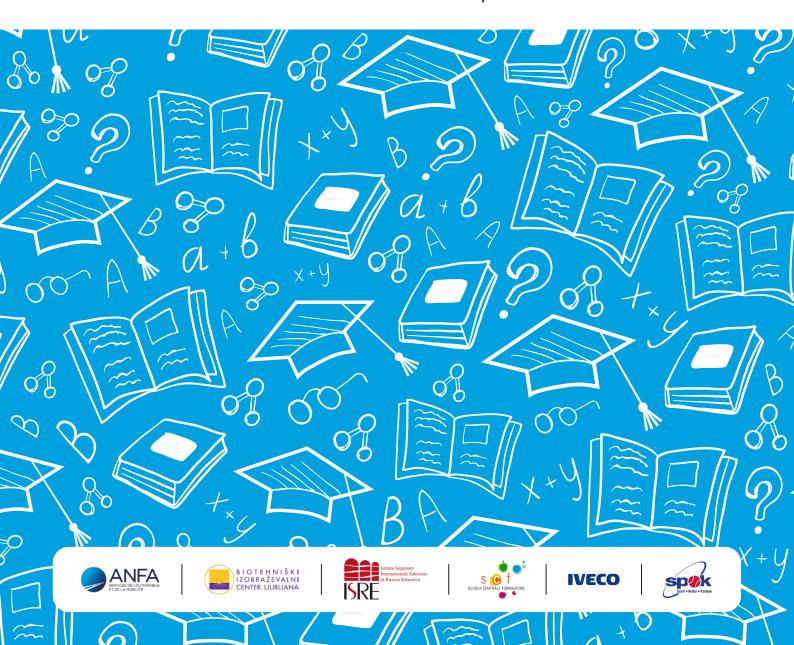




# ANALYSIS REPORT ON LITERATURE, PRACTICES AND EXPERIENCES IN PARTNER COUNTRIES ON LEARNING TO LEARN COMPETENCE

ERASMUS+ PROGRAMME - KA2 COOPERATION PARTNERSHIP PROJECT n°2023-1-IT01-KA220-VET-000156675 - Learn to Learn competence for IVET trainers/teachers



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### Glossary

Cross table between the LIFECOMP framework and the practices analysed

### Introduction

In a recent information note dated December 2022, CEDEFOP, "Looking at the past to understand the future: what are the possible developments of VET in Europe?"1 questioned on how VET content and provision respond to the changing needs of the labour market and society. Together with the rethinking of training standards and curricula, strong emphasis is placed on the need to overcome the barriers between initial training and continuous training, to create lifelong learning paths for the development of transversal and professional skills of job education. The note concludes that «How this happens will determine the overall relevance and quality of VET in the coming decades »<sup>2</sup>. Our L2L 4T&T project intends to respond to this challenge, proposing the development of a skill recognized as fundamental for the support of lifelong learning: learning to learn. In the perspective defined by Cedefop in the research paper "Key competences in initial vocational education and training: digital, multilingual and literacy – 2020"<sup>3</sup> and other contributions, it becomes increasingly crucial to ensure the continuous professional development of teachers and trainers, including the commitment to promote their competence to learn to learn. In a speech made in a PLA on 17/03/2023 by Cedefop, the issue of how to include and incorporate key competences in the IVET curricula, how to link them with technical-professional competences and the urgent need for teacher and trainer training were also evoked. Mastery of this competence plays therefore a fundamental role not only for the staff, but also for the quality of the IVET curricula, as an essential element of the "8 key competences for lifelong learning".

This analysis report develops as follows: after a brief theoretical excursus on the scientific literature regarding the learning to learn competence in adult education and a specific in-depth study on the framework proposed by the European Commission with LIFECOMP, experiences and practices of training paths for IVET teachers and students from all partner countries will be presented. The aim is to share languages and practices to arrive at a common definition of the framework, which will define the dimensions of this competence to be developed for IVET teachers and trainers.

The report is completed by two attachments: a glossary with the most used terms and a table that cross-references the dimensions of the LIFECOMP framework with the different practices and experiences analyzed by the partners

### 1. Theoretical perspectives on learning to learn competence

A well-known Italian scholar of learning to learn, prof. Massimo Marcuccio of the University of Bologna, in a 2009 article<sup>4</sup>, describes very well the origins of the scientific debate on this competence.

<sup>&</sup>lt;sup>1</sup> CEDEFOP, Briefing note - Looking back to look ahead: what is the future for VET in Europe?, 2022 - https://www.cedefop.europa.eu/en/publications/9178 (23/10/2023)

<sup>&</sup>lt;sup>2</sup> Ibidem, p. 4.

<sup>&</sup>lt;sup>3</sup> CEDEFOP, Key competences in initial vocational education and training: digital, multilingual and literacy" 2020 - https://www.cedefop.europa.eu/en/publications/5578 (23/10/2023)

<sup>&</sup>lt;sup>4</sup> MARCUCCIO M. (2009), L'imparare a imparare: da priorità strategica a pratica didattica. Una ricerca empirica nei percorsi professionalizzanti dell'obbligo formativo, ATTI DEL VI CONGRESSO SCIENTIFICO DELLA SIRD - <a href="https://www.researchgate.net/publication/251925971">https://www.researchgate.net/publication/251925971</a> (23/10/2023)

Learning to learn is not a new concept in the pedagogy and psychology of learning. Dewey in Experience and Education (1938)<sup>5</sup> develops the concept of connectedness in growth and underlines the importance of reflecting on one's own learning process. Only in the sixties, however, the debate developed on learning to learn as the central element on which everything else gravitates. In particular, Ivor Kraft's contribution (1964) "Learning to learn: myth or reality" opens the debate on some aspects such as: the delimitation of the object (set of study habits or simple participation in a training course); relationship between formal aspects of learning to learn and contents to be learned; relationship with problem solving skills.

In the 1980s, with the development of the lifelong learning movement, research developed mainly on two levels: "those who identify a meta-learning dimension in learning to learn (Dearden, in 1976, uses the expression 'second level learning'), those who instead place the reflection on the didactic level (Hounsell 1979), which traces learning to learn to 'learning activities' close to humanistic or person-centred psychological theories". Bateson (1987)<sup>8</sup> defines learning to learn as a set of aspects that includes both study strategies and the ability to critically reflect on the assumptions of learning processes

One of the most important scholars of learning to learn in the 1980s was Robert M. Smith (1982)<sup>9</sup>. He defined this competence as: "knowledge, processes and procedures through which people come to make - with support in this - appropriate educational decisions and perform tasks instrumental to successful lifelong learning"<sup>10</sup>

In the nineties, a heated debate developed on the social meaning of learning to learn. "In many school and training policy documents and research contributions, in fact, learning to learn is considered one of the fundamental tools that can promote continuous learning and thus create the conditions to facilitate the competitiveness of social and economic systems as well as the socialization of future citizens"<sup>11</sup>

Le Boterf (2000)<sup>12</sup> highlights the 'meta-meta-learning' dimension of learning, through which the subject learns to modify or develop his way of learning, to draw lessons from experience. In Italy, Pellerey<sup>13</sup> develops a theoretical reflection, combined with the

<sup>&</sup>lt;sup>5</sup> DEWEY J. (1938), *Experience and Education*, Kappa Delta Phi, 1938 (tr. it. di E. CODIGNOLA, La Nuova Italia, Firenze, 1996).

<sup>&</sup>lt;sup>6</sup> KRAFT I. (1964), "Learning to learn": myth or reality?, «The Journal of Negro Education», 33, 4,390-395.

<sup>&</sup>lt;sup>7</sup> MARCUCCIO, Ibidem, p. 172

<sup>&</sup>lt;sup>8</sup> BATESON G. (1987), Verso un 'ecologia della mente, Adelphi, Milano.

<sup>&</sup>lt;sup>9</sup> SMITH R.M. (1982), Learning how to learn: applied theory for adults, Cambridge Book Company, New York. SMITH R.M. (eds.) (1988), Theory buildingfor learning how to learn, Educational Studi es Press, DeKalb, Ill. SMITH R.M. (1990), The promise of learning to learn in SMITH R.M. et Al., Learning to learn across the life span, Jossey-Bass, San Francisco, 3-29. SMITH R.M. (1996), Learning to learn: adult education in International encyclopedia of developmental and instructional psychology, Elsevier science, Oxford, 760-764. SMITH R.M. AND ASSOCIATES(1990), Learning to learn across the life span, Jossey-Bass, San Francisco.

<sup>&</sup>lt;sup>10</sup> SMITH, 1990, 4.

<sup>&</sup>lt;sup>11</sup> MARCUCCIO, Ibidem, p. 172

<sup>&</sup>lt;sup>12</sup> LE BOTERF G. (2000), Construire les compétences individuelles et collectives, Edition d'Organisation, Paris Cedex.

<sup>&</sup>lt;sup>13</sup> PELLEREY M. (1996), QSA. Questionario sulle strategie di apprendimento, LAS, Roma. PELLEREY M. (2001), Sul concetto di competenza ed in particolare di competenza sul lavoro in MONTEDORO C. (a cura di), Dalla pratica alla teoria per la formazione: un percorso di ricerca epistemologica, FrancoAngeli, Milano, 231-276. PELLEREY M. (2002), Processi di transfer delle competenze e formazione professionale in ISFOL, Le dimensioni metacurricolari dell'agire formativo (a cura di C. MONTEDORO) FrancoAngeli, Milano, 113-153. PELLEREY M. (2004), Natura, diagnosi e sviluppo

construction of measurement tools, on learning strategies, self-determination and self-regulation in learning, recognized as a meta-competence. In parallel, other European research is dedicated to different attempts to operationalize the concept of learning to learn for the purposes of measurement and evaluation: the PISA surveys on cross-curricular competences, the framework created by the University of Helsinki for measuring learning to learn in the school system, in which this competence is defined as "the ability and willingness to adapt to new tasks, activating the commitment to think and an expectation of hope through the maintenance of cognitive and affective self-regulation in the learning action and of the learning action"

Coming to the present day, the first reference for this competence is represented by the Recommendation of 22/05/2018 about key competences for lifelong learning; in this recommendation the learning to learn competence is defined as "Personal, social and learning to learn competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career"; the centrality of this competence for the future of Europe is strengthened by the LifeComp published the European Commission in 2020, where a Framework of personal and social competence and the ability to learn to learn was defined as done before for the digital competence in the DigiComp and the entrepreneurial one in the EntreComp. Within this Framework, learning to learn is divided into three sub-skills: growth mindset, critical thinking and learning management. In a more global context, learning to learn is considered an interdisciplinary competence, also counted among the so called soft skills, to be promoted from childhood (OECD PISA 2010; UNESCO, 2013; UNICEF, 2012; European Council, 2006; 2018; US National Education Goals Panel, 1995) in order to: promote a peaceful school career and prevent school dropout; encourage constant updating of skills in adult life; allow for the integral development of the person and reduce social inequalities<sup>15</sup>.

For the partnership of this project, the importance of it would be that many actions and deliverables have been done on the competence learning to learn although the term "learning to learn" is not explicitly mentioned. With this project, there's the opportunity to combine everything and therefore maximize the development of the competence.

### 2. Learning to learn in adult education

The development of the competence of learning to learn for adults (and specifically for IVET teachers and trainers) has to be thought within a heutagogical model of lifelong learning. <sup>16</sup> In this model, "the learner is not only an actor of his own learning but represents

della capacità di autodeterminazione e autoregolazione nel 'apprendimento e nel trasferimento di competenze professionali in ISFOL, Apprendimento di competenze strategiche. L'innovazione dei processi formativi nella società della conoscenza, FrancoAngeli, Milano, 150-191, PELLEREY M., ORIO F. (2001) Il questionario di percezione delle proprie competenze e convinzioni (QPCC), Edizioni Lavoro, Roma.

<sup>&</sup>lt;sup>14</sup> HAUTAMÀKI et al. (2002), Assessing Learning-to-Learn. A framework, Helsinki University Printing House, Helsinki, p. 39 - <a href="https://www.researchgate.net/publication/242556806">https://www.researchgate.net/publication/242556806</a> Assessing learning-to-learn A framework (24/10/2023)

<sup>&</sup>lt;sup>15</sup> STRINGHER C. (2021)-Apprendere ad apprendere in prospettiva socioculturale, Franco Angeli Open Access, INVALSI.

<sup>&</sup>lt;sup>16</sup> COSTA M., Nuovi modelli eutagogici per la formazione continua, in Scuola Democratica n.1/2023; COSTA M., La formazione iniziale dei docenti come leva per la creazione di un ecosistema capacitante per l'apprendimento e lo

an agent capable of contributing to transforming his own context of action thanks to a mature freedom/possibility of choice and self-government [...]; the heutagogical model was first defined by Hase and Kenyon (2000) as a «form of self-determined learning.» While in pedagogy learning is controlled by the teacher, in andragogy it is self-directed and guided by the trainer, in heutagogy learning is characterized as self-determined and self-adaptive".<sup>17</sup>

The fundamental principles of this model are:

- agency of the subject, i.e. the ability to assume responsibility for dynamically directing and determining one's own learning paths in response to the needs emerging from complex work contexts (Hase, 2011);
- self-efficacy and capability, understood as the ability to believe in one's own skills and to create one's own training plan, for transformative learning;
- metacognition and reflection, reflecting and thinking critically about what and how it was learned
- non-linear learning, as it is not predefined or sequential but directed by the adult who is called to continuously review his own progress by governing its meaning ways.

In this perspective, adults determine their own learning processes starting from the needs emerging in their own personal or professional context. The principles of heutagogy were developed starting from the theories that support self-training<sup>18</sup> and the development of capability in adults<sup>19</sup>.

"The result is training activated by individual choices and aspirations (self-directed and self-regulated), but which is, at the same time, socially integrated (embedded in social relations and collaboration) and oriented towards the creation of value for the worker, for the organized community and the entire society (value-oriented)<sup>20</sup>". The right to training "expresses at the same time: the responsibility of the organization to create the conditions for the worker to exercise it and for the worker himself to enhance the learning opportunities that are offered to him and, in addition, to organize any alternatives by creating continuous opportunities of growth through paths of self-determination and choice of learning (Demetrio, 2002). The heutagogical model (Chacko, 2018) represents the best pedagogical way to combine the subjective right to training with an idea of active

sviluppo professionale, in Nuova Secondaria n.6/2022. The development of this paragraph will refer to these two articles.

<sup>&</sup>lt;sup>17</sup> COSTA (2023), p. 80.

<sup>&</sup>lt;sup>18</sup> DEMETRIO D., (2002), Autoformazione: le cifre, le pratiche, FOR – Rivista AIF per la formazione, 53; PELLEREY M., (2006), Dirigere il proprio apprendimento. Autodeterminazinone e autoregolazione nei processi di apprendimento, Brescia. La Scuola

<sup>&</sup>lt;sup>19</sup> The theories referred to are: the capability approach (Sen, 2000), the ability to learn (Stephenson, 1996; Stephenson and Weil, 1992), self-efficacy (Bandura, 2009, 2001), systemic thinking (Emery and Trist, 1965), double-loop and organizational learning (Argyris and Schön, 1996), andragogy (Knowles, 1975), learner-managed learning (Graves, 1993; Long, 1990), action learning (Kemmis and McTaggart, 1998), and work-based learning (Marcone, 2018). All these theories combine to underline how is central the freedom/possibility of the adult to determine his own learning path in the heutagogical process.

<sup>&</sup>lt;sup>20</sup> COSTA (2023), p. 84-85.

citizenship capable of promoting a learnfare (Margiotta, 2015) for human development (Costa, 2018)".<sup>21</sup>

The training of teachers and trainers is particularly strategic for the implementation of this human development learnfare. The centrality of the figure of the teacher as a connection between inclusion and development of the countries is well explained by the European document (Eurydice, 2019, p.1) when it is stated that it «It is becoming increasingly important as Europe faces challenges educational, social and economic. The growing expectations in terms of results of the students and the increased pressures of an increasingly diverse student population, coupled with rapid technological innovation, are simultaneously having a profound impact on the teaching profession itself »<sup>22</sup>.

Developing the competence of learning to learn for teachers in this theoretical perspective, "involves a shared reflexivity (Schön, 1993) on common practices, the construction and activation of a sort of shared mind which is the place where the set of professional opportunities are strongly connected with those of transformation experienced within a process of belonging to a reliable and stable community (Snoek, 2018). This connection of initial and lifelong learning based on research dialogue between academic and scholastic community (Pastrè, 2011) shows us how it is possible to promote reflection and analysis of one's teaching practices while at the same time creating personal and organizational changes (Striano, 2001). However, to create the short circuit between training and organizational development it is necessary strengthen empowering agency and personal and organizational self-efficacy in teachers and their school communities: these are the conditions to promote a transformative learning (Mezirow, 1991) which allows to identify and modify the perspectives and patterns of meaning that guide educational practices."<sup>23</sup>

The development of learning to learn in teachers and trainers can therefore only take place if the principles of reflexivity and capability are placed at the centre. "Enhancing reflexivity as a function of transformative learning (Mezirow, 2009)"<sup>24</sup> is the horizon towards which we have to move for the professional development of teachers and trainers and for a continuous process of response of the educational system to contemporary challenges.

### 3. The LIFECOMP Framework for "learning to learn"

The European Framework for Personal, Social and Learning to Learn Key Competence (LIFECOMP)<sup>25</sup> has been worked out in 2020 by the Joint Research Centre (JRC) of the

<sup>&</sup>lt;sup>21</sup> Ibidem, p. 85.

<sup>&</sup>lt;sup>22</sup> European Education and Culture Executive Agency, Eurydice, Birch, P., Piedrafita Tremosa, S., Davydovskaia, O., et al., La carriera degli insegnanti in Europa: accesso, progressione e sostegno, Delhaxhe, A.(editor), Publications Office, 2019, https://data.europa.eu/doi/10.2797/855181.

<sup>&</sup>lt;sup>23</sup> COSTA (2022), p. 96.

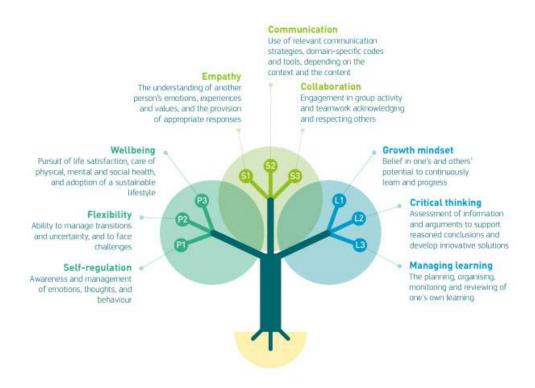
<sup>&</sup>lt;sup>24</sup> Ibidem, p. 100.

<sup>&</sup>lt;sup>25</sup> SALA A., PUNIE Y., GARKOV V., CABRERA M., *LifeComp. The European Framework for Personal, Social and Learning to Learn Key Competence*, European Commission Joint Research Centre, Luxemburg, 2020 - <a href="https://joint-research-centre.ec.europa.eu/lifecomp">https://joint-research-centre.ec.europa.eu/lifecomp</a> en (30/11/2023)

European Commission, in collaboration with the Directorate-General for Education, Youth, Sport, and Culture (DG EAC).

"LifeComp offers a conceptual framework for the 'Personal, Social, and Learning to Learn' key competence for education systems, students, and learners on the whole. LifeComp intends to systematise the need to improve personal and social competences through education and lifelong learning, as well as promoting learning how to learn. The framework has undergone several consultations, over the course of which, the consensus was to come up with three areas encompassing three competences each. Every competence has three descriptors, following a model 'awareness, understanding, action'. [...] This is the third competence framework for individuals the JRC has contributed to develop, following the already consolidated Digital Competence Framework for Citizens, also known as <a href="DigComp">DigComp</a>, and the Entrepreneurship Competence Framework, <a href="EntreComp">EntreComp</a>. We believe that LifeComp is a crucial complement to these and other frameworks, and maybe even constitutes the base line, as it deals with life skills – the skills and competences that everybody should continually develop throughout life. The LifeComp framework is a conceptual reference framework; more work will be needed to put the framework into practice, and to guide stakeholders on its implementation". 26

This is the visualisation of LifeComp - LifeComp Tree of competences describes nine competences, organised in three areas: The "personal" area (P1, P2, P3), the "social" area (S1, S2, S3) and the "learning to learn" area (L1, L2, L3)<sup>27</sup>:



In this analysis report we will focus only on the "Learning to Learn" area, with the aim of deepening the content to subsequently adapt it to the practice of the project, i.e. training

<sup>27</sup> Ibidem, p. 22

<sup>&</sup>lt;sup>26</sup> Ibidem, p. 7

for IVET teachers and trainers, with particular reference to the automotive and food sectors. The choice to intervene in these sectors remains on the fact that they are in drastically changing. These changes require the introduction of new «know-how», and therefore learning how to learn it.

"This competence involves several components within the personal and social domains. Related to personal development, Learning to Learn involves: inherited assets, like aptitudes; a cognitive dimension, e.g. problem-solving skills, and the use of different learning methods; a metacognitive dimension, e.g. self-awareness and self-assessment of one's knowledge, affective and motivational dimension, e.g. the motivation to learn, and the regulation of the emotions triggered by the learning activity; and learning dispositions, e.g. critical curiosity, a growth mindset, creativity, and resilience. Related to the social domain, Learning to Learn involves social, historical, economic and cultural aspects of the context in which learning occurs. The social dimension of Learning to Learn also stresses the relevance of the perception of support from significant others, the capacity to learn with peers and in groups, and the environmental resources and social values within the community.

[...] The Learning to Learn competence can be acquired throughout the lifespan. It is a relevant driver for change in adulthood, promoting employability and competitiveness [...]

Learning to Learn can unleash potential for change in individuals and communities, contributing to the common good of society, and empowering them to thrive in a rapidly changing world"<sup>28</sup>

Each area is made up of three competences. In turn, each competence has three descriptors which are outlined using the 'awareness, understanding, action' model, suggested by experts for depicting different facets of deployment. The order in which the descriptors are presented does not imply a sequence in the acquisition process or a hierarchy. In other words, every competence has different dimensions, which individuals can develop at different levels. The proposed set of competences has been identified and validated by experts and stakeholders in iterative consultations<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Ibidem, p.57

<sup>&</sup>lt;sup>29</sup> Ibidem p.21

### LIFECOMP LEARNING TO LEARN AREA COMPETENCES AND DESCRIPTORS<sup>30</sup>

### **L1 - Growth Mindset**

L1.1	Awareness of and confidence in one's own and others' abilities to learn, improve and achieve with work and dedication
L1.2	Understanding that learning is a lifelong process that requires openness, curiosity and determination
L1.3	Reflecting on other people's feedback as well as on successful and unsuccessful experiences to continue developing one's potential
	L2 - Critical Thinking
L2.1	Awareness of potential biases in the data and one's personal limitations, while collecting valid and reliable information and ideas from diverse and reputable sources
L2.2	Comparing, analysing, assessing, and synthesising data, information, ideas, and media messages in order to draw logical conclusions
L2.3	Developing creative ideas, synthesising and combining concepts and information from different sources in view of solving problems
	L3 - Managing Learning
L3.1	Awareness of one's own learning interests, processes and preferred strategies, including learning needs and required support
L3.2	Planning and implementing learning goals, strategies, resources and processes
L3.3	Reflecting on and assessing purposes, processes and outcomes of learning and knowledge construction, establishing relationships across domains

<sup>&</sup>lt;sup>30</sup> Ibidem, p.59

### 3.1. Growth Mindset

The concept of a "growth mindset" was developed by psychologist Carol Dweck<sup>31</sup>. It refers to a belief system or attitude that individuals hold regarding their abilities, talents, and intelligence. People with a growth mindset believe that their skills and qualities can be developed and improved over time through dedication, hard work, and learning.

Key characteristics of a growth mindset include:

- Embracing challenges: people with a growth mindset see challenges as
  opportunities to learn and grow rather than as obstacles. They are more willing to
  take on new tasks or difficult problems because they understand that it's a chance
  to improve. The failure is not seen as an obstacle but otherwise as an opportunity to
  get closer to the «success».
- 2. **Persistence in the face of setbacks**: instead of being discouraged by failure or setbacks, those with a growth mindset view them as part of the learning process. They persist in their efforts, using setbacks as learning experiences to improve their skills.
- 3. **Viewing effort as path to mastery**: individuals with a growth mindset understand that putting effort into their endeavours is essential for improvement. They believe that hard work and dedication can lead to mastery in a particular field or skill.
- 4. Learning from criticism: rather than feeling defensive or discouraged by criticism, people with a growth mindset use feedback as a valuable tool for improvement. They see constructive criticism as an opportunity to learn and develop their abilities further.
- 5. **Inspired by others' success**: instead of feeling in continuous competition/rivality with other, individuals with a growth mindset find inspiration in the achievements of others. They see success as proof of effort and believe they can also achieve their goals through hard work and learning.

In contrast, a "fixed mindset" refers to the belief that abilities, intelligence, and talents are inherent and cannot be significantly changed. Those with a fixed mindset may avoid challenges for fear of failure, give up easily, ignore feedback, and feel threatened by the success of others.

Developing a growth mindset can lead to greater resilience, motivation, and a willingness to take on new challenges, ultimately fostering personal and professional development.

Among the descriptors of this area of LIFECOMP, we find in **point L1.1** a strong reference to the concept of **self-esteem**. Defining the construct of self-esteem is not simple, as it is a concept that has a long history of theoretical development. A concise and shared definition in the literature could be the following:

<sup>&</sup>lt;sup>31</sup> DEWECK C., *Mindset. The new psychology of success*, Random House Publishing Group, 2007.

Set of evaluative judgments that the individual makes about himself<sup>32</sup>

Three fundamental elements consistently recur in all definitions of self-esteem:

- 1. The presence in the individual of a system that allows self-observation and therefore self-knowledge.
- 2. The evaluative aspect that allows a general judgment of oneself.
- 3. The affective aspect that allows you to evaluate and consider descriptive elements in a positive or negative way.

Self-esteem is a paradigm that can be built day after day through cognitive strategies.

A first definition of the concept of self-esteem is due to William James, who conceives it as the result arising from the comparison between the successes that the individual actually achieves and the expectations regarding them. A few years later Cooley and Mead define self-esteem as a product that arises from interactions with others, which is created throughout life as a reflected evaluation of what other people think of us. In fact, a person's self-esteem does not arise exclusively from internal individual factors, but the so-called comparisons that the individual makes, consciously or not, with the environment in which he lives also have a certain influence. There are two components that constitute the process of self-esteem formation: the real self and the ideal self.

The real self is nothing more than an objective view of one's abilities; put in simpler terms it corresponds to what we really are. The ideal self-corresponds to how the individual would like to be. Self-esteem therefore arises from the results of our experiences compared with ideal expectations. Greater is the discrepancy between what we are and what we would like to be, the lower our self-esteem will be. Possedere un'alta autostima è il risultato di una limitata differenza tra il sé reale e il sé ideale. Significa saper riconoscere in maniera realistica di avere sia pregi che difetti, impegnarsi per migliorare le proprie debolezze, apprezzando i propri punti di forza. Tutto ciò enfatizza una maggiore apertura all'ambiente, una maggiore autonomia e una maggiore fiducia nelle proprie capacità.

But what contributes to an individual evaluating himself positively or negatively? Well, we self-evaluate on three fundamental processes:

- Assignment of judgments by others, both directly and indirectly. This is the so-called 'social mirror': through the opinions communicated by significant others we define ourselves.
- Social comparison: that is, the person evaluates himself by comparing himself with those around him and an evaluation arises from this comparison.
- Self-observation process: people can also evaluate themselves by self-observing and recognizing the differences between themselves and others. Kelly (1955), the father of Personal Construct Psychology, for example considers each person a 'scientist' who observes, interprets (i.e. attributes meanings to one's experiences) and predicts every behaviour or event, building, among other things, a self-theory to facilitate the maintenance of self-esteem.

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<sup>&</sup>lt;sup>32</sup> BATTISTELLI P., La rappresentazione della soggettività: origini e sviluppo, Franco Angeli, 1992.

Working on teachers' self-esteem through the activation of cognitive processes, for example reflection on their own successes and failures, therefore seems to be a particularly effective way to develop the competence of learning to learn.

This practice is also reiterated in point **L1.3 of LIFECOMP**, also recalling in particular **the ability to receive feedback from others.** 

Douglas Stone and Sheila Heen, authors of "Thanks for the feedback: the science and art of receiving feedback well," have conducted extensive research on the effectiveness of feedback and the importance of receiving it constructively for one's personal and professional development. Carol Dweck in his research on mindset has highlighted the importance of mindset in receiving feedback. It explored how a growth mindset can positively influence the perception of feedback as a learning opportunity.

The ability to receive feedback from others is a crucial skill for personal and professional growth. Receiving feedback in a constructive way can be a valuable source of learning and development. Here are some key points about the ability to receive feedback:

- Open-mindedness: being open and willing to listen to what others have to say is key. Keeping an open mind allows you to accept feedback without defences or preconceptions.
- Constructive reception: accepting feedback constructively, seeing it as an opportunity to improve rather than as personal criticism, is essential. Consider feedback as useful information for growth.
- Active listening: listen carefully to those providing feedback, paying attention to both the words expressed and the emotional or non-verbal tone. Ask for clarification if something is unclear.
- Don't take everything personally: It's important to separate feedback from your personal identity. The feedback is about behaviour or actions, not about your whole person.
- Ask for feedback: being proactive in asking for feedback can be just as important as receiving it. Asking for opinions and suggestions can provide different and valuable perspectives.
- Feedback Analysis: evaluate the feedback received objectively. Consider what can be useful for improvement and what can be overlooked.
- Thank for feedback: be grateful and thank those who offer feedback. Demonstrate appreciation for the time and effort taken to provide advice or constructive criticism.
- Action and improvement: use feedback to make improvements. Implementing changes based on the feedback received can be a fundamental step for personal and professional growth.

The ability to receive feedback constructively is a skill that requires constant practice and effort. When handled correctly, feedback can be a catalyst for improvement and success in different spheres of life.

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<sup>&</sup>lt;sup>33</sup> STONE D., HEEN S., Thanks for the feedback: the science and art of receiving feedback well", Viking, 2014. See also https://www.youtube.com/watch?v=gTkxwkCJA-E

<sup>&</sup>lt;sup>34</sup> DWECK C., ibidem.

Working on the ability to receive feedback from teachers means putting metacognitive teaching into practice on oneself which allows one to grow in one's profession thanks to the peer tutoring of colleagues or the students themselves, who can provide us with elements for continuous improvement.

### 3.2. Critical Thinking

"Critical thinking" is a cognitive ability and a mental process that involves objective evaluation, rational analysis, and deep reflection on an idea, concept, argument, or situation. It is an active and conscious method of thinking that aims to understand, assess, and form judgments clearly, accurately, and reasonably<sup>35</sup>.

Critical thinking involves various skills and competencies, including:

- analysis: the ability to break down a complex problem into smaller parts to better understand it and study the relationships between them;
- **evaluation**: the ability to examine evidence, arguments, or claims to determine their validity, reliability, and coherence;
- inference: the ability to draw reasonable conclusions based on available data or information, even if not explicitly stated;
- **interpretation**: the ability to understand and explain the meaning of presented information, recognizing implications and contexts;
- **self-reflection**: the ability to critically assess one's own beliefs, assumptions, and viewpoints, considering alternative perspectives;
- problem-solving: the ability to solve problems logically and creatively, using appropriate reasoning methods and strategies.

Critical thinking encourages open-mindedness, curiosity, precision in analysis, and awareness of one's cognitive limitations. This process also requires the skill to recognize and mitigate distorted thinking or personal influences, such as emotions or preconceived beliefs, to seek a more objective viewpoint.

In summary, critical thinking is essential for making informed decisions, solving complex problems, understanding information in the appropriate context, and developing a comprehensive and reasonable view of the world around us.

The first descriptor **L2.1** of this area of LIFECOMP competence highlights in particular the need to be aware of the level of <u>reliability of the sources</u>. For a teacher, this aspect is fundamental for the teaching and learning process of students, even more today, if we consider the large amount of information that everyone can have access to through digital technologies.

Sources can be unreliable for various reasons, jeopardizing the accuracy and credibility of the information they convey. Here are some of the issues related to source reliability:

1. **credibility:** some sources may lack credibility due to their history, past inaccuracies, or a lack of expertise or experience in the relevant field. It is crucial to

<sup>&</sup>lt;sup>35</sup> PAUL R., ELDER L., *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life,* Rowman & Littlefield, 2022; DEWEY J., *How we think*, Prometheus Books, 1991

assess whether the source is known for reliability and possesses specific expertise on the subject matter;

- 2. **objectivity and bias:** sources can be influenced by personal interests, political, financial, or social ideologies, leading to a biased or partial presentation of facts. It is important to consider if a source is prone to potential conflicts of interest or partiality in content presentation;
- 3. **research rigor and updating:** reliable sources are based on verifiable and dependable information. Lack of primary sources, using outdated sources, or failure to update can compromise the reliability of the provided information;
- 4. **manipulation and misinformation:** with the rise of digital platforms, there's an increasing risk of information manipulation and the dissemination of false news or misinformation. Sources can intentionally be misleading or unreliable, making it challenging to distinguish between accurate information and manipulated content;
- 5. **anonymity and unverifiable sources:** anonymous or unverifiable sources can be problematic as the reliability of the provided information cannot be ascertained. In some contexts, anonymity may be necessary to protect sources but requires further assessment of the information's credibility;

To address these issues, it's crucial to adopt a critical approach in source analysis, verify their reliability, seek multiple sources, and compare different perspectives to obtain a more comprehensive and accurate view of a subject. The ability to critically evaluate sources is essential for making informed decisions and accessing reliable information."

Giving teachers indications on the attention they need to pay to verify the reliability of the sources (particularly digital) they consult and use for teaching would certainly be very important for the development of teaching professionalism.

Compared to the **L2.2** descriptor of the LIFECOMP framework, **the development of teachers' data analysis skills** is important. In particular, the use of <u>"Learning Analytics"</u> can become an excellent tool for understanding the students in front of them and their learning processes.

The spread of digital learning environments and specific protocols for tracking activities make a considerable volume of data available to us today. This data can be used to monitor the results achieved in distance learning and improve them. As long as we adopt innovative approaches and analysis tools. Hence the development of a new area of research in the field of educational sciences, data analysis or, better, learning data analysis techniques, the Learning Analytics.

The 2016 Horizon Report (Higher Education Edition) gives us this definition:

Learning data analytics is an educational application of web analytics aimed at profiling students; a process of collecting and analyzing details of students' individual interactions in online learning activities.

In 2012 this field of study received further stimulus with Siemens and Baker: "Learning analytics is the use of intelligent data, student-produced data, and analytics models to discover information and social connections, and to predict and advise on learning" <sup>36</sup>.

The Learning Analytics community was born with the first International Conference on Learning Analytics (Banff, 2011) immediately followed by the foundation of the Society for Learning Analytics Research. Two lines of study are being developed within this new field of research:

- Educational Data Mining which analyzes from a technical point of view how we can bring out significant trends from large sets of data related to learning
- Learning Analytics which focuses on educational aspects to optimize online learning opportunities.<sup>37</sup>

The primary goal of Learning Analytics is to provide teachers, educational institutions, and students themselves with detailed information about learning. This may include data such as student performance, learning patterns, behaviours, study habits, and engagement in online or classroom learning. Analytics can be used to:

- monitor student performance: track students' progress over time, identify areas of strength and weakness, as well as pinpoint students who may need additional support or intervention;
- **personalize learning**: use student learning data to tailor lessons, instructional materials, and teaching strategies more specifically to individual student needs;
- predict student success: use algorithms and predictive models to identify factors that may influence student success and predict their future performance;
- improve educational processes: analyze data to assess the effectiveness of educational programs, teaching methodologies, and resources used to optimize the learning environment;
- support educational decisions: provide information to teachers and school administrators to make informed decisions about education, educational policies, and resource allocation.

The use of Learning Analytics raises ethical issues such as student privacy and responsible use of personal data. Therefore, it is crucial to ensure that data is collected, stored, and utilized in compliance with privacy laws and ethics, while ensuring maximum security and protection of student information.

The third descriptor LIFECOMP **L2.3**, however, refers to the importance of developing creative thinking for solving problems.

Creativity is a particular way of thinking that implies originality, non-conformity and fluidity, which breaks with existing models by introducing something new. It fits into the broader concept of divergent thinking understood as the ability to produce a range of possible solutions for a given problem that does not include a single correct answer<sup>38</sup>. Paul

<sup>&</sup>lt;sup>36</sup> SIEMENS G., BAKER R. S. J.d. (2012). Learning analytics and educational data mining: Towards communication and collaboration. In *Proceedings of the 2nd International Conference on Learning Analytics and Knowledge* (pp. 252-254). New York, NY: ACM.

<sup>&</sup>lt;sup>37</sup> Vedi <a href="https://ardea.srl/it/learning-analytics-cosa-sono-e-a-cosa-servono/">https://ardea.srl/it/learning-analytics-cosa-sono-e-a-cosa-servono/</a> (12/12/2023)

<sup>&</sup>lt;sup>38</sup> GUILFORD J.P., "La creatività", Beaudot, A. (a cura di) La creatività, Torino, Loescher, 1977.

Guilford distinguished this way of reasoning from that arising from convergent thinking, which instead has a tendency towards uniformity on the only answer that is considered acceptable to a problem. What the author attempted to demonstrate is that, by emphasizing convergent thinking, we tend to completely neglect divergent thinking and consequently not enough is done for the teaching and development of creativity in schools.

The teacher should, therefore, regardless of the subject taught, encourage divergent thinking in students. Cognitivist Jerome Bruner argued that we tend to reward only the right answers and penalize the wrong ones; this behavior represents the typical form of convergent thinking which, unfortunately, still today is what prevails at an educational level. This causes the student to avoid looking for new or original solutions when solving a problem, because this increases the possibility of mistakes. However, the production of a response different from the conventional one, even assuming the risks of error, is inherent in the creative effort. The teacher should be prepared to act in an atmosphere where such effort is encouraged and rewarded rather than in an educational climate where only cautious and convergent solutions are approved. This does not mean that the creative act also involves verification and evaluation. The solution must be tested to see if it will work in the consideration that even failure can open the way to new ideas that may be the right ones<sup>39</sup>.

The approach to creativity and lateral thinking (which in some ways is similar to the divergent one as well as the vertical one to the convergent one) is interpreted in an original way by De Bono, who maintains that it is useful and profitable to help the creative process through reasoning and thought. He proposes an exercise to approach problems from different perspectives. In practice, each student takes on defined roles in order to declare his positions, overcome his prejudices and consider alternative points of view; and does this by wearing a hat of a particular colour. The white hat is neutral and does not express any judgement, the blue hat is the rationality that establishes the rules of the game; the black hat is the devil's advocate and highlights the negative aspects of everything; the yellow hat is the angel's advocate who notes the positive aspects; the red hat represents emotionality, emotions and feelings; finally, the green hat indicates creative outlets, new ideas, analyzes and proposals for improvements, unusual visions<sup>40</sup>.

To find truly innovative solutions, therefore, we need to break away from established patterns, question presumed certainties and rely on associations of new ideas. Ultimately, we need to wear many hats<sup>41</sup>. **Developing creative thinking as a problem-solving method requires first of all the teacher to know how to wear different hats and therefore it will be important to support him in this ability of divergent thinking in carrying out his teaching activity.** 

<sup>&</sup>lt;sup>39</sup> BRUNER J., *La cultura dell'educazione. Nuovi orizzonti per la scuola*, Feltrinelli, Milano, 2015.

<sup>&</sup>lt;sup>40</sup> DE BONO E., Il pensiero laterale, BUR, Milano, 2000; DE BONO E., Sei cappelli per pensare. Manuale pratico per ragionare con creatività ed efficacia, BUR, Milano, 2013.

<sup>&</sup>lt;sup>41</sup> Articolo di Concetta Maria Randazzo in <a href="https://www.giuseppemotta.it/creativita-e-pensiero-">https://www.giuseppemotta.it/creativita-e-pensiero-</a> divergente/#:~:text=Secondo%20Bruner%20il%20pensiero%20creativo,di%20produrre%20un'unica%20risposta.

### 3.3. Managing learning

The third "main branch" of the Learning to Learn area of the LIFECOMP is represented by an area called "Managing Learning". Our reference document states that: "Managing learning entails the motivation to foster both metacognitive knowledge and metacognitive regulation of learning." Three key concepts here:

- Motivation
- Metacognitive knowledge
- Metacognitive regulation of learning

### **Motivation**

There is a huge number of studies and experiences regarding the role of "motivation" in adult learning process. In this short analysis we referred to an excellent document: "Ilie, V. (2019). Study on adult learning motivation"<sup>42</sup>.

As a basic form of human activity, learning, is the consequent action of two essential components – purpose and reason. It is not enough for the purpose or scope of an activity to be clear to work effectively. If there is no stimulation and energy support to achieve the goal, the activity cannot be carried out. Even if the adult has well-developed intellectual instruments, if he is not determined by something to learn, he will not achieve the desired performance. The **reason** is the key factor that triggers, energizes and guides the action. There are different types of reasons that trigger adult participation in continuous training and development courses. They can be grouped as follows: Individual or social; direct or indirect; primary or secondary; lower or higher; minor or major; invariable or variable; selfish or altruistic.

Motivation is important not only because it apparently improves learning, but also because it mediates learning. In the adult learning process, high positive motivation can play the role of a compensating factor, especially if a person has poor skills or insufficient knowledge. In conjunction with the status and roles of a person, with their own aspirations and values, "the motivation for a task will be proportional to the ability to respond to the needs of security (trusting), affiliation (feeling of belonging), feeling competent (sense of competence). Motivation is a constellation of motives in interaction; at a certain age, a certain category of reasons prevails, which determines the general profile of motivation as a whole. Thus, sometimes adults learn because they are interested in this type of activity, because it gives them satisfaction, and sometimes they learn because they have to, which will determine a certain motivational profile. Essentially, reasons always will be organized around a dominant motif, to which all others are subordinated. Thus, their motivation is substantial and, as everyone knows, wanting to learn is the greatest aid to learning"<sup>43</sup>.

J. R. Wlodkowski believes and that there must be four environmental conditions for adults to be motivated to learn<sup>44</sup>:

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<sup>&</sup>lt;sup>42</sup> ILIE V., *Study on adult learning motivation,* International Journal of Human and Behavioral Science, Vol. 5, 2019

<sup>&</sup>lt;sup>43</sup> KIDD, J. R., *How adults learn*, Association Press, 1973, p.91.

<sup>&</sup>lt;sup>44</sup> WLODKOWSKI, R. J., *Instructional design and learner motivation,* in K. A. Johnson & L. J., *Instructional design: New alternatives for effective education and training,* Foa (Eds.), 1989, p.47-60.

- **providing inclusion**, creating a learning environment in which adults feel capable, respected, accepted and connected to one another;
- **developing attitudes** creating a favourable provision for the learning experience and personal choice;
- **improving meaning** creating challenging learning experiences that include learner values and perspectives, past experiences, emotions, etc.;
- **learning competency** creating situations in which adult learners are self-directed, responsible for their own lives, they are pragmatic and want to learn something relevant and meaningful, significant for their present lives or immediate future.

These four conditions are used as rules for selecting training strategies and learning activities. If any of these four conditions is missing, adults are less likely to get involved in the learning process.

### Metacognitive knowledge

Metacognitive knowledge refers to: knowledge about cognition in general, one's personal knowledge state, and one's strengths and weaknesses as a learner; knowledge of the task, for example its level of difficulty, what type of strategies are best suited to solving it, when and why to use them; and strategic knowledge of general strategies for learning, thinking, and problem solving. Metacognitive procedural regulation applies metacognitive knowledge to plan, monitor, and evaluate one's learning.

Now it is up to everyone involved in education and training to transfer these lessons into pedagogical practice and to develop such teaching and training, which will encourage students to increase their learning autonomy and self-regulation.

The application possibilities of a metacognitive perspective range from the educational field to that of rehabilitation, up to that of psychotherapy. Whatever the context, metacognitive intervention is characterized by some fundamental elements including the development of awareness, understanding and

control of mental operations, interactivity and exchange of roles for the better understand how other people's minds can function differently and produce different ideas and behaviours.

Here're some elements that characterize a metacognitive intervention:

- inform the subject
- discuss with the subject his system of beliefs and experiences relating to the problem area
- analyse errors
- bring attention to strategies
- relate objectives, behaviours and results to the mental processes involved
- orient the subject towards mastery rather than performance
- make communication interactive
- encourage him to put himself in the "heads of others"
- analyse with the subject his system of beliefs and experiences relating to the intervention
- insist on the control function that the mind can exercise over the same activity

### Metacognitive regulation of learning

Metacognitive *regulation* involves the actions we take in order to learn<sup>46</sup>. Although the theoretical framework that delineates these components is well established in educational and cognitive psychology <sup>47</sup>, biologists may not be as familiar with metacognitive regulation. Metacognitive regulation is how we control our thinking to facilitate our learning. For example, students with effective metacognitive-regulation skills can select appropriate learning strategies for a task and modify their approaches based on outcome. In contrast, students who plan to do "more of the same" after earning a poor grade on an exam lack these skills.

The ability to reflect on teaching and learning processes therefore becomes a fundamental element for the development of the competence of learning to learn for teachers who will subsequently have to transfer it to students<sup>48</sup>

In fact, L3.1 LICECOMP descriptor of this area, highlights the **awareness of own learning** interests, processes and preferred strategies, including learning needs and required support.

People need to be aware of their learning dispositions and preferred learning strategies, but also of their attitudes and values. Self-Regulated Learning (SRL) is the process through which individuals actively and consciously monitor, regulate and control their own learning from the cognitive and meta-cognitive, emotional and motivational, and behavioural points of view. In this effort, they are guided and constrained by their goals and contextual features<sup>49</sup>. The concept has been widely investigated in the last decades, with theoretical studies concerning models of how skilful self-regulators master their learning process and studies focusing on specific aspects, such as meta-cognition or motivation.

This descriptor emphasizes the importance of self-awareness and self-knowledge, the ability to reflect on one's own thinking, and awareness and understanding of one's own thought processes, particularly those relating to the self as a learner. It includes the judgment of the ability to carry out a task, i.e. self-efficacy, motivation to complete it and the level of interest in the learning task. To be effective, self-awareness and self-knowledge must be accurate and provide an honest portrayal of situations that enable the learner to take effective action.

At the same time, individuals' confidence in their self-efficacy as learners mediates persistence in the face of difficulties, as well as the effort and interest they mobilize in

<sup>&</sup>lt;sup>45</sup> CORNOLDI C., *Metacognizione e apprendimento*, il Mulino, Bologna, 1995, p.386.

<sup>&</sup>lt;sup>46</sup> SANDI-URENA S., COOPER MM., STEVENS RH., *Enhancement of metacognition use and awareness by means of a collaborative intervention*, Int J Sci Educ. 2011, 33:323–340.

<sup>&</sup>lt;sup>47</sup> SCHRAW G., *Promoting general metacognitive awareness*, Instruct Sci. 1998;26:113–125. ZOHAR A., BARZILAI S., *A review of research on metacognition in science education: current and future directions*, Stud Sci Educ. 2013, 49:121–169

<sup>&</sup>lt;sup>48</sup> Crf. SCHÖN D.A., *The Reflective Practitioner: How Professionals Think In Action*, Basic Books, 1984; MORTARI L., *Apprendere dall'esperienza*, Carocci, Roma 2003.

<sup>&</sup>lt;sup>49</sup> BOEKAERTS, M., PINTRICH, P. R., & ZEIDNER, M., Handbook of self-regulation, Elsevier, 2000.

learning. The higher the self-efficacy, the higher the goal challenge individuals are willing to take on and the more resources they are willing to expend to achieve them.

People need to be aware of their learning dispositions and preferred learning strategies, but also of their attitudes and values. Furthermore, especially in informal and non-formal contexts, it is crucial that people are aware of their interest and purpose in learning. Learning is a relational process of co-construction that implies interdependence. Therefore, an open attitude towards learning with and from others, as well as a sense of belonging to a learning community that can support the learning effort, are desirable learning dispositions, particularly in formal education contexts.

On the basis of the above, we can say that self-regulated learners are those who:

- know what they want to learn and why;
- plan their own learning process;
- consciously choose their study, understanding and problem-solving strategies, possibly by adapting those learned in other areas;
- do not get discouraged by failures but develop strategies to overcome them by controlling negative emotions;
- monitor the results obtained and, if necessary, adjust the strategies adopted so as to achieve their objectives;
- change their original plans by adapting the goals, the time devoted to learning, or the strategies adopted taking into account their previous results;
- are able to learn independently, but also to learn from and with others, seeking help when necessary.

The ability to self regulate her/his own learning process is a fundamental skill for a teacher; the self regulation requires a clear perception of the strategies and approaches that are most efficient, but also of the weal points.

The L3.3 descriptor of LIFECOMP reports that is fundamental to reflect and evaluate the purposes, processes and results of learning and knowledge construction, establishing relationships between different areas. As people improve in understanding learning processes they will be able to recognize that learning activities in different areas are similar and therefore the same strategy can be transferred and applied in different areas. According to this model, SRL is a cyclic process consisting of three phases: Forethought, Performance and Self-Reflection<sup>50</sup>. These three phases are all needed during the process of self-regulation and the last one, self-reflection, normally stimulates a further phase of forethought that takes into account what happened in the previous cycle and leads to an adaptation of the strategies adopted in previous cycles to improve the next forethought and performance phases. The cyclic process will repeat itself until the learner decides - in the self-reflection phase - to interrupt the cycle, either because satisfied with the result, or for other reasons. The forethought phase focuses on task analysis and self-motivation beliefs. The former includes setting the goals and an initial plan of the learning strategies to be used. The latter concerns a first assessment of one's own ability to achieve the objectives (self efficacy) and of the expected outcomes, as

<sup>&</sup>lt;sup>50</sup> The sub-processes of each phase have been integrated based on the content of an interview with Barry Zimmerman by Science watch: Barry Zimmerman Discusses Self-Regulated Learning Processes - ScienceWatch.com - Clarivate

well as the appraisal of the learner motivation and "goal orientation", i.e. whether the learner is moved by desire to master content for intrinsic interest of rather by motivations of a more competitive nature.

The **performance** phase entails self-control and self-observation. The former includes monitoring of performance in terms of adapting the learning strategies when they turn out to be sub-optimal, imagery (i.e. using imagination or other creative strategies to remember something), managing time, configuring and personalising the learning environment, making sure to avoid distractions and focus the attention on the learning tasks and, very importantly, making decisions about help-seeking. It should be noted that help-seeking refers not only to the explicit request for help from the teacher, an expert or other students, but also to looking for alternative sources of information with respect to those already available to the student, which he or she can use to improve understanding or acquire deeper/wider knowledge. In the internet age, for example, searching for explanations or more in-depth texts on the net can be considered a *help-seeking* activity. Self-observation consists in self-recording (keeping track of one's own learning process) and metacognition, i.e. reflection, understanding, analysis and management of one's own cognitive processes. The latter is the bases for effective adaptation of the learning process. Finally, the **self-reflection** phase concerns self-judgement and self-reactions. These comprise an evaluation of the learning process that has taken place, including selfevaluation, the identification of the causes of failure, the emotional reactions towards oneself (positive, such as satisfaction, or negative, such as anger) and the identification of the opportunity to adapt some approaches that have proved to be ineffective. Adaptation is particularly important self-regulated behaviour, as opposed to self-defensive reactions, which normally lead to finding justifications for the choice of ineffective strategies without trying to improve them.

To create relations between different areas of knowledge applying what has been learnt, is, somehow, the final achievement of the learning process. In this case we can talk about meaningful learning allowing the integration of new information with that already possessed and the use of the same in different contexts and situations, developing problem solving, critical thinking and meta-reflection and transforming knowledge into real skills. For this reason, this dimension of learning to learn competence becomes fundamental for IVET teachers and trainers.

# 4.Experiences and practices of "learning to learn" for IVET teachers and trainers in different partners' countries (France, Germany, Italy, Slovenia)

In order to propose, through our L2L 4T&T project, the development of the "learning to learn" competence recognized as fundamental for the support of lifelong learning, and to develop an adequate competence framework for IVET teachers in particular in the automotive and food sectors, all partners carried out research in their own country to identify significant practices and training experiences in this sense.

First of all they verified whether and how the "learning to learn" competence was considered in the training curricula for teachers and students. Subsequently they carried out desk research or interviews with IVET operators regarding possible training practices and experiences attributable to the development of this competence, starting from the theoretical approach described above and from the LIFECOMP framework.

Each practice and experience is presented through sheets containing the following points:

- 1. Title
- 2. Author of the practice
- 3. Brief description of the practice (Main characteristics of the practice, target, length) and any links or attachments for further information
- 4. Why the practice is suitable for the development of the learning-to-learn competence

To connect the different practices to the LIFECOMP skill framework, at the end of the analysis through the sheets, a table was created that cross-references the different practices with the different areas and descriptors of the competence.

### 5. Experiences and practices in France

### 5.1. The "learning to learn" competence in French vocational education and training curricula

In France, the objectives of initial and continuing vocational training are generally defined by training standards specific to each branch or trade. The skill "learning to learn", although not explicitly formulated in a general way, can be integrated transversally into certain reference systems.

The French National Repository of Key Skills in Professional Situations (*Référentiel National des Compétences Clés en situation Professionnelle*) aims to identify the cross-disciplinary skills required in the professional context. Although the term "learning to learn" is not explicitly mentioned, the repository includes skills that are generally associated with this ability. These competencies may vary according to versions of the reference framework and updates, but here are some examples of general competencies that may be linked to learning:

### **Communication skills:**

Understand and interpret written and spoken information.

### Digital competence:

Use digital tools to collect, organize and share information.

### **Problem-solving skills:**

Identify and solve problems independently. Make informed decisions.

### **Autonomy and initiative competency:**

Demonstrate autonomy in work.

Take initiative to improve own learning.

### Adaptability competency:

Adapt to new or unexpected situations.

Accept constructive criticism and adjust accordingly.

### Time management competency:

Organize work time efficiently.

These skills are designed to enable individuals to adapt and develop their learning throughout their careers, and to cope with changes in the professional world.

### 5.2. Experiences and practices of "learning to learn" for IVET teachers and students

The experiences and practices are as follows:

- The learning journal
- The skill portfolio
- Pedagogical contract
- The follow up dashboard
- The RCI Method: Remediation/ Consolidation / Improvement
- Mind map
- Supporting "Learning to learn": certification

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The Learning journal

### 2. Who developed the practice

Le Greta du Velay, Haute Loire, France - <a href="https://www.velay.greta.fr">https://www.velay.greta.fr</a>

Coordinated by Valérie Alibert, Pierre Carrolaggi and Denis Aboulin, training consultants. Doriane Dupland, Céline Gibert and Mathieu Gauzins, as well as Michel Dujeux from Belgium, took part in the project.

A Greta is a grouping of public educational institutions, including high schools, technical and vocational schools, and colleges. It leverages the resources of the National Education system to provide adult continuing education in a specific geographical area.

In 2006, the European Parliament called for key skills to be integrated into strategies and infrastructures as part of lifelong learning. In 2008, Greta du Velay took part in the European Parliament's project, supporting the implementation of the "Learning to learn" key competence.

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The learning journal is a reflective piece of writing that helps trainees to build knowledge and activate mental representations. It allows information to be organized and linked together, with the aim of clarifying the aims of the tasks to be accomplished.

It can be weekly or daily, individual and personal but can also be shared collaboratively among peers.

Initially, the teaching diary is a collection of the trainee's thoughts, he/she can:

- Talk about himself
- Comment on school activities
- Explain how he/she learns
- Explain how he/she understands
- Verbalize what he/she doesn't understand
- Talk about what he/she liked
- Share strengths and difficulties

In a second phase, the learning journal will evolve as the trainee moves from a narration of facts (mentioned above) to the presentation of content and procedures used to learn.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- It's a tool that enables the trainee to understand, memorize and engage in metacognitive activity.
- It's also a tool that can help the trainer, by drawing on this discursive elaboration, to establish remediation and differentiation in the implementation of learning sequences.
- It's important to create an exchange around this writing in order to mutually integrate representations, reprocess knowledge and procedures with flexibility and adaptation, and assimilate the objects of study to the trainee's mental universe.

### **5. Annexes** (tools or references to additional information if available)

A website has been created to present the deliverables developed for this competency: <a href="https://competencescles.eu/">https://competencescles.eu/</a>

### 1. Title

The skill portfolio

### 2. Who developed the practice

Le Greta du Velay, Haute Loire, France - <a href="https://www.velay.greta.fr">https://www.velay.greta.fr</a>

Coordinated by Valérie Alibert, Pierre Carrolaggi and Denis Aboulin, training consultants. Doriane Dupland, Céline Gibert and Mathieu Gauzins, as well as Michel Dujeux from Belgium, took part in the project.

A Greta is a grouping of public educational institutions, including high schools, technical and vocational schools, and colleges. It leverages the resources of the National Education system to provide adult continuing education in a specific geographical area.

In 2006, the European Parliament called for key skills to be integrated into strategies and infrastructures as part of lifelong learning. In 2008, Greta du Velay took part in the European Parliament's project, supporting the implementation of the "Learning to learn" key competence. A website has been created to present the deliverables developed for this competency: <a href="https://competencescles.eu/">https://competencescles.eu/</a>

### **3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The skills portfolio is a tool that can be used by trainers, learners, and others. It is considered to be personal, scalable and rewarding.

In it, the individual can gather information about his or her career path, but also illustrate his or her skills with evidence of activities carried out and testimonials.

It's a way of valorizing extra-professional activities and continuous learning.

It is a tool that can be created online via various platforms.



Example of a skill portfolio made on Canva:

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- This tool will enable the user to discover his own learner profile. Then it can use it to help his trainees to do the same.
- The skills portfolio enables its user to track learning over time and highlights his ability to progress.
- It provides a critical view of what has been learned and where improvements are needed.
- Finally, it links theory and practice.

### **5. Annexes** (tools or references to additional information if available)

A website has been created to present the deliverables developed for this competency: <a href="https://competencescles.eu/">https://competencescles.eu/</a>

### 1. Title

Pedagogical contract

### 2. Who developed the practice

Le Greta du Velay, Haute Loire, France - <a href="https://www.velay.greta.fr">https://www.velay.greta.fr</a>

Coordinated by Valérie Alibert, Pierre Carrolaggi and Denis Aboulin, training consultants. Doriane Dupland, Céline Gibert and Mathieu Gauzins, as well as Michel Dujeux from Belgium, took part in the project.

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**3. Brief description of the practice** (Main characteristics of the practice, target, length...)

The pedagogical contract involves the trainer more closely in the training process in order to take everyone's needs and constraints into account.

The first step to design this contract is to effectuate a personalized study of the trainee through an interview conducted by the trainer. Subsequently, the discrepancies detected during the interview between the trainee's expectations and the training course will enable the content to be targeted.

### Example of an interview of about 30 minutes:

Objectives and expectations:

What are your specific objectives in undertaking this customized training?

### Experience and Prerequisites:

- What is your previous experience in this area of study or training?
- Do you have any particular prerequisites that the trainer should take into account?

### Learning Style:

- How do you prefer to receive information (visual, auditory, hands-on, etc.)?
- Do you have teaching methods that have worked well for you in the past?

#### Assessment:

• What evaluation methods do you prefer to measure your progress?

### Time constraints:

What is your usual schedule? What times of day are you most available?

### Resources:

Do you need additional resources or special aids to facilitate your learning?

Once the interview and the responses analysis have been done, the redaction of the contract can be made by the trainer.

The contract must include all of the following:

- A list of all courses required for graduation
- The date on which trainees are expected to graduate
- The time trainees are expected to spend in class each day
- The number of hours of tutoring per week
- The number of hours per week devoted to study.

What happens if trainees fail a course or miss a deadline

#### But also:

- The objectives of the training
- The prerequired competences
- How those competences will be assessed

After the contract has been written, the trainer and the trainee will be reunited in order to read it and signed it by both parties.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- Teaching the trainer to set up the interview and the pedagogical contract helps the trainee to feel more listened:
  - Using contextualized positioning to explore what the trainee has acquired in various situations.
  - Conducting a personalized study to make recommendations (strengths and weaknesses)
- The pedagogical contract enables the trainer to make the link between the training objectives and the trainee's skills and expectations. This relation limits the trainee's perception of the training as a constraint.

### **5. Annexes (**tools or references to additional information if available)

A website has been created to present the deliverables developed for this competency: <a href="https://competencescles.eu/">https://competencescles.eu/</a>

### 1. Title

The follow-up dashboard

### 2. Who developed the practice

Project PIA "Compétences Numériques Services Auto"

ANFA (Association Nationale pour la Formation Automobile)

Paris, France

## **3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The follow-up dashboard is a visual communication tool (material or virtual) that presents the results obtained for a series of indicators, in real time, and the deviations from expectations, in order to guide actions (such as an intervention with a person), for both the trainee and the trainer.

The tool enables trainees to check independently where they are in their learning and skills development, as well as the timetable for completing their assignments.

Trainers can use the data displayed on their dashboard to plan targeted interventions with trainees in difficulty. The data can also be used as a basis for modifying teaching strategies and orienting activities towards a more inclusive approach.

### Example of a follow-up dashboard:

« My intentions-	"What I've	"What I failed to	"Areas of
commitments »	managed to establish"	implement"	improvement »
	Cotabilori		

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- Its graphic, synthetic appearance gives a quick overview of the progress of each trainee's learning.
- It helps to quickly analyze trainee's progress and identify those who seem to be in difficulty.

- It contributes to learning by enabling the trainee to track his/her progress independently.
- It helps determine which interventions should be prioritized to support the trainee.
- It is part of a strategy of pedagogical coherence (or alignment), since the indicators selected are directly linked to course content, activities, and assessments.

### 1. Title

The RCI Method: Remediation/Consolidation/Improvement

### 2. Who developed the practice

IDIVET Project - Improving Digital Learning in VET (Erasmus+ KA2)

ANFA (Association Nationale pour la formation automobile)

Paris, France

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The RCI method is a cycle of actions that comes into position after the summative assessment of a chapter.

It allows the trainee to be positioned in the acquisition of his/her knowledge and therefore to then put into place an action plan which goes through these 3 stages:

- **Remediation**: going back to the points not acquired yet, in order to help the trainee to master everything he/she needs to know.
- **Consolidation**: this step helps to verify that the knowledge is acquired over time and not just over a period. it is done by making regular reminders, in the form of exercises or quizzes / multiple choice questions, to mobilize the trainee's memory and his/her revisions all the time.

A base at Day 1 (D+1), Day 7 (D+7), Day 14 (D+14), Day 28 (D+28) is quite easy to set up.

• Improvement: the last step of the process. Not all trainees might get there since some will need more time to revise and learn the notions. Those who go faster or already master the concept can reach this perfecting phase. It is a question of setting up a differentiated pedagogy. The idea of improvement is to propose activities or resources that go further the prerequisites of the concept of the reference system. This helps to motivate the most advanced learners. You can

provide them with documents, "learn more" videos, or highlight certain points or particularities of the concept. Remediation / Consolidation / Improvement (RCI) Formative Formative Summative assessment assessment evaluation Lesson D+7 mþ D+14 Feedback D+1 Diagnostic assessment + theoretical Assessment of the acquisition · Feedback on Self corrected of skills Feedback are compulsory summative contributions + Study cases, professional Use on the benefits if the previous e-learning content assessment activities + formative Proposal of a RCI plan Quizzes, closed questions scenarios · Allows the RCI assessments Remote On site

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- This interactive process enables trainees to assess their learning journey.
- It involves evaluating knowledge acquisition, identifying difficulties, and recognizing areas for improvement.
- The three distinct steps prompt personal reflections and forward-looking considerations.
- Trainees are compelled to answer essential questions: "What have I learned?" "How committed am I?" "In what ways can I deepen my work?".
- The structured approach fosters a positive self-attitude among trainees.
- It encourages a proactive stance towards personal development.

### 1. Title

Mind map

### 2. Who developed the practice

Project PIA "Compétences Numériques Services Auto"

ANFA (Association Nationale pour la Formation Automobile)

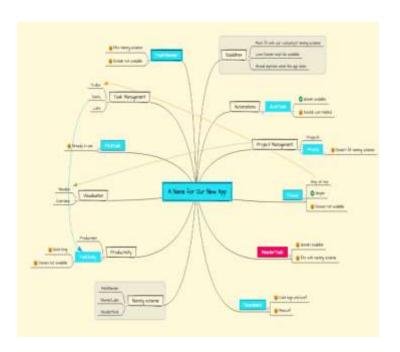
Paris, France

### **3. Brief description of the practice** (Main characteristics of the practice, target, length...)

The mind map is an intuitive graphic tool for structuring ideas and concepts visually and in an orderly tree structure. It reflects the way our brains organize and classify information.

One of the captivating aspects of mind maps is their ability to provide both a detailed view and an overall perspective on a subject or theme, all in a small space. It's the art of creating maps centered around a main idea in order to synthesize and visualize information, organize concepts, and take notes.

### Examples of a mind maps:



### 4. Why the practice is suitable for the development of the learning-to-learn

A mind map helps develop the learning to learn competence because it allows you to:

- Visualize the information
- See details and the big picture at the same time
- Engage both hemispheres of the brain
- Understand a situation more quickly
- Establish links between ideas
- Memorize and retrieve information
- Stimulate creativity

- Simplify complex ideas
- Gain flexibility

### 1. Title

Supporting "learning to learn": certification

### 2. Who developed the practice

<u>The Centre académique de formation continu (CAFOC)</u> is a training organization that aims to support the acquisition or development of skills for those involved in training.

It designs and implements training projects enabling the development of various skills linked to:

- Pedagogical engineering and training intervention
- Management and steering of training projects
- Tutor and apprentice master functions
- Developing pedagogical innovation.

### **3. Brief description of the practice** (Main characteristics of the practice, target, length...)

In 2021, CAFOC will be launching its first certification in support of learning to learn through training: Accompagner l'apprendre à apprendre. The aim of this certification is to enable young people to develop their autonomy in learning. To achieve this objective, the training is aimed at "learning mediation professionals", i.e., trainers and educators from all sectors, who are the accompaniers of this learning. This training aims to put professional practices into perspective with theories from work in cognitive psychology and in particular cognitive mediation of learning and neuroscience.

The skills provided by this training will be dominated by three guidelines:

- Competence n°1: learn to design learning situations using cognitive mediation tools and methods.
- Competence n°2: learn to adopt a mediator's posture to encourage learners to develop their autonomy.
- Competence n°3: learn how to analyze your practice as a "designer-mediator" and continuously improve it according to the learner's profile.

To have a better comprehension of those competences let's give some examples tasks associated to each competence:

1. Learn to design learning situations using cognitive mediation tools and methods:

- Situate the planned intervention with the action's purpose(s)/goal(s)/objective(s) of the action to which it contributes.
- Characterize the people for whom the intervention is intended, the learners: project(s), assumptions about their learning, reason(s) for their presence, etc.
- Carry out and analyze the task to be given to learners: identify what it requires them to mobilize cognitively using specific tools.
- 2. Learn to adopt a mediator's posture to encourage learners to develop their autonomy:
  - Supporting individual consciousness: support each learner's efforts learner through his or her attitude/ words.
  - Guiding the co-construction of knowledge.
  - Establish and maintain a favorable learning climate for all by adopting a mediator's posture integrating contributions from neuroeducation cognitive psychology, as well as the principles of together.
- 3. Learn how to analyze your practice as a "designer-mediator" and continuously improve it according to the learner's profile:
  - Evaluate your posture as a design mediator and your own use of tools of cognitive mediation for learning.
  - Develop recommendations to improve your practice based on the contributions of neuroscience and cognitive psychology and the principles of living together.

This is a hybrid training, with 128 hours of classes over 9 months. A new session has been settled for 2023-2024.

### 4. Why the practice is suitable for the development of the learning-to-learn

This certification accompanies teachers in teaching that promotes learning to learn and, especially for the third skill, develops a method that encourages self-evaluation and reflection on one's own practice

**5. Annexes (**tools or references to additional information if available)

Accompagner l'apprendre à apprendre - <a href="https://gipfcip.scola.ac-paris.fr/Conseil/accompagner-apprendre-a-apprendre.php">https://gipfcip.scola.ac-paris.fr/Conseil/accompagner-apprendre-a-apprendre-a-apprendre.php</a>

#### 6. Experiences and practices in Germany

### 6.1. The "learning to learn" competence in German vocational education and training curricula

**Summary** ( <a href="https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/germany-u2">https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/germany-u2</a> )

Vocational education and training (VET) is based on close cooperation between the State, companies and social partners. The Federal Ministry of Education and Research (BMBF) is responsible for general VET policy issues and has a coordinating role for all training occupations. The BMBF works closely with the Federal Institute for Vocational Education and Training (BIBB). BIBB conducts research, moderates the process of developing the training regulations and plays a crucial advisory role for VET policy. The Federal States (Länder) are in charge of the school-based part of VET. Social partner contribution is important at different levels.

#### Continuing VET

Continuing training is playing an increasingly important role in improving employability by upskilling and reskilling in line with the digital and ecological transition. It is characterized by a wide variety of training providers and a low degree of State regulation....// Germany's VET is a successful model, largely based on the dual system (apprenticeship) leading to high-quality vocational qualifications, valued on the labour market. Apprenticeship enables smooth education-to-work transitions, contributing to low youth unemployment...// About 50% of upper secondary school learners are enrolled in a VET programme; of those, 70% participate in apprenticeship...//

National standards and training regulations (curricula for in-company and school-based components) ensure the quality of the dual training programmes. Companies provide apprenticeships in accordance with the training regulations....// These regulations allow for flexibility to agree on company training plans with apprentices. Regular revisions to training regulations guarantee keeping pace with rapid technological and organizational changes.... // As vocational training must respond to labour market needs, employer organizations and trade unions have a major influence on the content and form of IVET and CVET....// At regional level, the chambers play a crucial role in VET, such as in examinations. The initiative for updating or developing new occupational profiles comes mainly from social partners....//

In Germany there is thus a strong focus on the dual system in VET, even if there are different examples of school based VET, similar to most other European VET-systems. This concerns both initial VET and adult (continuous) VET. In order to be able to analyse the current situation in Germany, and understand the differences between the different learning settings, one should first define the roles of teachers/trainers and students in these environments.

The dual system in Germany: This is in Germany the traditional and most common way to reach a normal VET-diploma. The learner spends about 80 % of the time in a company learning mainly future on-the-job related practical skills. In addition to this, the learner visits a state controlled school (OSZ - Oberstufenzentrum) about 20% of the

time. The emphasis in school is mainly on theoretical knowledge in a classroom setting. As a reminder, one should not forget though, that there is no 100% clear border between theory and practical content as learning takes place regardless of both learning environments. Each curriculum is defined at state level, allowing people to access the labour market regardless of region, letting the relevant industry expect a common set of competences and professional skills in the workforce. A typical VET-learner within the dual system is thus facing different teachers and trainers with different roles during his or her training.

The trainer: During the training in the company, the learner has one or more designated trainer(s). This person has a short non-academic training, often only for 80-140 hours, in order to be able (and to be allowed) to train in the VET-area. The background of the trainer is normally professional training with some years work experience resembling DQR/EQR Levels 4 and 5. The Trainer Aptitude Ordinance (AEVO) is an ordinance issued by the Federal Ministry of Education and Research, which is issued on the basis of the Vocational Training Act. It regulates conditions under which a person can be recognized as a trainer. The AEVO examination consists of a short written and a practical part. The AEVO-curriculum is thus based on daily VET-issues, such as planning and executing the training. The curriculum is of course often set by the company's daily business and clients assignments and wishes. That means a curriculum in the dual system must be allowed to be very flexible. Therefore the training of the trainer through the AEVO-exam is not focused on methodological aspects. The AEVO-curriculum contains different learning methods to a certain extent. However, when the trainer wants to acquire more methodological knowledge than the AEVO provides, such as learn-to-learn strategies, the trainer is normally dependent on external further training, often provided by the local chamber of commerce or by the many further training institutes for trainers (www.foraus.de, BIBB - Bundesinstitut für Berufsbildung etc.). This case shows in particular that our project has a special relevance for VET within the dual system.

The **teacher** in the state school: The teacher's main task is to provide the learner with sufficient theoretical knowledge for a profession during class, handling relevant topics and subjects. In order to become a teacher, normally an academic study on tertiary level is required. As a teacher in the state school part of the dual system, you are normally continuously confronted with learning methods, such as learn-to-learn strategies. An excerpt from a state school curriculum shows this aim in teaching:

The teacher initiates a goal-oriented learning situation, based on constant continuous further development and attitude towards lifelong learning. The teacher is committed to support the learners in this field as a committed employee. The aim is to impart comprehensive professional competence which, in addition to specialized knowledge and professional competence, includes social, personal and methodological skills. The special features of heterogeneity must be taken into account. A teacher's methodological competence must provide the learners with a willingness and ability to proceed in a targeted, planned manner when working on tasks and problems (e.g. when planning work steps). Free from "Handreichung Implementierung von Rahmenlehrplänen", Land Brandenburg, StR Sylvia Schulz et al, Publisher "Landesinstitut für Schule und Medien Berlin-Brandenburg (LISUM)" 2019

### Learning competence in the dual training system in the Federal Republic of Germany

The following assessments are based on discussions with vocational school teachers, the learning coach Dr Thomas Tillmann and our own experiences working with trainees.

The Conference of Education Ministers and the Federal Institute for Vocational Education and Training, as the institutional guardians of training, have recognised that it is essential for the future labour market to train employees who are capable of lifelong learning on their own. Otherwise, employees will not be able to fulfil the constantly changing demands placed on them. Subsumed under the concept of learning competence, this conviction has been firmly anchored in many framework curricula. The framework curriculum for skilled workers in the catering sector from 2021 serves as an example. Despite the clear content requirements, companies are increasingly criticising the fact that trainees have little to no ability to organise their own learning, let alone reflect on it. Companies often complain that their trainees are becoming too school-based, which has a counterproductive effect on their independence in everyday working life.

A central cause of the gap between the wishes of educational policy stakeholders and the observable reality is the area of tension in which the vocational school finds itself as one of the two central stakeholders in dual vocational training. The idea of self-direction of trainees, as demanded above, with the simultaneously prescribed rigid regulatory framework for teachers and learners, poses a considerable dilemma. If the actors in the school system were given more freedom in the selection, timing and organisation of training content, the principle of autonomous teaching and learning would be more firmly anchored. However, this would increase the risk of a possible lack of uniformity in the quality of education, for which its guardians are ultimately responsible.

A second cause is the sometimes outdated self-image of trainers. Trainers often believe that, as teachers, they have to give trainees everything they need for the job. If the trainee internalises what they have been taught, they will be optimally prepared for the world of work. Those who are stuck in this mindset have little room for experimenting with their own learning process. Another group would like learners to be independent and take responsibility for themselves, but cannot free themselves from the role of complete responsibility. One explanation for this could be that, from the trainers' point of view, independence can only result from the trainees' expertise. Only when they have acquired the expertise that only the trainers can give them are they ready to take their own learning steps. In both cases, work needs to be done on the teachers' understanding of their role. It would be helpful if the teachers/trainees were supported with concrete tools so that the theoretical implementation of the concept of "learning/learning" does not just remain a wish.

#### 6.2. Experiences and practices of "learning to learn" for IVET teachers and students

The experiences and practices are as follows:

- IG4L2L Inspiring Guide for Learn to Learn
- The reflecting learning diary
- Review of learning behaviour

#### 1. Title

IG4L2L - Inspiring Guide for Learn to Learn

#### 2. Who developed the practice

"Inspiring Guide for Learn to Learn" is an Erasmus+ project in the field of adult education and was carried out from October 2016 to November 2018. The project involved partner organizations from Lithuania (<u>Lietuvos suaugusiųjų švietimo asociacija</u>), Spain (<u>Fundación El Tranvía</u>), Estonia (<u>Eesti Vabaharidusliit Mtu</u>) and Germany (<u>Stephansstift Zentrum für Erwachsenenbildung gemeinnützige GmbH</u>).

### **3. Brief description of the practice** (Main characteristics of the practice, target, length..)

Inspiring Guide for Learn to Learn (IG4L2L) is an on-line L2L competence self-assessment tool in 5 languages (English, Estonian, German, Lithuanian and Spanish) that allows adult learners to evaluate their L2L abilities and provides recommendations for development of learning abilities.

IG4L2L is designed for self-development of adult learners, but it can be used also by teachers and trainers to encourage learners to develop their learning effectiveness. For learners whose Learn to Learn ability is low it may be difficult to achieve this without the teacher's help. Here you can find more information regarding Learn to Learn competence and materials for training of teachers and trainers on how to use the instrument.

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

Following the Recommendation of 2006 on key competences for lifelong learning this project is considered interesting because its Learn to Learn competence concentrate on five abilities:

- Ability to motivate yourself and to develop your self-esteem.
- Ability to reflect learning experiences.
- Ability to manage your time.
- Ability to organize information.
- Ability to learn in groups.

### Furthermore, the project presents us some open free-of-use resources for download:

- on-line L2L self-assessment questionnaire
- PDF version of the L2L self-assessment questionnaire
- PDF version of Recommendations
- Learning Diary Instructions
- **5. Annexes** (tools or references to additional information if available)

http://www.learntolearn.eu/

#### 1. Title

The reflective learning diary

#### 2. Who developed the practice

Prof Dr Silke Michalk Professor at the Technical University in Cottbus

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The reflective learning diary is an attempt to encourage trainers/students to think critically and scrutinise. Lectures, seminar texts and oral contributions inevitably contain content that has not been understood after being absorbed once. However, not all participants are aware of the points at which a lack of understanding necessitates research. The learning diary promotes awareness and thus encourages action.

This is the reflection process presented in the diary:



- ➤ Document & describe: How am I at the seminar/at the learning activity? What individual steps were there?
- ➤ Analyze & Interpret: What does this mean for me? What consequences arise from them?
- > Evaluate & Judge: To what extent were my expectations (goals) achieved or not?
- ➤ Plan: How will I use this new knowledge for my future Learning activities / my further studies?
- ➤ My goal: What do I want from the seminar/learning activity take along? How does this fit with my learning history/career aspirations?

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

- Managing Learning: monitoring and reviewing of one's own learning
- Critical thinking: Evaluation of information during own learning processes from which conclusions and solutions are developed
- Growth-orientated thinking: Belief in one's own reflective potential of learning with the help of which one can make individual progress

#### 1. Title

Method: Review of learning behaviour (Bernd Ott et al)

#### 2. Who developed the practice

Bernd Ott: Grundlagen des beruflichen Lernens und Lehrens, Pp. 14

Cornelsen Verlag, 3. Überarb, Auflage 2007, ISBN 978-3-589-23930-6

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

With a checklist containing questions of how to review ones own learning, the learner are able to position themselves in a very transparent manner, according to preferred clustered learning types and channels in a self-reflecting process. There are 2 possible, nonexclusive choices possible:

The learner will mark individually if they:

- 1. Understood the material, and if they
- 2. can keep the learned content.

Main conclusion is that the <u>motivation</u> (with following action) is most important, rather than the plain learning types method, which were critized by psychologists. There are still a connection to the methods presented by Vester years ago though.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- reflection on own learning behaviour for students AND teachers/trainers
- method of finding the optimum own learning MOTIVATION
- develop a Learning plan, rewarding learning, fun at learning, own motives, learning with partners
- SQ3R Reading technique: Survey, Question, Read, Recite, Review

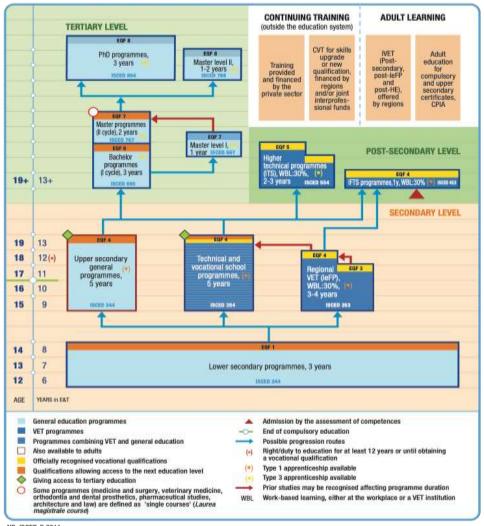
#### 7. Experiences and practices in Italy

### 7.1. The "learning to learn" competence in Italian vocational education and training curricula

In Italy Vocational education and training pathways are an alternative channel to school for fulfilling the obligation to participate in education (with the legal requirement for all young people to attend school from age 6 to 16) and the right-duty to it (which must be guaranteed for at least 12 years or until attainment of an upper-secondary school qualification or a vocational qualification before the age of 18). Each year the labour ministry grant funding to the regions and autonomous provinces for the financing of vocational and training pathways, following criteria shared between the labour ministry and the regions.

The chart below shows how the Vocational education and training system relates to the national education and training system.

# VET in the Italian education and training system



NB: ISCED-P 2011.

Please cite as: Cedefop; ReferNet Italy (2022). VET in the Italian education and training system. In: Cedefop; ReferNet (2022). Vocational education and training in Europe [database]. www.cedefop.europa.eu/en/tools/vet-in-europe

The Italian education and training system provides for the Certification of Competences attained for each student who has fulfilled the 10-year compulsory education requirement (Ministerial Decree 139/2007 and Ministerial Decree 9/2010):

- at the end of the two-year secondary school course
- at the qualification in the case of VET
- for those who have reached the age of 18 and passed the final exam

The skills certification document is drawn up by the Class Council during the final examination based on the national model adopted by Ministerial Decree No. 742/2017. Competence-based certification is implemented in Italy by the EU Council Recommendation of 22 May 2018 on "Key Competences for Lifelong Learning" identifies 8 key citizenship competences for lifelong learning. The 8 key citizenship competences and 16 cultural competences are identified in relation to the 4 multidisciplinary areas: linguistic, mathematical, scientific-technological, historical-social, certified on the basis of the model DM no. 9 of 27 January 2010.

The model provided by the Ministry of Education and Research certifies the basic skills and the relative levels achieved in relation to the 4 cultural areas, declaring the acquisition of the key competences of citizenship (1. Learning to learn, 2. Planning, 3. Identifying connections and relationships, 8. Acquiring and interpreting information) as they form the basis on which basic cultural competences are built. Key competences for citizenship are not certified individually, but are mentioned in connection with the certification of the basic competences related to the cultural axes within which they are shown.

Learning to learn competence is recognized when the student:

- participates actively in teaching-learning activities, bringing personal and original contributions, the result of individual and group research
- organizes his/her learning in terms of time, sources, resources, technologies, also found beyond the school situation
- understands if, how, when, and why in each situation (study, work, other) it is necessary to learn/acquire further knowledge/skills
- understands whether he/she can cope alone with a new learning/acquisition situation or has to use other inputs (group, dedicated sources, tools).

Certified basic skills are assessed at three levels: basic (the student performs simple tasks in known situations), intermediate (the student performs tasks and solves complex problems in known situations) and advanced (the student performs complex tasks and problems in even unfamiliar situations).

The governance of VET pathways is on a regional basis, so each region decides whether and how it organizes the recognition of the learning-to-learn competence. They are referred to as 'supplementary competences and personal resources' in addition to basic skills. Some Regions translated the L2L competence also into the training standards of the pathways beside the other competences.

For instance, Friuli Venezia Giulia Region translated into the training project the competence learning to learn as "Managing one's own learning and professional development" and describe it as the ability to:

- reflecting and learning to recognize one's own learning strategies and modes,
- acquire the tools and be able to use their own learning strategies and modes,

- learning to define and plan the time needed to perform a task or activity.

The competence Learning to learn is not included in teacher training neither in the compulsory training for regular school teachers (Act 107 of 2015) nor for VET teachers.

Neither does the L2L competence appear explicitly in the funded optional training courses for school teachers. In which, in some cases, references to individual dimensions referring to the L2L competence can be identified in the context of pathways with a main focus on other competence areas (mainly in the methodological field). For example, in the context of teacher training for disabled or disadvantaged pupils, 'organizational and didactic autonomy' is mentioned, which can refer to L2L competence. Even in in-service training for educational innovation, particularly on digital aspects, there are some dimensions related to L2L competence (e.g. "knowing how to identify and apply strategies...").

In this national scenario our project meets a need in the structured teacher training offer that, in fact, doesn't provide any explicit and structured support for the development of L2L competence for teachers and other figures with an educational role in the national IeFP system.

Just as we're writing this report, the Italian Ministry of Education has published a the Decree no. 14 of 01/30/2024 in which it has standardized the format of the key skills certification module from primary school to adult education.

Learn to learn competence is described in the same way, both at the end of compulsory education (for students) and for adult education, and is as follows:

- organizing your own learning, identifying, choosing and using various sources and various methods of information and training (formal, non-formal and informal), also depending on the time available, one's own strategies and one's own study and work method. Develop confidence in your abilities, evaluate your critical points, potential and resources; maintain motivation and interest in always learning. Identify connections and relationships, identifying, elaborating and representing coherent arguments, relationships between phenomena, events and concepts, even those belonging to different ones disciplinary fields and distant in space and time, grasping their systemic nature and complex, seeking analogies and differences, consistencies and inconsistencies; establishing causes and effects in relation to possible scenarios/futures, recognizing their probabilistic nature. Research and critically interpret information coming from different fields through different communication tools, evaluating their reliability and usefulness, distinguishing facts and opinions.

Certified key competences are now assessed at four levels:

A – Advanced. The student carries out tasks and solves complex problems, showing mastery in the use of knowledge and skills ability; proposes and supports one's opinions and makes informed decisions responsibly.

B – Intermediate. The student carries out tasks and solves problems in new situations, makes conscious choices, showing knowledge, use the knowledge and skills acquired.

C – Basic. The student carries out simple tasks even in new situations, showing that they possess knowledge and skills fundamentals and to know how to apply basic rules and procedures learned.

D – Initial. The student, if appropriately guided, carries out simple tasks in known situations.

#### 7.2. Experiences and practices of "learning to learn" for IVET teachers and students

The experiences and practices are as follows:

- Design thinking approach
- Training for trainers about digital skills (for didactics, communication and managing activities)
- Media Literacy
- Stop and breathe project
- Other types of activities
- National Research on the evaluation of the 8 key competences for lifelong learning in initial training

#### 1. Title

Design thinking approach

#### 2. Who developed the practice

Scuola Centrale di Formazione (SCF)

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

Design thinking in an approach, supports the development of innovative ideas and complex projects (related to products and services) starting from: people's needs, opportunities in terms of tools and technologies, and economic sustainability.

#### SCF's experience of training trainers on design thinking:

- 4-hour introduction workshop to the approach during a national residential training (35 teachers and trainers involved as participants).
- In-person training at a partner 6 hours, 16 teachers and trainers involved as participants.
- Online training 2 webinars for a total of 4 hours introduction to the approach and testing of a work phase (definition) using specific methodologies for the creation of personas (20 teachers and trainers involved as participants).

Other practices in use in relation to the approach:

- our member Centro Arti Grafiche Artigianelli of Trento trains all the staff in the adoption of this working approach, which is used both by the staff involved in the planning and coordination of activities for the development of new work paths, and in teaching with the students. Also the students are trained to use the approach.
- During specific activities, some phases of the design thinking approach (especially the problem definition and conception phase) were used for example with staff involved in the management of pupil mobility flows abroad with the aim to identify critical steps in workflows and find possible solutions.

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

- valorizes active listening to people (authentic understanding of the need, adoption of an empathic understanding),
- promote teamwork between people with different backgrounds (valorization of diversity),
- get used to divergent thinking (depth of thought in search of original solutions),
- graphical and prototypical approach (concrete declination of ideas, cultivating the actual feasibility of the project),
- iteration (circular logic of continuous improvement).

#### 1. Title

TRAINING FOR TRAINERS ABOUT DIGITAL SKILLS (for didactics, communication and managing activities)

#### 2. Who developed the practice

Scuola Centrale Formazione

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

SCF Since 2013 has been running a structured activity to train trainers in the use of didactics with technology. As part of this activity, we offered train-the-trainer activities on the use of technology to support collaborative practices and manage workflows more effectively.

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

This activity impacts on the ability to plan and organize one's learning practices (managing learning dimension).

It could be a working path to link part of the DIGcomp Edu to the learning to learn competence, in particular seems to be particularly coherent the area "Professional Engagement" that include: Organisational communication, Professional collaboration, Reflective practice, Digital Continuous Professional Development (CPD).

#### 1. Title

#### MEDIA LITERACY

#### 2. Who developed the practice

Scuola Centrale Formazione

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

**Media literacy** refers to the ability to properly find, evaluate, organize, use, create and communicate information in a digital context, most notably in situations requiring decision making, problem solving, or the acquisition of knowledge.

In the field of Media Literacy as SCF we carried out training experiences for vet centre staff:

- 4-hour introduction workshop to the approach during a national residential training (35 participants)
- Online training 3 webinars for a total of 6 hours for 32 participants: introduction to the topic, datafication and profiling, information disorder and fake news.
- We are planning an online media literacy training focusing on the implications of AI in conscious and ethical content creation.

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

It clearly affects the ability to manage information, in particular:

- supports the development of critical thinking,
- promotes safe and responsible online behavior,
- supports the conscious creation of content,
- supports the correct search for information,

 facilitates the development of online communities of practice aimed at the circulation of knowledge-based news

#### 1. Title

#### STOP AND BREATHE PROJECT

#### 2. Who developed the practice

Scuola Centrale Formazione

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The project aims to spread the culture of personal and professional well-being through the rediscovery and re-evaluation of personal resources using the principles of positive psychology. The training of trainers activities proposed are aimed at teaching contemplative practices that reduce professional stress and support the development of the values dimension in the workplace.

The project is ongoing. Involves 22 participants from 7 associate VET center for a total of 48 hours of training.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

It support the affective and motivational dimension, it could help for e.g. in the regulation of the emotions triggered by the learning activity.

#### 1. Title

Other kinds of activities

#### 2. Who developed the practice

Scuola Centrale Formazione

- **3. Brief description of the practice** (Main characteristics of the practice, target, length..)
  - Participatory action research projects that support an improvement process (plan/do/ceck/act). We have experience in managing this kind of project such as the INAPP survey for the validation of key competences.

- peer mentoring in communities of practice. We have made several experiments to animate thematic communities of practice, but we have never managed to consolidate these experiences.
- situational learning with job shadowing. We have little experience of job shadowing, we could enhance this way of working both at national and international level.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

Above all, these working methodologies reinforce a growth mentality, valuing the contribution of all people according to their aptitudes and skills

#### 1. Title

National Research on the evaluation of the 8 key competences for lifelong learning in initial training

#### 2. Who developed the practice

INAPP: The National Institute for Public Policy Analysis (Inapp) is a public research body of national importance, supervised by the Ministry of Labour and Social Policies, which deals with the study, research, monitoring and evaluation of public policies in the fields of labour, education and training, social protection, active and passive labour policies, the third sector, social inclusion, and policies with effects on the labour market.

SCF and ISRE were involved in a comprehensive action-research conducted by INAPP on the evaluation of the 8 key competences for lifelong learning in initial training.

### 3. Brief description of the practice (Main characteristics of the practice, target, length..)

In the first phase, the research (2018-2021) elaborated a conceptual reference framework and defined a model for the analysis, observation and evaluation of soft skills, based on the reconnaissance of the literature and the most significant experiences of competence-based training courses already implemented.

This led to the definition of a device for the assessment of four European key competences: personal, social and learning-to-learn competences;

- citizenship competence;
- entrepreneurial competence;
- competence in cultural awareness and expression.

The device for the assessment of these competences was tested with four administrations to over 1,300 IeFP pupils, both incoming and outgoing in the first training year, for a total of over 10,000 assessment tests.

The 1<sup>st</sup> phase described this competence for students as follows:

- 1. Ability to reflect on oneself, understand one's emotions and learning strategies,
- 2. Taking care of oneself,
- 3. Knowing how to collaborate with others,
- 4. Understanding the tasks given and the risk involved,
- 5. Knowing how to plan our actions,
- 6. Dealing with problems, difficulties, and conflicts with one's own commitment.

The second action-research phase (2022-2023) concerned the extension of the assessment device up to the fourth training year of the IeFP, and its 'grounding' through a pathway accompanying training centers to a didactic and methodological curricular planning consistent with a full adoption of the key competences.

The research pathway was designed on the basis of two main assumptions:

- the importance for young people of acquiring adequate levels of transversal key competences through their training courses;
- recognising the potential impact of the teaching and assessment of these competences, integrated with the technical-professional and basic ones, as a lever for a general improvement in training action.

Adoption of Key competences in the curricula is widespread, but mostly by virtue of the organization's value-pedagogical roots, cultural identity, and educational model. The development of Key competences is often underlying, but not formalized, not identified, or identified by another name (a broader one).

Specifically, there is a generalized assumption of Learning to learn. It is a widespread didactic methodology: metacognitive didactics ('debriefing' at the end of each activity, reflection on experiences, 'exit ticket' as a moment of reflection on learning, errors, difficulties overcome and how overcome, etc., ...), narrative self-assessment, error valorisation, accompanied stage management (=stage as 'teaching methodology'). But specific dedicated modules are also proposed (consulting sources, taking notes, organizing data, developing a study method, writing reports, drawing up concept maps, ...).

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- The research has enabled:
- The construction of the repertoire of learning outcomes of the key competences of interest, to be pursued in the entire training pathway of IeFP up to the fourth years;
- the definition of example-matrices of reality tasks within which to carry out the assessment action:
- the identification of progressive mastery indicators and observation focuses for vocational reality tasks;
- the elaboration of guidelines for designing reality tasks to assess in an integrated way key, technical-vocational and cultural competences over the four years of IeFP:
- the development of an instruction manual for administering and collecting test results;
- the design of didactic, methodological and organizational solutions to support trainers in integrating the development of the key competences of interest in the scheduled training activities;
- the realization of the skills portfolio.

For the L2L project, the products related to L2L competence indicators and reality based tasks are particularly capitalized.

#### 5. Annexes:

- Specific indicators for personal, social and learning to learn competence
- Heading of personal, social and learning competence learning outcome

### SPECIFIC INDICATORS FOR PERSONAL, SOCIAL AND LEARNING TO LEARN COMPETENCE

DIMENSION		INDICATORS
Intellectual Dimension	1	Describes one's own learning process with reference to one's own learning styles and/or beliefs and/or dispositions and/or emotions
	2	Describes one's learning process in relation to the conditions of the task (objectives-resources-phases-times)
	3	When describing one's learning process, one uses terms, words that refer to one's personal and/or professional development

	4	When searching for sources and/or tools used for learning, one asks oneself about their reliability	
	5	Chooses information for learning based on the reliability of the sources and/or tools used	
	6	Asks questions in order to understand the meaning of what is proposed in relation to one's own professional development	
Strategic dimension	7	Recognises the meaning of a learning task to the objectives/expectations of the learning context	
	8	Recognises the meaning of a learning task to personal or professional objectives/expectations	
	9	Identifies the conditions of the task that influence the solution of the task (objectives-resources-phases-times)	
	10	Identifies with external help the cognitive conditions (e.g. learning styles, concentration, perseverance, own beliefs, etc.) that influence the solution of the task	
	11	Identifies independently the cognitive conditions (e.g. learning styles, concentration, perseverance, own beliefs, etc.) that influence the solution of the task	
Methodologic al Dimension	12	Modifies learning processes with external help on the basis of analyses of task conditions	
	13	Independently modifies learning processes on the basis of analyses of task conditions	
	14	Modifies with external help the learning processes on the basis of the analyses of the task conditions and cognitive	
	15	Organises actions-activities in accordance with the expectations of the learning context	
	16	Organizes actions-activities in a logical and coherent way in line with the demands of the context and of the work	

	17	Identifies the significant moments (which brought about a turning point) in your learning process
	18	Recognizes the importance of learning to learn
Social and value	19	Recognizes learning to learn as a useful tool for personal and/or professional growth
dimension	20	Shares ideas with the group regarding the organization of the learning process
	21	Helps colleagues organize the learning process taking into account the conditions of the task
	22	With external help, he shares ideas with the group regarding the learning styles (beliefs and/or emotions) implemented in the work process
	23	Provides feedback on the learning strategies implemented by colleagues
	24	Helps colleagues to organize the learning process taking into account the conditions of the task and partly the cognitive ones

## HEADING OF PERSONAL, SOCIAL AND LEARNING COMPETENCE LEARNING OUTCOME

#### PERSONAL, SOCIAL AND LEARNING TO LEARN COMPETENCE

Personal, social and learning to learn competence consists of the ability to reflect on oneself, manage time and information effectively, work constructively with others, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, to foster one's physical and emotional well-being, to maintain physical and mental health, and to be able to lead a health-conscious and future-oriented life, to empathise and to manage conflict in a supportive and inclusive context.

Dimensions	Qualification (EQF 3)	Diploma (EQF 4)

Person is able to manage learning Person is capable of strategies and related study managing learning strategies and related study methods. methods. On the cognitive level, person is able both to identify the On the cognitive level, person conditions of the learning task, i.e. is able both to identify the the special characteristics of the conditions of the learning problem to be solved in order to task, i.e. the special learn, and to elaborate with the characteristics of the problem support of external resources a to be solved in order to learn, solution proposal. Person and to work out a solution identifies with external help the proposal independently. styles, dispositions, beliefs and Person identifies and emotions that influence the manages cognitive conditions learning processes. (the styles, dispositions, beliefs and emotions that influence his/her learning processes) and with external help, is able to attribute meaning and significance to learning processes, directing them towards specific goals and is able to identify the consequences of choices. Knowledge cores Knowledge cores Reason and knowledge Experience as smart action Styles of intelligence Sources and their reliability Meaning/connection Argumentation Learning method Memory Is able to identify the learning Is able to identify learning modes and processes required by modes and processes by INTELLECTUAL the conditions of the task; referring to task conditions **DIMENSION** and a part of cognitive When expressing himself with conditions respect to learning (study, commitment, motivation) he does When expressing himself so using the knowledge cores with respect to learning consistent with the expectations of (study, commitment, the context. (Understands the motivation) he does so by meaning with respect to one's own using the knowledge cores in learning path) a way relevant to the task or the objectives to be achieved (understands the meaning

STRATEGIC DIMENSION	- Recognizes the meaning and significance of what is proposed or required as learning in relation to the expectations and conditions of the learning context in which he/she finds him/herself - Identifies also with external help the styles, dispositions, beliefs, emotions that influence the learning process	with respect to his own personal and professional development)  - Attributes meaning and significance to learning tasks on the basis of personal and/or professional development perspectives - Examines the styles, beliefs, dispositions and emotions that influence the learning process
METHODOLOGI CAL DIMENSION	<ul> <li>Fulfils the commitments undertaken, devoting oneself to them in an orderly manner consistent with the expectations of the learning context</li> <li>On the basis of the analysis of the conditions of the learning task, with external help controls and modifies the learning process</li> <li>Recognises own needs for training support and development</li> </ul>	<ul> <li>Fulfils the tasks undertaken, devoting oneself to them with order and logical sense and making an original and responsible contribution to the success of the work</li> <li>Based on the analysis of styles, dispositions, beliefs and emotions, with external help uses simple strategies to control and modify the learning process</li> <li>Seeks the forms of educational and professional support and development that he/she has identified as necessary</li> </ul>
SOCIAL AND VALUES DIMENSION	<ul> <li>Understands the value         <ul> <li>(importance) of managing learning processes in relation to the expectations and conditions of the learning context</li> <li>Shares with the group strategies and supports to manage the conditions of the learning task</li> </ul> </li> </ul>	<ul> <li>Understands the value (importance) of managing learning processes on a personal, cooperative and professional level.</li> <li>Shares strategies for managing cognitive and learning task conditions with</li> </ul>

- Provides help to group members to overcome an obstacle in the learning process generated by the conditions of the task.	the group, also with external help  - Provides feedback on the learning strategies implemented by colleagues  - Provides help to overcome an obstacle in the learning process generated by the task and cognitive conditions.

#### 8. Experiences and practices in Slovenia

### 8.1.The "learning to learn" competence in Slovenian vocational education and training curricula

Learning to learn is included in curricula of many subjects in the VET field, but not specifically, its more a mention, it is not defined as a learning objective, it appears in the curricula several times, but in a scattered way. The revision of the curricula to be published in 2026 is supposed to define the content and learning objectives of learning to learn more clearly, as the current dispersion is perceived by head teachers and teachers as a weakness.

Learning to learn content is also included in the so-called "compulsory electives" or with a newer expression »Other forms of educational work«. The Slovenian National Institute of Education prepares an annual Catalogue of programmes of external providers of »Other forms of educational work« content and extra-curricular activities. »Other forms of educational work« make up around 6% of the curriculum, where schools and external providers meet to offer their content. The activities offered vary widely, some are compulsory (civic culture, library information skills, cultural and artistic contents, sports days, health education, family education, peace and non-violence), some are linked to the type of educational programmes, and some are compulsory for the school to offer: logic, cross-curricular content with an excursion or camp, research methodology, keyboarding, voluntary social work, first aid, sports camps and nature schools, learning to learn, religion and ethics. The »Other forms of educational work« shall last no more than 30 hours per week. As a rule, there are no classes on the days of implementation, so they can last around 5 hours a day. In »Other forms of educational work«, we generally introduce methods, forms and techniques of active (experiential, project-based, collaborative, entrepreneurial, etc.) learning that are fundamentally different from traditional teaching methods such as lecturing. The emphasis is on student creation and co-creation, on

experience, on collaboration and good interaction between the facilitator and the participants.

At BIC Ljubljana, we also integrate learning-to-learn content into class camps, which are a special feature unique to BIC Ljubljana. Students go together with a teacher and a school counsellor to a so-called class camp, where they spend 3 days together, the whole class. They take care of their meals, cooking and cleaning, while the professional staff fills the timetable with carefully selected activities, which are often the »learning to learn«.

In the COVID situation when we faced new reality, one of our teachers recognized that more emphasis is needed for learning to learn competence. She developed a special workshop, poster and a leaflet on the theme of learning to learn to help the students.

#### 8.2. Experiences and practices of "learning to learn" for IVET teachers and students

The experiences and practices are as follows:

- Supervision
- Training of trainers or training for mentors (project "Usposabljanje mentors" in Slovenia)
- Annual interviews with the head teacher
- Mentoring teachers' beginners project
- Advisory tools for learning to learn

#### 1. Title

Supervision

#### 2. Who developed the practice

BIC Ljubljana but it is a well-known method often used in schools

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

Supervision takes place individually or in a group. The number of sessions depends on the goals of the participants. Individual supervision usually lasts 1 hour and group supervision 2 to 3 hours.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

Supervision is a form of professional reflection and counselling designed to improve the quality of professional work and promote personal development. It is designed to help individuals, groups, and organizations to achieve better performance.

Supervisors help participants find the best solutions by listening, asking key questions, and other techniques.

Through supervision, participants improve their professional performance, gain better insight into their communication style, and become more aware of their thinking, experience, and behaviour. As a result, they are better able to cope with professional and personal challenges and learn to set and achieve goals.

#### 1. Title

Training of trainers or training for mentors (project "Usposabljanje mentors" in Slovenia)

#### 2. Who developed the practice

It is a project financed by the Slovenian Ministry of Education and ESS. The project took place in two periods, from 2016-2021 and 2021-23, and will be published again in January 2024.

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

The basic training provides the individual with the pedagogical and teaching skills to work with students in the workplace while improving his/her competencies in the field of mentoring.

The basic training consists of a 32-hour program, usually delivered over four days, and culminates in a final thesis.

Further training consists of 8-hour programs, usually delivered in one day. Participants may apply for one of the further training programs but may apply for more than one.

https://www.usposabljanje-mentorjev.si

### 4. Why the practice is suitable for the development of the learning-to-learn competence

The training focuses on providing individuals with pedagogical and teaching skills. This is crucial for developing the ability to impart knowledge effectively. "Learning to learn" involves understanding how to acquire and assimilate information efficiently. By gaining pedagogical skills, individuals can better facilitate the learning process for themselves and others.

The practical aspect of working with students in a real-world setting is essential for honing learning skills. It allows individuals to apply theoretical knowledge to practical scenarios, fostering a deeper understanding of how learning occurs in different contexts. This hands-on experience is valuable for the development of adaptability and flexibility in learning.

Mentoring involves guiding and supporting individuals in their personal and professional development. By enhancing competencies in mentoring, individuals are better equipped to understand the unique learning styles and needs of different individuals.

The training strikes a balance between theoretical knowledge and practical application. Learning to learn is not just about acquiring theoretical knowledge but also about applying that knowledge in real-world situations. The integration of theory and practice in the training content enhances the individual's ability to transfer learning from one context to another.

The emphasis on mentoring and teaching skills suggests a commitment to the idea of lifelong learning. The ability to learn continuously and adapt to evolving circumstances is a key aspect of "learning to learn." This training content supports the development of a mindset that values ongoing self-improvement and professional development.

#### 1. Title

Annual interviews with the head teacher

#### 2. Who developed the practice

BIC Ljubljana but it is well established and common obligatory part of schoolwork

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

Teacher fills in the self-evaluation form and has a discussion with the head teacher later on

This is an example of self-evaluation form we use:

1. The following statements are intended to find out how you, as teachers/ educators, assess/evaluate your work. Please rate the statements in the table below based on how much they apply to you, where 1 signifies never, 2 rarely, 3 sometimes, 4 often, 5 very often, or "I cannot assess."

	1 never	2 rarely	3 sometimes	5 very often	
I assess my work through feedback obtained from students using questionnaires (openended – written on paper; utilizing tools like Mentimeter, etc.).					
At the end of each lesson, I reflect on my work, which proves beneficial for future work / teaching.					

I occasionally discuss about the conducted lessons with colleagues within the professional community.			
During teaching, I gather information through formative assessments to understand students' progress, comprehension, and the quality of their knowledge. This helps me in evaluating my performance, teaching methods, and instructional approaches, enabling me to identify areas where knowledge gaps exist.			
I also document information (ideas, improvements, students' initiatives, etc.) I receive about my work during the lesson.			
Notes on improvement I for the next lesson planning or activity.			
I also incorporate on the basis of the results of the questionnaire that students fill in to obtain their opinions on the work of teachers and lecturers.			
I see interdisciplinary connections as an opportunity to improve my teaching approach.			
Other (please indicate):			

2. Do you conduct collegial peer hospitations / observations? YES / NO  $\,$ 

Have collegial peer hospitations / observations contributed to implementing changes in your work? YES / NO

Please elaborate your answer:

3. Does the head teacher at your school carry out hospitations / observations?

YES / NO

Have the hospitations / observations by the head teacher contributed to the implementation of changes in your work? YES / NO

Please elaborate your answer:

4. Is there anything else you would like to share with us? Let us know in a comment below.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

- Regular interviews provide an opportunity for the head teacher to offer feedback on the individual's teaching and mentoring practices. Constructive feedback is valuable for self-reflection, helping the individual identify strengths and areas for improvement in their approach to facilitating learning.
- Through annual interviews, the head teacher and the individual can collaboratively set goals for professional development. These goals may be aligned with enhancing teaching methods, improving mentoring skills, or acquiring new pedagogical techniques. Regular check-ins during subsequent interviews allow for progress monitoring and adjustments to the learning plan.
- The head teacher can use the annual interview to suggest relevant professional development opportunities. This could include workshops, training sessions, or courses that can further enhance the individual's competence in learning-to-learn strategies. Access to continuous learning opportunities is crucial for staying updated on best practices in education.
- The interview process can help identify specific learning needs or challenges faced by the individual.
- Regular interviews with the head teacher create a culture of continuous improvement and a growth mindset. By emphasizing the importance of ongoing learning and development, individuals are more likely to approach challenges as opportunities for growth rather than setbacks. This mindset is fundamental to learning-to-learn competence.
- The annual interview provides a structured platform for open communication between the individual and the head teacher. Building a supportive relationship is essential for creating an environment where individuals feel comfortable seeking guidance, sharing concerns, and actively participating in their own professional development.
- Knowing that there will be an annual review of progress and goals can promote
  accountability. Individuals may be more motivated to take ownership of their
  learning-to-learn competence when they are aware that their performance will be
  assessed and discussed regularly.

#### 1. Title

Mentoring teachers beginners project

#### 2. Who developed the practice

Erasmus + Project LOOP – Empowering teachers personal, professional and social continuous development through innovative peer-induction programmes

### **3. Brief description of the practice** (Main characteristics of the practice, target, length..)

To enable better work of teachers beginners, many schools offer mentorship of older teachers. The linked project dealed with mentoring of teachers beginners more thoroughly

#### https://empowering-teachers.eu/teacher-induction-programme/

From the project: The proposed modules and related activities are intended to fill the gap between initial training programmes and continuing professional development at the beginning of teachers' careers.

The modules represent the first step in a teacher's career and are designed to provide personal, social and professional support to beginning teachers. The materials will help beginning teachers help address the most common early career challenges highlighted by identified by the pre-service teacher survey.

Given the diversity of the policy context and existing initial training schemes teacher training and induction frameworks across Europe, not to mention the very specific challenges of each region and each school, the material should be seen as a toolkit with suggestions and ready-made activities that schools and trainers can select and adapt to their own most urgent needs and situations.

### 4. Why the practice is suitable for the development of the learning-to-learn competence

Mentoring new teachers, teachers beginners is an example of good practice for learning to learn competence from several points.

Mentoring provides personal support and guidance to beginning teachers in their professional development. An experienced mentor can share his/her knowledge, experience and tailor advice to the specific needs and challenges of the individual beginning teacher.

Mentoring encourages reflection and self-assessment in beginning teachers. Through discussions with the mentor, teachers can reflect on their teaching, identify strengths and identify areas where they could further improve their approaches.

Mentoring helps to create and consolidate the professional identity of beginning teachers. By sharing experiences and insights into different teaching approaches, teachers become more aware of their impact on students learning and feel more competent.

Mentors can help pre-service teachers to adapt and develop different teaching strategies and approaches. In doing so, teachers develop competence in learning to teach, as they learn to adapt their methods to the needs of different groups of learners.

Mentoring promotes an understanding of the values of teaching and of acting in accordance with professional standards. This enables teachers beginners to develop enduring values that guide their professional work.

#### 1. Title

Advisory tools for learning to learn

#### 2. Who developed the practice

The handbook collecting different tools for learning to learn was prepared by the Andragogic Center of Slovenia

**3. Brief description of the practice** (Main characteristics of the practice, target, length..)

In adult education, effective counselling activities require the use of counselling aids. These aids enhance the quality of counselling by providing a more comprehensive and tailored approach to individuals' needs. They are essential tools for counsellors, fostering their professional development and competence. For adults engaging in counselling, these aids offer opportunities to explore themselves, set goals, make informed choices in education and career paths, and overcome learning challenges. They also promote self-awareness and guide individuals in effectively managing the acquisition of new knowledge and skills.

https://arhiv.acs.si/rezultati\_projektov/SPISDVNPZ\_2016-2022/Svetovalni\_pripomocki\_za\_ucenje\_ucenja.pdf

### 4. Why the practice is suitable for the development of the learning-to-learn competence (briefly in bullet point)

The handbook is a collection of useful tools for development of different competences in long life learning.

The practice encourages reflective learning, allowing individuals to assess their own learning process, identify strengths, and recognize areas for improvement.

Engaging in the practice promotes adaptability, helping individuals develop strategies to adjust their learning approaches based on different contexts and challenges.

Tools offer individuals development of problem-solving skills, learning to overcome obstacles and find effective solutions in the learning process.

The tools foster self-management skills, empowering individuals to set goals, plan their learning paths, and take responsibility for their own educational journey.

# Glossary

#### **Attitudes**

Attitudes are motivators of performance. They include values, aspirations and priorities.

#### Competence

Competence is understood as a set of knowledge, skills and attitudes.

#### Formal learning

Learning that occurs in an organised and structured environment, such as in an education or training institution, or on the job, and is explicitly designated as learning. Formal learning is intentional and typically leads to certification.

#### Critical thinking

"Critical thinking" is a cognitive ability and a mental process that involves objective evaluation, rational analysis, and deep reflection on an idea, concept, argument, or situation. It is an active and conscious method of thinking that aims to understand, assess, and form judgments clearly, accurately, and reasonably.

#### **Growth Mindset**

A person with a growth mindset believes that their skills and qualities can be developed and improved over time through dedication, hard work, and learning.

#### Heutagogical model of lifelong learning

Adults determine their own learning processes starting from the needs emerging in their own personal or professional context.

#### **Informal learning Learning**

That results from daily activities related to work, family or leisure. It is not organised or structured and in most cases unintentional from the learner's perspective.

#### Knowledge

Knowledge is the outcome of the assimilation of theoretical or factual information by learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study.

#### **Learning Analytics**

Is an educational application of web analytics aimed at profiling students; a process of collecting and analyzing details of students' individual interactions in online learning activities (Horizon Report 2016). The primary goal of Learning Analytics is to provide teachers, educational institutions, and students themselves with detailed information about learning. This may include data such as student performance, learning patterns, behaviors, study habits, and engagement in online or classroom learning.

#### Learning outcomes

Learning outcomes are statements of what a learner knows, understands and is able to do after completion of learning.

#### Learning to learn

"Personal, social and learning to learn competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career" (EU Recommendation of 22/05/2018). Learning to learn is divided into three sub-skills: growth mindset, critical thinking and learning management (LifeComp 2020).

#### Lifelong learning

Learning activities undertaken throughout life, to expand or improve competences, knowledge, skills and qualifications for personal, social and professional reasons.

#### **Managing learning**

Managing learning entails the motivation to foster both metacognitive knowledge and metacognitive regulation of learning. As a basic form of human activity, learning, is the consequent action of two essential components – purpose and reason.

#### Non formal learning

Learning that is embedded in planned activities not explicitly designated as learning, but which contains an important learning experience. Non-formal learning iw s intentional and typically does not lead to certification.

#### **Skills**

Skills means the ability to apply knowledge and use know-how to complete tasks and solve problems. Skills can be cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

#### **Transformative learning**

Transformative learning goes beyond acquiring skills and knowledge. It helps learners reflect on how they acquire and frame knowledge. It also helps them become aware and critical of their own and others' assumptions. This can lead to changes in thinking, perceptions, beliefs and values, which can transform how learners interpret the world around them.

#### **Trainee**

A trainee is an individual who is undergoing training or instruction in a particular field or occupation. The training process is designed to prepare trainees for their roles and responsibilities, helping them develop the competence and confidence required to perform effectively in their chosen field. Trainees may receive guidance from experienced professionals or instructors as they progress through the training program. The term "trainee" is commonly used in various contexts, such as in workplace training, apprenticeships, internships, or educational programs.

CROSS-TABLE LIFECOMP-PRACTICES		IFARNING	TO LEARN A	RFA							
CROSS TABLE LITECOMI TRACTICES		L1 Growth mir	L1 Growth mindset - Belief in one's and others' potential to continuously learn and progress			L2 Critical thinking - Assessment of information and arguments to support reasoned conclusions and develop innovative solutions			L3 Managing learning - The planning, organising, monitoring and reviewing of one's own learning		
Practices and experiences	Partner	one's own and others' abilities to learn, improve and achieve with work and	that learning is a	feedback as well as on successful and unsuccessful experiences to continue developing one's	L2.1 Awareness of potential biases in the data and one's personal limitations, while collecting valid and reliable information and ideas from diverse and	L2.2 Comparing, analysing, assessing, and synthesising data, information, ideas, and media messages in order to draw logical	g creative ideas, synthesising and combining concepts and information from different sources in view of solving	interests, processes and preferred strategies, including learning needs and required	L3.2 Planning and implementin g learning goals, strategies, resources	processes and	
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	SCF		<i>x</i>	^	x	x	x			x	
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,	SCF					х		х	х	х	
3	SCF	х	х	х				х	х	х	
peer mentoring in communities of practice	SCF	х	х	х			х				
situational learning with job shadowing	SCF			х			х	х	х	х	
National Research on the evaluation of the 8 key competences for lifelong learning in initial training	SCF	x	x	x	x	x	x	x	x	x	
The reflective learning diary	SPOK	х	х					х		х	
	SPOK	х		х			х	х	х	х	
	SPOK	х	х			х		х	х	х	
Skill portofolio	ANFA	х	х					х	х	х	
	ANFA	х		х				х	х	х	
Learning journal	ANFA	х	х					х	х	х	
	ANFA			х				х	х	х	
REMEDIATION / CONSOLIDATION / IMPROVEME	ANFA			х	х	х	х	х	x	х	
Mind mapp	ANFA	х	x					х	х	х	
Supervision	BIC LJ	х	х	х			х		х	х	
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