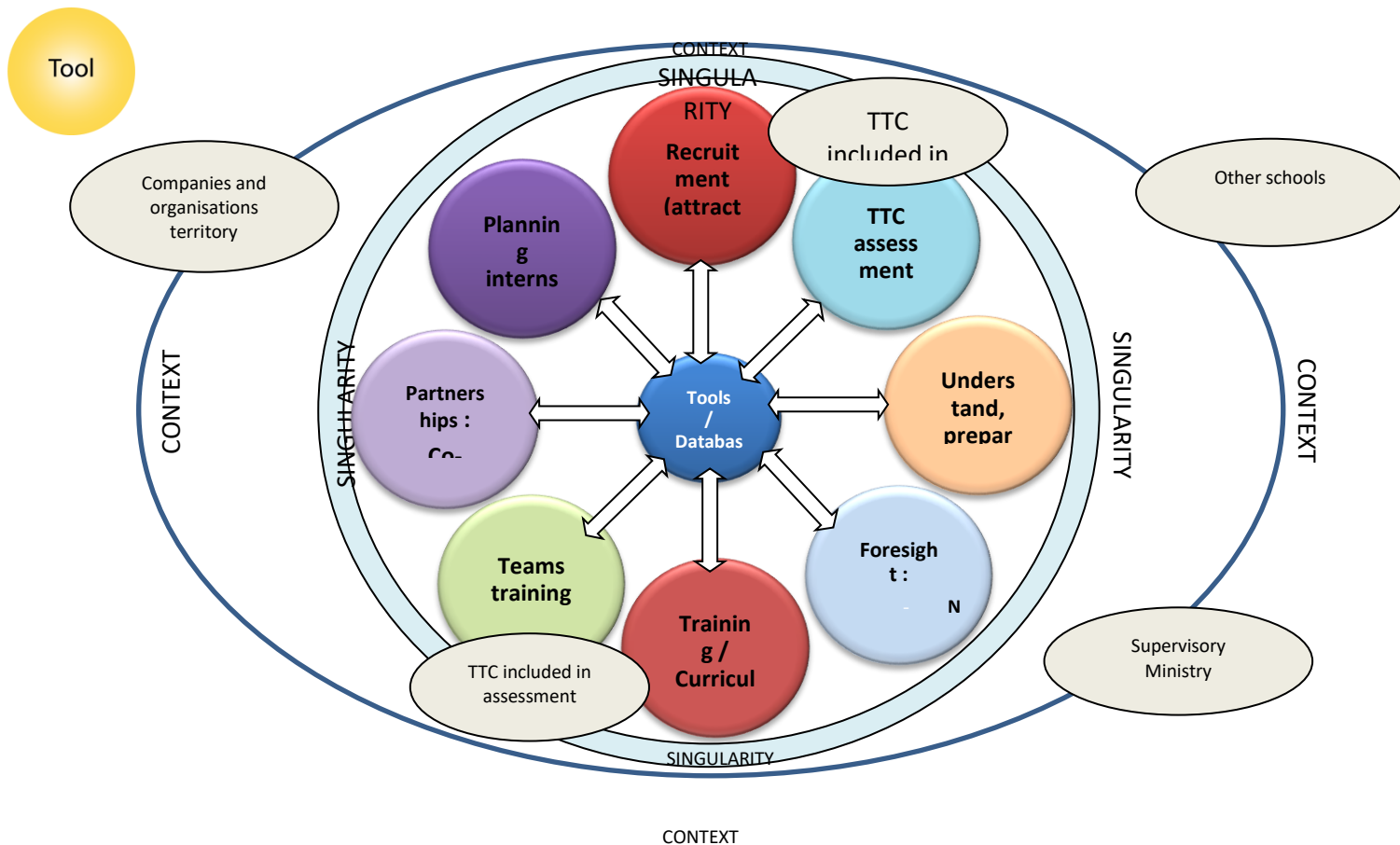
This section is aimed to be useful for curriculum designers and teachers of VET and Higher Education Institutions, particularly those with a technical and professional character.

Methodological introduction

METHODOLOGICAL INTRODUCTION

- The training centre can meet four types of needs:
 - recruiting trainees
 - building curricula
 - caring about trainees' professional experience
 - training trainers
- It can take place in three types of contexts
 - TC are integrated in assessments or not
 - TC are included in institutional guidelines or not (repository, frame of reference).
 - Trainers are aware that they have to consider TC in their trainings, or not; for themselves, for the trainees.

It is important to consider the Training setting's environment includes its territory, other training centres, companies, its institutional ecosystem (department, professional branch ...)



TOOL

- Identify problematic situations and find out how TC can address them.
- Analyse what has already been done on the subject of TC, find out if other frameworks have been used.

-> Find complementarities with platform use

QUESTIONS TO ANSWER:

- What importance do you give to TC when recruiting?
- How do you deal with TC things?
- Which TC do you currently develop?
- Which TC should be developed by trainees to become a competent professional?
- How are TC considered to prepare trainees for their professional placements?
- Are these TC shared in all trainings or specific to each one?
- In feedback times, are trainees asking for TC improvement? If yes, for which ones?
- Did you work on curricula with companies, especially on TC?
- Did you collaborate with companies, for example during apprenticeship or internship, so that each part considers TC acquisitions?

HOW TO:

○ **SPONTANEOUS THINKING**

List spontaneously TC you think you need for your training centre compared to problematic situations you previously identified.

○ **CONFRONTATION WITH TC OCTAGON**

- Confront the competences listed in the previous step to the TC octagon of the platform using the TC octagon tool.
- Complete or modify your competences needs using the octagon.
- Would you like to propose changes on the octagon?

GUIDELINES FOR INNOVATIVE LEARNING PATHS

A tool for co-design, co-development and implementation of innovative learning paths as joint learning experiences integrating transversal competences development.

Why ?

WHY

The purpose of this Tool is to accompany the joint education/enterprise teams of training designers and teachers/trainers in the successive phases of conception, executive design, implementation, and evaluation of innovative learning experiences, in which transversal competences are considered as important as technical and job-specific ones.

For whom ?

FOR WHOM

In this section of the final Toolkit, methods, and instruments to support the collaboration between enterprises and education/training organisations will be provided. From the review of existing qualifications to the development of dual learning paths for young students, from the design of new curricula to the joint training of teachers from schools and tutor/mentors from companies, this section will offer a battery of practical support instruments to improve education and training supply through TC.

Methodological introduction

METHODOLOGICAL INTRODUCTION

Documents illustrating co-design principles for collaborative learning experiences, materials for teachers training and formats to support the joint design of collaborative learning experiences are made available to curriculum and course design teams, including experts from the education and the enterprise world.

Beyond the selection of available and selected practical tools, the main result of this task are the Guidelines for the design and implementation of joint learning experiences integrating transversal competences development, a document that addresses all the phases of the collaborative process leading to the design, implementation, and review of joint training activities, organised in a cycle coherent with the EQAVET Quality Assurance approach. Every section of the document includes one or more activities and refers to more specific instruments available in the Toolkit.

TOOL

Tool

TRAINING DESIGN FOR TRANSVERSAL COMPETENCES AS A JOINT TASK FOR EDUCATION AND ENTERPRISES

These Guidelines have been developed in the framework of **the Ed-En Hub Project** with the coordination of **CIS-Scuola d'Impresa** and the collaboration of all project partners, with an important contribution of **Trouver/Créer** and **IUT Lumière Université Lyon 2**.

In these Guidelines methods and instruments to support the collaboration between enterprises and education/training organisations are presented and proposed for validation. They are focused on **how to collaborate (education institutions and enterprises) in the design and implementation of training and learning experiences in which Transversal Competences are considered key learning outcomes**.

Other instruments of Ed-En Hub are aimed at recognising and assessing Transversal Competences, at guiding the work of career guidance professionals, and, at suggesting ways to train together schoolteachers/trainers and company tutors/mentors. They can easily be accessed through the project <https://edenhub.eu> are referred to in some sections of these Guidelines.

All Ed-En Hub tools are **not intended to be prescriptive**. Rather the tools suggest logical and methodological steps that have been proposed, discussed, tested, and agreed by the project partnership. An essential role remains with the users in terms of adapting these steps to the specific context in which the education-enterprise collaboration is taking place, to the ambition of the training project, to the level of experience and to consolidated collaborations.

Knowing how confusing the discourse on transversal competences can be for teachers, learners, families, these Guidelines aim at supporting training designers to move through coherent steps to add Transversal Competences to their existing training supply or to start a new experience of collaborative design and implementation of innovative training experiences.

The basic assumptions of these Guidelines are:

- 1. Transversal Competences are becoming more and more important in the present labour market conditions.**
- 2. Transversal Competences are better developed when educational institutions and enterprises join their efforts and agree ways to innovate the learning experience to make it more relevant and, at the same time, more enjoyable for the learners.**

After an introductory section to refer to the overall Ed-En Hub approach and the other tools, the Guidelines analyse the main steps in establishing a training partnership and collaborating in an effective way in the design and implementation

of joint education-enterprise learning experiences, for initial and continuing training.

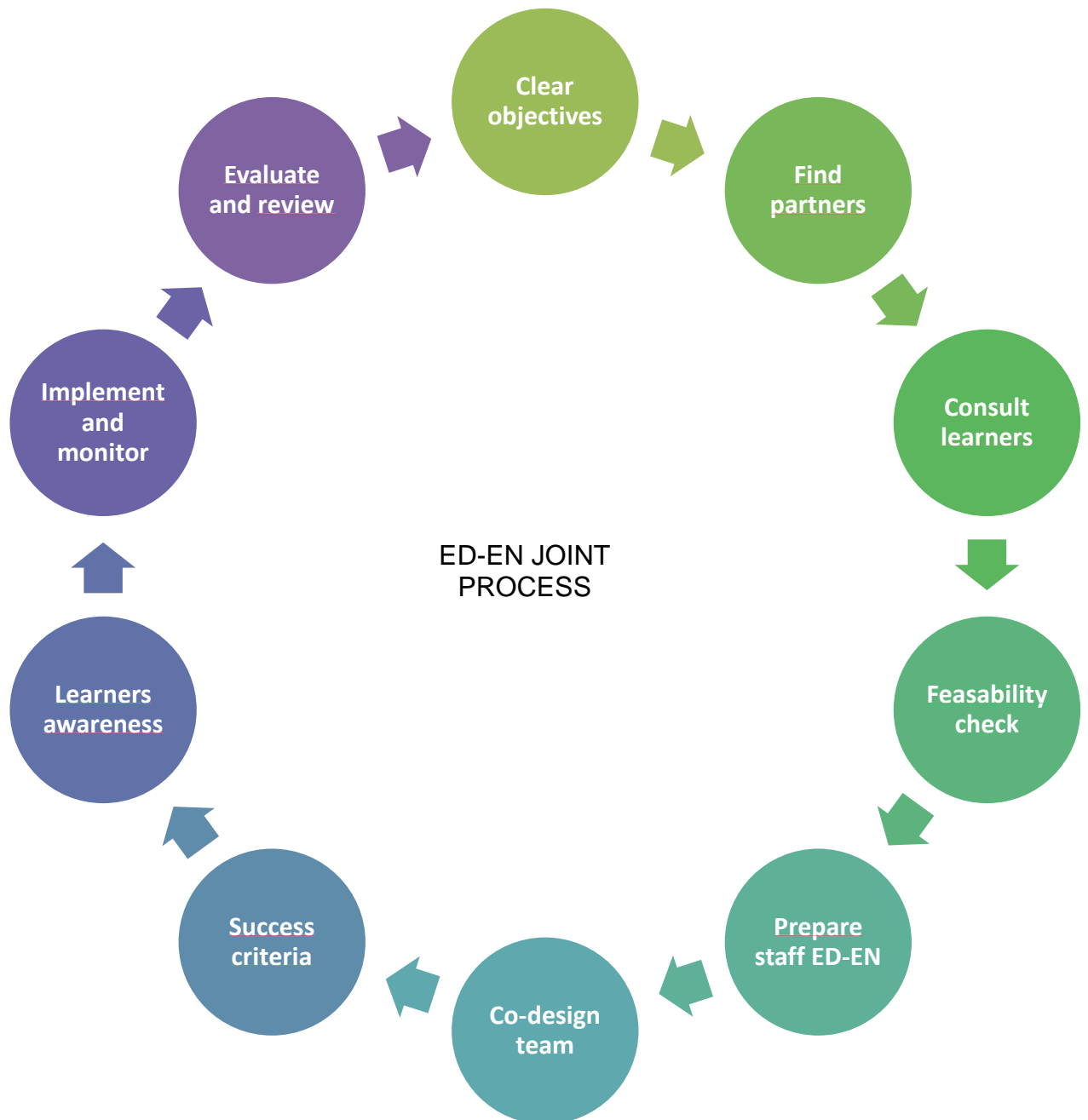
The use of the Guidelines does not need to be sequential. Users may already be in an advanced phase of collaboration and start from the steps that are the most relevant at a given moment. Some other users, although at the beginning of the process, may want to focus only on the steps that appear more problematic, while other may use the Guidelines to check and reflect on how they worked in the past and on improvements that can be achieved by strengthening the level of collaboration.

Each section corresponds to a specific step and proposes some practical activities to collect ideas and stimulate discussions between the enterprise and education partners that are committed to the collaboration. **Multiple feedback loops are suggested to adjust planning and design according to new inputs from the different stakeholders at the different steps.**

The involvement of learners should, in most cases, take place as soon as possible, but very frequently the design phase takes place when learners are not yet identified. This is the reason why the step "Prepare learners and listen to their views" appears relatively late in the sequence of steps. However, in the case of ad hoc training courses for a given group of learners, they should be involved very early to be part of the discussion of expected learning outcomes, creating due awareness on the role of Transversal Competences to progress in employment but also in life quality and well/being at both individual and social level.

THE TRAINING DESIGN AND IMPLEMENTATION LOOP REVISITED

Sections of the Guidelines are organised according to an adaptation of the well-known loop of training, going from needs' analysis to design, planning, implementation, evaluation, and review. The following model illustrates how the cycle has been modified to take account of the education-enterprise partnership element that is the action paradigm of Ed-En Hub. Each of the following sections corresponds to one of the steps in the loop.



START WITH CLEAR IDEAS OF MAIN LEARNING OUTCOMES TO BE ACHIEVED, BASED ON LEARNING NEEDS

Collaboration works best when different parties make it clear what is expected as a result of collaboration and they find not only legitimate different interests, but also a common core of objectives that they can share. In the specific cases that Ed-En HUB addresses, jointly designed and implemented learning activities are expected to facilitate staff recruitment and selection and to improve performance indicators for education and training institutions. This should result in an increase in the level of competence of students and workers, and thus the quality of education and training provision. Making learning objectives explicit helps to find a balance between the respective points of view of education, enterprises, and learners. An education or training organisation or a company which starts the collaboration process has an interest in meeting partners who explicitly can share part of the aims and broadly agree on expected learning outcomes.

ACTIVITY 1

Write down the main goals of the desired collaboration and draw a map of expected learning outcomes, with visualisations of how transversal and technical/disciplinary competences might be related in a training path. Questioning of stakeholders on the objectives to be achieved:

1. Draw up a list, as broad as possible (at least 10), of objectives to be achieved in terms of Transversal Competences.
 2. Choose the 3-4 main outcomes to be achieved.
 3. Present the octagon of competences to validate and situate the chosen objectives.
- Note that there is no single way of expressing the competences of an objective to be achieved, to prepare for the possible discussion on the terminology.

FIND PARTNER(S) AND AGREE AIMS AND APPROACH

Finding a partner who understands and agrees on at least part of the aims and learning objectives is a fundamental condition for the success of the collaboration. This does not mean that this agreement must exist at the first opportunity to meet. Agreement may be reached by dialogue, by mediation, and/or by progressive steps of mutual understanding. Agreement may take some time to be reached, and it may not be complete on every single aspect, but some fundamental points of agreement should be achieved before a firm commitment to collaborate is established.

ACTIVITY 2.1

Define what kind of partner your organisation is looking for, which activities should be conducted collaboratively, paying attention on desired agreement points and their relative importance.

For education/training organisations: Look for partner companies in the same industrial/service sector that want to develop the skills sought (each company may be able to develop different Transversal Competences) for companies experiencing recruitment difficulties.

For enterprises: According to transversal competences, look for specialised education/training organisations conducting specialised training or education/training organisations close to the core business. Sources of partners can include:

- Ed-En Hub databases of partner companies and schools/training providers
- Prospecting: Go into the field (trade fairs, forums, and so on)
- Integrate the possibility of collective events which are often conducive to TC learning, provided they are prepared, processed, and integrated.

ACTIVITY 2.2

Prepare carefully the first meeting and define what is negotiable and what is not in establishing a partnership agreement.

- Confront the lists established in point 1 with each other in two stages (the main one, then the larger one) to arrive at a common list respecting the must-haves of both parties.
- Think about activities that mobilise the group of partner companies: activities such as job discovery, job forum that train transversal skills.

IF LEARNERS ARE ALREADY KNOWN, CONSULT THEM ON NEEDS AND APPROACH BEFORE STARTING THE OPERATIONAL DESIGN OF THE TRAINING EXPERIENCE

Learners, young people, or adults are not only a third party in the collaboration scheme, but they are also the real owners of the learning process. They are normally able to express learning needs, development objectives, preferences on learning and teaching approaches available, available transversal and technical competences. They may be of great help in making training successful and are, at least potentially, the most important actors in the development of transversal competences. This requires that they are made aware and supported in assessing their existing levels of competence and planning their development.

ACTIVITY 3

Propose the Transversal Competences Self-assessment tool to a sample of your future learners and help them to define their competence development path.

Write down the main goals of TC improvement and draw an action plan that can be a development path.

Questioning the learners on their needs of improvement:

- Draw up a list, as broad as possible (at least 10), of TC to be improved.
- Confront them with the TC octagon to validate and situate the chosen competences. To note that there are more competences than they just thought of. Confirm or change the 10 TC chosen to work on.
- Classify them by a preference order.
- Classify them by a feasible order.
- Make a definitive classification of the competences they would like to work on, and for each one, imagine a situation in which they could improve it.

Check what is feasible and agree a first draft of the training experience

When the decision to collaborate is taken and a substantial agreement on aims and learning outcomes is achieved, it is time to define design principles and structure of the training project, specifying how enterprise and education/training institution will respectively contribute in the different phases of implementation: which learning outcomes are expected to be developed in a classroom, which in the enterprise and which in an integrated learning path in which both parties are active. It is expected that transversal competences are better developed through project work that is carefully planned as the result of collaboration between the two parties. It is also important to agree on learning/teaching and assessment methods, and the activity level expected by learners.

ACTIVITY 4.

Draft together a first training project, specifying the design principles that are agreed and the main choices in terms of learning outcomes, methods, course structure and respective roles of partners.

Training in technical competences is an opportunity to develop Transversal Competences. You cannot do one without the other. Take the time to analyse that TC have been developed.

Thinking of experiences/teaching in stages: preparing / experiencing / processing / integrating

Define the postures of each party required to meet these steps.

- Enterprise: Daily monitoring and ensuring that the acquisition of TC is achieved
- Education/training organisations: More distanced, more analytical

Learning outcomes	First	Second	Third
Learning situation			
Preparing			
Experiencing			
Processing			
Integrating			
Learner outcomes in terms of competence to be in one's portfolio			
Assessment of the learner			
Assessment of this step			
Each crossover is distributed to the defined actor(s).			

Writing the contextualised situation to show the link between the development of transversal competences in the exercise of technical competences.

Place emphasis on the reflective part (processing + integrating), organise it.

The same process can be transposed into collective events and other modalities that provoke learning (forums, trade fairs and so on).

5 - CONSULT AND PREPARE TEACHING AND SUPPORT STAFF

When the core training design team from the two partners has completed the macro/design phase, the draft project has to be presented to all teachers, trainers, tutors and mentors who will be involved in the following phases: the detailed design of each step of the learning path, the development of evaluation and learning assessment strategies, the activation of learners awareness and engagement, and the implementation and evaluation of the training experience. Teachers and support staff should not be involved as simple executors of a pre-defined project. If they are listened to and engaged in the collaboration idea and in the innovation objectives of the proposed experience, they may propose ideas and identify possible risks that their direct experience allow them to perceive. Their opinions should be given space and not only the micro design, but also the main ideas might be improved by their contribution.

ACTIVITY 5.

Prepare an awareness raising and discussion meeting with all teachers, trainers and other support staff who will be involved in the implementation.

Introduce the objectives and get people thinking about:

- The validity of the objectives
- What participants have already done on these topics
- The solutions they feel are necessary

Presentation of the draft joint project to all.

Questionnaire to be completed individually, then in small groups and all together:

- How can they position themselves in their respective functions (be involved in a specific point) in relation to what is proposed?
- At what level should they be involved in the process?
- How will it help you to develop yourself?
- What changes or improvements would you propose?

6 - CREATE A MIXED (EDUCATION/ENTERPRISE) PROJECT TEAM AND PREPARE THEM FOR DETAILED DESIGN AND IMPLEMENTATION

After the awareness raising and discussion phase, the actual mixed education-enterprise team who will develop and run the training activity has to be constituted. Together they will build a work plan and specify respective roles, trying to identify all opportunities to collaborate in view of innovating and improving the learning experience, and making the value of transversal competence fully explicit. They will also work on creating the necessary favourable conditions (organisational, regulatory, technical, and economic resources, etc.) in the different environments (face-to-face or event-based/collaborative) where learning will take place.

ACTIVITY 6.1.

Jointly prepare a work plan including the main phases and operational steps to make the training experience happen according to the desired objectives and design principles.

Go deeper with the board previously proposed.

ACTIVITY 6.2.

Coordinate the development of Learning Units by the whole mixed Project Team and check how the development of transversal competence is integrated into the learning path.

Establish a roadmap for each Learning Unit specifying the TC to be implemented at each stage, with the obligation of a feedback on the validated integration of TC.

7 - AGREE SUCCESS CRITERIA AND EVALUATION APPROACH

It is extremely important that the project's success criteria and the evaluation approach are the result of a consensus building process in which all involved parties are taking an active role. Not only the management of the education establishment and of the enterprise, but also the teachers, trainers and learners should all have the right to express their suggestions and to have them seriously considered. This exercise will facilitate the engagement of every party involved in the successful implementation of the Learning Experience Project. It is suggested that success criteria are built as a result of a participatory session, and that detailed evaluation strategies are then built by the Project Team and published, allowing all parties to express their comments.

ACTIVITY 7.

Prepare and conduct a participatory session, involving education and enterprise partners and a representation of learners, to jointly define success criteria for the joint learning experience to be conducted.

Invite each party to think about its own success criteria and confront the results of all the participants.

8 - PRESENT THE DETAILED TRAINING PROJECT TO LEARNERS, PREPARE AND MOTIVATE THEM, PROPOSE SELF-ASSESSMENT OF TRANSVERSAL SKILLS AND CONSIDER THEIR FEEDBACK

The full engagement of learners can only be achieved if they fully understand the potential benefits of the joint Ed-En design and implementation model, and the importance of transversal competence as key set of learning outcomes. For this reason, it is suggested to propose a self/assessment session on transversal competences before the start of the training activities, and a specialised support service for learners to track their progress in this domain, provided through the Ed-En Hub Network. This support service offers collective feedback.

ACTIVITY 8.

Prepare an awareness session for students who will be involved in the learning experience and prepare them for a Transversal Competences self-assessment exercise using the platform and services provided by the En-EN Hub.

In terms of TC, make three lists:

- The TC I think I have a good level in
- The TC I think I have a middle level in
- The TC I think I should improve

Together, have a look at the first part of the TC octagon.

- Do you agree with the different categories proposed?

Together, have a look at the different lists of the TC octagon.

- Did you think all the competences listed were TC?
- In what kind of situations do you think those TC are activated?
- Are those TC you have listed for yourself in the octagon lists?
- Do you find other TC to add in your own three lists?

9 - IMPLEMENT AND MONITOR THE COURSE/LEARNING EXPERIENCE PROJECT WITH AN EXPERIMENTATION APPROACH, AS NEEDED IN ANY INNOVATION

During the joint learning project implementation, a significant monitoring effort should be conducted, according to the success criteria agreed, and considering the possible risks that might affect the planned development of the experience. While unforeseen aspects might happen, it will be important to detect if delays or implementation gaps are due to external factors or to design mistakes or to other circumstances. Considering the experimental and potential replicability of the learning experience, understanding what can be improved as soon as possible is of great importance and should not be underfunded or underestimated.

ACTIVITY 9.

Jointly prepare a monitoring plan for the learning project, including risk analysis and different checkpoints in the different phases of implementation.

Different apps exist: Asana / GantPro / Zoho Projects.

You can find some here: <https://project-management.com/top-10-project-management-software/>

10 - EVALUATE, SHARE RESULTS AND USE THEM TO IMPROVE

Agreed success criteria should be the basis for project evaluation, but other elements emerging during the implementation phase should not be neglected, particularly when they concern feasibility and replicability conditions. A project evaluation report should be produced and published. Feedback from learners, teachers and trainers should be searched and used in order to improve the next edition of the joint learning experience.

ACTIVITY 10.

Draft an essential evaluation plan, specifying main criteria and methods to collect information, and ways to make the evaluation report published and used.

You can find some here: <https://www.jotform.com/blog/electronic-logbook-software/>

WHAT NEXT?

The final section of the Guidelines is intended to stimulate networking, through the ED-EN platform, with other joint teams in other countries and will refer to existing cases of good practice. The ED-EN Hub website contains all the project tools in an easily acceptable manner. This means that each Regional ED-EB hub is ready to aid and support in setting up a partnership and developing collaborative training projects. The experience of all the European partners is diverse and extremely interesting, for example :

IUT Lumière Université Lyon 2 is an example of training organisation that develops exclusive, progressive, and inclusive Apprenticeships with practices to analyse. It was not this in itself that produced the IUT's work on transversal competences, but its desire to recruit and train differently through successful apprenticeships, which showed that a structure as such, through the mechanisms it puts in place and the priorities it sets itself, and not only the teachers and companies in the interpersonal relationships they develop, also trains in transversal competences. Just as a school can be orienting through its practices and systems, a training organisation can itself be "transversalising" all its courses.

CIS is constantly collaborating with enterprises and the school system to enrich existing curricula through transversal competences. In its two Masters-level qualifications, transversal competences are fully embedded in the project work that students are doing in collaboration with enterprises, and the development of these competences is monthly monitored by the course tutor and by specialised teachers. Collaboration with companies is mandatory within ITS – Higher Technological Institutes – courses. CIS manages several ITS courses in different sectors: logistics, food, mechatronics. The two-year training paths are co-designed with companies. Digital, communication and interpersonal skills are a fundamental integration of the technical vocational skills and are part of the assessment criteria for internships.

City of London is uniquely placed as directly running schools and adult and further education, while having immediate access to large numbers of global companies and more than 350,000 employees who work every day in the City of London. The City of London is leading strategy to encourage the adult education and skills training sector to urgently adapt and respond to changes in the workforce, to changes in demand for skills and competences, and to new, innovative ways to deliver education and skills training. The combination of the ageing population in most high-income economies and the rise of automation and digitisation means that more workers will need to retrain and reskill multiple times in their lifetimes. Rising levels of self-employment combined with increasing interest from young people in pursuing entrepreneurial careers requires new approaches to TC delivery, as individuals have fewer opportunities to access employer-led training. Employers may be disincentivised to provide training to employees as people follow non-linear career patterns and have more frequent job moves. These patterns are disrupting traditional education and skills delivery models and will have profound implications for equity of access to training, for matching the supply and demand for skills, and ultimately for economic growth. Traditional education and skills sector has not kept pace with the speed of change. This underscores the need for a responsive and dynamic education and enterprise collaboration which moves beyond traditional models, and brings in other actors, sectors, and approaches to meet this need. This agenda is particularly pressing for the City of London as it is a global hub, providing access to skills and education for people across London and the world.

EXAMPLE OF USE COMPETENCES IN CONTEXT

GOOD PRACTICES AND PARTNERSHIP GUIDANCE

Good practices require co-design. Processes can be individual and/or collective, at school and/or at company. IUT Lumière Université Lyon 2 is an example of training organisation that develops Exclusive, Progressive and Inclusive Apprenticeship with practices to analyse. The idea here is more to give *markers* of good practices than to give a list of good practices. How do we know that a practice is a good one? Is it because it is charming, or because it is re-read in the light of a training project? It is necessary to work on the guidance in a special state of mind. A practice becomes a *good* one when it's written in a rhythmmed and organised monitoring.

Students accompanying is built like spread out accompanying at school and at companies, and it takes part in the respect of a work frame. It is founded on schools', companies' and organisations' knowledge and experience. Different approaches rely on specific concepts and tools borrowed from human sciences, education pedagogy, professional coaching, and organisational management fields.

Regarding establishments, there are a great diversity of approaches which can result in good practices, including:

- Providing training, information or accompanying
- Framing training within the scope of ethical respect
- Basing programmes around individual and/or collective terms and conditions
- Varying professional and/or personal approaches
- Training that can be an isolated working group or experience, to a longer, and more elaborated programme
- Training accompanied by teachers, guidance professionals and/or company professionals
- Providing training in an optional or obligatory manner to students
- Integrating assessment, accreditation or not
- Having regulation and planning controls or not

It is therefore suggested that school and company professionals engaging in Ed-En HUB project take time to select and curate the approaches that work best for their aims and contexts. The programme and tools can be adapted to conduct experiences in their own environment, and thus, each use of the Ed-En Hub Framework and resources will contribute to the further elaboration of good practices in TC. It will allow each stakeholder to model, regarding one's own context, purposes, and constraints of one's own system in which one evolves. In this way, a survey is to be initiated to promote information repository from several establishments.

ASSESSMENT

CONTEXT AND STAKES

The effort was focused on accompanying the methodological framework with concrete development and selection of evaluation tools to be made available within the Toolkit. With the important contribution of City of London, IUT Lumière Université Lyon 2 and Rectorat de Lyon a set of over 150 tools and concrete operational methods were collected and reviewed, and a Teaching and Learning Week allowed to establish practical experience on how to combine the project methodological approach with existing tools freely available on the web.

EUROPEAN CONCERN

Transversal Competences certification

ED-EN HUB CHALLENGE

Promote the development of competent professionals in terms of TC by facilitating the collaboration between Education and Enterprises

BECOMING COMPETENT, TC CAN BE

Developed mostly through work situations but also through a large diversity of situations (such as, civic participation, games, and even in school education when it is designed to this purpose)

Developed in synergy with other competences and mutually strengthen

Mostly assessed through activities and processes conducted in interaction with others.

IDENTIFY COMPETENCES, NEEDS AND TRAINING

Many grids, questionnaires and competences frameworks are already available, as well as website providers. Professionals become more responsible and autonomous by:

- Becoming aware of and assessing their own TC
- Developing the opportunity to strengthen their TC
- Building their own assessment grids in consistency with one's projects and objectives

CO-BUILD AND CO-DEVELOP

Getting inspired by modelling examples which facilitate the collaboration Education-Enterprises on the topic of TC.

DETECT, ASSESS AND CERTIFY

Multi-layer evaluation: competences, actors, system, platform, and processes.
Assessment is not only about people but also about systems.

WHY ASSESS TC?

Why?

Before starting an assessment, questioning oneself about one's reason to do this is a useful step to be efficient on the assessment. The activity proposed below can be done with one person or with a group.

(In any case)

- For you or your organisation, what purpose does the assessment of TC provide?

(With a group)

- Reflect on this on your own.
- Join your answers in small groups.
- Join your answers in the big group.

IN WHAT SITUATIONS OR CONTEXTS IS TC ASSESSMENT RELEVANT?

For whom?

INDIVIDUALS

SELF-KNOWLEDGE

- To know one's strengths and weaknesses
- To know what to improve
- To do a personal development work
- To know what was improved
- To benefit feedback

CHANGE / TRIGGER

Self-assessment for self-guidance

To make choices

AT WORK

- Mobility: internal, external, transnational
- To communicate about personal activities
- To know how to well introduce oneself
- To get a job which matches well
- To allow people to make a difference
- To get certification
- To have documentation to present
- To justify and evidence competences

TRAINING / GUIDANCE CENTRES

FOR THE LEARNERS

During coaching, training to be sure that there is positive impact

To assess improvement
To certify

FOR THEMSELVES

To recruit trainers
To assess their own process

ENTERPRISES

CHANGE / TRIGGER

For recruitment: To identify the best candidate and to enable people to make good choices for themselves and for the organisation/s
Internal mobility: To take decisions about reorganisation
External mobility: To prepare people to move on

IMPROVE

Continuous learning and training, both individual and collective
Apprenticeship linked to training
To certify learning within a working-training context
To assess entrepreneurship abilities
To self-assess within an organisation
To see improvement at the end of an internship
To retain people
To care about employees

CONDITIONS OF ASSESSMENT

WHY

Wanted / Needed / Constrained

WHEN (IN RELATION WITH AN EVENT)

Before / While / At the end / Sometime after the end

HOW

A guided process (tests, other tools)
Discussion
Demonstration by proof: illustration by examples of situations
Faced with other people
Involvement
Reflexiveness
Projects
Practical tasks



BY WHOM

Self-assessment	}	360 feedback
Co-assessment		
Peer or group assessment		
Collaborators' assessment		
Hierarchy assessment		
External Board assessment		

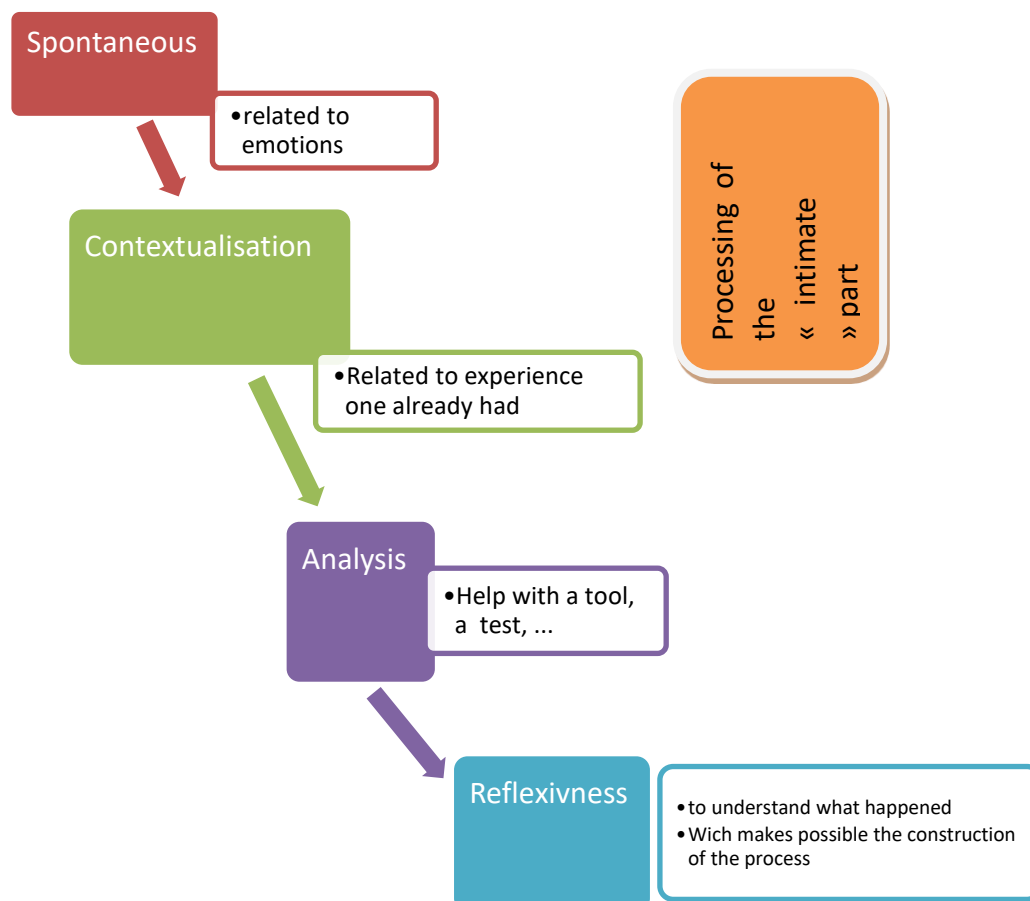
FRAMEWORK

Security and safety of data
Responsibility and quality assurance of the assessors
Exploitation and dissemination of data

ASSESSMENT PATTERN

To resume the process done in the experimentations, here is a four-step pattern. It can be used in every assessment condition.

To start the process, a question is needed. This one depends on the context (a typical day of work, a complex project, and so on)



TOOLS

Tool

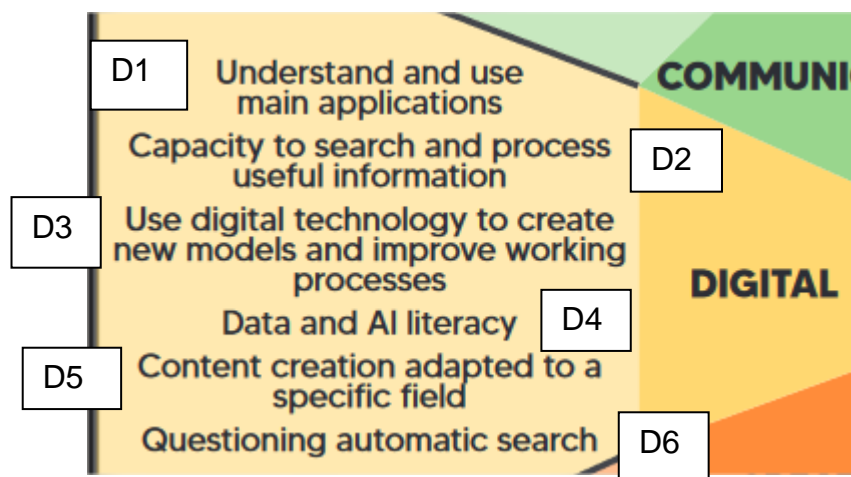
SELF ASSESSMENT PREPARATION GRID

This grid is aimed at people who would like to have a better understanding of their sub-competences.

There is no indication of level because the definition of levels depends on their own context.

Each organisation has to adapt its own grid to the population assessed. Here are two examples of questionnaires for sub-competences:

DIGITAL

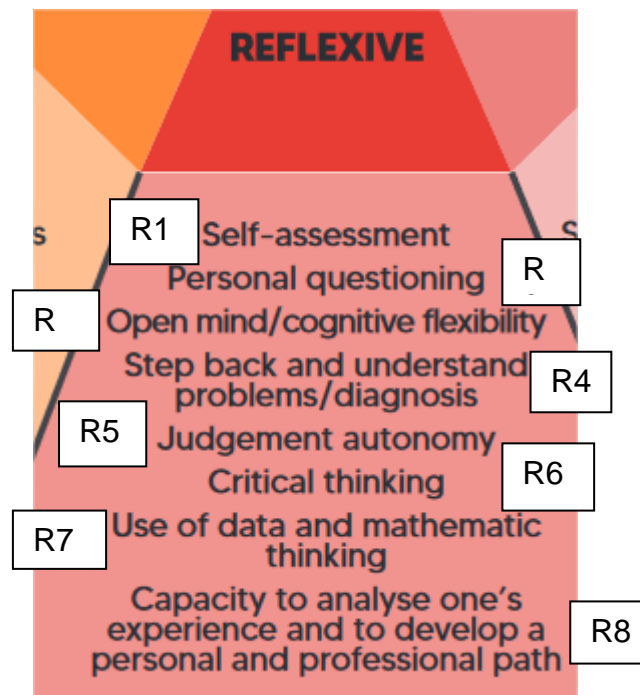


D1	Is it easy for you to use office automation and web applications? What kind of software or applications do you regularly use? Do you always know which application to choose to do something?
D2	When you have information to get, how do you do it? Do you know how to get information using digital? Are search engines familiar to you? Do you know the differences among those that exist?
D3	Is the use of digital technology a way for you to create new models and improve working processes? To develop concepts and schemes to reflect on your work, your private life, your networks? Use a digital device rather than paper
D4	What are big-data and AI for you? Are data and AI in your subjects of interest? What is your use of data or AI to make decisions? Is the use of data or AI in your work field?
D5	Are you used to creating content adapted to a specific field? Videos, digital materials, graphics to illustrate a presentation, social networks Transfer your graphic abilities on digital



D6	<p>Do you click only on the first suggestions?</p> <p>Do you click on several ones?</p> <p>Do you go on further suggestions pages to see other results?</p>
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REFLEXIVE

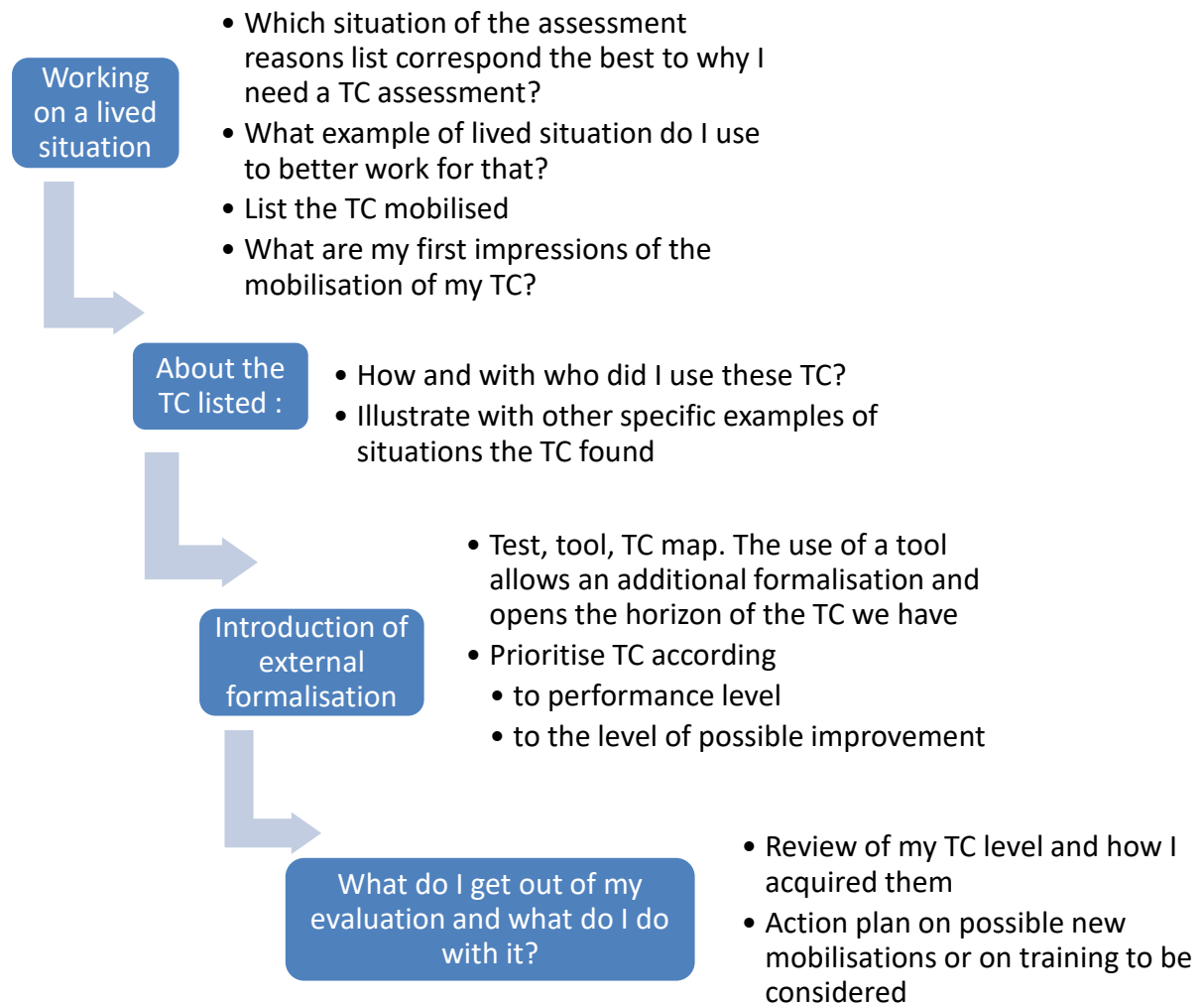


R1	<p>Do you know what self-assessment is and its usefulness?</p> <p>Do you assess yourself on things you do? How? In which contexts?</p> <p>Are there grids of self-assessment in your organisation?</p>
R2	<p>Do you have a look back on things you do and ways you think?</p> <p>Often imagine how other persons think of your behaviour</p>
R3	<p>Do you keep searching or listening to other opinions than yours?</p> <p>What do you think about people who don't have same point of view as yours?</p> <p>Do you think there is always a right way to see things?</p>
R4	<p>When you are facing a problem, do you take time to take a step back?</p> <p>Is it easy for you to have an overview of things which are composing a problem? From the overview, are you able to resume them in a diagnosis?</p> <p>Are you normally able to see problems in another way from the others?</p>
R5	<p>Do you feel at ease when you have a different way of thinking, or do you prefer to refer to other's opinions?</p> <p>Do you define your own criteria before expressing a judgement?</p>



R6	<p>About what you read or listen, do you believe it immediately or do you search references before, in your own knowledge or around you?</p> <p>Do you reflect on who has a certain interest in diffusing information and opinions?</p> <p>Do you have any experience in detecting misinformation?</p>
R7	<p>Do you often check available data before believing a given statement in the media?</p> <p>Do you know and apply the concept of evidence-based decision making?</p> <p>Do you naturally search for models that can explain facts around you?</p>
R8	<p>Do you easily refer to things you have already done to adapt your way of being in front of a new situation?</p> <p>Do you frequently use models of action that you have already used in the past, correcting past mistakes and using lessons learned?</p>

EXPERIMENTATION 1 (FOR ONE PERSON)



EXPERIMENTATION 2 (FOR A GROUP)

Each one for oneself, in terms of TC, could you make three lists:

- The TC I think I have a good level in
- The TC I think I have a middle level in
- The TC I think I should improve

Altogether, have a look at the first part of the TC octagon.

- Do you agree with the different categories proposed?

By yourself and then all together, have a look at the different lists of the TC octagon.

- Did you think all the competences listed were TC?
- In what kind of situations do you think those TC are activated?
- Are those TC you have listed for yourself in the octagon lists?
- Did you find other TC to add in your own three lists?

DIGITAL TOOLS

With the important contribution of City of London, IUT Lumière Université Lyon 2 and Rectorat de Lyon a set of over 150 tools and concrete operational methods were collected and reviewed, and a Teaching and Learning Week allowed to establish practical experience on how to combine the project methodological approach with existing tools freely available on the web.

The principle is mainly the same: a list of questions with several propositions has to be answered, and at the end you get a profile of your competences level.

The proposition below can be used alone or can be supported by accompaniment.

GUIDELINES

Digital tools allow you to better understand yourself, also known as personal development. As a result, they often provide you a profile (such as narrative text, a grid, or a spider map) without other explanation. You can use them alone, but we propose a different way of using them, to go deeper in your reflexivity

BEFORE STARTING WITH THE TOOL

Before starting ask yourself four questions:

- Why do I do this test?
- In what kind of mood am I today?
- What is my purpose?
- Will I answer honestly or do I have to embellish things to get the job of my dreams, to appear the best person...

DURING THE USE OF THE TOOL

For each question, before clicking on the indicator, ask yourself and take notes if needed:

- When did I use this competence?
- What task was I working on? With whom?
- What was the result?
- If I didn't use it, how can I imagine using it?

AFTER USING THE TOOL

What do you think is the difference between doing a test without accompaniment and with the method I suggested you?

- Beyond a feeling of being it is a way of proving who you are
- It takes more time, but it is more complete, more reusable

How did you feel during the test, questioning your experiences?

How do you feel now?

What does this workshop bring to you?

For yourself?

As an employer / a team manager / an employee taking part of a team?

EXAMPLE OF COMPETENCES USE IN CONTEXT

Examples of use
competence in context

These guidelines will support assessment in an innovative way in real situations. The assessment guidelines are based on witnessing, amazement report, problem-solving, co-assessment, peer assessment and so on. It could be based on IUT Lumière Université Lyon 2 and Trouver /Créer expertise, for example of the co-assessment of competences of apprentices (cf. below).

PRACTICE OF ASSESSMENT BASED ON DOUBLE TUTORING (TUTORSHIP) IN APPRENTICESHIP

IUT Université Lumière Lyon 2 has been developing practical skills in the area of TC for 30 years. Here are some elements discussed and documented on this basis:

Tutorship is not a function that goes without saying. It has often been perceived as "natural", but in reality, this is not the case, it is learned, even if few training courses are offered for tutors (in France at least). Tutors therefore find resources to develop their tutoring practice in their professional networks, at school or in their family circles, close friends, etc. (Pelé-Peycelon, 2018). Tutors are caught up in the work/training duality and must constantly find a balance between these two logics, regulating them both in relation to the requirements of each, but it is often the productive logic that prevails over training. (Barbier, 1996; Filliettaz, 2017; Kunégel, 2011; Rémy & Markaki, 2016; Thébault, 2018). Tutorship is an activity that strongly supports on-the-job learning. It unfolds to a large extent in interactions (Billett, 2011; Filliettaz, 2009; Mayen, 2000).

A tutoring duo (tutor-apprentice) is often presented, yet the tutoring function is often assumed to be a collective. At the very least, it is important to place the 'tutor-tutored' duo within a wider network of actors with whom it interacts (Thébault, 2018, Filliettaz, 2017, Olry-Louis & Olry, 2011; Pelé-Peycelon, 2018).

TROUVER /CRÉER PRACTICES ON EVALUATION AND ASSESSMENT

Trouver /Créer has been developing practical skills in this area. Here are some elements discussed and documented on this basis:

At the point of assessment, the first question to answer is what is or is not evaluated. We talk here about evaluation of processes and persons. For example, in a secondary school, evaluation is on the structures and pedagogical practices, which have themselves evaluation processes for teachers and students. High school evaluation amounts to its efficiency evaluation. It is its processes and stakeholders' evaluation. It is different from person-based evaluation.

Evaluation is a structured and structuring approach. It is proposed for individuals and groups. What is common in these two evaluation levels is that the intent of the evaluator in this act structures evaluation. The intent is to train a skilful and employable professional, to do things that the student will be able to get to grips with a situation, with the intent to realise the given mission, enlisting internal and external resources. The meaning is that a skilful professional is able to implement adjusted purposes and

to evaluate them at each step. Then it becomes clear that learners must be submitted to evaluation but also to self-evaluation.

For example, for one's assessment, the student comes with one's self-evaluation grid filled in, and it is discussed with the extended pedagogical team (teacher, tutor, supervisor). Ideally, evaluation and auto-evaluation always run in parallel.

To enlighten the difference between evaluation, assessment / certification:

- First, we must go from comments to evaluation. One often would like to do a quick evaluation with short comments. More precise questions allow us to refine the examination, to reach questions which are about how rather than why. A Company is more used to this approach than a school. The partnership between the school and the company must have a common evaluation.
- Then from evaluation to assessment: This time the company is not used to doing that and nor to giving marks. The partnership is also to be built around this assessment because giving marks is an obligation for certification.
- Then comes co-assessment notion. For example, for apprentices a trio emerges, namely the supervisor, tutor, and the apprentice. With tools like in France Le@ (digitalisation of older paper processes), apprentice self-evaluation and marks can be accumulated. Le@ is online. It does not need exchange or verbalisation. Yet meeting increases competences learner's appropriation, especially when it is tri-part (student, school, company). To this end, exchange is increased and leads to further reflexivity. This allows learner to analyse and get to grip with one's pathway. All this occurs through an agreement which specifies purposes and requirements, and terms and conditions of scheduled meetings.

The process of this tri-part assessment building is a pathway punctuated by immersive evaluation moments. It is a way of designing evaluation in material and temporal terms: mission times, evaluation moments, organised in grids and moments.

This can also be implemented for internships.

PORTFOLIOS, MICRO CREDENTIALS, E-BADGES

These instruments are used, mostly within large organisations, to recognise learning achievements of employees related to some specific competence, typically associated to technology or management performance. The Toolkit proposes methods to adapt these approaches and tools to the set of TC that are the focus of Ed-En Hub interest.

GLOSSARY

The Project Glossary of the Toolkit first explains how the project is using some core terms, shortly referring to other possible uses that were found in the process of building the Toolkit. At this stage, it contains 58 terms.

It refers mainly to English as main project languages but also contains references to French, Italian and Portuguese (partners' languages) whenever necessary.

The terminological issues pose another set of problems, especially in a transnational context like that of a European project. CEDEFOP and other European services have spent a few decades on providing a common glossary, and nevertheless every EU country and language continues to use terms like competence, skill, qualification in a country-specific, non-standardised way.

The taxonomy was defined to consider the terms in their national framework (at the institutional level and also in research work), but also their practical uses with differences in language and cultural/disciplinary approach. *For example*, in French there are differences between Transversal Competences that are more generic competences mobilised in various professional situations and Transferable Competences that are attached to professional situations but can be implemented in other sectors of activity or trades (Lainé, Réseau REC, France Stratégie).

Academic tutor	A tutor, formally also called an academic tutor, is a person who helps or provides tutelage to one or more people on certain subject areas or skills. The tutor spends a few hours on a daily, weekly, or monthly basis to transfer their expertise on the topic or skill to the student.
Affordance	According to Billett, affordances are defined as offers to participate in certain activities or interactions generated by the characteristics of work situations. Together with "engagement", they constitute "the constitutive duality of learning in a work situation". "Affordances are merely potentialities and are only actualised because the subject perceives these offers, decides to seize them and engage with them, thus making them relevant as resources for his learning." (Pelé-Peycelon 2018).
Centres of Excellence	A centre of excellence (COE) is a team, a shared facility or an entity that provides leadership, best practices, research, support and/or training for a focus area.
Co-creation	Co-creation the context of a business, refers to a product or service design process in which input from consumers plays a central role from beginning



	to end. Less specifically, the term is also used for any way in which a business allows consumers to submit ideas, designs, or content.
Continuing education	<p>Continuing education (similar to further education in the United Kingdom and Ireland) is an all-encompassing term within a broad list of post-secondary learning activities and programmes. The term is used mainly in the United States and Canada.</p> <p>Professional continuing education is a specific learning activity generally characterised by the issuing of a certificate or continuing education units (CEU) for the purposes of documenting attendance at a designated seminar or course of instruction. Licensing bodies in a number of fields (such as teaching and healthcare) impose continuing education requirements on members who hold licences to continue practising a particular profession. These requirements are intended to encourage professionals to expand their foundations of knowledge and stay up to date on new developments.</p> <p>Recognized forms of post-secondary learning activities within the domain include degree credit courses by non-traditional students, non-degree career training, college remediation, workforce training, and formal personal enrichment courses (both on-campus and online).</p>
Discipline-based curricula	A model of curriculum in which content is divided into separate and distinct subjects or disciplines, such as language, science, mathematics, and social studies. ¹
Dual learning	Dual learning suggests that students are combining learning and working. This means that students are practicing a real profession a few days in the week. The resting days, they just go to school.
Enterprise tutor / mentor	The role of the enterprise tutor/mentor is to follow the student/s when they spend time in the company. The tutor is responsible for monitoring the employee throughout their period of professional practice. The tutor/mentor is responsible for welcoming, helping, informing, and guiding the student, to organise one's activity with the employees of the company interested in this activity. The enterprise mentor contributes to the acquisition of the professional knowhow of the employee and ensures that schedules are respected. The tutor/mentor is the link

¹ <http://www.ibe.unesco.org/en/glossary-curriculum-terminology/d/discipline-based-curriculum>



	with the training organisation and participates in the evaluation of the training follow-up.
EPALE	EPALE ² is a European, multilingual, open membership community of adult learning professionals, including adult educators and trainers, guidance and support staff, researchers and academics, and policymakers.
EQF	The EQF ³ is a common European reference framework which links countries' qualifications systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe.
Erasmus+ Project Results Platform	This database ⁴ will give you access to descriptions, results and contact information of all projects funded under the Erasmus+ programme and some of the projects funded under its predecessor programmes in the field of education, training, youth, and sports. You can find inspiration from the pool of good practices and success stories, i.e., projects that distinguished themselves in terms of policy relevance, communication potential, impact, or design.
eTwinning	eTwinning ⁵ is a free online community for schools in Europe and some neighbouring countries, which allows you to find partners and collaborate on projects within a secure network and platform.
Exponential technologies	Exponential technologies include artificial intelligence (AI), augmented and virtual reality (AR, VR), data science, digital biology and biotech, medicine, nanotech and digital fabrication, networks and computing systems, robotics, and autonomous vehicles.
FabLabs	A fab lab is a small-scale workshop offering digital fabrication. A fab lab is typically equipped with an array of flexible computer-controlled tools that cover several different length scales and various materials, with the aim to make "almost anything".

² <https://epale.ec.europa.eu/>

³ <https://www.cedefop.europa.eu/en/events-and-projects/projects/european-qualifications-framework-eqf>

<https://europa.eu/europass/en/european-qualifications-framework-eqf>

⁴ <https://ec.europa.eu/programmes/erasmus-plus/projects/>

⁵ <https://www.etwinning.net/>



Fusion skills	<p>This concept is based on close co-operation between education, business, creative and cultural sectors, and higher and higher education. Embedding the fusion of technological, creative, and entrepreneurial skills.</p> <p>To instil in individuals the core skills of teamwork, communication, leadership, and deliberate thinking in order to innovate and problem solve.</p> <p>In creating fusion management skills⁶, whether the focus is on a particular sector or across a number of creative media industries, there would seem to be three principal issues.</p>
Glossary	<p>Is an alphabetical list of technical terms with their definitions in a specific field.</p>
ICT driving keys	<p>Can be https://encompass-europe.com/comment/the-digital-economy-driving-innovation-growth-and-social-prosperity</p>
Innovation-oriented skills	<p>These include competences like creativity, critical thinking, communication, strategic thinking, and problem solving to find and develop creative solutions for the complex world we live in.</p>
Kick-off meeting	<p>A kick-off meeting is the first meeting with the project team and the client of the project. This meeting would follow the definition of the base elements for the project and other project planning activities.</p>
Knowledge Management	<p>Knowledge management is the process of creating, sharing, using, and managing the knowledge and information of an organisation. It refers to a multidisciplinary approach to achieve organisational objectives by making the best use of knowledge.</p>
KPI	<p>A Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organisations use KPIs at multiple levels to evaluate their success at reaching targets.</p>
Student/ Learner Agency	<p>Student agency is thus defined as the capacity to set a goal, reflect and act responsibly to effect change. It is about acting rather than being acted upon; shaping rather than being shaped; and making responsible decisions and choices rather than accepting those determined by others (OECD)⁷. "The concept of agency refers to individuals' capacity to make choices and to act on these</p>

⁶ See page 25 in: https://www.screenskills.com/media/1551/fusion_report.pdf

⁷ [Student Agency for 2030 concept note.pdf \(oecd.org\)](#)

	choices to exert control over their lives." (Goller & Paloniemi, 2017) ⁸
learning knowledge method	
Lifelong Learning	Lifelong learning is the "ongoing, voluntary, and self-motivated" pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, as well as competitiveness and employability.
NEET	NEET, an acronym for "Not in Education, Employment, or Training", refers to a person who is unemployed and not receiving an education or vocational training.
Ontologies	In computer science and information science, an ontology encompasses a representation, formal naming and definition of the categories, properties and relations between the concepts, data and entities that substantiate one, many, or all domains of discourse. More simply, an ontology is a way of showing the properties of a subject area and how they are related, by defining a set of concepts and categories that represent the subject.
Participatory learning	Participatory Learning Technique (PLT) is a way of organising the classroom that motivates learners to participate in the act of teaching, a peer-based learning process. In this way, learning is focused on increased student participation, so it is basically student centred.
Project-based learning	Project-based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.
REX	
School Education Gateway	Presented in 23 European languages, the School Education Gateway ⁹ is an online platform for teachers, school leaders, researchers, teacher educators, policymakers and other professionals working in school education – including Early Childhood Education and Care (ECEC) and Vocational Education and Training (VET).
Semantic interoperability	Semantic interoperability is the ability of computer systems to exchange data with unambiguous, shared meaning. Semantic interoperability is a requirement to enable machine computable logic,

⁸ M. Goller, S. Paloniemi, (2017), Agency at Work: an Agentic Perspective on Professional Learning and Development Springer, Cham, Switzerland.

⁹ <https://www.schooleducationgateway.eu/en/pub/index.htm>



	inferencing, knowledge discovery, and data federation between information systems.
Systemic approach	The advent of the systemic approach ¹⁰ heralded a turning point in the history of science and its application to the organisation, and to production. The approach, which considers phenomena and problems as systems, only really began to distinguish itself from the classical analytical approach in the mid-twentieth century, but its origins are much older. The systemic approach, as it is currently called, can be considered as a general scientific paradigm, such as the Matter of Life or Society. It offers a generic way to construct and present valid, relevant, and rational representations of the most diverse, changing situations. The general system theory, which was conceived by von Bertalanffy (General system theory. Foundations, development, applications. Georges Braziller, New York, 1968), encapsulates these ideas and entails a theoretical and practical method: modelling.
Taxonomy	Taxonomy is the science and practice of classification of concepts within a specific field.
Terminology	The set of terms used within a specific field.
Thesaurus	A reference work and controlled vocabulary where the terms with similar meanings and linguistic relationships such as synonym and antonym are structured in a group for better search and retrieval.
Transferable competences	Competences specific to a professional activity but transferable to other professional contexts. This is a specific set of skills that don't belong to a particular niche, industry or job; they are general skills that can be transferred between jobs, departments and industries.
Transversal competences	Transversal Competences are relevant to a broad range of occupations and economic sectors. They are different from technical competence, which is shared by employees in the same occupation (ESCOpedia- Europa EC). They are often referred to as core skills, basic skills or soft skills, the cornerstone for the personal development of a person. They are the building blocks for the development of the "hard" skills and competences required to succeed on the labour market (ESCOpedia). Even if Transversal Competences and Transferable Competences are different (see Transferable Competences), they tend to converge more and more in their use.

¹⁰ https://link.springer.com/chapter/10.1007/978-3-319-96259-7_1



	<p>To go forward : (Lainé, REC Network, France Strategie) Transversal competences are "generic competences mobilisable in various professional situations (which does not mean for the as long as they can be mobilised from the outset in any professional situation).</p> <p>Transversal competences include the following:</p> <ul style="list-style-type: none"> - those based on basic knowledge. They are not dependent on of a particular professional context but are nonetheless indispensable for a wide range of trades; for example, mastery of the language, writing and arithmetic operations, or even the first level knowledge in office automation ; - those corresponding to behavioural, organisational or cognitive skills, or to general knowledge common to trades or professional situations: the ability to manage customer relations, the ability to work in a team, to coordinate a team or a project, adaptability to the work environment, use of the main office automation software.
User stories	<p>In software development and product management, a use story is a n informal, natural language description of one or more features of a software system. User stories are often written from the perspective of an end user or user of a system. User stories are part of an agile approach that helps shifting the focus from writing about requirements to talking about them.</p>
VET	Vocational Education and Training
VET traditional priority 1	<p>Developing partnerships aimed at promoting work-based learning in all its forms, for both young and/or adults and in particular for the implementation of the Council Recommendation on a European Framework for Quality and Effective Apprenticeships (Council Recommendation on a European Framework for Quality and Effective Apprenticeships (2018/C 153/01)). These partnerships can also aim at developing new training content and joint VET qualifications that integrate periods of work-based learning, opportunities to apply knowledge in practical workplace situations, and embedding international mobility experience whenever possible.</p>
VET traditional priority 2	<p>Introducing systematic approaches to, and opportunities for, the initial and continuous professional development of VET teachers, trainers and mentors in both school and work-based settings (including apprenticeships), as well as through the development of effective digital, open, and</p>



	innovative education and pedagogies, as well as practical tools; raising the attractiveness of the professions for VET teachers, trainers, mentors, and leaders.
Virtuous circle	A recurring cycle of events, the result of each one being to increase the beneficial effect of the next. The terms virtuous circle and vicious circle, also known respectively as virtuous cycle and vicious cycle, refer to complex chains of events that reinforce themselves through a feedback loop. A virtuous circle has favourable results, while a vicious circle has detrimental results.
Virtuous context	Virtuous contexts are these that aim at promoting the common good.
Work-based learning	Supervised program sponsored by an education or training. Organisation that links knowledge gained at the work site with a planned program of study.

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