Competence Oriented Learning and Validation

Towards professionalisation and quality in informal, non-formal and formal learning.

...because learning happens everywhere...

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1 Introduction

This publication was developed within the framework of the REVEAL network. REVEAL was founded in 2005 by experts from educational research and practice, since when REVEAL has grown into a European umbrella organisation of institutions from 27 countries working together in modern, human centred education, training, professional and personal development.

Between 2017 and 2019 a project team has worked on a European professionalization strategy for educational professionals and produced three main outputs:

1. A Continuous Professional Development (CPD) concept in Competence Oriented Learning and Validation based on a complete competence framework for educators
2. A web-based platform (www.provide-eu.org) as a hub for CPD offers (courses, job-shadowing and conferences) and Adult Education Organisations and their staff who look for CPD offers
3. A valorisation and implementation concept for the REVEAL community which embraces not only the general professionalization of adult educators but also different adult education domains such as cultural heritage interpretation, entrepreneurship, innovation and creativity management, as well as Corporate Social Responsibility (CSR) and Sustainable Development

Apart from this latest REVEAL-project the publication reflects the work that our community has carried out in the last decade and the experiences we have gathered in more than 40 Research & Development projects funded by European Educational programmes from Socrates, through the sub-programmes of the Lifelong Learning Programme (LLP), right up to ERASMUS+.

A word on Adult Education

Adult education is an extremely heterogeneous sector; it covers a vast range of purposes, tasks and functions of institutions, stakeholders and individuals working in a large diversity of societal fields and contexts.

Probably as a result of a lack of self-organisation and advocacy, Adult Education remains at something of a disadvantage when compared to Higher Education (HE) and Vocational Education and Training (VET),

We remember intensive discussions for funding and recognition of the Adult Education sector taking place in 2013 at the end of the Lifelong Learning Programme (with its GRUNDTVIG Adult Education sub-programme) and during the preparation of the following ERASMUS+ programme. Even the overarching title no longer contains any reference to these sectors.

Without a doubt Adult Education deserves political support and reasonable funding since the professional practice for educators and the framework conditions are often much more challenging than in other educational sectors.

But what exactly is the Adult Education sector?

The educational sectors are no longer static and clearly defined, but now overlap and merge. Dual education is well known in VET and in recent years dual university offers have come into existence; bridging research and practice or Higher Education and business.

There are a number of other educational offers that cannot be clearly assigned to the one or the other sector, for example: which sector does Human Resource Management or Coaching belong to? Where should we allocate personal training and offers like resilience, work-life balance, burn-out intervention training, cultural activities, CSR programmes, sustainability training, integration courses, trans-cultural learning activities, local and regional development and capacity building activities? (to name but a few).

Probably a large part of our population would summarize all these educational activities under the term ‘Adult Education’, since they would only distinguish Adult Education from School Education because of the age of the learners.

Maybe this overarching view is also more appropriate for certain purposes, for instance to encourage the professionalization of educators.

For many people the scope and concept of Adult Education is difficult to grasp and in some European countries it is still a relatively unknown term.

People working in the aforementioned fields, be it in professional and leisure contexts often do not consider themselves as 'Adult Educators'. They might well ask themselves 'Are we still in education then?' An interesting example of this disassociation with education is that the English term: 'Continuing Professional Development' does not even have a connection in the title to 'learning' or 'training' anymore.

However, it goes without saying that all creative and innovative development processes are based on human learning. The stakeholders providing competence development in the above-mentioned contexts contribute strongly to individual and societal development and they often have an impressive repertoire of training, teaching and other supporting skills and competences.

Adult educational professionals and researchers should not forget this informal adult education sector just because it is not organised within larger organisations. In our research and development projects we realised that increasingly only 'Formal Adult Education' is considered as 'real' Adult Education. However, many, maybe even most learning activities for adults are only partly delivered in 'Official' Adult Education Institutes. Too often in educational research and in professionalization, providers of Informal Adult Education are slipping under the radar of European (educational and unfortunately also funding) programmes.

In a nutshell: We are observing two parallel phenomena:

- On the one hand there is the rather amorphous 'Adult Education sector'" with blurred boundaries ranging from 'informal adult education' beyond folk high schools (e.g. self-help organisations, youth and mobility support organisations or any kind of actors who promote development opportunities for others) to formalised adult, continuing vocational and even higher education.
- On the other hand, we have an overarching, inter-sectoral need for good teaching and learning methods[1].

If we truly want to create a 'European Continuing Professional Development Culture' it seems meaningful to bridge the sector specific boundaries, to 'break open the silos' because in reality they are not discrete categories anyway.

Consequently, we should open our educational CPD programmes not only to other educational stakeholders but open it to all persons who are involved in personal and professional development, since we strongly believe that learning happens everywhere, and happens from cradle to grave.

What does REVEAL stand for:

Our vision is a high-quality approach for a large range of stakeholders, a learning community if you like, working in informal, non-formal and formal contexts, creating and developing the competences of their learners.

Since the foundation of our European network in 2005 we have developed and substantiated quality driven approaches, methods and tools to support new ways of learning and development and to measure their impact, also aided by state-of-the-art learning technologies.

We call our approach Competence Oriented Learning and Validation.

[1] Educators need competences for modern learning, independent from the sectors; especially and additionally in highly theoretical learning environments.

Competence oriented learning is a counter-concept to a subject oriented, formalised and de-contextualised (sterile) form of education. However, this is not an erratic, laissez-faire approach but is based on a specific taxonomy, the LEVEL5 system. In informal learning contexts outside the educational institutes – in other words in real life - it is important to validate the competences: especially in these rather informal contexts we have to go for quality and create demand-driven, practical and meaningful learning environments.

This publication explains our background, the theory behind “competence acquisition”, our basic models and the taxonomy.

Based on this theory we present our approach, the tools and instruments to plan, deliver and validate Competence Oriented Learning.

This publication is not only based on our practical experiences and extensive works with the approach over the last decade. We also found it important to describe the development and the demand of continuing development in teaching approaches related to the rapidly changes in society and technological progress.

We hope that this publication may contribute to a deeper understanding of human learning, the importance of continuing professional development in education, and will also support professionals in planning and delivery of Competence Oriented Learning and Validation.

2 Trends in Education, Training and Learning

2.1. Man and his smartest inventions

Throughout time man has often compared himself with his own smartest inventions (Vroon and Draaisma, 1985), be it a steam engine, a radio, or a computer.

Twenty-five years ago, in their book about metaphors, Vroon and Draaisma indicated that 'in recent times' the human mind has often been compared with computers. However just as the development of computers shows an evolution, as a consequence so did our perception of our own mind and maybe so did our mind itself.

2.2. The early Seventies

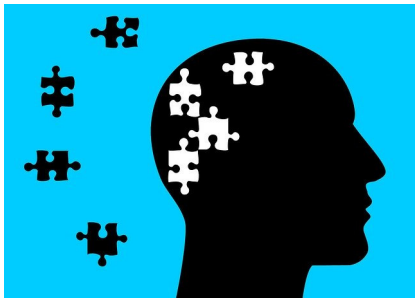
In the early Seventies behaviourism was beginning to lose its position (Lecas, 2006). The time of mechanical metaphors, simple ideas of mechanical minds, memory drums, programmed instruction etc. made way for a much more cognitively oriented approach. The days of programmed instruction, in which learning was perceived as synonymous to being trained, and a matter of conditioning involving rewards or reinforcements, were over.

The personal computer was introduced and became fashionable and invaded all our offices in schools and universities.

2.3. The late Seventies, early Eighties

Psychologists started to think about the human mind as a personal computer; as a system that stores information, processes information, that retrieves information and that functions better when the information stored is well organised and structured. The cognitive revolution took place. Cognitivism of course had existed before, but now this approach became the dominant approach. Now that learning was assumed to be basically an information-processing function, people began to use metaphorical concepts such a long-term memory, short term memory. The human being and his metaphor approached each other. In a way one could argue that a person is not only compared to an information processing system; people actually are information processing systems (Lindsay and Norman, 1977).

2.4. The late Eighties

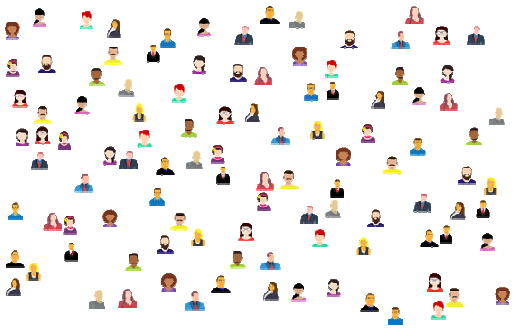


Soon it appeared that computers were not just information processing systems; they could also be much more creative than people had anticipated. Artificial intelligence was no longer just science fiction; it started to become more and more of a reality, so psychologists realised that the human brain might be far more constructive than they had assumed thus far.

The cognitive approach was evolving into constructivism in those days. In the late Eighties the cognitive view shifted towards a more constructivist one (Valcke, 2007). In that approach, knowledge is not just absorbed and stored; knowledge becomes a personal competence that is self-constructed. It is an integrated entity of knowledge, skills and attitudes, that allows the individual to act in a given situation.

Constructivism was a theory developed long ago, but the significant thing here is that it suddenly gained support in this era.

2.5. The early Nineties



The computers developed rapidly, and the Internet was introduced, firstly between educational institutions, and then progressively in organisations and homes. Suddenly computers appeared to be more than just processors or constructors; they became tools of social interaction.

Researchers, authors and, journalists discovered that email allowed them to work closely together with colleagues all over the globe in a constructive way. It proved once more and more convincingly that leaning was more than individual construction of knowledge. Knowledge construction to a great extent appeared to be a social activity, in which individual and collective progress goes hand in hand (Palinscar, 1998)

That is when constructivism turned into social constructivism. Again, of course Vygotsky had already expounded such theories long ago, but now it became commonly accepted.

2.6. The late Nineties

In the early nineties the Internet was still very much limited to storing, searching and downloading information and to sending and receiving electronic mail. The attention of psychologists was drawn in two directions.

One was inspired by the internal structures of computers and networks which

is what led to theories of connectionism in which the actual brain structures of neural connections became the object of studies.

Other psychologists were focussing on the external links and connections and turned to connectivism in which learning was conceptualised as a matter of connecting to the right people as sources and resources of learning. Connectivism emphasizes the necessity of sharing knowledge and finding the

right sources and persons to connect with (Siemens 005). Connect*ionism* is very much focussing on the neuronal functioning of the brain, while connec*tivism* is paying more attention to communication and information technology and the potential these have for human learning.

2.7. The turn of the millennium

By the time we reached the turn of the millennium paradigms had been changed and challenged so often that a kind of postmodern eclecticism set in. Like the computer, which had turned into a multitasking multimedia tool, the human brain was believed to be of a similar multi levelled structure with many underlying mechanisms and a variety of theories to explain them.

2.8. The Second Decade of the Millennium

Today another profound development shows its impact on the way we work with computers and on how we think about learning. For a long time, computers were perceived as sources of information, or channels through which sources could be found especially by non-academics and ordinary citizens. Increasingly, however, computers in the 2nd decade of the Millennium have been used by a growing number of 'ordinary' people to upload information.

Wikipedia is a good example of this trend:

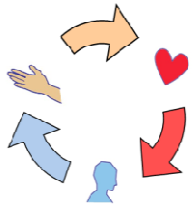
A person puts information on the web, other persons add their contributions, and another other person upgrades the information or enriches it with their views or inputs. When the first person subsequently types the same title into a search engine, he or she sees clearly that the knowledge has grown without their own involvement in the meantime.

In a way you might argue that learning takes place at a level beyond the individual. Knowledge was produced or created. The seat of that knowledge may not primarily be the human brain but in the storage of computers and servers.

Learning has turned into knowledge production and creation.

Has man been taken over by his smartest invention?

Now we may see the risk that learning itself evolves in such a way that without being involved in learning ourselves all the time, we will lose touch with developments in various fields and with learning itself. In the context of our jobs and professional life, this risk of 'falling behind' has long been recognised. One had to attend refresher courses, or read the latest technical journals, but this short history of learning shows that learning itself is in such constant evolution that it requires a permanent re-orientation. It is our conviction that educators, whose core business it is to think about learning, to promote learning and to optimize learning have a special responsibility in these matters.



A second fundamental development related to learning was induced by the evolving neurosciences. In the first decades of the millennium scientists have become able to observe the brain while it is working. We have learnt about the central role of emotions and values in learning and so could derive a more holistic view on competence development, including an affective, non-cognitive dimension in learning.

Despite the increasingly high performance of information processing and the tasks we can assign to computers, we are now beginning to also understand the limits of artificial intelligence and the differences from human competences and learning. Emotions, attitudes and values are fundamental elements of our capability to behave and learn.

2.9. Learning 2030 - Didactics and Mathetics

Technology supported learning environments[2] are increasingly proving to be responsive to the individual profile and the web history of the user. Users will increasingly learn in an environment of their own, which differs from that of others.

This implies that the contextual component of competence (e.g. environment, preferences and expected quality) becomes more and more important and has to be considered in teaching and learning.

Society is moving in a direction in which we all operate in a rich and increasingly personalised work-learning environment (triggered for instance by the home-office and other non-traditional working modes). For matters of education and learning this implies that learning increasingly needs to become a mutual process rather than a one, or two-way process.

This requires new and different competences from both learners and trainers (including mentors, coaches and other learning supporters).

2.9.1. Didactics - Competences for Teachers and Trainers

To tackle these new challenges from the instructional point of view we need appropriate and specifically adapted approaches to teaching and learning in order to cope with the new societal (learning) environments.

It will require a paradigm change from a formalised, structured, subject and supply-oriented training and qualification approach to a more informal, demand oriented, needs-driven and individualised learning design.

In a time of nearly unlimited access to information, knowledge, facts (and fakes) the main task of teachers and trainers is not merely the processing of knowledge anymore, but rather the facilitation and (self-)management of competences of their learners.

2.9.2. Mathetics - Competences for Learners

In future, we will not only need competent teachers but also competent learners. Not just smart training and teaching skills will be required but also advanced learning competences.

We view teaching and learning as two sides of the same coin- although this is not a new idea. Already Comenius, who developed the concept of “Didactics” as the “Art of Teaching” also coined the term “Mathetics” as the “Art of Learning” in the middle of the 17th century.

[2] For the avoidance of misunderstanding: We are not promoting solely technical solutions but rather blended learning ones as direct human interaction is vital for human learning and development.

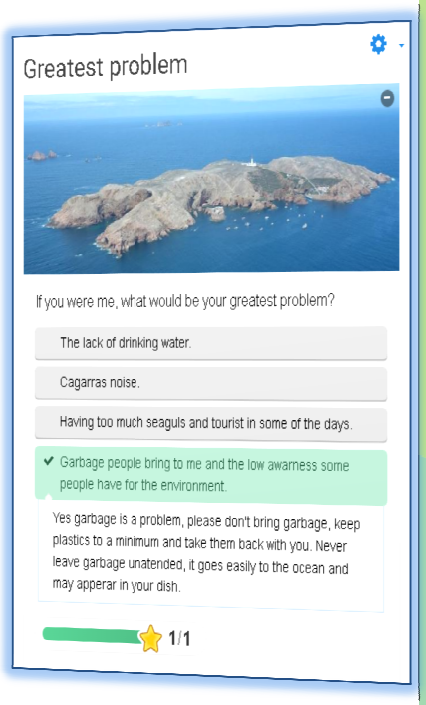
The concept was re-discovered in the nineteen seventies by a few progressive educational scientists; however, it did not play a role in the increasingly formalised educational systems in the following decades up to 2020.

In the third decade of the Millennium however, our societies are facing fundamental changes which will also affect our professional and educational lives. Mathetics, as a way to facilitate self-learning, may become a key approach to teaching and learning in 2030.

The affective (emotional, attitude and value related) dimension is of the utmost importance for self-learning competences, for instance:

- by using attractive, demand driven learning formats that create curiosity and motivation,
- which bring into play the rules and norms of central societal values and
- which consider the individual learning context and pre-knowledge and existing competence levels.

When it comes to technology aided learning, we are as yet scratching the surface and still admire the shiny but often didactically very poor video based, technology-driven learning assignments. These are too often just comprised of knowledge delivery or behaviouristic drills and as a consequence relate to low competence levels.



In most cases the non-cognitive components of learning are neglected or not considered even though we know about their importance. However, the affective competence dimension is what distinguishes human from computer-based learning.

In 2020 many educationalists are talking about "digital learning"[3], however, some refer exclusively to digital tools, others to solely video-based learning formats, while some other experts put nearly every didactic model in a Massive Open Online Course (MOOC) context. Today, many learning technologies (among them also Open Educational Resources (OER) tools like H5P) still offer rather poor didactic options and suffer from the limitations of "programmed learning", while other "hard coded" learning apps are lacking the options to design multiple learning spaces for the planning and delivery of various contents. Nevertheless, there are open source learning management systems ((LMS e.g. moodle) and e-portfolios (mahara) which are in use in many institutions in all educational sectors and which offer a fairly wide range of structuring, designing, delivery and methodological options and tools. However, the created learning environments are often unattractive for the learners – too complicated, too much related to formal "learning". In many cases these LMS are just used as carriers for learning materials.

Whilst technology has changed rapidly, there remains a distinct lack of adequate didactic blended learning competences which will be necessary to help us explore the full potential of the new learning technologies. In the overall discussion we should not forget the threat that in our ever more technology-dependent societies, the "direct encounters" of social and socialised learning in the real world, may vanish behind a digital learning facade promoting just behaviouristic, programmed

[3] which creates a kind of contradiction in terms since it reduces learning to digital on-off processes and therefore comes as a completely misleading metaphor

learning assignments. We run the risk of detaching learning from the lived experience and of becoming isolated behind our screens.

It is important to state that we are not taking an anti-technology stance here: Digital learning offers great opportunities and we have been promoting blended learning since the beginning of the millennium – however we feel strongly that it should always be used to promote human learning and not to determine it.

We believe that it is not only the problem of the technologies but more the problem of the old-fashioned learning and teaching designs which prevent us from achieving a more successful use of attractive blended learning approaches which encourage learners to start and continue learning on higher competence levels.

If our aim is to promote more individualised, user-centred learning we have to change the educational concepts and training, teaching and coaching approaches – at least to some extent. Therefore, we consider a modern adult education system to be so important.

We have to enable and empower our learners to use learning technology in an appropriate and meaningful way, to make them drivers of the development and not just the passengers of externally driven learning programmes.

In the third decade of the Millennium, competitive economies in liberal and sustainable societies need creative, innovative, communicative, collaborative and critical thinking workforce and citizens. The old acceptance of 'Adult Education' as either a social luxury or as merely 're-tooling' a workforce as a cheaper alternative to automation has to be challenged. If our aspiration is to move to a truly circular economy where our civilisation's resources are preserved, valued and continuously up cycled then we have to apply this doctrine not just to energy, materials and the environment, but to people as well.

Education must respond to these needs and challenges.

It has to become less formal and more flexible, open and participatory. It has to offer a multitude of different entry gates for adult learners with interfaces between the formal and informal sector.

In a more learner-centred perspective, training will be more about support of navigation on the individual leaning pathway and collaboration with others than about pre-determined content and programmed learning.

Hence, we should expect a shift from teaching to learning and from instruction to more self-centred learning.

Mathetics – the art of learning - is going to become a crucial element in this development and it requires a competence-oriented learning and training approach. It is aiming for self-development and empowerment of the learners rather than their formal qualification.

Today we have reached a state of play in which the original differences of theories no longer substantially divide the experts. As in so many societal domains people pick and choose; they select the elements they find useful and compose their own mix of elements from the available theories and concepts. However, the mainstream approach to adult learning and education today includes elements of:

1. Social constructivism, as well as-
2. processes of creating and giving personal meaning, and personal growth, together with-
3. Blended learning in which the virtual environment plays and important role.

These three elements form the background against which we have opted for a competence-oriented approach to learning, educating and validating learning.

3 Competence acquisition

3.1. The Concept of Competence

Competences as defined by various European bodies, as well as by educational experts throughout and beyond Europe, consist of three interrelated ingredients:

- Knowledge (cognition),
- Skills (capabilities and the overt behavioural repertoire) and
- Attitudes (emotions and values).

Competences consist of a combination of cognitive, behavioural and affective elements[4] required for effective performance of a real-world task or activity. A competence is defined as the holistic synthesis of these components.

If we see it this way it may be explained as the (inner) potential of a person to tackle a task.

From another (an external) perspective a competence may again be divided in three aspects. A competent person is able to:

- demonstrate behaviour
- in a specific context and
- at an adequate level of quality.

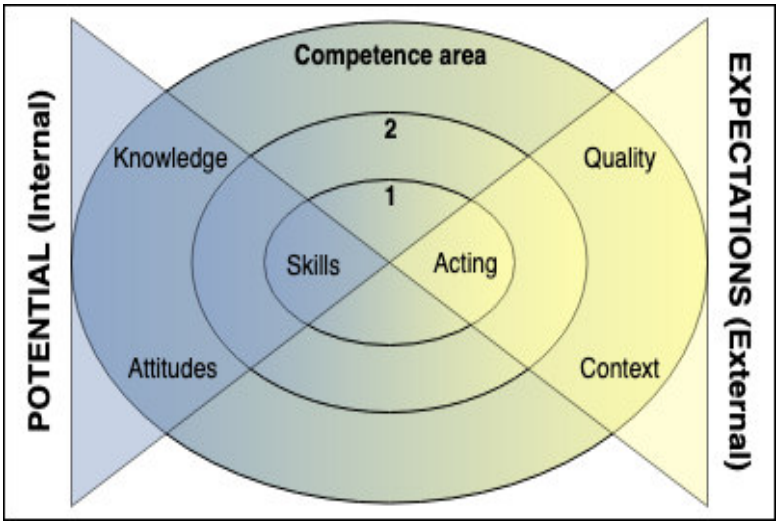


Fig. 1: Bow tie model of competence components

The "bow-tie model" in Figure 1 is a visualisation of all competence components and their interdependencies, brought together in one picture.

In the model knowledge (as is quality) is only one component. We know that what is often criticised in formal education, is that feeding knowledge into learners' heads and then assessing the extent of its retention is simplistically used to measure 'quality'.

[4] knowledge, attitudes and capabilities (to be exchanged?)

In this more accurate representation, the circle where the two triangles meet can be understood as a kind of “performance lens”. Here, skills and capabilities are acted out and become externally visible with the activities and behaviours (of the learners). At the same time the performance lens also covers the other internal aspects (cognitive and affective) and external aspects (quality and context).

Knowledge and cognition are needed to understand the content matter, theories, principles, functionalities and the own behaviour.

The affective dimension is vital since learning is always connected to emotions and values which bring in curiosity, motivation and volition (commitment) to learn and develop more.

Eventually the context also becomes a crucial factor since it determines the environment in which the individual has to perform – and it is certainly a different matter to solve an exercise or to engage in

role play or to tackle a challenge in real life. At the same time, this critical element of contextualisation brings in the quality aspect.

The bow-tie model visualises that, for a holistic understanding of a competence, the performances should neither be reduced to just the knowledge and quality aspect or only the behaviour.

It demonstrates that the shape and the size of the performance lens will indicate the level and quality of a competence. Competence levels are schematically indicated as circles in this model – meaning that an individual is more competent the larger the area covered by the circle is and the more equally all the aspects are covered.

This is how educational scientists may describe what competences are.

To put this in terms perhaps better understood by the layman, this implies that what matters is not only what we know about things, but more importantly it is what we are able to do with this knowledge, and whether we are able to go on developing our abilities.

Should education make learners knowledgeable, or should it make them competent? That is no longer the question.

3.2. Competence Taxonomies

The increasing level of control (management) over a particular competence can also be called a 'competence level'. This implies that a 'competence' is a dynamic concept – competences grow while learning. The question on how to measure and document different competence levels is as old as it is complex. It has probably challenged generations of educationalists on practical, administrative and political levels; in formal education but also in professional development domains, such as in Human Resources.

The problem in measuring competences is not only a certain ambiguity in the term 'competence', caused for instance by different connotations in different languages, but also by different cultural views on competence and learning theory.

Additional complexity comes in as competences are – unlike (school) subjects – always dependent on their contexts. Teamwork competences are (among others) dependent on the team composition and the task; leadership competences are dependent on the group and the environment in which it is practiced and teaching competences relate to the learning environment, the students and their familiarity with the learning schemes – among many other contextual aspects.

In order to operationalise competences, one needs certain reference points against which competences can be described.

Taxonomies are such reference systems.

They are the major instruments to classify, and later to measure and document competence levels.

One of the best-known taxonomies was developed by Benjamin Bloom in 1956 as Taxonomy of Learning Objectives. He differentiates 3 main areas:

- Taxonomy for the area of cognitive behaviour
- Taxonomy for the area of affective behaviour
- Taxonomy for the area of psycho-motor behaviour

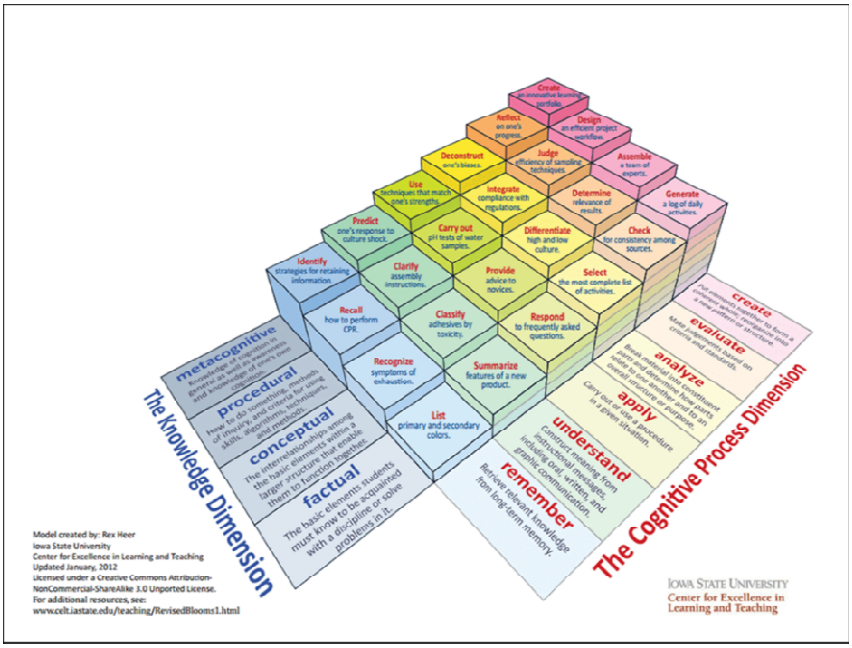


Fig. 2: Taxonomy according to Bloom [5]

Bloom's taxonomy has been constantly further developed by his followers (Anderson/Krathwohl and others) and describes cognitive objectives, psycho-motor objectives and affective objectives

[5] Heer (2012), Iowa State University, CCBYSA

along a number of quality levels.

A second, well known taxonomy is for instance the European Qualification Framework and the related Credit Transfer Systems (ECTS and ECVET).

Level	Knowledge	Skills	Competence
Level 1	Basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured context
Level 2	Basic factual knowledge of a field of work or study	basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	work or study under supervision with some autonomy
Level 3	Knowledge of facts, principles, processes and general concepts, in a field of work or study	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	take responsibility for completion of tasks in work or study adapt own behaviour to circumstances in solving problems
Level 4	Factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others
Level 6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups
Level 7	Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields	specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
Level 8	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

Fig. 3: EQF-Taxonomy

Both taxonomies not only differ in structure (EQF is clustered in Knowledge, Skills and Autonomy/Responsibility and has 8 levels while Bloom distinguished Cognitive, Psycho-Motor and Affective traits on 4-6 levels).

The main difference between these taxonomies – and this is often forgotten – is their purpose.

While 'learning' was in the focus of Bloom's taxonomy, 'qualification' is the main driver for the establishment of the EQF.

What all taxonomies have in common is that they aim to describe competence dimensions (the vertical columns) and competence levels (the horizontal competence qualities) with the help of learning outcome descriptors. These learning outcome descriptors have to be precise and consistent in order to facilitate distinguishing between different competence quality levels.

There are several other competence models and taxonomies which try to explain and describe competences and try to operate them for different purposes.

The REVEAL group has developed its own taxonomy (LEVEL5) based on the post-Bloom taxonomy in a blend with a derivate of the emotional intelligence taxonomy. It consists of Knowledge, Skills (capabilities) and Attitudes (emotions/values) on 5 levels. This taxonomy facilitates assessing, documenting but also planning competence developments in highly context-dependent environments such as learning in mobility or learning on the job or in leisure time activities.

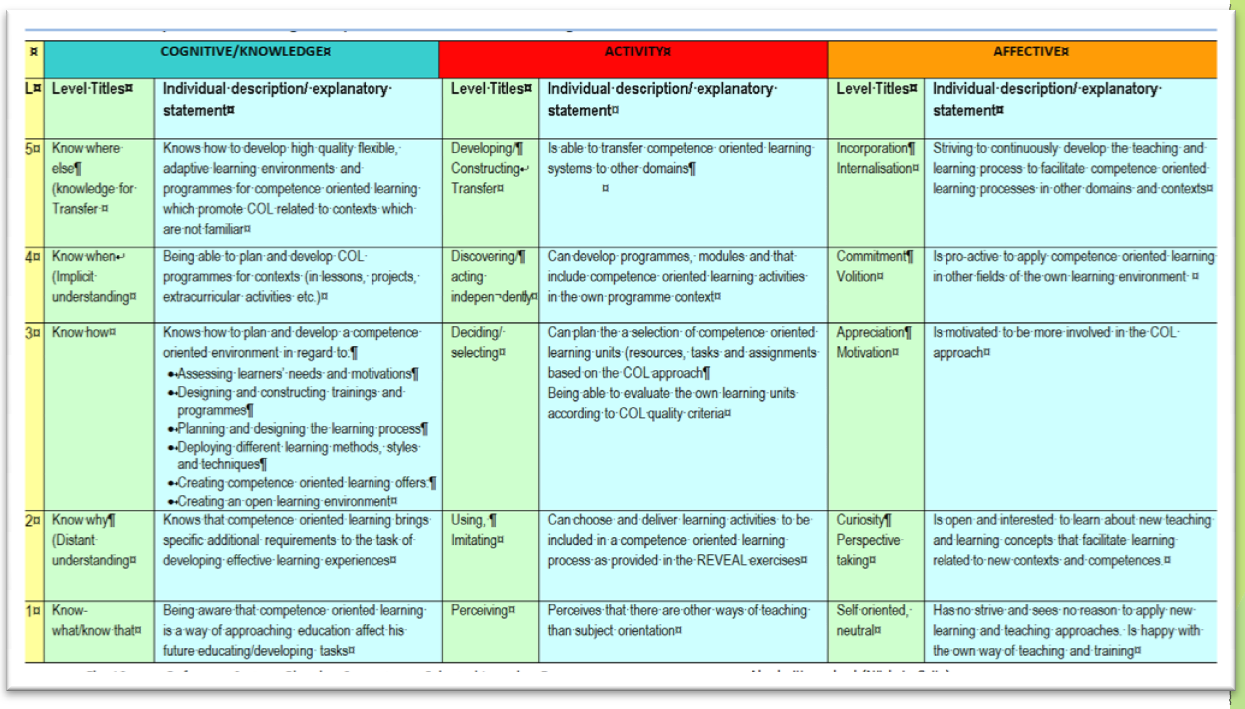
LEVEL	KNOWLEDGE	SKILLS Capabilities	ATTITUDES Emotions/Values
5	**Know where else…** (Transfer Knowledge, *Strategic Knowledge*	**Transfering** Developing/ Constructing *Versatility*	**Incorporation** (Internalising) *„Unconscious" Competence*
4	**Know when…** Practical (Procedural knowledge	**Discovering/** acting independently (disturbed systems)	**Commitment** *Affective self-regulation (Willing)*
3	**Know how…** Theoretical knowledge	**Deciding/** selecting (Known systems)	**Appreciation** Motivation
2	**Know why**… (Distant understanding)	Applying **Imitating** (Exercising)	**Perspective taking** (Curiosity)
1	**Know-that…** Basic Perception	**Perceiving** Listening	Self oriention **Neutral**

Fig. 4: LEVEL5 Taxonomy

As Fig. 4 shows, the LEVEL5 taxonomy comes with general descriptors ('level titles') which are derived partly from Bloom's systems and partly from other taxonomies and concepts, like levels of 'emotional intelligence' and 'affective competence' and affective self-regulation.

The LEVEL5 taxonomy is the basic system for so called 'reference systems' in which the taxonomy is transferred to distinctive competences.

In the reference systems competences are contextualised with the help of specific learning outcome descriptors for each of the cells.



	COGNITIVE/KNOWLEDGE		ACTIVITY		AFFECTIVE	
L	Level Titles	Individual description/ explanatory statement	Level Titles	Individual description/ explanatory statement	Level Titles	Individual description/ explanatory statement
5	Know where else (knowledge for Transfer	Knows how to develop high quality flexible, adaptive learning environments and programmes for competence oriented learning which promote COL related to contexts which are not familiar	Developing/ Constructing/ Transfer	Is able to transfer competence oriented learning systems to other domains	Incorporation/ Internalisation	Striving to continuously develop the teaching and learning process to facilitate competence oriented learning processes in other domains and contexts
4	Know when (Implicit understanding	Being able to plan and develop COL programmes for contexts (in lessons, projects, extracurricular activities etc.)	Discovering/ acting independently	Can develop programmes, modules and that include competence oriented learning activities in the own programme context	Commitment/ Volition	Is pro-active to apply competence oriented learning in other fields of the own learning environment
3	Know how	Knows how to plan and develop a competence oriented environment in regard to: • Assessing learners' needs and motivations • Designing and constructing trainings and programmes • Planning and designing the learning process • Deploying different learning methods, styles and techniques • Creating competence oriented learning offers • Creating an open learning environment	Deciding/ selecting	Can plan the a selection of competence oriented learning units (resources, tasks and assignments based on the COL approach Being able to evaluate the own learning units according to COL quality criteria	Appreciation/ Motivation	Is motivated to be more involved in the COL approach
2	Know why (Distant understanding	Knows that competence oriented learning brings specific additional requirements to the task of developing effective learning experiences	Using, / Imitating	Can choose and deliver learning activities to be included in a competence oriented learning process as provided in the REVEAL exercises	Curiosity/ Perspective taking	Is open and interested to learn about new teaching and learning concepts that facilitate learning related to new contexts and competences.
1	Know-what/know that	Being aware that competence oriented learning is a way of approaching education affect his future educating/developing tasks	Perceiving	Perceives that there are other ways of teaching than subject orientation	Self oriented, neutral	Has no strive and sees no reason to apply new learning and teaching approaches. Is happy with the own way of teaching and training

Fig. 5: LEVEL5 Reference system with general descriptors on teamwork

With the help of the reference systems each competence can be described properly on 5 quality levels along their three basic dimensions: the knowledge, skills (capabilities) and affective (value) competence components.

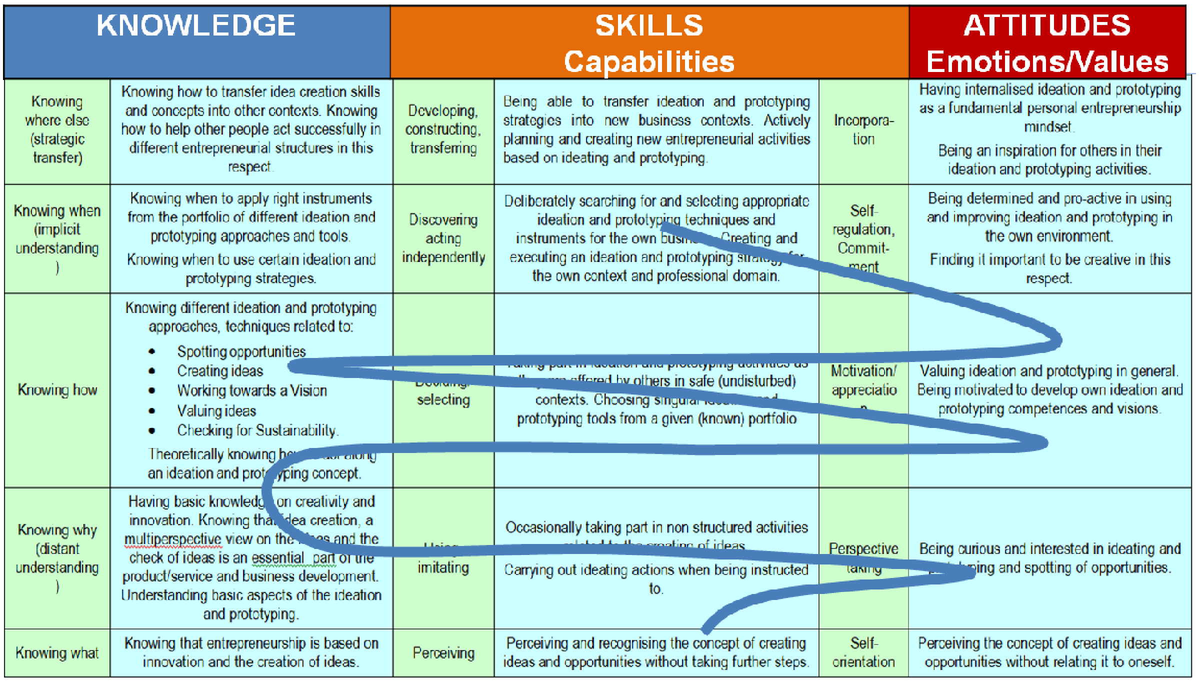
3.3. Competence Development and Learning Pathways

The development of competences is a very complex matter and is certainly not always a linear process, despite terms like 'learning trajectory' which imply the contrary.

Competence development is a process which is highly dependent on the competence itself[6], the potentials (stages) of the learners and, as stated above, also on the external factors such as context and quality expectations.

LEVEL5 was designed to facilitate and arrange learning in a competence-oriented way in all kinds of possible learning settings, be they formal, non-formal or informal (but not 'unintentional'[7]).

A learning facilitator may design, based on a sound reference system, a learning pathway which crosses certain learning outcomes/objectives and different quality levels.



KNOWLEDGE		SKILLS Capabilities		ATTITUDES Emotions/Values	
Knowing where else (strategic transfer)	Knowing how to transfer idea creation skills and concepts into other contexts. Knowing how to help other people act successfully in different entrepreneurial structures in this respect.	Developing, constructing, transferring	Being able to transfer ideation and prototyping strategies into new business contexts. Actively planning and creating new entrepreneurial activities based on ideating and prototyping.	Incorpora-tion	Having internalised ideation and prototyping as a fundamental personal entrepreneurship mindset. Being an inspiration for others in their ideation and prototyping activities.
Knowing when (implicit understanding)	Knowing when to apply right instruments from the portfolio of different ideation and prototyping approaches and tools. Knowing when to use certain ideation and prototyping strategies.	Discovering acting independently	Deliberately searching for and selecting appropriate ideation and prototyping techniques and instruments for the own busi[illegible] Creating and executing an ideation and prototyping stra[illegible] the own context and professional domain.	Self-regulation, Commit-ment	Being determined and pro-active in using and improving ideation and prototyping in the own environment. Finding it important to be creative in this respect.
Knowing how	Knowing different ideation and prototyping approaches, techniques related to: • Spotting opportunities • Creating ideas • Working towards a Vision • Valuing ideas • Checking for Sustainability. Theoretically knowing h[illegible] an ideation and prot[illegible]ping concept.	[illegible] selecting	[illegible] offered by others in safe (undisturbed) contexts. Choosing [illegible] prototyping tools from a given (known) portfolio	Motivation/ appreciation	Valuing ideation and prototyping in general. Being motivated to develop own ideation and prototyping competences and visions.
Knowing why (distant understanding)	Having basic knowledg[illegible] on creativity and innovation. Knowing tha[illegible] idea creation, a multiperspective view on the [illegible] and the check of ideas is an essential part of the product/service and business development. Understanding basic aspects of the ideation and prototyping.	[illegible] imitating	Occasionally taking part in non structured activities [illegible] Carrying out ideating actions when being instructed to.	Perspective taking	Being curious and interested in ideating and [illegible]ping and spotting of opportunities.
Knowing what	Knowing that entrepreneurship is based on innovation and the creation of ideas.	Perceiving	Perceiving and recognising the concept of creating ideas and opportunities without taking further steps.	Self-orientation	Perceiving the concept of creating ideas and opportunities without relating it to oneself.

Fig. 6: Schematic learning pathway

Fig. 6 visualises the learning process as a meandering, but upwardly moving trail.

For facilitators of competence-oriented learning the reference system is a central instrument in the learning design process.

[6] language competences for instance usually develop in a series of plateaus rather than in linear or exponential ways while other competences can develop in a more linear fashion)

[7] Reference to annex „Informal learning"

3.4. The Engine of the Learning Process

There are a number of circular process charts that are used in management and human learning and development. Among others there are, for instance, the Think-Do-Act Circle (Levin) used as a background model for his concept of Action Research; the Deeming Circle in Quality Management (PDCA) and David Kolb's approach to Experiential learning[8].

A circular approach has the big advantage that it always comes back to its beginning and provides as such the opportunity to check if a planned status has been reached. Hence management and learning circles support iterative developments that are of growing importance in our professional lives, for instance in programming and design thinking processes.

From the learning point of view these principles are extremely important since they offer different (interesting and attractive) modes to approach a subject and at the same time offer "reflection points" – quasi "fermatas" in the process which invite to think about was has been achieved and what is still ahead. At the same time, they also support the learning-by-doing principle.

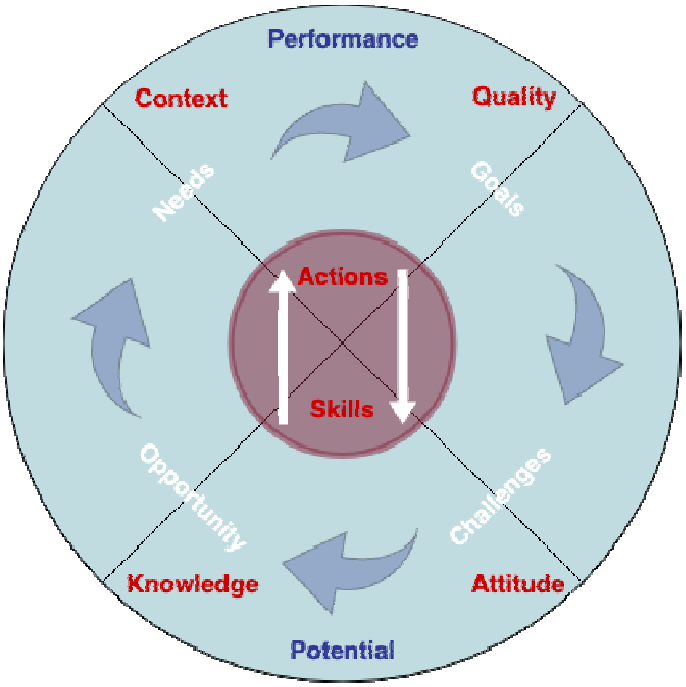


Fig. 7: The components of competence

Fig. 7 is a model which includes the main drivers for learning and competence development. It further develops the (still rather static) bow-tie model and illustrates the dynamics of competence development as a circular process.

The light blue lower sector represents the knowledge, skills and attitudes that serve as the potential of the learner to use these learning outcomes once they are needed. The upper sector includes the actual behaviour in a concrete context at a certain level of quality.

[8] In his models Kolb considers certain learning preferences and learning stages (e.g. doing, reflection, evaluation etc.) and combines them in a cyclic process.

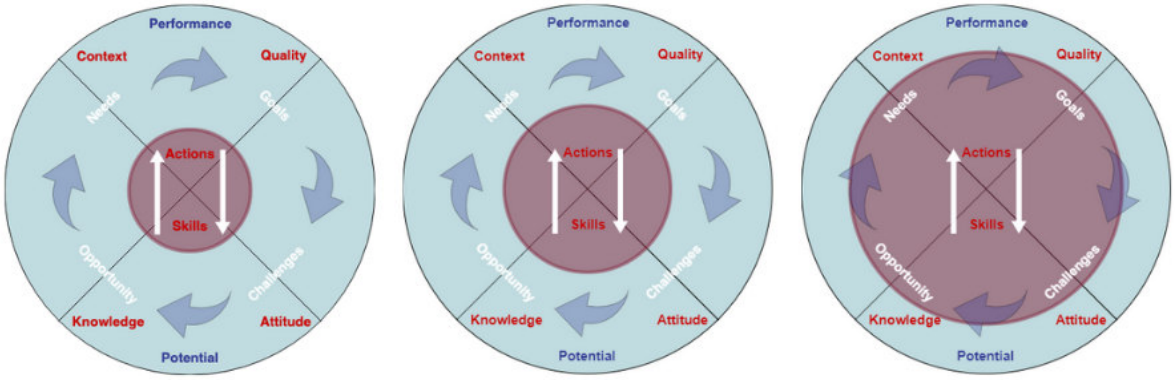


Fig. 8: Development of components of competence

The circle in the middle of the scheme includes the actual behaviour that shows the level of control over a particular competence – the competence level which can grow with every circle around the process, starting for instance with the identified needs, converted by reflection into goals and objectives taking on board challenges and opportunities to come to a higher construction and competence level.

The social constructivist learning process is conceived as a kind of engine in which the actual experience of performing in a context, and finding out to what extent this has an adequate quality/effect, leads to a need to find out more about it, to develop skills and to get motivated to again try to perform but now at a hopefully higher level of quality. Thus, the experiential process and the acquisition process inspire each other and bring the learner in a spiral trajectory to a higher level of performance and to an increased potential to do so.

3.5. Competence Oriented Learning and Education

In this section we move from general ideas on what competences are to competence-oriented education. Competence based learning and competence-based education do not consist of traditional teaching situations. They are based on the idea that the learners learn by experience and discovery. This concept has an impact on how learners may be educated. The idea is that learners need to be actively involved in the learning situation. They learn best in meaningful contexts and in co-operation and interaction with others and with their environment. Thus, they enable themselves to acquire knowledge, construe knowledge and check and cross check their newly constructed ideas with those of others. Of course, this in no way denies the importance of teaching; it emphasises the necessity of teaching in a highly responsive and learner-centred way without neglecting the obligation of showing learners new horizons and perspectives and enthusiasm for things they may never yet have heard of.

Key features of Competence Based Education

Competence based learning requires an approach to education that differs from the traditional approaches to teaching. In competence-based education one tends to stress the importance of powerful, or rich learning environments, that enable students/learners to engage in meaningful learning processes. The most distinctive features of this approach may be summarized as follows:

- *Meaningful contexts*

  For learning to take place it is recommended to create or to look for meaningful contexts in which students will in a natural way experience the relevance and the meaning of the competences to be acquired.

- *Multidisciplinary approach*

  Competences are holistic and consequently the educative approach needs to be integrative and holistic as well.

- *Constructive learning*

  The philosophy of competence-based education has its roots in the social constructivism that pervades our views on learning today. Learning is conceived as a process of constructing one's own knowledge in interaction with one's environment, rather than as a process of absorbing the knowledge others try to transfer to you. The consequence of this view is that educative processes are better when they are constructive. By focusing on the construction of models, products, guidelines, rules of thumb, reports, or other tangible outputs the learning easily and naturally will turn out to be constructivist. This is the opposite approach from using learning processes that focus on information processing first, after which the actual application of the knowledge will have to wait for another time.

- *Cooperative, interactive learning (with peers, teachers and heritage providers etc.)*

  The basic idea behind competence-based education is to help learners to develop and construct their own knowledge and seek ways to make optimal use of other people's competence in their learning itinerary. This is what social constructivism is about.

  Co-operation and interaction are both domains of learning as well as vehicles of learning in other domains. If learning is supposed to be self-initiated, self-regulated, and aimed at developing personal competences, the educative approach must allow for diversity in needs and related to that in goals and objectives. This requires an open approach in which education includes dialogues between learners and educators about expectation, needs, goals, choices etc.

- *Discovery learning*

  Open learning processes require learning that may be characterized as active discovery as opposed to receptive learning. This does not imply that learning content should not be made available and accessible. It means that the way of acquiring this knowledge or these competences, should not be just a process of providing information, but should always be embedded in a discovery-based approach.

- *Reflective learning*

  Competence based learning requires, apart from a focus on the key competences, also an emphasis on the learning processes as such. By reflecting on one's own needs, motivation, approach, progress, results etc. one develops learning competences/strategies that may be considered *meta-competences*. The competence meant here is usually referred to as the process of 'learning to learn'.

- *Personal(ised) learning*

  In the competence-oriented theories learning is conceived as a process of constructing one's own personal knowledge and competences. Information, knowledge, strategies etc. only become meaningful for a person if they become an integral part of one's own personal body of knowledge and competences. In education this implies that students need to be able to identify with the contexts, the persons, the situations and interests that are included in the learning domains involved.

4 Validation

Validation of informal and non-formal learning is one of the major educational initiatives in Europe. It has been developed since 2002 and comes with a number of very powerful instruments like the EQF, ECVET and EUROPASS which have been promoted in the European Educational field. The main purpose is to make skills and competences of the individuals visible, transparent and transferable and with it to contribute to European mobility and cohesion.

The year 2018 marked the official European introduction of validation of informal and non-formal learning in political and administrative structures in all European member states.

Validation of competences is an integral part of the applications for KA1 projects. Hence Adult Education professionals should be competent in validation.

Up to now, however, validation of competences is still unknown territory to the vast majority of (adult) educators in Europe.

Our surveys over the last few years[9] show that a competence validation is not being managed, its' potential usefulness is not even explored and the need for it remains undiscovered by the large majority of educational stakeholders in Europe. The reasons are manifold, and it certainly requires a larger publication than this to explain them.

Validation is often reduced to certification, connected only to the delivery of proofs of attendance or considered as a rather formal exercise to deliver some kind of proof that learners crossed a certain threshold for whatever reason and for whichever purpose. In the utilitarian world of purely work-related learning, the only driver for this is often regulatory compliance by the employer.

It has to be emphasised though, that the validation of competences can be far more than just another (isolated) assessment and certification exercise. It is also a great opportunity to invent new forms of learning and to improve teaching, training and learning design.

It inherits the identification, documentation, assessment and certification and related counselling, training and learning activities.

Most educational stakeholders in Europe are still a long way from a feasible and attractive integration of competence validation in their training offers.

However, innovative learning formats (especially also online, blended technology supported) can contribute a lot to holistic learning approaches which also include validation processes, be it identification, assessment and documentation and eventually also certification.

4.1. Levels of Formality in Learning

Since the full title of the concept is called "Validation of non-formal and informal learning" it is crucial to understand the concept of formalisation in learning and education.

As with many formal structures in society we take our education systems for granted – we consider them as quasi-natural systems. We are simply used to them, and many of us (educationalists) never really question them or reflect about major principles.

Some official documents define 'informal learning' as a 'precursor to learning" or 'unintentional' learning; in other words: learning which cannot be influenced. However, the term 'informal learning' was coined in the 1970s in connection with adequate (informal) learning strategies to educate citizens in the former European colonies. In this case it was the opposite of 'unintended'. In

[9] PROVIDE, IMPACT, REVEAL

connection with validation the term was hijacked and used for a rather unconscious state of competence acquisition which can be exploited for qualification purposes.

Some other approaches developed concepts of the 'Recognition of Prior Learning' which at least have a learning aspect in it.

However, at the beginning of the invention of validation of non-formal and informal learning, the 'learning' part was not more than a pre-stage that was not considered at all.

As well as this, more than 15 years after the first official concept and 10 years after the specifications of VINFL[10] there is still the danger that either validation is treated as an add-on to adult education or conversely that adult education is not a part of validation (which is far worse). In this case (and from a solely utilitarian point of view) validation would become just a smart tool for qualification, an instrument to speed up certification processes and to produce certified individuals without development of their competences. This is exactly the structural threat of validation for informal and non-formal adult and youth education: the risk is that they might become obsolete since learners (or more likely their employers or the state) only need assessments and certifications and not the learning part – especially where training providers are being 'paid by results'

With the 2016 guidelines for VINFL it seems that also the CEDEFOP[11] realised this danger and the fears expressed by some of the AE and youth stakeholders[12] and emphasised the necessity for guidance, counselling and accompanied training.

However, what is missing is a holistic approach to integrate Validation in Adult Learning, not only for the sake of the individual learner but also as an improvement of the quality of the learning offer and as a starting point to Competence Oriented Learning. To fully understand all implications of the concept of "Validation of Informal and Non-Formal learning" (and its integration into COL) it is worth taking the time to reflect a bit on the nature of formality and informality in education.

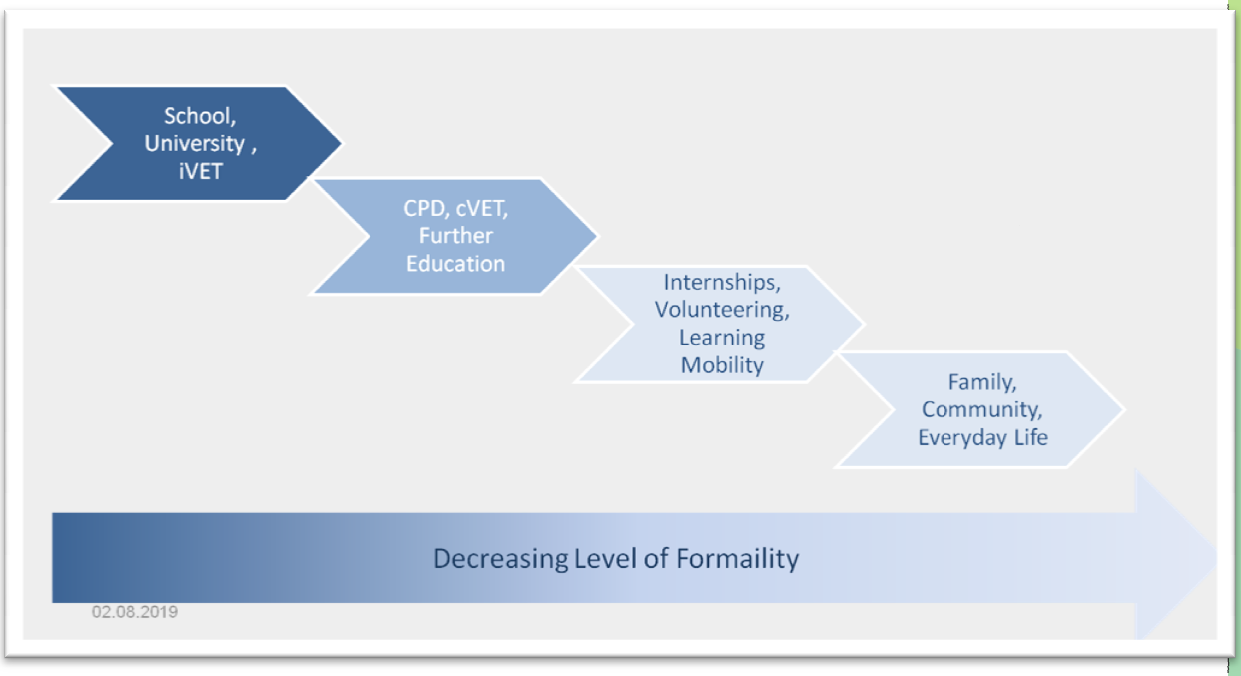


Fig. 9: Learning offers in relation to the level of formalisation

[10] VINFL validation of non-formal and informal learning specs 2009, European Commission

[11] Cedefop (European Center for the Development of Vocational Training) is one of the EU's decentralised agencies. Founded in 1975 and based in Greece

[12] Who still clashed in the 2013 conference on validation of informal learning

Fig. 9 shows the main educational domains and training/learning offers along a decreasing level of formality.

From the purpose point of view the focus of formal education (in school, university, iVET) is clearly on qualification – as a doorway into the labour market.

The focus of CD is still very much on qualification, however it allows more choices and probably also tackles more generic competences.

In the fourth cluster there is still a more or less conscious personal development component like in internship, learning on mobility, volunteering and other societal engagement – however, the learning is more practical and overlapped by other motives like travelling, discovery, trying out, help and support etc.

The last area is unintentional learning such as that which occurs within the family and communities.

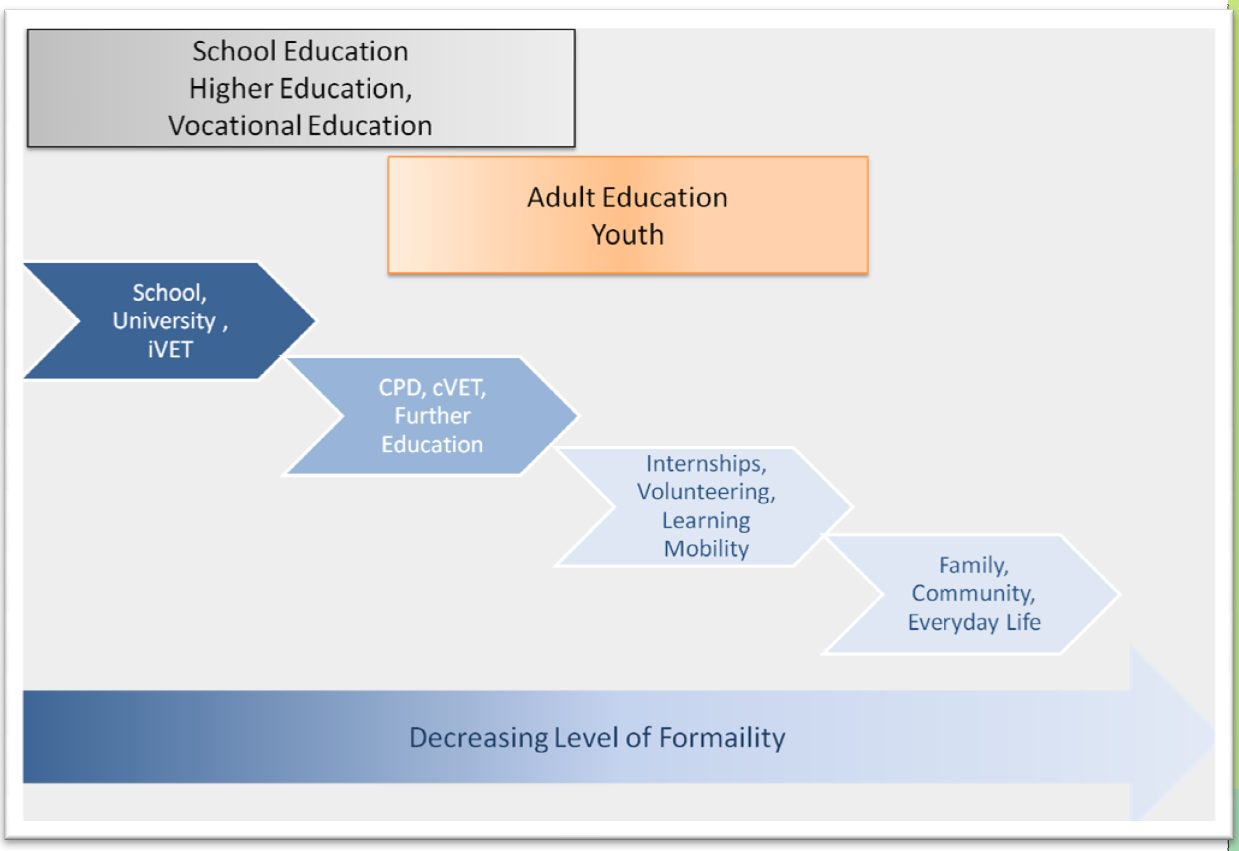


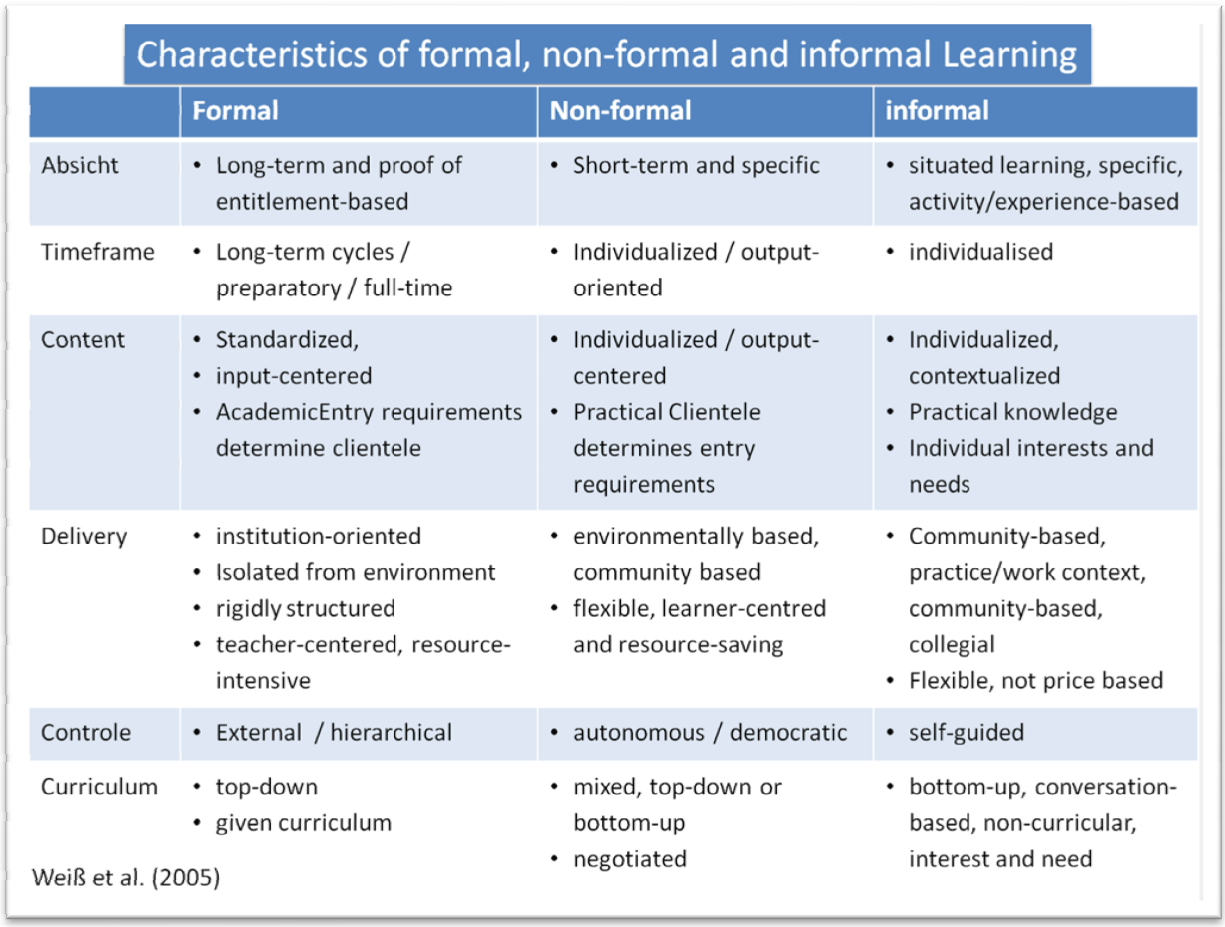
Fig. 10: Education sectors in relation to the level of formalisation

It goes without saying that adult and youth education are operating in less formalised sectors.

This is one of the reasons why adult education and youth education providers should pay more attention to VINFL and integrate it into their learning offers. This goes together with the competences which are acquired in these less formal learning areas. They are less formalised and more contextualised, not so much looking to be certified, not so much anchored to curricula and more are more generic in nature.

This does not mean that they are less important as a quick check through the job adverts will certainly reveal. Enterprises are looking more and more for team workers, networkers, communicators and interculturally skilled labour.

Given the fact that these competences can be validated, this is a great opportunity for adult and youth educators to gain more importance and influence.



Characteristics of formal, non-formal and informal Learning

	Formal	Non-formal	informal
Absicht	• Long-term and proof of entitlement-based	• Short-term and specific	• situated learning, specific, activity/experience-based
Timeframe	• Long-term cycles / preparatory / full-time	• Individualized / output-oriented	• individualised
Content	• Standardized, • input-centered • AcademicEntry requirements determine clientele	• Individualized / output-centered • Practical Clientele determines entry requirements	• Individualized, contextualized • Practical knowledge • Individual interests and needs
Delivery	• institution-oriented • Isolated from environment • rigidly structured • teacher-centered, resource-intensive	• environmentally based, community based • flexible, learner-centred and resource-saving	• Community-based, practice/work context, community-based, collegial • Flexible, not price based
Controle	• External / hierarchical	• autonomous / democratic	• self-guided
Curriculum	• top-down • given curriculum	• mixed, top-down or bottom-up • negotiated	• bottom-up, conversation-based, non-curricular, interest and need

Weiß et al. (2005)

Fig. 11: Characteristics of formal, non-formal and informal learning

Fig. 11 shows indicators for each of the educational areas.

Certain characteristics can be assigned to each of the areas though it has to be emphasised that this table as well as the previous graph visualise a continuum and not discrete categories. Even in school and university there are hopefully also informal (or less formal) traits and activities and there may also be formal aspects in mobility activities (e.g. the mobility supplement to the EUROPASS).

However, what the table from Weiß clearly shows is that informal learning is also intended learning – intended at least from one learning partner – either facilitator and/or learner.

4.2. Validation Stakeholders

“Validation is the process of identifying, assessing and recognising a wider range of skills and competences which people develop through their lives and in different contexts…“(Bjoernavold 2004).

In order to fully understand the concept of validation we have to think about the stakeholders and their (potential) motivations in being part of the system.

From the side of the European Commission the idea is clear:

“The purpose of validation is to make visible the entire scope of knowledge and experience held by an individual, irrespective of the context where the learning originally took place. “

” Lifelong learning requires that learning outcomes from different settings and contexts can be linked together.“

"In lifelong and life-wide learning, 'validation' is a crucial element to ensure the visibility and to indicate the appropriate value of the learning that took place anywhere and at any time in the life of the individual. " (Colardyn/Bjornavold 2004)

Given that the CEDEFOP and the authors represent the will of the EU, the main idea is to make competences of individuals more transparent and comparable and to contribute to the European Cohesion and economic growth.

One has to see validation in the larger context of the growing Europe and its educational policy, starting already in the years after the Rome treaty (to support guest labourers and their children) through the Maastricht and Lisbon contracts (Lifelong Learning) up to the European Skills Agenda (2018) and its components.

Below the European and national political stakeholders there are four other groups which play decisive roles in validation:

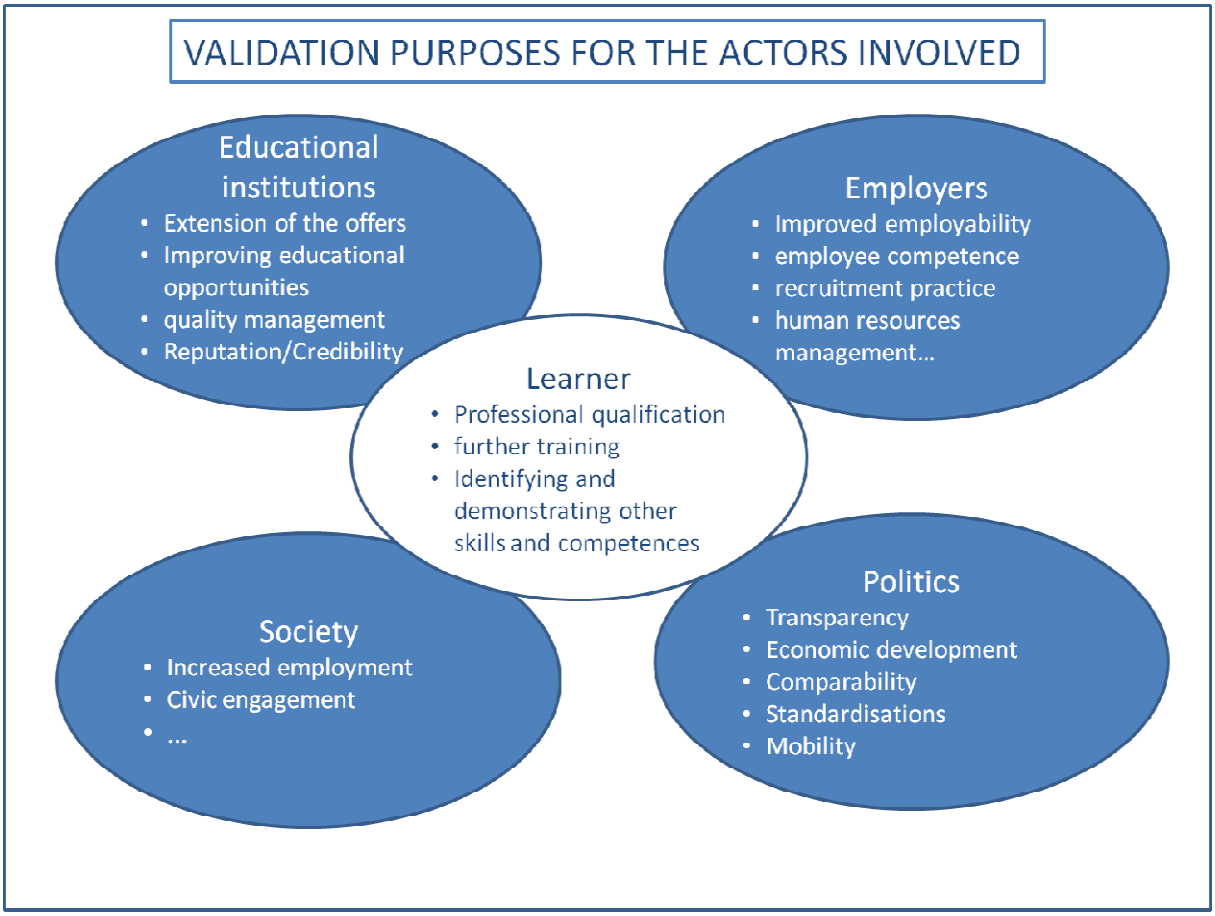


Fig. 12: Stakeholders involved in validation

Following the idea of the inventors of validation the individual learner should be in the centre of the system and improve his/her employability and through the management of the competences.

Employers expect a more competent labour force and better access to and visibility on competent human resources.

Educational institutions expand their offers, improve their quality and credibility.

Eventually the European societies benefit via higher employment greater productivity and higher social engagement.

This is of course still rather visionary and up to now we neither have the administrative nor the educational structures to effect a reasonable introduction. However, the system inherits chances for innovative and creative adult education institutes.

4.3. Validation Purposes

Validation purposes can firstly be clustered along organisation levels:

1. EUROPEAN level (European Commission)
    - Transparency of qualifications
    - Mobility
    - Comparability
    - European economic growth and stability
2. INSTITUTIONAL level (enterprises, public institutions, schools)
    - Finding personnel
    - Providing evidences of own capacities
    - Organisational development
3. INDIVIDUAL level
    - Showing potentials and competences
    - Finding jobs
    - Collecting evidences in CV
    - Sharing competences for private projects/purposes

As far as educational stakeholders are concerned the purpose changes with the level of formality. This is especially important for Adult Educators since a sole qualification purpose would not bring any added value in their working area.

Hence, one could differentiate 2 opposite sectors, derived from the levels of formality as outlined in 6.1.

Professional Formal Qualification:

Purpose: 'profiling', identifying levels of competences and measuring 'performances'

Means: -> summative assessments and high level of formality, certification

Personal development:

Purpose: incentive for civic engagement, showing potentials of learners

Means:-> identification, formative assessment and low level of formality

Between those two poles there are a large number of different scenarios ready and waiting for competence validation:

- Continuing professional education and training,
- Learning on the job,
- Training on social/personal competences like teamwork, communication, customer orientation etc.,
- Orientation projects for young (unemployed) adults,
- Mobility projects for those Not in Employment Education or Training (NEETs) – what used to be known as the Intermediate Labour Market or ILM - to develop their potentials and to bridge to the working life or formal education again,

- Self-learning arrangements, to give evidence to competences acquired in rather informal learning contexts, e.g. in volunteering,
- Competence Oriented Learning Arrangements, e.g. Design Thinking workshops for young entrepreneurs -

just to name a few.

4.4. Validation procedure

Validation, as a European concept, is based on a 4-step procedure consisting of

- identifying,
- assessing,
- documenting and
- recognising

Knowledge, Skills and Competences[13] acquired in formal, non-formal and informal settings.

CEDEFOP glossary, EU Communication on LLL:

" Validation is the process of identifying, assessing and recognising a wider range of skills and competences which people develop through their lives and in different contexts…"

The EU-wide agreed process of validation of informal and non-formal learning (EU Directives 2009/2012) consists of the four steps of identification, documentation, assessment, certification of "learning outcomes achieved by a person in a non-formal or informal way".

Learning outcomes play an essential role in the validation concept - they are descriptions of what a learner should know and be able to do (after completing a learning activity).

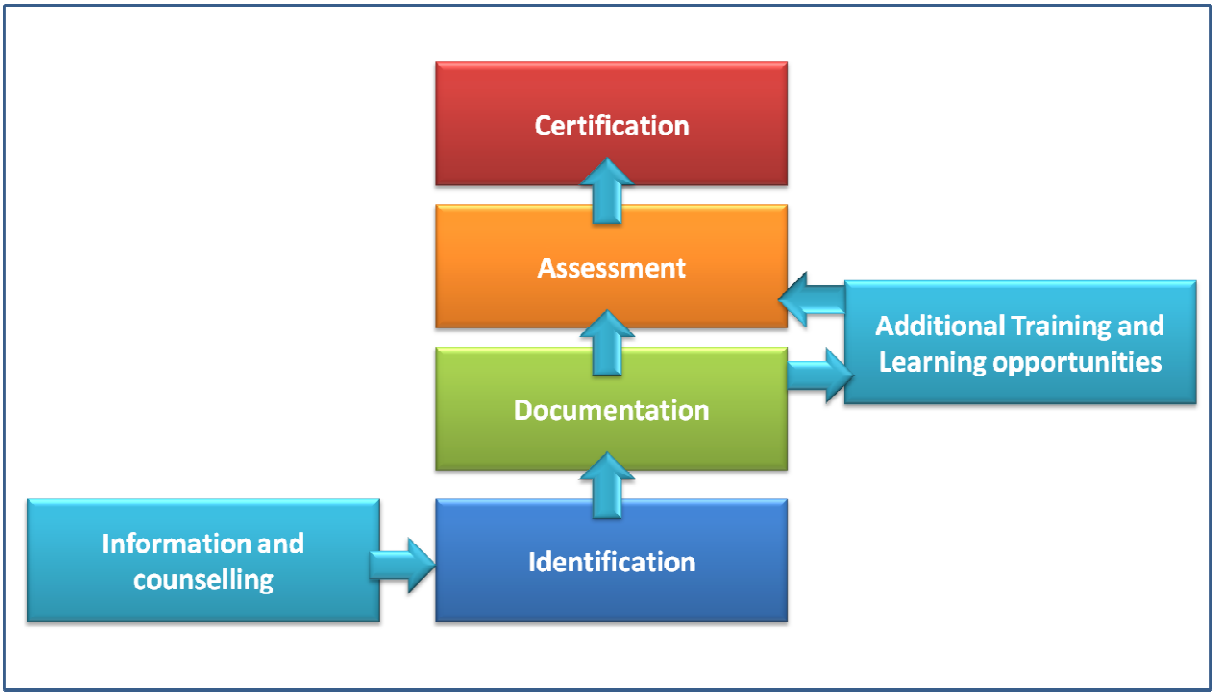


Fig. 13: Validation steps and necessary support measures (information, counselling, training)

[13] For educationalists of certain member states the 'competence' component sounds rather odd or tautological (since knowledge and skills are parts of a 'competence'). In this definition 'competent' marks the level of autonomy and responsibility that a person shows in the working process.

'Identification' is the collection and identification of existing competences and learning outcomes of the individual.

'Documentation' means that the competence proofs and learning outcomes are collected in appropriate tools, for instance in e-portfolios. To identify potentials, strengths and competences, biographical tools such as ProfilPASS play an important role, as the purpose of the collection phase is also to increase the awareness of the results of previous learning experiences.

'Assessment' is the third validation step in which the existing evidence of competences and learning outcomes are classified according to specific reference points and / or standards. This step requires high quality measurements for the credibility and transparency of the procedures. According to the 2016 Guidelines, this step will use "similar methods and tools as used in the formal education and training system". However, at a time when social, personal and organisational competences are becoming increasingly important, the question arises as to how these competences are also taken into account in the validation process.

The fourth element of validation is '**Certification**', which seeks to 'authorize' a person to perform certain activities by awarding a formal qualification (or partial qualification, or 'license').

The multiple meaning of the term '**competence**' becomes clear at this point: In formal, qualification-oriented contexts, being competent may have the main meaning of 'being allowed to'. In a pedagogical context it describes the comprehensive ability of a human being, to apply a mixture of knowledge, skills attitudes/values in a defined context (which may also be professional) in a certain quality.

For qualification purposes, learning outcomes are assigned to defined professional skill levels, for example through the European Credit Point System for Vocational Education and Training (ECVET). Here, the European Qualifications Framework (EQF) serves as a background system and orientation framework for the descriptions and classification of different qualification levels. The EQF is the central European reference system that integrates and links the different national qualifications frameworks and thus serves to make comparisons and transparency of qualifications possible.

A broader understanding of the concept of validation, as increasingly articulated in the CEDEFOP 2016 Guidelines, creates new opportunities for adult learning and its actors. The purpose of validation is to make visible the full range of a person's knowledge and experience, regardless of the context in which the learning originally took place. This vision includes at least in principle essential elements of adult education conception (e.g. a competence orientation), even if the objective of the validation was originally entirely occupation related.

EU Member States should include by 2018 the necessary regulations for the introduction of the four validation steps, which "give individuals the opportunity to use each of these steps, either individually or in combination, according to their needs."

This makes it clear that, in contrast to input-oriented education models, the validation of informal learning focuses on the individual and the validation steps and instruments used should be flexible.

Secondly, it emphasizes that validation does not necessarily have to include all four steps. Thus, 'validation' is also to be understood as an umbrella term for all recording, documentation, evaluation and certification activities.

4.5. European Tools and Instruments

The EU has developed a number of instruments to facilitate the Validation of Non-formal and Informal learning (VINFL).

The most prominent ones are the EQF (European Qualification Framework) and the credit transfer systems:

ECTS for the Higher Education sector, based on time-related credit points and ECVET is the European Credit Transfer System for VET. In contrast to ECTS the ECVET system is based on learning outcomes, which are descriptions of what a learner knows, is able to perform in which grade of responsibility and autonomy.

As outlined above, the EQF is a central taxonomy to compare 'qualifications' among member states with the help of 8 levels.

The ECVET system is entirely based on the EQF level descriptions that should be transferred into an occupation-specific taxonomy. In reality, the system was implemented without much success. Even in more than 100 funded model projects only a minority kept to the ECVET specification and only about 10% delivered reasonable models for 10 VET and CPD areas[14].

EUROPASS has been designed as European wide CV with several interfaces to practical learning and mobility learning documentation.

The instruments serve as assessment and documentation tools.

For identification purposes the German ProfilPASS may be mentioned as well as the YouthPass for youth and volunteering actions.

4.6. The LEVEL5 validation approach

REVEAL has developed and maintained the LEVEL5 system since there are a number of shortcomings that relate to a solely formal validation approach as it has been brought forward by the Commission and the CEDFEOP in recent decades.

Firstly, LEVEL5 aims to also validate those competences that are not related to qualification or curricula. Nevertheless, they are becoming increasingly important in our professional lives. We cluster them in social, personal or organisational competences, among them teamwork, communication, flexibility, creativity and innovation, conflict management, client orientation, critical thinking and spotting ideas and opportunities, just to name a few.

A second aspect which differentiates the LEVEL5 validation from the above-mentioned systems (EQF, ECVET, ECTS) is its purpose: while the EU systems aim at summative assessment and validation, LEVEL5 can also be used in a formative approach. Formative assessments aim primarily at empowering learners, while summative assessment is a sort of grading process which aims at measuring performances related to knowledge or expected behaviours. We can therefore say that formative assessment is diagnostic in nature while summative assessment is evaluative. For us the diagnostic functionality is very important since the learning process is very much in the focus of our members and not just the assessment and grading of the learners. Nevertheless LEVEL5 can also be used as a summative tool to judge the performances; hence it allows a balanced assessment based on both functions, thus delivering on the one hand necessary information about the next steps of the trainers and learning providers and motivating learners to go on, and at the same time measuring the student's learning regarding to the taxonomy.

Eventually – and this goes along with the second aspect, LEVEL5 does not relate only to one measurement at the end of a learning process but to several points in time which allows a documentation of the progression of a learner. This progression is displayed in the LEVEL5 cube and the LEVEL5 certificates.

[14] Survey crried out in the framework of the IMPACT project (https://mahara.vita-eu.org/artefact/artefact.php?artefact=20068&view=3270)

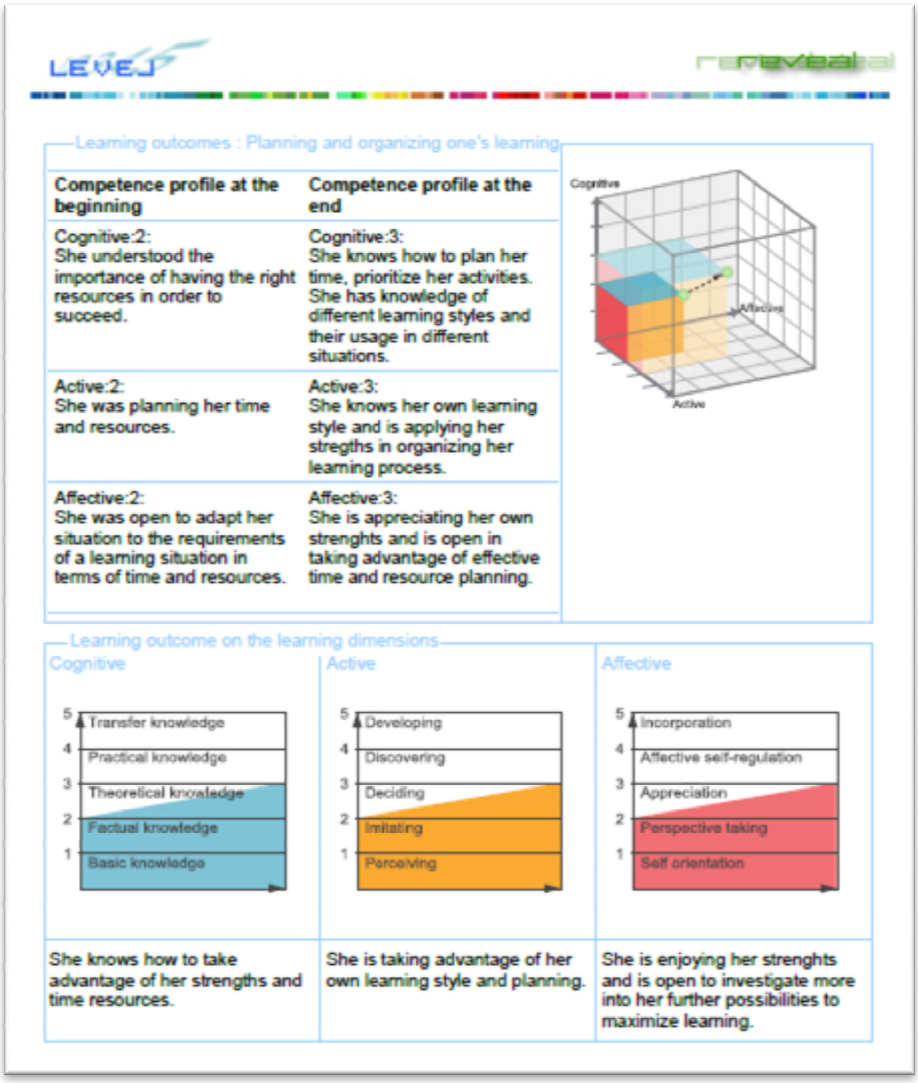


Fig. 14: Excerpt from a LEVEL5 certificate

To conclude: LEVEL5 is not just a validation system but an approach which combines Competence Validation with Competence Acquisition; a holistic training, learning and validation approach which we call “Competence Oriented Learning and Validation”.

5 How to apply Competence Oriented Learning and Validation

As mentioned earlier our approach is based on the definition that a competence is the ability of a person to apply

- Knowledge,
- Skills and
- Attitudes

in a specific context and in a particular quality.

Unlike in this holistic model the third affective dimension is mostly neglected in formal and professional education, particularly in traditional learning settings and in connection with the assessment of 'learning outcomes'. The attitudes of the learner, if they are reported on at all, are usually relegated to general notes at the end of a tutor's assessment.
Neurobiological (brain) research in recent years, however, has clearly proven that the affective (emotional and non-cognitive) dimension of learning is of utmost importance for the learning process. Feelings, attitudes and values are crucial for learning, especially for the development of social and personal competences – which play an increasingly important role in our modern societies, be it in professional or civic life.

Communication, teamwork, service-mindedness, intercultural and diversity management, autonomy, flexibility and problem solving belong to these competences, but also the complex 'key competences' like entrepreneurship or active citizenship which cannot be efficiently 'taught' in school but are mostly acquired in practical and real life learning situations.

For efficient learning in formal or non- formalised learning contexts we need innovative learning approaches that promote tailor-made, needs driven and situational learning for the integrated development and validation of these skills and competences.

5.1. Core Elements of Competence Oriented Learning and Validation

According to our philosophy, all three dimensions have to be considered to design learning and validate competence development along a comprehensive, holistic and effective learning approach.

Therefore, LEVEL5 is based on a three-dimensional model which maps the development of:

- Knowledge (-> cognitions)
- Skills (-> actions) and
- Attitudes (-> emotions and values)

along five quality levels – from beginner to competent expert.

This model forms the basis for the two core LEVEL5 instruments:

The LEVEL5 *cube* visualises a person's competence development in a specific (preferably practical) learning field which is described in the so called LEVEL5 *reference system*.

The LEVEL5 *reference systems* facilitate the design and planning of informal/non-formal learning and the validation of competences in a specific practical action and learning field.

The LEVEL5 *cube model* reduces significantly the complexity when visualising and describing learning outcomes and therefore provides an attractive presentation and documentation system for learning.

With LEVEL5, learning and validation of competences is promoted in practical, rather informal learning situations (e.g. learning on the job, in internships, volunteering and in mobility programmes etc.) and in innovative competence fields (e.g. entrepreneurship, active citizenship and other key-competences).

5.2. Principles of Competence Oriented Learning

Competence oriented learning is based on human centred educational concepts that are backed up by educational research and practice.

We believe that it should contain the following features:

- Active learning
- Experiential learning
- Contextualized learning
- Explorative learning
- Collaborative learning
- Constructive learning
- Personalized learning
- Reflective learning

These principles and features should be considered when designing, planning and delivering a learning module or learning pathway.

There are several tools and instruments that support competence-oriented learning. Design Thinking approaches, for instance contain a large number of instruments and tools for different phases of visioning, spotting and creation of ideas, refinement and prototyping.

Open source learning technologies offer multiple learning pathways be it as LMS or e-Portfolios. They are also rich development and collaboration pools.

Especially in mainly informal learning environments (for instance in mobility learning, volunteering etc.) well designed learning apps can be used as (hidden) navigation to lead learners through intended learning steps. Here explorative (e.g. app-guided) learning arrangements can be the methods of choice, especially when working with non-mainstreaming or hard to reach learning groups such as those excluded from conventional schools, Hence there is no lack of state-of-the-art technologies or creative approaches to design and deliver Competence Oriented Learning. What we identified as a shortcoming is a lack of a systemic approach to create a holistic, quality driven method of developing competences and the means to assess and document them.

To design and deliver Competence Oriented Learning we have to leave the formal education domains and plan learning in real life scenarios in which we make use of real demands and interests of the learners. This was the original idea of 'informal learning': It should relate to challenges in REAL life, should have an immediate effect and use more practical and fewer theoretical learning resources.

We do not want to be misunderstood here: of course, we need knowledge and theory to learn – but we have to construct knowledge rather than just transfer it from teacher to learner. We have to stimulate learners to be more active: show them how to them explore knowledge and research sources and do not just transmit theory at them but let it be constructed by action, reflection, and comparison to real life experience!

5.3. Planning and Delivering Competence Oriented Learning

There is a high demand for Professional Development for Educational personnel, be it trainers, teachers, coaches, learning providers or e-Learning designers – but increasingly also professionals without a professional educational background who deliver learning to others.

For both groups, professionals working in formalised education and other competent learning providers working in informal learning we wanted to set up an easy-to-use approach to plan and deliver Competence Oriented Learning and Validation.

Therefore, we developed the LEVEL5 system which builds on a simplified Plan-Do-Check step procedure:

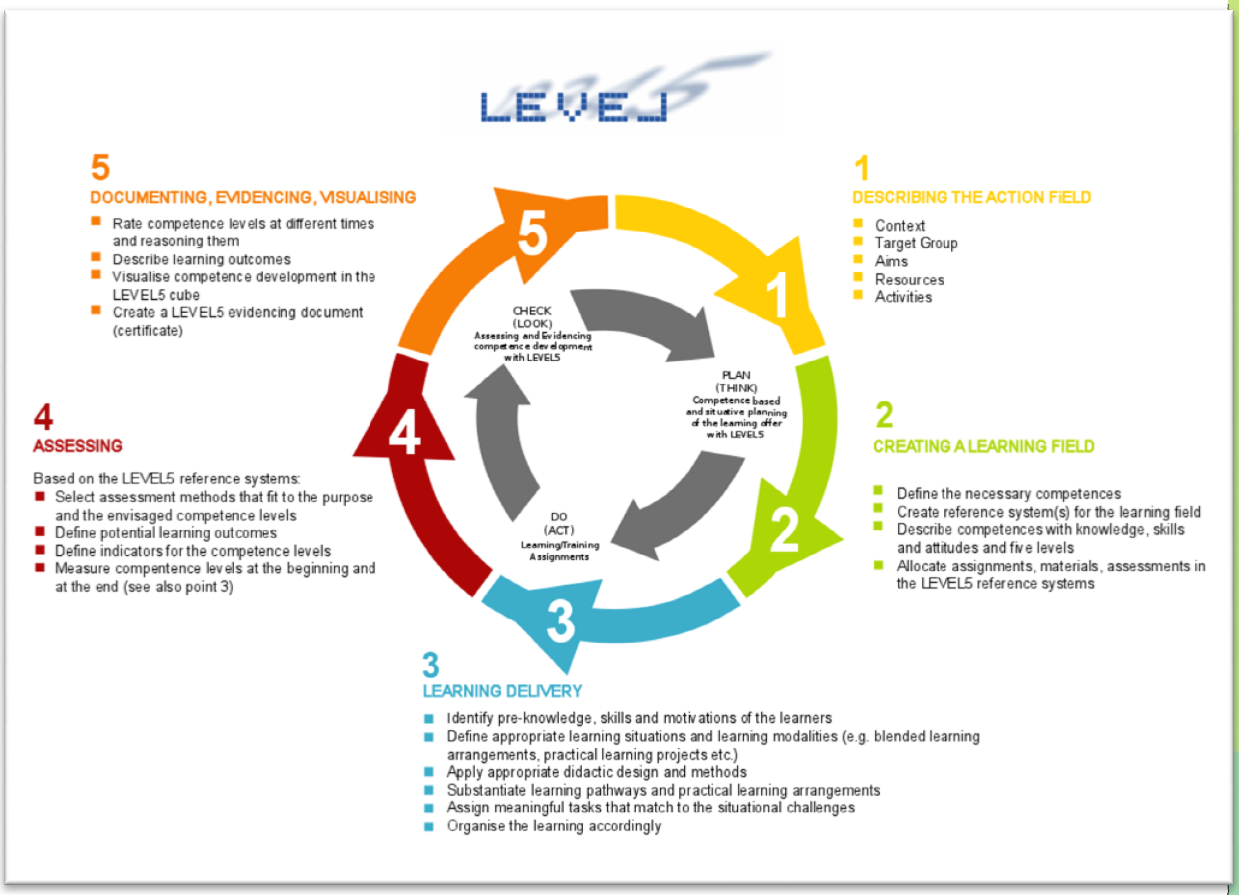


Fig. 15: Procedure to plan and deliver COL&V

Plan:

The starting point of the planning is the so called 'action field' in which the learner is located. It describes context, actions, resources and objectives of his/her activities.

The conversion of this action field into a learning field is facilitated by the LEVEL5 reference systems which derive the competences that are necessary to tackle the actions and solve the tasks in the field.

Do:

The delivery of learning is highly dependent on the context. It can range from a rather informal, self-guided learning (e.g. in learning on the job or in mobility settings) to more formal arrangements (e.g. in school projects or more guided continuing professional development (CPD) actions).

LEVEL5 largely supports blended, web-aided learning arrangements. The REVEAL community offers state-of-the-art learning technologies and an open learning space for these purposes.

Check:

The check-element refers to the validation within LEVEL5. Dependent on the identified action and learning field it covers the identification, documentation, assessment and certification of competences. It is largely based on the LEVEL5 reference systems that facilitate individual and contextualised validation. The learning outcomes are documented in LEVEL5 certificates including the dynamic LEVEL5 cube.

5.4. Instruments for Planning and Delivery

Based on the procedure we have developed four main instruments to plan and deliver Competence Oriented Learning and Validation.

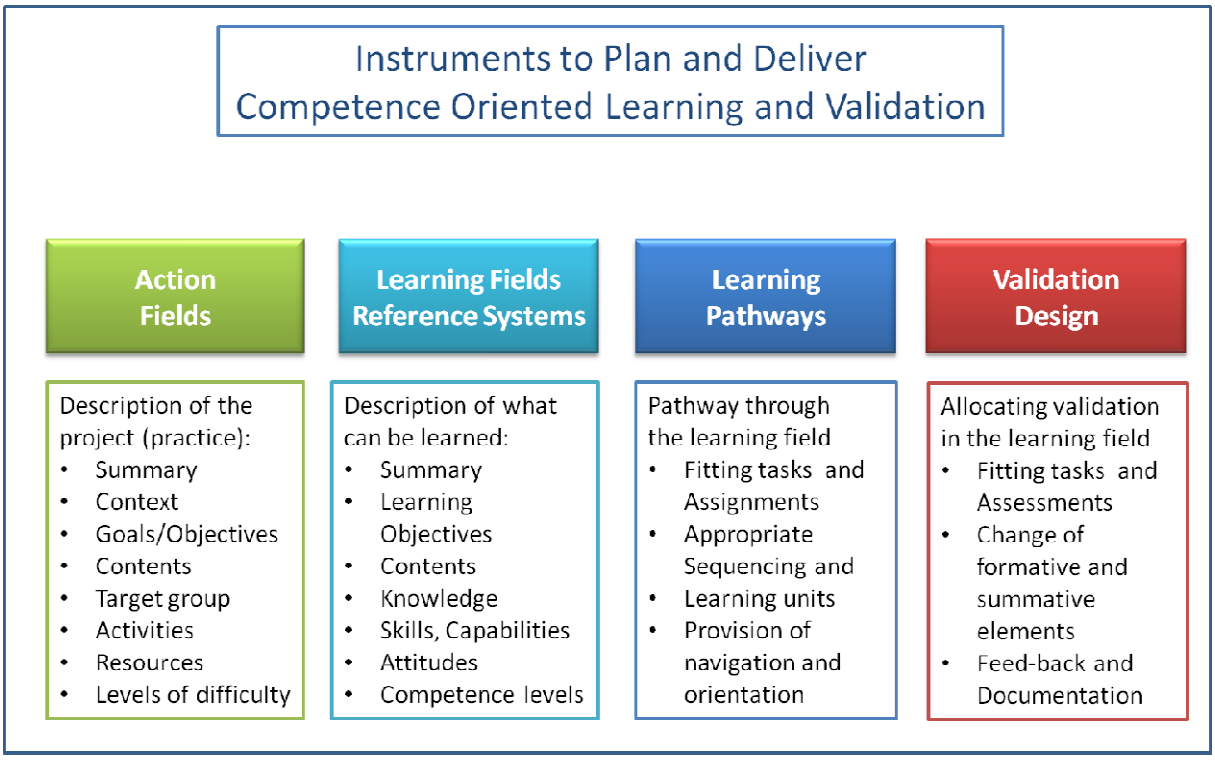


Fig. 16: Tools and Instruments for Planning and Delivering COL&V

The instruments are easy to use tools that facilitate the planning according to a logical step-by step procedure. The first step (action field) scans the practical field and the challenges therein.

The learning field connects to learning objectives and envisaged competences levels and sets up a contextualised reference system. In the third step a learning pathway is designed and reasonable tasks and assignments are located on it. In the last step a reasonable assortment of assessments is assigned to it (formative and summative if applicable) as well as meaningful documentation and certification.

5.4.1. Action fields

The first planning step is always related to the practical situation and describes:

What is the acting field and what does the individual has to perform in a specific context –(what are the tasks, the challenges, the visions, background and the perspectives)?

The action field is thoroughly described in a pre-defined project pattern. This step represents the planning of modern, practical and contextualised learning. It can be applied in a large variety of learning sectors ranging from modern HR-management for highly efficient continuing professional development (CPD at the workplace) to practical learning projects in NGOs or in innovative (primary, secondary or VET) schools, e.g. in climate friendly management, system thinking or other interdisciplinary action fields.

The action field already comes with five different quality levels and describes the challenges and tasks that the individual is confronted with in his/her field of action (which can be professional and/or private).

5.4.2. Learning fields

In the next planning step, the action field is turned into a learning field, following the question: Which competences do we need at which (quality) level in order to tackle the situation successfully? At this stage the LEVEL5 reference systems establish a framework which maps the necessary (contextualised) competences on three dimensions and quality levels.

	KNOWLEDGE		SKILLS Capabilities		ATTITUDES Emotions/Values	
L	Level Titles	Level description	Level Titles	Level description	Level Titles	Level description
5	Knowing where else (strategic transfer)	Knowing how to enhance team processes in different teams. Knowing how to help other people act successfully in teams and to assign specific responsibilities to people keeping in mind their relevant skills.	Developing, constructing, transferring	Leading a team in a way that members are able to contribute to the best of their abilities, supporting them to do so. Being able to strategically develop a team.	Incorporation	Having internalised the "culture" of constructive team work and to accomplish goals through mutual support. Inspiring others to improve their teamwork skills.
4	Knowing when (implicit understanding)	Having substantial knowledge on how and when to join/form a team. Understanding strength and weaknesses of team members. Knowing the importance of communication and how to coordinate workflows.	Discovering acting independently	Being able to assign and coordinate specific tasks and roles to team members on the basis of their strengths and weaknesses. Monitoring team processes. Trying out new roles for one-self.	Self-regulation, determination	Feeling the importance to refrain from own preferences (e.g. in regard to procedures, own solution strategies, methods etc.) for the sake of the team and the teamwork. Being determined to be a good team worker.
3	Knowing how	Knowing the basic dynamics and demands of teamwork. Knowing how to engage in a coordinated work flow where the skills, qualities and limits of each member are taken into account in order to work efficiently.	Deciding/ selecting	Actively reaching out to join a team or help create a team. Contributing to the team process according to own strengths and needs for reaching the shared goal.	Motivation/ appreciation	Having a positive attitude towards working together in a team and to appreciate team diversity. Finding it important to have a 'team spirit'. Being motivated to develop own competence to successfully work in a team.
2	Knowing why (distant understanding)	Knowing that teamwork is a more effective way to achieve results. Knowing it demands from individuals to coordinate their work considering individual competences and abilities.	Using, imitating	Contributing to team work when being invited or instructed to. Fulfilling assigned tasks in a team by following the example of others.	Perspective taking	Being interested in the potentials of team work and to learn more about it.
1	Knowing what	Knowing that teamwork is collaborating with others to reach a shared goal.	Perceiving	Recognising situations in which teamwork is feasible to reach goals.	Self-orientation	Seeing teamwork as something positive, but without considering developing own team work competence.

Fig. 17: LEVEL5 Reference system (Learning field)

Knowledge, skills and attitudes in the learning field are described in a consistent way on the five quality levels including potential learning outcomes. Appropriate learning activities, materials, resources, and potential validation settings are assigned to and allocated in the reference systems.

5.4.3. Learning Pathways - Planning not formal learning

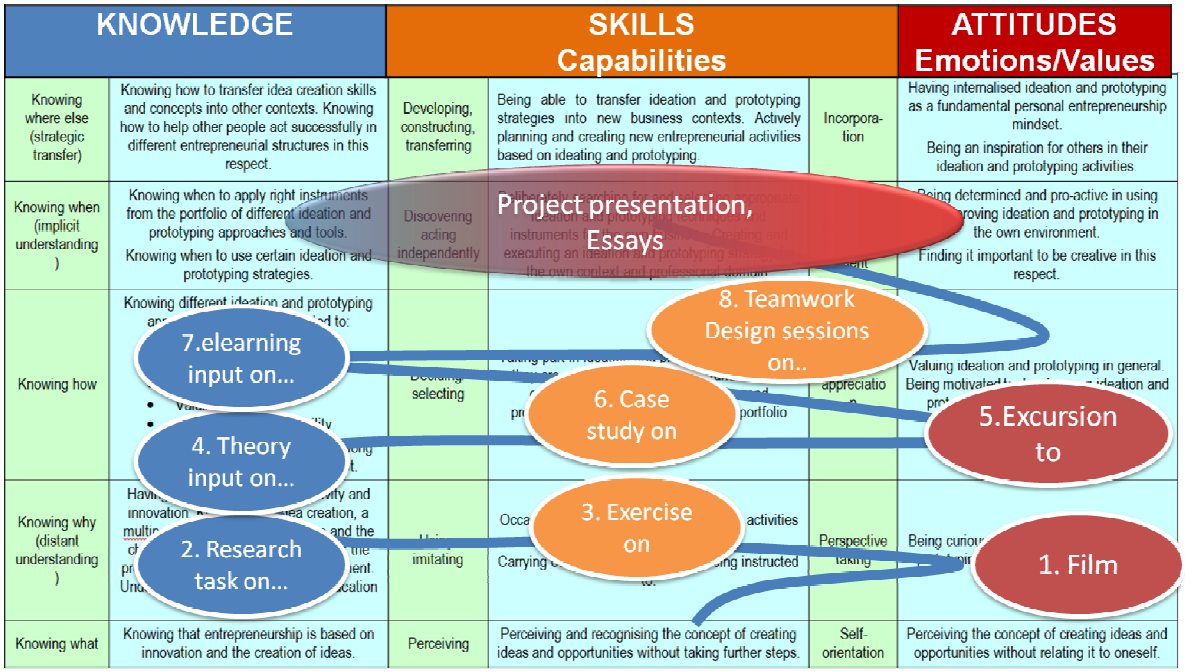


Fig. 18: Learning pathway with envisaged activities in the Learning field

In a nutshell: What do we have to consider while planning and delivering COL?

- Assigning the right tasks to the right boxes; Depending on
- content levels (level of complexity)
- levels of difficulty
- levels of knowledge, skills
- attitudes
- intention of the designer

The action and learning fields help the learning designer to identify different competence levels, to describe learning outcomes related to the levels and the three dimensions (columns) knowledge, skills and attitudes. They are then able to deliver a kind of landscape to develop a consistent and high-quality learning pathway – also in informal learning settings.

Based on these landscapes, designers can also plan entrepreneurial learning or learning trajectories when the learner is not in a classroom (e.g. in internships, volunteering or on mobility) and/or connected with mobile learning apps.

5.4.4. Validation Design for informal and non-formal learning

Validation is a complementary process to planning and delivery of competence-oriented learning. As outlined in the competences for AE professionals, validation refers to the identification of already available competences, their documentation, a competent assessment and (if needed) a certification as formal proof of the learning activity.

The identification can be easily integrated into the learning processes, for instance as entry questionnaires or competence spiders based on self-assessments.

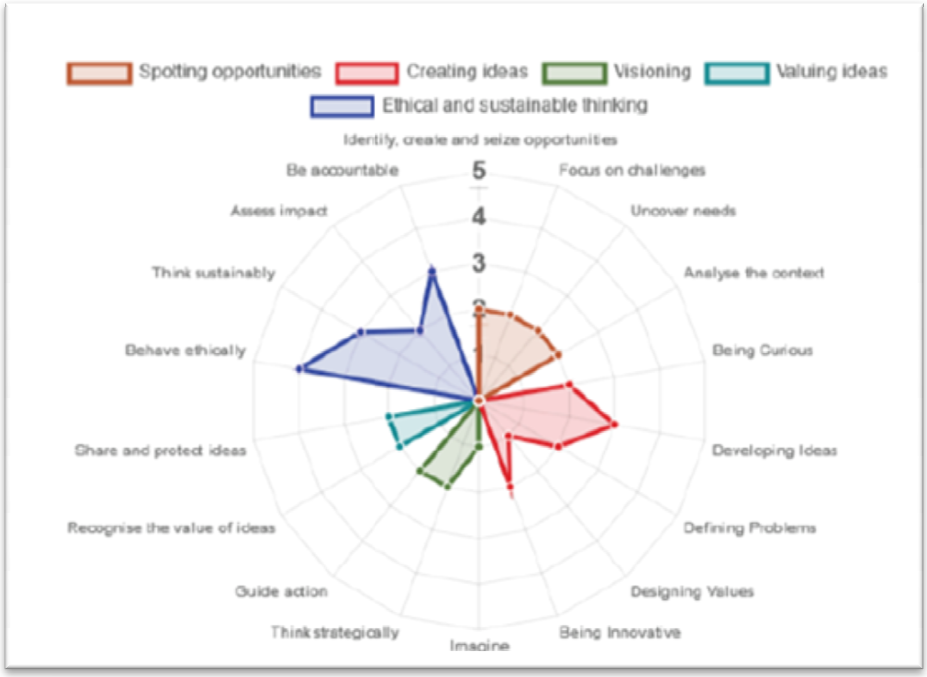


Fig. 19: Competence spider on the Competence to spot ideas and opportunities used in design thinking

Documentation, as outlined above, can be facilitated with e-Portfolios (e.g. mahara as an Open Source tool). Here, the learning proofs or artefacts can easily be collected and connected to the learners' competence profiles.

Assessments have to be competence-oriented as well. This refers to

1. the competence column (knowledge, skills and attitudes): there is no need to identify and measure complex attitudes with simplified tick-box questions.
2. on the other hand, to the competence level (again, the higher the competences level is, the greater the need for a more complex assessment)
3. to the purpose (formative to empower, summative to measure performances)

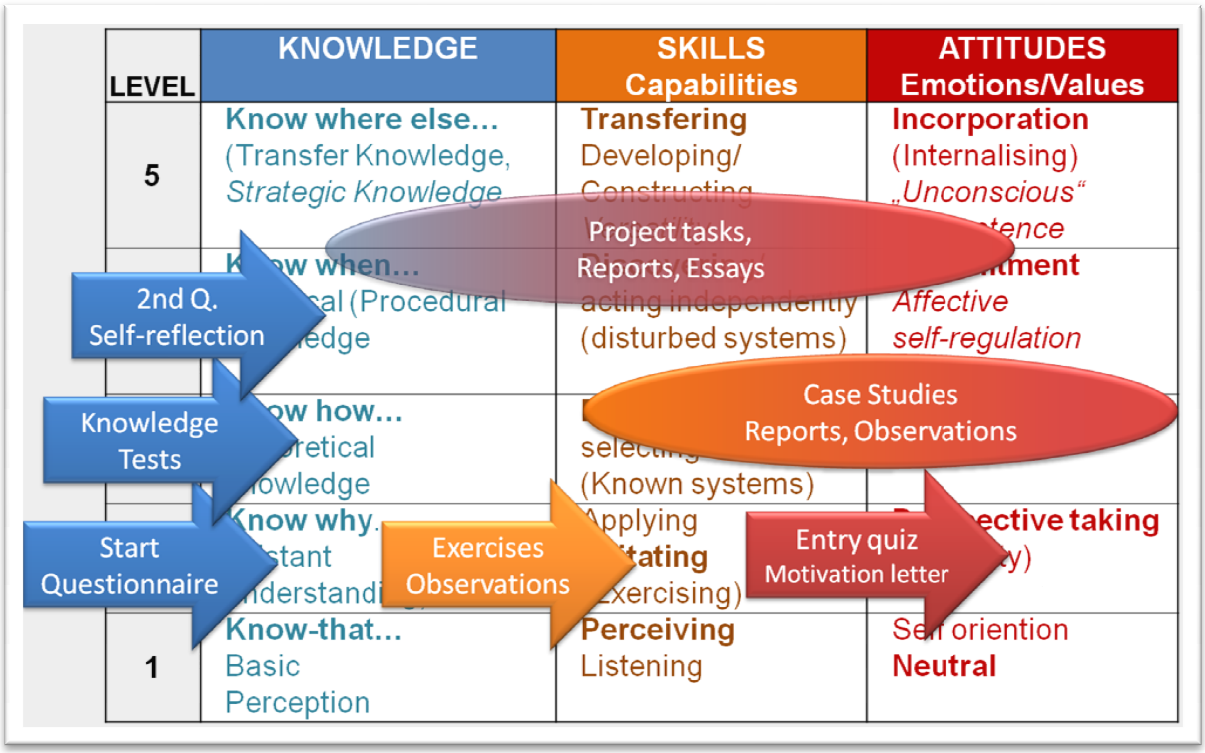


Fig. 20: Schematic ordering of assessments with a reference system for competence-oriented learning

When looking for proofs of learning we should also consider that a smart assignment is often a very powerful assessment tool. Especially in higher competence regions it is not helpful to only go for a knowledge related assessment, since the performance quality can only be observed by looking at all three dimensions.

At least from level 4 the complexity of a challenge is in most cases so high that it needs more than just a simple, descriptive report to understand capabilities, motivation and commitment but also procedural knowledge. We can expect a rather high level of reflection on a problem and self-reflection (metacognition) which will only be revealed either in more complex essays and/or in complex pieces of work.

Given that, it is only logical that the individual (who is in the centre of the validation, remember?) has the opportunity to organise his/her learning proofs accordingly, for instance in a web-based portfolio which also facilitates a 'management' of these proofs of competences.

Eventually the learning outcomes have to be documented and (if useful) certified.

A standard LEVEL5 certificate is displayed below, in this case related to a design-thinking learning project and the validation of the competences to spot ideas and opportunities[15] and intercultural teamwork.

As outlined above LEVEL5 is not only designed to proof singular performances but the development of a learner in a practical and complex learning project.

[15] Based on the EntreComp framework

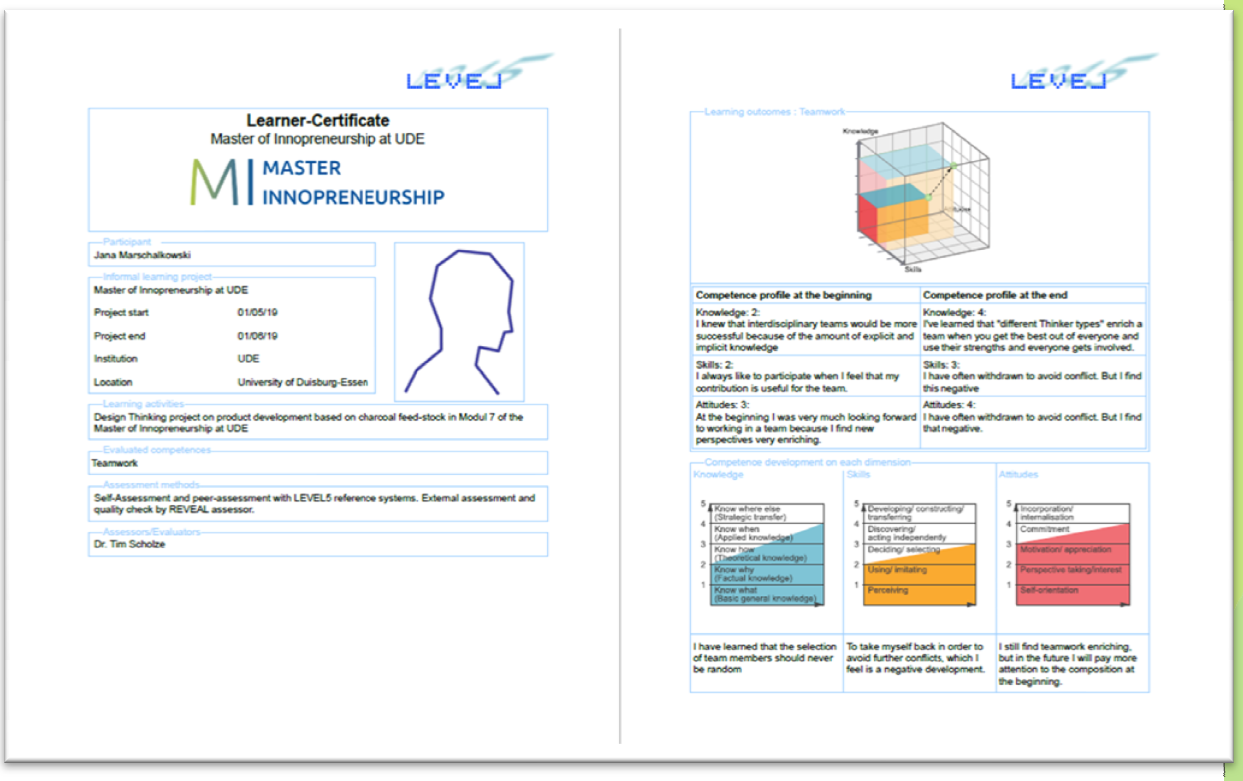


Fig. 21: LEVEL5 certificate template

The competence development is displayed in the 3-dimensional LEVEL5 cube and in the 2-dimensional visualisation of knowledge, skills and attitudes.

The learning outcomes at each stage are described to the left of the cube and below the dimensions. If needed learning outcomes related to the ECVET systems can be easily included, if the learning providers in adequate settings (e.g. in formal VET contexts) wish to do so.

Competence descriptions (learning fields with expected learning outcomes) are annexed to the certificate to describe the context and the learning environment.

6 Towards Professional Development of Adult Educators

6.1. Trends in CPD for Educationalists

From in-service courses towards lifelong in-service learning

Looking at the changing role of educators along similar lines to the historical evolution of views on learning, we see trends in the way in which professional development of educators has been perceived and approached throughout recent decades. The roles of those who promote and facilitate their professional development evolved accordingly.

In-Service Training Courses

Traditionally the professional development of trainers was organized as in-service courses, aimed at updating knowledge and skills in subject matter, in the modification of curricula and occasionally in educating methods. The focus was on being trained rather than on professional learning. In the seventies the emphasis on professional learning shifted from skills training towards approaches more focused on teacher thinking and teacher planning processes.

Tailored in-service education

After a long tradition of training focused on individual teachers, offered by universities and colleges, the concept of school-based in-service was explored. Learning was not only a matter of being trained, it was a matter of committing oneself both as an individual and as a team.

Schools and learning institutions began to take more responsibility for their development as an organization and in-service education became more demand driven. Learning in in-service education had to be more tailored to specific work situations. This new approach of site based in-service delivery required new competences among in-service educators. They now had to fulfil several roles: as catalyst, problem solver, process helper and resources linker.

From in-service education to in-service learning

External, school based in-service learning was the dominant approach for several years but then an awareness arose of the necessity to learn whilst at the workplace, using the employer's own internal resources. After all, retention of what was learned outside the workplace and its translation into daily practice remained insufficient. Constructivism entered the field of professional development of educators with induction programmes for educators starting at the workplace, mentoring and coaching, creation of teacher portfolio's, etc.: the focus was on learning as a part of integrated process of professional development.

In-service educators re-defined their positions and assumed the role of embedded facilitators of learning. Gradually the emphasis shifted to more co-operative forms of in-service learning. Professional learning communities, communities of practice, study circles, networks and partnerships became terms frequently used. Still the focus was mainly internal.

Contextual learning in management and teaching

Whereas in-service learning can still be considered as an activity that alternates with working – one learns and then one applies – the idea behind knowledge productivity is that change and innovation are not interruptions of stable periods in which practice doesn't change too much. On the contrary, change and innovation were seen to be the 'normal' situation. Current views include the idea that educative organisations, and maybe the educational profession, as well as society as a whole,

provide educators and managers with an environment that continuously evokes learning, that helps them to produce and create knowledge, and stimulates them to upgrade the profession and their own competences repertoire within it. The challenge became to optimize this environment as a learning environment for all parties involved. We live in a learning landscape in which we upload and download knowledge, in which we produce and share knowledge, in which professionals cross borders and barriers and in which they include many media and modes of learning. This rate-of-change is both accelerating and expanding. The necessity of learning increases; the complexity of learning increases; the modes of learning become more varied and at the same time we see that professional learning increasingly becomes part of the work. It no longer seems possible, nor desirable to make a distinction between work and professional learning. Professional learning has become our work. Teaching and learning amalgamated. The same applies to management and professional learning. Managers and school leaders are learners and facilitators in a learning environment for all. The ever-present risk is that by integrating learning and work, the need to be aware of competence development, and to reflect on it, record it and validate it become submerged. The employer may (wrongly) see competence value accruing to the learner as a loss of productive value to the employer, and the tying of learning to the workplace may limit the learner's ability or even willingness to experiment with newly learned competencies in other, outside applications and contexts.

Learning beyond Organisations

Learning so far has been treated as something that happens within school or college organisations. The reality is that much learning occurs between organisations, or between persons in a variety of contexts and interconnections. Educators and other professionals work in their own settings. At the same time however they take part in professional networks of various kinds. A few examples of networks, that may extend beyond one's own organisation are:

- Communities of practice
- Alumni networks
- Search engines (Google)
- Associations, networks, conferences
- Partnerships
- International links
- E-learning environments
- Data bases
- Peers, professional and other friends, family
- Social media
- Blogs
- Synchronous web-based communication

At all levels and in different circles people gain input that adds to their experience and competence. The organisation's curriculum sketched above would be too narrow a concept, if it were to make us neglect these processes that often occur beyond the direct sphere of influence of one's own organisation. A curriculum for learning refers to a wider landscape that exists beyond organisations, that is partly virtual and that allows us to create and produce knowledge that exists beyond the individual human mind. It is the body of knowledge that composes the knowledge/competences included in the profession.

6.2. CPD as part of European KA1 courses

International courses, job shadowing and other staff training opportunities within a KA1 project are the corner stones of continuous professional development (CPD) in the ERASMUS+ programme. The KA1 programme is based on the CPD needs of the school or adult education organization and indicates the teachers/trainers involved and the type and topics of the course/training envisaged. The system however encounters some difficulties.

The sending organisations in the KA1 system are all kinds of educational and training organisations spread over Europe. They apply for a KA1 grant and, if successful, look out for appropriate courses, job shadowing opportunities or conferences (abroad) to suit their training needs and send out their staff. Since the sending organisations, after approval of their application, can pick any course/training that suits their needs, the group of course/training providers consists of a large variety of organisations: public training organisations as well as private bodies.

The common point of the successful KA1 projects and grant holders is the so-called European Development Plan in which the organisations describe their perspectives and development trajectories. In other words: the direction in which they want to evolve, which services do they want to offer (with which contents, methods, qualities) and what kind of competences do they need amongst their educational professionals.

In fact, this is a nearly identical approach as promoted by LEVEL5 – a first definition of the 'Action Field' which is transferred into a 'Learning Field' by defining, describing and fine-tuning the competences that the professionals would need.

KA1 learning activities have a huge potential since they offer opportunities to learn and work in intercultural, interdisciplinary European teams. KA1 projects can become the drivers for innovation and state of the art CPD for the European Educational community, if the offers relate at least in the majority to certain quality criteria, which have already been defined in the LLP as forerunner programme to ERASMUS+.

6.3. Quality criteria and Learning Activities in CPD for AE

Continuous professional development - in view of Education & Training 2020 - calls for competence development, for a needs-oriented approach, an international profile, validation of learning outcomes and learning agreements, and puts forward a number of priority themes. Most of these elements are reflected in the criteria of the KA1 applications of the sending organisations. These applicants are looking for the courses answering their needs and fitting their European development plan. The European policy is present on the demand side so it should also be present in the training offer.

So, for REVEAL the course quality criteria are clear. Courses should:

- be innovative and competence oriented
- care for quality and have a self-evaluation system on board
- link up with European education priorities
- include a European dimension and exploit the European added value
- engage in learning agreements and validation of the individual learning outcomes
- use ICT in an appropriate way
- take care of transfer and impact

Within REVEAL we focus on adult educators in various contexts, some of them are involved in adult educators' courses, others may be involved in mobility learning delivery. Some people may be involved as managers responsible for the professional development of staff, or as staff attending courses or as participants in other mobility like activities. In each kind of involvement, the challenge is to organise and design the learning environment and activities in a way that facilitates the acquisition of competences optimally, both as learning experience and as inspiration for personal growth.

In the learning arrangements needed to promote learning among adult educators in an international EU context, like we wish to establish in the REVEAL project. Various activities may be included that promote learning in a competence-oriented way. These activities may include:

Work learning processes

Work-learning refers to opportunities to engage in any kind of work that will be relevant to the necessary competence level that still has to be acquired, while simultaneously or alternately focussing on acquiring both the knowledge skills and attitude needed to reach the required level of performance. Such experiences need to be embedded in processes of feedback and dialogue

Shadowing

Shadowing is limited to observing others while they perform their professional tasks. Such learning process gains value if it is a process one may identify with. Therefore, a good relationship between the shadower and the one being shadowed is of vital importance. Even though the activities are not shared the learning it evokes may well be shared. Reflective dialogues are needed for that to happen.

Attending courses

Courses at first glance may seem the more traditional approach to learning, but the course may very well be designed in a competence-oriented way, including meaningful hands on experiences, followed by feedback and reflective dialogue. A big advantage of the course mode is the presence of others to identify with and to share your analyses and reflections with. These interactions with peer learners add depth and variety to the learning process

Action research

Already we have seen in the nineteen eighties the idea of teachers as researchers being launched[16]. The idea is that teachers who engage in practical research, develop a sense of self-directed learning in which they build new and personalised knowledge to be applied in their own practice. This way their knowledge is situated, personalised and may be shared with peer teachers. It is important that educators use research as a means for their own development, which implies that the themes should be highly relevant and not to academic. As in many forms of teaching, the alternation between doing research and giving a presentation, between exploratory design and demonstration, between practice, performance and the masterclass are crucially informative. To reflect on choosing effective teaching methods improves self-analysis of one's own work and to work at expanding one's own repertoire broadens the basis of experience from which to teach and mentor.

[16] Nixon, J. (1989, Winter). The teacher as researcher: Contradictions and continuities. Peabody Journal of Education, 64(2), 20-32. EJ 395 998

Narratives/story telling

Story telling is a highly powerful way to make learners experience their work and their learning trajectories as a journey with themselves as the protagonists and navigators. The communicative part of the storytelling strengthens the possibility to identify with each other experiences and learning outcomes. The element of creativity and art that is to be integrated in a story telling, or narrative approach, helps the participants to process the stories, to identify with them and to gain a sense of meaning that goes way beyond just the content of what is shared. People may really connect and touch wavelengths that otherwise may have remained untouched. Storytelling has been often dismissed as just 'folklore repetition' but in many major societies that developed before written records evolved, story-telling was a highly effective method of transmitting critical skills and knowledge, using role-play, imagery and context that could sometimes mean the difference between life and death.

Creative reporting

Whatever mode of learning adult educators may choose to be part of, the process gains value once it leads to a memorable output. This may be a report, but better is to make it a creative record including elements such as photo's, sound recordings, recipes, drawings, cartoons, sculpture etc. The sense of ownership of the learning process and outcomes will grow as a consequence and what's more, the tangible memory will keep the experience alive way beyond the actual duration of the activity and the enduring record or installation can acquire an intrinsic artistic value all its own.

Product development

What was explained above becomes even stronger once people actually create a product. This may be of various kinds. It may be a video production, a tool, a booklet, a painting, a model or a song. The idea is that it even more than creative reporting it will produce a tangible memory and anchor for future reflection. The idea of analysing a situation, detecting problems, developing solutions and applying such a solution while reflecting on it parallels the core thoughts of design thinking. Working according to such steps helps people to feel they are both the architect and the beneficiary of the solutions they came up with.

Blended learning

The learning environment in today's society increasing has become virtual. Through the Internet, media and social media the world of educators has grown bigger. Knowledge is available in many sources. Communication about issues may be done instantly with colleagues anywhere. These opportunities have profoundly affected the learning environments of people and the roles of those who are involved in it either as learners or as facilitators. Connectivity is an important asset in learning environment. Still at times it will be necessary to focus on the processes of learning and of co-operation learners are involved in within their groups without distractions from the outside world. For that reason, it is a challenge to find a balance between phases of learning in which it is beneficial to connect and phases in which it is better to switch off and concentrate on the (learning) processes and people in the group.

6.4. Professional Competences for Adult educators

With the definition of competence in mind and building upon the result of the EU studies ALPINE (adult learning professions in Europe) and a few follow up activities, on the competences of adult educators[17], we made an inventory of the competences an in-service course organiser would need to have. The elaboration of these competences is made according to the competence model included earlier in this document.

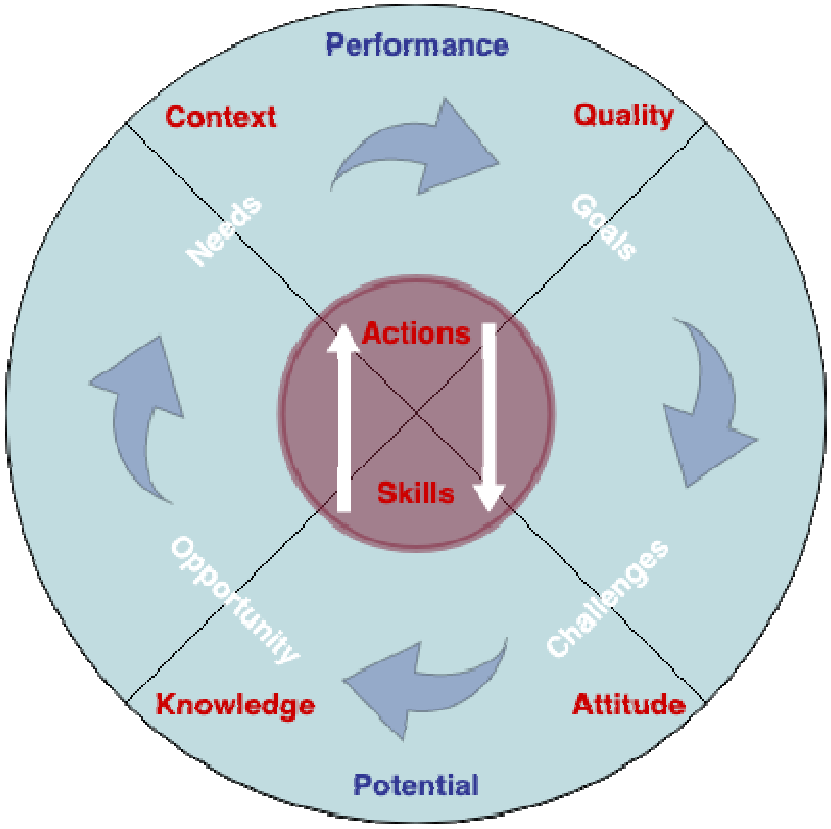


Fig. 22: Components of Competences

It includes the knowledge, the attitudes and the skills required and the actions that the course organizers or mobility facilitators will need to show in a variety of contexts and with a particular quality. The competence profile mentioned above serves as the basis for the elaborations below. The focus is on the competences of organising and implementing international courses, or mobility learning offers. Both the elaboration and the model consist of two sectors/triangles. One includes all knowledge, skills and attitudinal elements as derived from a literature search on the relevant background of course organisers and trainers.

The actual competences is assumed to be an integral synthesis of these components that is demonstrated in, or shown in behaviour in a relevant and authentic context at a defined level of quality.

These last three elements (behaviour, context and quality) are assumed to be connected by a contextual mechanism in which the organisers/trainers are moved forward by an awareness of their needs and the goals they set given the challenges, and opportunities they are facing. The competences as defined in this exhaustive and analytical way (including all angles of the two triangles) are rich in detail. This is both an advantage (the richness) and a disadvantage, (the number of details). That is why after this exercise of unravelling the competences, we attempt to distil the

[17] KCAE, GINCO, GINCO T&T, PROVIDE, IMPACT, REVEAL

number of details again into a smaller set of core competences. The richness of the triangles as outlined above serves as an underlying justification of the core competences identified, and is a helpful source when later in the process the core competences will have to be turned into a professional profile, a course offer, or mobility offer; an assessment, or a validation process and tool.

For practical purposes we will focus on a manageable number of 24 competences we clustered together based on the analysis mentioned.

They are clustered in 4 action areas relevant for educational professionals and relate to:

1. Competences **to plan** Competence Oriented Learning
2. Competences **to deliver** Competence Oriented Learning
3. Competences **to validate** Competences
4. Competences **to evaluate** Competence Oriented Learning

Additionally, there are a number of generic competences that Adult Educators should acquire to perform in competence-oriented learning arrangements.

The inventory of competences for COL&V gives an overview of 24 identified competences for educational professionals. These competences are clustered into 5 competence areas: planning competences, competences related to the delivery of training, competences related to evaluation and validation and generic competences.

		1. Competences **to plan** Competence Oriented Learning	
1	P1	Planning, preparation	Assessing learners' needs and motivations
2	P2	Planning, preparation	Designing and constructing trainings and programmes
3	P3	Planning, preparation	Planning and designing the learning process
4	P4	Planning, delivery	Deploying different learning methods, styles and techniques
5	P5	Planning, delivery	Creating competence-oriented learning offers:
6	P6	Planning, delivery	Creating an open learning environment
		2. Competences **to deliver** Competence Oriented Learning	
7	D1	Delivery	Facilitating ICT based learning
8	D2	Delivery	Facilitating (open) learning processes
9	D3	Support	Advising/counselling on career and further life planning
10	D4	Support	Mentoring an intern/trainee/apprentice
		3. Competences **to evaluate** Competence Oriented Learning	
11	E1	Evaluation, QM	Designing an evaluation process

12	E2	Evaluation, QM	Defining the right indicators and apply the right instruments for evaluation
		4. Competences **to validate** Competences	
13	V1	Validation	Assessing competences and competence developments
14	V2	Validation	Evidencing competence developments in terms of learning outcomes
15	V3	Validation	Integrating validation concepts promoted by the EU
		5. Generic Competences	
16	G1	Personal/delivery	Being an expert in the content matter
17	G2	Self/personal	Lifelong learning
18	G3	Social/delivery	Motivating/empowering learners
20	G4	Social	Communication
21	G5	Social	Teamwork
22	G6	Social	Networking
23	G7	Social	Managing diversity
24	G8	Social	Intercultural communication

In the following section each of the competences is described in terms of abstract and general learning outcomes that relate to an ideal, to which a professional working in this field should aspire.

6.4.1. Planning competences

P1: Assessing learners' needs and motivations

Description: The learning professional is competent in assessing the prior experience of learners, identification of the perceived learning needs, demands, motivations and wishes of learners. This includes insights into the intrinsic motivation (e.g., self-generated willingness to learn), and the extrinsic motivation (e.g., responsiveness to external pressures from others, the reward of a diploma or mandatory requirements) of the learners, the learning trajectories and careers (including gaps) and the societal learning needs, including the key competences in lifelong learning. In assessing learning needs, the professional is able to listen carefully, deploy interview techniques, read body language, and deal with possible language difficulties and other disadvantages. The professional is able to respond to learning needs by deploying a wide range of teaching strategies and is able to see the background, expertise and knowledge of the learners as a learning resource to be used in the learning process.

P2: Designing and constructing trainings and programmes

Description: The learning professional has the competence to design and construct study programmes for learners that are embedded in a wider curricular context and which allow the development of the learners into, or as, fully autonomous life-long learners. The programmes are based on relevant learning theory and the needs and demands of the learners, views on group dynamics, classroom management, the use of course ware and assessment. Furthermore, the professional is able to develop appropriate instructional and assessment instruments that are constructively aligned to aims and objectives and that are attuned to learning theories. The programmes should be deliverable by other learning professionals.

P3: Planning and designing the learning process

Description: The learning professional is competent in designing the learning process for learners of different target groups. On one hand this competence entails the knowledge of the learning needs and deficits of the learners, the level of the learners and the heterogeneity of the group for whom the learning process is developed (if the learning takes place in a group setting). On the other hand, the professional must have knowledge on the different learning phases, processes, styles, methods and programme designs that can be deployed to facilitate the learning process. The design of the learning process can be for individual () learners as well as for a group of () learners. The learning professional is able to use his/her own expertise and knowledge of relevant learning resources and the potential of the learners themselves to design the learning process. Furthermore, the learning professional is able to formulate and communicate the objectives of the learning process to give a larger picture of the learning process as a whole.

P4: Deploying different learning methods, styles and techniques

Description: The learning professional is competent in, and shows confidence in, using different learning methods (didactics), styles (approaches) and techniques including new media, ICT and social networks in the learning process Didactics refers to specific methods to enable learners to learn and gain knowledge and skills. Approaches alludes to the different styles of transferring knowledge, which includes traditional teaching, facilitating, coaching and supporting learners in their own learning process. Furthermore, the professional should be aware of relevant recent developments concerning new methods, styles and techniques, and of the new possibilities that come with this. Also, the professional is able to critically assess the value of new technologies for the learners.

P5: Creating competence-oriented learning

Description: The learning professional knows how to systematically plan, organise and elaborate a learning experience and the necessary conditions to launch, support, maintain and promote this experience. In order to do that, they use guidelines on how to set and formulate competence-oriented goals. They are familiar with ideas on self-regulated and contextual learning. They know what kinds of (learning) activities support distinct competence developments. And know how to evoke these activities by means of actions, tasks, assignments and settings. They are able to create the open learning environments needed to ensure motivating, rich and reflective learning conditions (including required sources and resources, ICT infrastructure/equipment/software), or see to it that this is taken care of properly. They are well aware of, and capable in planning the learning conditions in such a way that the learners can work on the development of their competences in mutually beneficial ways.

P6: Creating an open learning environment

The learning professional is competent in creating open learning environments. The professional is able to design, develop, implement, and facilitate learning in open environments and can give support to learning professionals working with, or in, open learning environment and learners who use them to further develop themselves. Furthermore, the professional can assess the effectiveness of the open learning environment.

6.4.2. Competences when delivering learning/training

D1: Facilitating ICT based learning environments

Description: The learning professional is competent in facilitating and supporting ICT based learning environments. The professional is able to design, develop, implement, and facilitate ICT-based learning environments and can give support to learning professionals working with, or in, an ICT-based learning environment and learners who use ICT to further develop themselves. Furthermore, the professional is able to assess the effectiveness of the ICT-based learning environment.

D2: Facilitating (open) learning processes

Description: The learning professional has the competence to guide learners in their learning processes and in further development toward, or as, fully autonomous lifelong learners. The professional supports the learner in reaching the objectives of the learning process and in following the defined learning strategy. The professional is able to use different learning methods (didactics), styles (approaches) and techniques, including the use of new media and ICT. She or he is able to relate learning to everyday life and to attune the learning process to the living world of the learners. The professional is able to provide relevant and contextualised tasks and activities and assess the outcomes of these. The professional is flexible and has the ability to change the learning strategy when necessary. The professional ought to be able to align the learning process properly according to the delivery mode and context (traditional classroom, distance learning, in-service, workplace, etc.).

D3: Advising/counselling on career and further life planning

Description: The learning professional is competent in advising learners in their career, life, further development and, if necessary, is able to refer s to other professionals (in case of professional help, illness etc.). The professional has knowledge on career information, work environments and educational offerings, and can assess the need for professional help. The professional has knowledge and understanding of the stages of development of the learner and has the ability to use tests to collect information on characteristics of the learner.

D4: Mentoring an intern/trainee/apprentice

Description: The learning professional is competent to accompany a learner who is placed into his/her working environment. In many cases the professional may not have an educational background. However, it will certainly improve the efficiency and the impact of this important learning modality that the person has a basic understanding and skills and a positive attitude regarding this competence. In educational terms mentoring comes very near to the instructional model of a hospitation (learning from a model). It is most effective if the placement is taking part in a structured and planned way (e.g. as a project).

6.4.3. Evaluation competences

E1: Designing an evaluation process

Description: The learning professional is competent to design an evaluation process and to transfer it to other domains of work. He/ she is able to adapt the design according to the learning needs of the learners. In order to design an evaluation process, the learning professional needs to have profound knowledge about a variety of evaluation methods and techniques and is able to apply them according to the concrete group needs and the conducted training and the transmitted knowledge. He or she is self-reflective and uses methods of self-evaluation as well.

E2: Defining the right indicators and apply the right instruments for evaluation

Description: The learning professional is competent in using appropriate evaluation instruments and to create and apply the right indicators to get reasonable results and to facilitate the evidencing of the evaluation results.

6.4.4. Validation competences

V1: Assessing competences and competence developments

Description: The learning professional is competent to assess competence developments and is aware of the importance of this task for learners, educators and staff who are in contact with the learners in different learning contexts. He/she is aware that the context may vary depending on learners' groups, the setting and the level of formalisation. It is also determined by the purpose of validation (internally to prove the efficiency of the learning or external to illustrate the potential of the learner).

Assessment can serve to check/measure the performances of learners or even be used as motivation to continue learning (summative assessment vs. formative assessment). Hence the assessment settings and methods have to be chosen in accordance to the context, the purpose and also regarding the available resources. Assessment can (ideally) be built in the learning process to achieve a holistic learning design.

V2: Evidencing competence developments in terms of learning outcomes

Description: The learning professional is able to rate and evidence learners' competences and competence developments, providing evidence and to document (describe) learning outcomes. It requires knowledge on theories about competence development, the concept of learning outcomes, and skills in how to describe them in a correct and meaningful way and a respective attitude to do so. It also requires knowledge and skills on quality assurance and criteria (validity, objectivity, reliability, level consistency). It relates to educators and staff who are in contact with the learners in different learning context.

The context may vary with the learners' groups, the setting and the level of formalisation.

It is also determined by the purpose of validation (internally to prove the efficiency of the learning or externally to illustrate the potential of the learner).

V3: Integrating validation concepts promoted by the EU

Description: The learning professional is able to connect competence assessments and ratings with LEVEL5 to EUROPASS, EQF ECVET and/or other official frameworks. This requires knowledge on those frameworks and the whole validation approach as promoted by the European commission, skills in applying them and the respective attitudes concerning the aims and appropriate utilisation of these

European systems. It requires knowledge on the structures, elements and principles of those tools and instruments as well as on the whole validation concept. This competence relates to the ability to transfer competences and competence developments into the systems based on EQR, to describe learning outcomes for qualifications, to rate learners according to those LO descriptions and to allocate the ratings in learning units and respective EQR-levels.

This competence is important for educators and staff who are validating learners in different learning contexts, be it in real validation situations related to the recognition of prior learning (validation shall be introduced in every members state by 2018) or in learning situations in which the assessment and documentation of competences plays a role. They should also know the connections and interfaces of these systems to Open Learning Environments (e.g. e-Portfolios). Finally, they should know about the challenges and interfaces between the EU validation system and concepts like social, personal and organisational competences and key competences.

6.4.5. Generic competences

G1: Being an expert in the content matter

Description: The learning professional is competent in using their own expertise in a specific field of study or a field of practice and is aware of relevant recent developments in the related (academic) field of study or practice. This is not only to transfer knowledge or skills but also, by selecting and providing resources, to enable learners to learn and develop themselves. Closely related to this competence comes the competence to choose and attune resources to the educational level and background of learners.

G2: Being a lifelong learner

Description: The learning professional is competent in systematic reflection of their own practices, learning and personal development and is able to incorporate the findings of that reflection into their own professional practice.

The professional is able to see their own practice within the larger context of the institute, sector, the wider profession and society and is able to define their own role and responsibility within these contexts. Regarding this responsibility, the professional portrays consistency, authenticity, discipline and critical thinking. The professional is concerned about their own development, is willing to further develop and improve him/herself and sees him/herself as an autonomous lifelong learner. Furthermore, the learning professional has some basic organisational skills, such as time management.

G3: Motivating/empowering learners

Description: The learning professional is competent in empowering the learners to develop themselves towards, or as, autonomous lifelong learners. The professional is able to use different styles and techniques to motivate, empower and inspire learners in their learning process and is able to make the relevance of the learning clear from a broader perspective. The learning professional is responsible for creating a stimulating learning environment for learners.

G4: Being a communicator

Description: The learning professional is competent in communicating with others involved in professional practice, is able to establish a relation of trust and shows integrity through his/her way to communicate. In the communication with learners and with colleagues the VET professional is aware of different communication styles and techniques and that different situations and settings

require different styles and techniques of communication. Communication is used by the educator as a means for interaction with learners and colleagues and through appropriate communication the professional can identify problems, can discuss them and find solutions in improving the learning process.

G5: Being a team player

Description: The learning professional is competent in interacting with others involved in professional practice appropriately. In the collaboration the professional respects specific backgrounds, competences and skills of team/group members and has the ability to act as a team player. This involves communication skills like assertiveness, clarity and active listening, awareness of diversity in teams and potentials of teamwork. He/she has an attitude of appreciation for teamwork as efficient way of collaborating and source of creativity and is determined to contribute to the success of the entire team. He/she is aware of the roles and capabilities in the team and acts accordingly.

G6: Being a networker

Description: The learning professional is competent in interacting with others involved in professional practice, is able to establish relationships and to build up a network of relevant contacts in his professional setting. In collaborating with colleagues and stakeholders, the professional has the ability to exchange knowledge and experience as well as to establish new contacts in a target-oriented way. The professional is aware of his/her role in different context and knows feasible approaches to establish new contacts, taking into consideration the working contexts and roles of other stakeholders. He has internalised his/her own goals and recognises opportunities to promote these towards others.

G7: Managing diversity

Description: The learning professional is competent in dealing with the heterogeneity and diversity in the historical, social, economic, religious background, learning needs, motivations, prior experience and knowledge, learning history, (learning) abilities, learning styles, age and gender of the learners and to understand their stages of development. This includes understanding of the value of diversity, respect for differences and the ability to incorporate or obviate any differences in the learning process. The professional shows empathy, is reliable, authentic and loyal to the learners. Furthermore, the professional has the ability to analyse behaviour of learners and the group, the ability to identify possible problems and conflicts and to act strategically to prevent and/or manage possible conflicts and anger towards individual learners, the group and the professional him/herself. The learning professional is responsible for creating a safe learning environment which is based on mutual respect and cooperation in which the learners can develop into, or as, fully autonomous lifelong learners.

G8: Intercultural communication

The learning professional is competent in interacting with others involved in professional practice with different cultural backgrounds, is able to establish a relation of trust and respect. Competence in communicating with other learners, colleagues and stakeholders

7 Annexes - Toolboxes

7.1. Planning Informal Learning

Informal learning is not necessarily incidental. Informal learning can be planned – at least to the extent that the "quality" and the efficiency as well as the joyful experiences can be increased.

It needs reflections of the settings, the resources, the target groups and the didactic and mathetic processes to design an informal learning setting and process.

We developed so called "Informal Learning Patterns" as a counterpart to 'instructional design patterns' that are used in formalised learning.

Prior to the patterns we present you a number of practical examples for informal learning and the development within the learning engine.

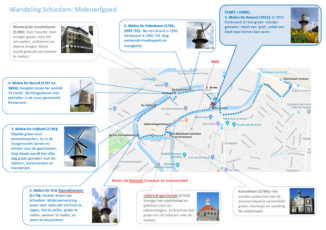
7.2. Examples of Informal Learning Settings

Learning with Windmills

A first Informal Learning Setting was created by our partners from the Netherlands and it relates to "Learning with Windmills". This "learning in cultural heritage".

An example is a walking tour through the city of Schiedam, including five windmills and other buildings, all built to contribute to the production process of genever/gin. The tour offers lots of opportunities to develop competences. In the tour in Schiedam the focus is on:

- Life and work in/around windmills
- Production processes of flower and eventually gin
- Weather and wind
- Technical aspects of windmills



During the tour, visitors answer questions and fulfil assignments about these four themes.
They enjoy themselves; they do a lot. Meanwhile though they learn a lot and become aware of many more things they may wish to know more about. That is where the engine of learning starts moving.

Bird watching

Bird watchers try to learn about birds, the wish to spot as many different birds as possible and try to extend their knowledge of birds. While doing so they get to know a lot about where the birds move to and from, and thus they extend their geographical know how.

They acquire competences in using camera's and binoculars, they find out things about behavioural patterns of birds, they become skilled hikers and climbers in order to get to otherwise inaccessible places.

They may read about birds in foreign countries, they improve their language skills to understand books in English. Bird watching isn't just about birds, it is a vehicle to open a world of learning opportunities. Bird watchers get engaged in a mix of experiences, study and dialogue that moves their learning further, in many ways often even without being aware of it.

Singing in a choir

Many people like to sing, some become members of choirs. While doing so the choirs study rehearse songs, the read the lyrics, they meet other choirs, they may talk about the songs, the cultural backgrounds, the meaning, the relation to national or other identity etc. By doing so they learn so much more than singing. They may develop an interest in culture, in people is history, in music theory, in foreign languages, in lyrics. They rehearse, they read, they study, they discuss, they develop knowledge, skills, and attitudes integrated in competences they continuously seek to extend. While they are active as members of the choir, the engine of learning moves on and brings them to higher levels of performance.

7.3. Planning Tools - Informal learning patterns

How can informal ('unplanned') learning be improved without 'formalising' it too much?

We developed a new planning device as a counterpart to 'instructional design patterns' that are used in formalised learning.

Basing on the concept of the "Göttingen Katalog Didaktischer Modelle" (GKDM[18]) for formal and non-formal learning a new planning device for informal learning has been developed.

The approach is based on the idea that similarities in the vast variety of informal learning offers can be detected. Derived from these clustered similarities so called 'Informal Learning Patterns'(ILP) can

[18] For more information please retrieve: http://www.blinc-eu.org/uploads/media/Toolbox_on_GKDM.pdf

be established and described according to principles, actors, specific learning activities, impact on competence development and suitable assessment methods.

The evolving database has been connected to reference projects that are available on the websites related to LEVEL5 to deliver recognition patterns for stakeholders in the field.

Please note that this Inventory is based on a competence definition which explains competence as the ability of a person to apply a mixture of knowledge, skills and attitudes/values in a specific situation and a specific quality (level).

Hence the 3 dimensions knowledge, skills (activities) and attitudes (emotions/values) are crucial to outline the effect and impact of the informal learning on the competence development.

We are aiming to expand the models into planning devices of practical (situational) learning in which learners develop their competences fairly informally alongside the practical requirements and 'challenges', problems and assignments that they have to tackle in (professional) real life situations.

The growing inventory of 'Informal Learning Patterns' will be a useful instrument for stakeholders involved in projects ranging in scale and complexity from major practical undertakings to informal school projects, to try new ways of informal learning in their projects.

The ILP is relevant to experts in the field (for instance to the responsible persons in grass-root projects, HR managers or to teachers/trainers who plan rather informal activities of their students/learners in real life situations). It is a help tool to identify good informal learning practice, to transfer the experience in its own context and to describe the learning processes in their projects accordingly.

The patterns are illustrated with the first micro-project examples.

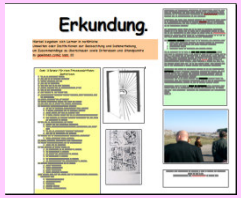
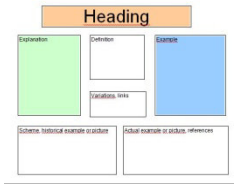
They have been and will be continuously presented on the REVEAL portal as stimulation for potential future users.

Contributors are warmly welcome to add new ILPs and to contribute to our knowledge base of informal learning.

On the last page there is an empty pattern which you can use for the patterns that you discovered.

7.3.1. Explanatory and informative ILP

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
1	Artefact (e.g. technical device, machine) 	Artificial objects may have genuine functions for learning about and with them, the may be self-explanatory. Many things we do are developed on closer examination of details and their mechanisms.	producer, acting person, player	looking, trying out	ACT-NET project: CUBE model -> reduction of complexity	*Knowledge:* Understanding functionalities by an artificial haptic model, know how creation and deeper understanding *Active:* Trying out, activation *Affective:* Creation of curiosity	observation, questioning, tasks
2	Model 	Demonstration models build a (mostly simplifying) copy of a reality for reasons of explanation or insight	producer, acting person, player trainer trainee visitor	looking, trying out Rather holistic learning	PROGRASS project, demonstration prototype Reduction of size of the final plant	*Knowledge:* Understanding functionalities by small size models, know how creation and deeper understanding *Active:* Trying out, activation, application and exercise *Affective:* Creation of curiosity	observation, questioning, tasks,

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
9	Poster  	Poster learning means "learning from posters", i.e. documents with text and image, which present information and message on one page. They resemble in some way the public advertising; they normally have a central topic in combination with one central message and further information which go more into details. So they offer orientation the first sight but also deepening on closer inspection. There exist typical variations in different sectors, like work routine in factories or administrations, explanations on hygiene or on special diseases in doctor's surgeries, central points of quality management in production facilities or short descriptions on research and results on scientific congresses. This is a specimen to generate a poster. **Specimen in .doc-format** **Links:** **teachsam.de/arb/lernplakat/arb_lplakat_3_3.htm** 215 **www.teachsam.de/arb/lernplakat/arb_lplakat_1.htm**	author, designer reader, observer	Reading and discussing with other readers A **poster** is any piece of printed paper designed to be attached to a wall or vertical surface. Typically posters include both textual and graphic elements, although a poster may be either wholly graphical or wholly text. Posters are designed to be both eye-catching and convey information. Posters may be used for many purposes. They are a frequent tool of advertisers (particularly of events, musicians and films), propagandists, protestors and other groups trying to communicate a message. Posters are also used for reproductions of artwork, particularly famous works, and are generally low-cost compared to original artwork. Another type of poster is the educational poster, which may be about a particular subject for educational purposes.	Project posters available on the ACT-NET Websites specimen  Learning posters that have been built by children on their learning process: http://www.letteroftheweek.com/preparatory_learning_poster.html Professionally built learning posters to buy: http://www.entershop.co.uk/index.php?main_page=index&cPath=31	*Knowledge:* This is the major impact: Knowledge and understanding on the content matter *Active:* No impact except one designs a poster oneself *Affective:* Less	Questions do people remember it later? do people convert the message into practice?

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
4	Book, script (	Learning from a book knowledge gained from reading or study rather than from practical experience One could differentiate narrative and expository literature. The first one relates to “story telling”, the second to describing or discussing a specific theme	author, reader designer (if pictures or graphs if any)	Reader: Reading Eventually discussing or even taking notes Writer: Gathering information Discussing information and plot Writing	Any book Teachers help students use popular children’s books to learn key language arts skills such as comprehension, sentence writing, nouns, verbs, synonyms, antonyms, contractions. http://www.picturebooklearning.com/	*Knowledge:* Knowledge and Understanding on the theme *Active:* --- *Affective:* Perspective change, empathy for the main persons in a book, no self-regulation	test, essay, discussion

No.	Pattern	Description	Actors	Learning activities	Example Proj.	*Impact on 3D*	Assessment
5	Handbook, manual	Collection of information with explanations, pictures, schemes, giving insight into functions, processes, regulations	author, reader	Reading Applying Cross-checking Rather sequential learning (step by step)	LEVEL5 Handbook, INTERTOOL guidance	major impact on the cognitive dimension (knowledge and understanding) *Cognitive:* Understanding a specific content that is explained by the advisor *Active:* --- *Affective:* *Dependent of the content; eventually change of perspective*	Observation during application Tests may be included

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
6	Operating instructions„ job-aid“ Flow Chart 	With the technical and scientific progress innumerable amounts of operation instructions have to be produced and used. Technical devices, how to use a stain-remover, how many pills and under which circumstances are some of the needs that we are confronted with. A job-aid is a shortened version for those, who have an orientation of handling the thing, but must be helped in doing it in the right order, e.g.	author, reader	Reading Applying Cross-checking Rather sequential learning (step by step)	Flowchart in LEVEL5 http://www.advancedjobaidsntraining.com/c-5-job-aids-tips.aspx http://www.qaproject.org/jobaids/presentations/Moore - How to Write a Job Aid.pdf Comparing job aids to instruction in courses: http://blog.cathy-moore.com/2010/12/the-anti-course-an-instructional-job-aid/ How to Create a Job Aid: http://www.ehow.com/how_6046856_create-job-aid.html	major impact on the cognitive dimension (knowledge and understanding) *Knowledge*: Understanding a specific content that is explained Practicing, reading, checking *Active:* Practicing according to the flow chart *Affective:* --	Usage Test Observation of usage Questions (asking for success)

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
7	"Belehrung" Advice, Instruction, explaining 	Learning through informal instruction/explanation in the context of acting out. People can give advice to others or can ask for advice by others. "Advice (also called exhortation) is a form of relating personal opinions, belief systems, personal values and recommendations about certain situations relayed in some context to another person, group or party often offered as a guide to action and/or conduct. Put a little more simply, an advice message is a recommendation about what might be thought, said, or otherwise done to address a problem, make a decision, or manage a situation." http://en.wikipedia.org/wiki/Advice_(opinion)	advisor, instructor, trainer learner	listening, looking	Trainer explains specific exercises to learners Trainer explains how to behave in intercultural contexts This is a website for giving and receiving advice: http://www.advice.com/	*Knowledge*: Major impact on the cognitive dimension (knowledge and understanding) Understanding a specific content that is explained by the advisor *Active:* --- *Affective:* Dependent of the content; eventually change of perspective	feed-back, questions, observation of usage.

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
8	Newscast, newspaper  	Learning from actual messages, the continuity has to be established by the viewer. Newspapers report messages about different kinds of life, esp. political, social, economic, cultural life.	author, speaker, audience Publisher, author, distributor, reader	listening/viewing Reading, discussions with others about the articles, writing a reader's letter to the editor	We can learn from newspapers: http://www.gooddocuments.com/philosophy/newspapers.htm Make a Classroom Newspaper: http://www.enchantedlearning.com/newspaper/ http://www.computerwoche.de/heftarchiv/1980/14/1189164/	*Knowledge*: major impact on the cognitive dimension (knowledge and understanding) *Active:* --- *Affective:* Creation of emotions rather with moving pictures	Test, questions, Interview, essay writing, group discussion
9	Feature 	Thematically focused production like a documentary film	producer, viewer	listening viewing producing	Feature about the PROGRASS project broadcasted in TV	*Knowledge*: major impact on the cognitive dimension (knowledge and understanding) *Active*: --- *Affective:* Creation of emotions rather with moving pictures	Test, questions, Interview, essay writing, group discussion

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
10	(Information) stand 	Learning from a set of information which can be read within a short time, with further information on demand (brochure, talk to an expert, e.g.) Pool of information in different formats (posters, presentations, brochures, leaflets and competent personnel) compiled in a specific environment: May be part of a -> fair or exhibition	facilitators, producers designers content producers visitors	Viewing, Watching, listening, explaining Discussing	CESO Promotion stand of "CAN DO"	*Knowledge*: major impact on the cognitive dimension (knowledge and understanding) *Active:* --- *Affective:* Curiosity, perspective change	essay, discussion, observation, short test (questions on exposed information)

7.3.2. ILP related to personal support

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
11	Person as model “Idol” 	"Idol": person as model Imitation (observational, model) learning plays a very important role in human development and can be seen as a basic form of learning (Albert Bandura). In traditional cultures it is a major source for learning and development of children. It takes place through observation (which means, the learning person is passiv and observes), but it can also be initiated by the learning person himself, by questioning or even through provocations (think of a child who hurts a family rule and looks what will be the reaction of the parents). Learning from a person as a model and idol is a rather complex form of learning, it implies not only opinions, argumentations etc. but also ways of expressive behaviours, like moving, making gestures etc.	acting person, looking person	acting person, looking person Learning activities looking, asking/answering, imitating		*Knowledge:* Understanding and knowledge creation rather as side effect Active: Imitation (level 2) *Affective:* Perspective taking	observation, questioning

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
12	Coaching 	"The coach is there to provide bespoke personal development, to listen to your requirements, to answer your questions, to challenge you, to inspire and encourage you." http://www.ldl.co.uk/leadership-management-training.htm A person's present, in order to help them design and act toward the future. While positive feelings may be a natural outgrowth, the primary focus is on creating actionable strategies for achieving specific goals in one's work or personal life. The emphasis in a coaching relationship is on action, accountability and follow through	coach (expert), learner	Advising, listening to advice, questioning, giving tasks, discussing activities.	CESO evaluation of the Can-Do-projects (neighbourhood community development with coaching)	*Knowledge:* *Understanding a specific content that is explained by the coach* *Active:* *If successful "discovering" activities, change of behaviour and action* *Affective:* *Change of perspective and attitude towards a specific topic* *Motivation to take action*	essay, discussion, questions, observation,

No.	Pattern	Description	Actors	Learning activities	Example Proj.	*Impact on 3D*	Assessment
13	Consultation 	Learning/teaching on occasion of other reasons, e.g. getting/giving information on an illness. or to receive information and advice on legal or financial issues The difference between coaching and counselling is very difficult to draw. In psychology the counsellor acts more like a therapist and relates to the personal issues of the client (patient) whereas the coach is rather tackling organisational questions. The look of a counsellor id more focused on the past and the personality, the coach rather concentrates on the abilities. Counselling is more directed in the improvement of the personal situation	counsellor (expert in the field (e.g. medical doctor)), learner, client/patient as learner counsellor, person seeking advice	Providing information on the topic of advice, listening, questioning.	http://www.ferococoaching.com/coaching-and-counseling.html#Flaws%20in%20Most%20Distinctions	*Knowledge:* *Understanding a theoretical background* *Active:* *If successful "discovering" activities, change of behaviour and action* *Affective:* *Change of perspective and attitude towards a specific topic* *Motivation to take action*	observation, questions discussions change of behaviour

7.3.3. ILP related to leisure time, culture and sports

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
14	Performance (theatre, 	Seeing a complex situation as play, often with a clarifying intention (epic theatre, e.g.)	author, producer, visitor, audience actor	listening, exercising collaborating viewing	The Polish Theatre project (CKU)	*Knowledge:* Understanding the contents of the play *Active:* Just visiting *Affective:* Creation of empathy for the characters	Observations, group discussions, questions
15	Exhibition 	Learning in a situation with exposed objects	producers of exhibits, producers of exhibition visitors guides	looking, reading, asking discussing	Exhibitions during the REVEAL conferences Documenta exhibition	*Knowledge:* *Understanding the content matter of the exhibitions* *Active:* *Actively visiting, actively looking for more information on the content matter,* *Affective:* *Curiosity, self-regulation in case of unknown exposés*	Observations Discussions with the viewers Guest books

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
16	Fair 	Learning in a situation with common bargaining processes	producers of objects, designers of stands, visitors	Discussing Bargaining Looking, informing Selecting what is interesting Experiencing exchanging	CEBiT any kind of fair Regional learning fairs	*Knowledge:* *Understanding the content matter of the exhibitions* *Active:* *Actively visiting, actively looking for more information on the content matter,* *Affective:* *Curiosity, self-regulation in case of unknown exposés*	Observations Feed-back-Questionnaires Interviews Guest books Evaluations of organisers
17	Festivity, festival 	Learning in a situation with common artistic processes	authors of plays/pieces, producers of stages, visitors, audience	Looking, listening, exchanging with others Selecting what is interesting	Hässelholmen Festival of the Swedish partner	*Knowledge:* *Understanding the content matter of the exhibitions* *Active:* *Actively visiting, actively looking for more information on the content matter,* *Affective:* *Curiosity, self-regulation in case of unknown exposés*	Observations Questionnaires Interviews

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
18	Work of art (e.g. painting, sculpture)  	The impact of works of art on learning is seen and utilized since centuries, paintings with scenes from the bible were a sort of anthology or reader for the public in the Middle Ages, e.g. relevant knowledge: With a work of art you can present knowledge to visitors in form of a story or message which this work of art is telling them. Take a picture in a Christian church, for example. It is often telling a story from the bible. This was important in former times, when most people were not able to read a text. Often the knowledge is hidden in a symbolic or metaphoric form. Which knowledge can be shown by pictures or statues? It may be orientation knowledge, but it can be action knowledge, as well. People who want to learn something from such objects, must be able to interpret it. One of the most known examples to make use of pictures in adult education is the use of everday-life pictures by Paolo Freire and his teams in literacy campaigns in Latin America.	artist, visitor, guide, expert,	viewing, listening to explanations, asking the expert, watching others how they see the object,	Documenta project: Creating understanding for modern arts	*Knowledge:* *Understanding the piece of art from an in-depth perspective, putting in relation to other periods* *Active:* *Activating participation in cultural life* *Affective:* *creation of new perspective on new cultural aspects*	observations, questions/ answers, discussion, group discussion, essay,

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
19	Club (music, sport etc.) 	Learning from and with others from a common point of interest.	Teammates (interest group) Group leaders	Practical activities Informing if certain activities, contributions or tools are new Showing and discussing certain routines/techniques to others Joining special groups of like-minded persons Creating new techniques Exchanging ideas and interests, reinforcing ideas	http://www.instructables.com/tag/type-id/category-living/	*Knowledge:* *Understanding certain new routines, creating and developing knowledge on the content matter* *Active:* *Carrying out the activity, maybe first imitating, later taking over the role, joining special groups* *exchanging on news and certain aspects* *Affective:* *Getting a personal relation and an attitude towards the new activity, understanding those who practice* *Regulating and influencing oneself and others*	Observations, Discussions Plays Presentations events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
20	Travelling, tourist 	Learning from insight into other countries and cultures. „Travel teaches how to see", „He that travels far knows much", "Travel broadens the mind, and raises the spirits", „Reisen bildet", these are some proverbs that stress the educational function of travelling. Already from the ancient world we find travelogues, in the middle ages travels of students, artists and workers on apprenticeship arise. About 1900 the german "Wandervogel" movement was an important part of the "Jugendbewegung". In modern times, travelling has become a huge industry, and it is partly for pleasure and partly for knowledge acquisition. Travelling projects are common in schools as well as in youth associations (boy and girl scouts), in the 1970s the Danish travelling folkshighschool became a famous example, travelling is also part of the "Erlebnistherapie" of Kurt Hahn ("outward bound").	Visitors, guides, companion travellers, local residents	Observation, questioning, reading travel magazines	Holidays in the sailing boat: The main aim of the project was to organize holidays in sailing boats for children from dysfunctional families from Sopot. The participants were learning sailing and kayaking and how to organize purposefully their free time. The best learners have been prepared for the exam for the sailor's patent. http://act-eu.org/index.php?id=109	*Knowledge:* *knowledge and understanding of the foreign country* *Active:* *Actively moving in the foreign country, discovering new things* *Affective:* *Perspective change: getting an attitude towards the people in the visited country*	Interview, test, questionnaire, observation

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
21	Excursion 	An excursion is visit to an important place for the learner. The relevance is of course dependent on the life situation and the context. It may be a museum regarding cultural competences, a zoo to discover different species and so on. However, it may alos be a visit to a town administration or a shelter or an exemplary project related to the learning content. Dependent on the level of formality the excursion may be rather spontaneous or well-planned including guides and other learning facilitators.	producer, supplier, visitor guide	Looking at a certain learning content, experiencing with all senses, trying out, Listening to explanations, guiding.	Monumenti Aperti:  places that every school adopts as proper.	*Knowledge:* Getting to know (better) a place or certain issues *Active:* Discovering specific sites or artefacts *Affective*: less	Questionnaires, observations, learning diary, final discussion

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
23	Club (music, sport etc.) 	Learning from and with others from a common point of interest.	Teammates (interest group) Group leaders	Practical activities Informing if certain activities, contributions or tools are new Showing and discussing certain routines/techniques to others Joining special groups of like-minded persons Creating new techniques Exchanging ideas and interests, reinforcing ideas	http://www.instructables.com/tag/type-id/category-living/	*Knowledge:* Understanding certain new routines, creating and developing knowledge on the content matter *Active:* Carrying out the activity, maybe first imitating, later taking over the role, joining special groups exchanging on news and certain aspects *Affective:* Getting a personal relation and an attitude towards the new activity, understanding those who practice Regulating and influencing oneself and others	Observations, Discussions Plays Presentations events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
24	Play 	Seen under the aspect of “homo ludens”; most famous pedagogical theories and practical usage from Friedrich Fröbel and Maria Montessori “Play is the highest expression of human development in childhood for it alone is the free expression of what is in a child's soul.” (Friedrich Fröbel)	author, designer, producer, player, fellow player	learning by playing	The Polish Theatre project (CKU)	*Knowledge:* Understanding the rules if any *Active:* Playing, learning in the game/play (focus) *Affective:* Getting an attitude to the teammate	Observations, group

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
25	Sport game 	Sport activities have to be learnt and enable persons to feel more comfortable, especially people learn to observe and handle their body and to interact with other people Sport can be a great transport method to overcome prejudices and xenophobic emotions and attitudes	coach, instructor, referee, players, spectators	learning rules, learning movements getting in better shape training exercising	Project Hattrick	*Knowledge:* --- If any: background information on physical and physiological issues theory on moving *Active:* (focus) Practicing *Affective:* Getting an attitude to the teammate	observations, questions/ answers, discussion better physical situation, psychological welfare, results of activities (time for running etc.)

7.3.4. ILP in Private Life

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
26	Turning point (e.g. marriage, First Communion, life crisis) 	Learning and perhaps changing habits through profound events	enacting persons with different roles/functions	Perceiving the Discussing	Burn out intervention and prevention	*Knowledge:* Understanding the consequences of the turning point, *Active:* Adapting to a new situation *Affective:* Accepting the change in one's personal life	Observations

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
27	Family 	The family constitutes the first important learning environment for nearly all human beings. Even in modern societies with nuclear families and a highly developed formal education system the family's influence on cognitive and other aspects of personal development exceed any other by far. A specific theme here is intergenerational learning.	Family members with different roles	The informal curriculum of the family is delivered by demonstration, explanation, rewards and punishment. Asking and answering Presentation, imitation Motivating Learning from each other	Nearly all families Specific projects: http://www.srep.ro/basic-life/ http://www.clarefamilylearning.org/events/2009/11/25/grundtvig_family_learning_training_for_trainers	*Knowledge:* *Understanding basic issues, repetition of certain issues, transferring into action* *Active:* The whole spectrum from just perceiving, imitating to expertise on certain content matters *Affective:* Very basic affective competences are learnt in family life, Security and trust	Observations Diary
28	Friendships 	Learning from others mostly in practical situations, also much exchange of opinions and interpretations. Getting new impulses	Friends	Gathering, Common activities Regulating others Helping inspiring	http://www.friendsandflags.org/scrapbook.php	*Knowledge:* *Understanding the life and viewpoints of the friend, dependent on certain content issues* *Active:* *Actively caring for the friendship,* *Affective:* *Empathy, changing viewpoints, curiosity*	Observations, diaries, role plays

No.	Pattern	Description	Actors	Learning activities	Example Proj.	*Impact on 3D*	Assessment
29	Learning in the household 	Learning in a situation with practical processes, partly as routines, partly as new challenges Learning to optimise material flows and environments in daily life Learning to use time more efficiently	The person practicing Teammates (family members) External aid, counsellors	Practical activities Informing if certain activities or tools are new Showing and discussing certain routines/techniques to others (e.g. family members)	http://www.innovation.cc/peer-reviewed/taylor1sph_final5.pdf	*Knowledge:* *Understanding certain new routines, e.g. energy saving,* *Active:* *Carrying out the activity, maybe first imitating, later taking over the role* *Affective:* *Getting a personal relation to the content, losing shyness against the activity, motivating others to do as oneself*	Observations, Discussions

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
30	Gardening 	Learning in a situation with practical processes, partly as routines, partly as new challenges Learning in nature	The person practicing Teammates (interest groups)	Practical activities Informing if certain activities or tools are new Getting background information Showing and discussing certain routines/techniques to others (e.g. family members) Joining special group Creating new techniques	http://www.instructables.com/tag/type-id/category-living/channel-gardening/	*Knowledge:* *Understanding certain new routines* *Understanding plant physiologies, cultivation and other gardening know-how* *Active:* *Carrying out the activity, maybe first imitating, later taking over the role, joining special interest groups* *Affective:* *Getting a personal relation and an attitude gardening and plants, understanding those who practice*	Observations, Discussions Watching results

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
31	Hobby  	Learning in a situation with practical processes, partly as routines, partly as new challenges	The person practicing Teammates (interest groups)	Practical activities Informing if certain activities or tools are new Showing and discussing certain routines/techniques to others (e.g. family members) Joining special groups of like-minded persons Creating new techniques	http://www.instructables.com/tag/type-id/category-living/	*Knowledge:* *Understanding certain new routines* *Active:* *Carrying out the activity, maybe first imitating, later taking over the role, joining special groups* *Affective:* Getting a personal relation and an attitude towards the new activity, understanding those who practice	Observations, Discussions Results

7.3.5. ILP in Civic Life

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
32	Neighbourhood 	Learning from others mostly in practical situations, also much exchange of opinions and interpretations. Neighbourhood activities are a very strong means to active citizenship	Neighbours coaches	Exchanging opinions, discussions, common leisure time activities, if coached, more developing activities networking	 **CESO** **Ge's Barbecue** In 2005 the Dutch government appeals to social organisations to propose ideas to stick together to approve the social cohesion in the communities of the cities. One of these social organizations is LSA, a national union of collaboration of "attention neighbourhoods" (deprived neighbourhoods). Together with housing associations it started the project "CAN DO".	*Knowledge:* Understanding certain new routines *Active:* Carrying out the activity, maybe first imitating, later taking over the role, joining special groups *Affective:* Getting a personal relation to the content, losing shyness against the activity, motivating others to do as oneself	Observations, Discussions

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
33	Religious community 	Learning in social contexts from and with others in a situation of common values with common ethical and behaviour codes against the background of common beliefs The value of this kind of learning is entirely determined by our own values and beliefs. There may be a blend of religious and civic goals, themes and activities.	Community Leaders (Priests, Imams etc.) Persons on a hierarchical position with specific functions	Practicing common rituals and behaviour codes Praying and worshipping as an act of reinforcement of the theoretical background Convincing and persuading others Talking about and reinforcing specific rituals Discussing community life Planning of common activities in order to practice the religion (e.g. helping the poor, common excursions)	http://www.virtualbibleschool.com/BibleStudy.htm http://muxlim.com/blogs/AmericanMuslimMom/make-ramadan-learning-fun/ http://chavarah.blogspot.com/	*Knowledge:* Knowledge about contents, backgrounds and ethics of a certain religion *Active:* Actively practicing the religion in a specific community *Affective:* Empathy with people of the same religion and potential beneficiaries of the same, Imitation of rites, regulating others and oneself for the sake of the religion	Observations, Diaries Number of participants in religious events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
34	Political community 	Learning in social contexts from and with others often in a situation of different values but common duties.	Members of the political communities Leaders Persons on a hierarchical position with specific functions Debaters Political opponents	Debating, Discussing Reading (political programmes) Developing (agendas, programmes, positions to civic themes) Advertising programmatic points of the Self-organisation Planning of common activities for the sake of the community and for the civitas (town, region, nation, Europe)	Political parties: http://www.globalgreens.org/platforms http://www.libdems.org.uk/home.aspx http://conservativehome.blogs.com/	*Knowledge:* Knowledge about contents, backgrounds and ethics of a certain civic problem or political theme *Active:* Actively participating in a political party or movement *Affective:* Change of perspective, empathy for the situation of the other, regulating others	Observations, Questionnaires Diaries Number of participants in political events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
35	Political/Civic movement	Learning in a political movement outside the mainstream political parties. Often influenced/established by a political decision which is interpreted being against the will of the people.	Citizens Politicians Administration Different interest groups Civic leaders	Debating Discussing Developing campaigns Active influences Blocking Conflict solving	Stuttgart21 Anti-Atomic power plants	*Knowledge:* Knowledge about contents, backgrounds and ethics of a certain civic problem or political theme *Active:* Actively participating in a movement *Affective:* Change of perspective, empathy for the situation of the other, regulating others	Observations Number of participants in political events
35	Manifestations 	Manifestation of opinions, of showing social problems to other people, often with banner or similar devices	demonstrators spectators	information, clarification	Anti-atomic power manifestations	*Knowledge:* Knowledge about contents, backgrounds and ethics of a certain civic problem or political theme *Active:* Actively participating in a political party or movement *Affective:* Change of perspective, empathy for the situation of the other, regulating others	Observations Number of participants in political events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
37	Nature trail „Lehrpfad“ 	Arrangements of nature objects, as for example trees in a certain order of species and replenished with inscriptions on boards.	producer, developer, visitor, guide, expert, scientist	viewing, reading short explanations, walking to objects, trying out	KLIMZUG project Water-forest trail Youth project in Göttingen	*Knowledge:* Understanding the natural extract through the inscriptions in combination with the exhibits *Active:* Moving from one exhibit to the other, trying out *Affective:* Understanding the exhibit in its natural surrounding and getting a relation to it	observation, task solutions, questions/answers, discussion, group discussion, essay,

7.3.6. ILP in Professional or Educational/Training Contexts

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
38	School (extra-curricular) 	Schools always have an aspect of community besides the instructional reasons. Pedagogical reformers often have stressed upon this more than on the instructional reasons of schools Specific projects outside the school curriculum, be it environmental, climate or European issues or others (like health prevention and intervention etc.)	Students Teachers Counsellors Parents External experts	Gathering information Planning, developing Campaigning Monitoring, checking Exchanging Discussing Learning by doing Project learning	www.jem-eu.org www.etwinning.net	*Knowledge:* knowledge and understanding on the theme *Active:* Actively participating in proposed activities (imitation) or developing new activities *Affective:* Perspective change: getting an attitude towards the theme or other persons related to the topic, regulating/influencing others	Observations Learning diaries Events

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
39	Workspace 	Besides partnership and family this domain is the most important for most adult persons. The daily work offers always new challenges and needs also for new solutions. The non-formal part of the learning may be delivered in VET and continuous education/training Assessing the given competences is the main topic of the “Validation of Informal Learning” as it is understood by the EU-COM..	Employers Employees Teammates Trainers HR managers Clients	Interacting with other professional groups, subordinates and clients	Leonardo ECVET projects take a look at the VIP website to learn more about VINFL in regard to VET. www.vip-eu.org	*Knowledge:* Understanding basic issues, repetition of certain issues, transferring into action *Active:* The whole spectrum from just perceiving, imitating to expertise on certain content matters *Affective:* Perspective change for teammates	All possibilities from formalised to rather informal learning assessments like: Test Observations Measurements against standardised reference systems

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
40	Student exchange 	Learning from living in other countries and cultures	Students (guests and hosts) Parents Teachers	Exchanging Discussing	www.etwinning.net	*Knowledge:* knowledge and understanding for the foreign country *Active:* Actively moving in the foreign country, discovering new things *Affective:* Perspective change: getting an attitude towards the people in the visited country	Observations Learning diaries Questionnaires

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
41	Internship 	Learning from practical work without obligation of daily routines mainly for the start for a career.	Interns Facilitators Potential employers Job aids Tutors	Watching Trying out Practicing in a limited scope for a limited time Exercising	http://www.eujobs77.com/q-internship-jobs-in-uk http://www.praktikums-boerse.de/	*Knowledge:* knowledge and understanding for the area of work *Active:* Actively taking the internship, practicing and exercising *Affective:* Getting a personal relation to the area of work and the people working there	Tests, observation, learning diary

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
42	Job orientation in Mobility actions 	Learning from practical work without obligation of daily routines mainly for orientation purposes And specifically, in EU mobility actions: Learning while moving in unknown territory (this is not restricted to geography)	Interns Facilitators Potential employers Job aids Tutors Funding bodies Intern Exchange learner Guide counsellors	Watching Trying out Practicing in a limited scope for a limited time Exercising Researching Communicating Explaining own background Participating in other life situations	VILMA IdA projects in Karlsruhe and Göttingen	*Knowledge:* knowledge and understanding for the area of work *Active:* Actively taking the internship, practicing and exercising *Affective:* Getting a personal relation to the area of work and the people working there	Tests, observation, learning diary

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
43	Job shadowing 	A short stay with a partner organisation in another country to exchange good practice, acquire skills and knowledge and develop partnership. Job shadowing activities can be supported by the Youth in Action Programme under action 4.3	Interns Facilitators Potential employers Job aids Tutors	Watching Trying out Practicing in a limited scope for a limited time Exercising	http://www.slideshare.net/AncaDudau/anca-dudaaus-jobshadowing-grundtvig-visit-in-academia-cordoba http://www.grundtvig.org.uk/casestudy.asp?itemid=92&itemTitle=Job+Shadowing+in+France&section=000100010039&sectionTitle=Projects+Around+the+UK	*Knowledge:* knowledge and understanding for the area of work *Active:* Practicing and exercising, imitating, developing *Affective:* Getting a personal relation to the area of work and the people working there	Tests, observation, learning diary
44	Collaboration in European projects	Learning in a European partnership that gathers partners who collaborate to achieve a common objective	Project partner, manager, moderator, evaluator	Listening to others, Sharing common objectives Discussing Collaborating	All LLP projects but also other EU programmes www.vip-eu.org	*Knowledge:* knowledge and understanding for the area of work *Active:* Practicing and exercising, developing *Affective:* Perspective change, regulating oneself	Questionnaires Interviews observation, learning diary

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
45	Conference 	Learning in a situation with new impetus from other stakeholders, common decision processes	official, colleagues partners presenters organisers minute takers	listening, arguing, contributing	REVEAL active conferencing	*Knowledge:* *Understanding the theme of discussion* *Active:* *Actively participation, bringing in own arguments, creatively contributing to the success of the theme* *Affective:* *Creation of understanding for the viewpoints of others*	Observations questionnaires discussions minutes

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
46	Teamwork 	Learning in a situation with common production processes, learning in interdisciplinary or transnational teams A special form is the “tandem” situation, where to persons undertake something (travel, e.g.) and share experiences.	colleagues team-mates subordinates coordinators specialists partners	discussing cooperating producing negotiating learning from each other networking	Work groups VIP-project www.vip-eu.org	*Knowledge:* Understanding the theme of discussion *Active:* Actively participation, bringing in own arguments, creatively contributing to the success of the *theme* *Affective:* Creation of understanding for the viewpoints of others	Results of the work Observations Check in VIP

7.3.7. ILP Related to ICT

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
47	Computer 	Learning with PC in general and offline (the "old fashioned way"). CBTs provided on CD or copied on the hard drive. Different methodologies, e.g. observations, games, quiz etc. But also, pure practicing on the computer can be seen as self-related learning	author, learner, teachers and developers content providers designers	reading, viewing, acting, following certain procedures	ECDL; European Computer Driving Licence Foundation www.ecdl.com	*Knowledge:* Knowledge and Understanding on the theme *Active:* Imitating, practicing *Affective:* Losing reluctance against the PC, regulating oneself to practice	direct results of practicing observation, tests, quiz
48	Website 	Learning from a special website, dedicated to a distinguished topic, search the web to find get specific information, looking for keywords, specifically provided learning contents (specific learning sites)	author, learner, teachers and developers content providers designers	reading, viewing, information/products can be exchanged Interacting	Any website: http://www.doityourself.com/ http://www.diynetwork.com/	*Knowledge:* Knowledge and Understanding on the theme *Active:* Gathering information *Affective:* curiosity	test, essay, discussion, observation of activities

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
49	ePortfolio 	"In general, an ePortfolio is a purposeful collection of information and digital artefacts that demonstrates development or evidences learning outcomes, skills or competencies. The process of producing an ePortfolio (writing, typing, recording etc.) usually requires the synthesis of ideas, reflection on achievements, self-awareness and forward planning; with the potential for educational, developmental or other benefits. Specific types of ePortfolios can be defined in part by their purpose (such as presentation, application, reflection, assessment and personal development planning), pedagogic design, level of structure (intrinsic or extrinsic), duration (episodic or life-long) and other factors." http://www.eportfolios.ac.uk/definition Establishing an own profile and providing information about oneself; Presenting own skills and interests.	author, viewer, content providers	Reading other persons' profiles Development of own profile interlinking persons with same interests, Interconnecting with likeminded persons. There are different formats of e-Portfolios, some may e.g. offer space to present pieces of work	blinc ePortfolio http://www.blinc-eu.org/elgg/ http://www.diynetwork.com/ **http://www.eportfolios.ac.uk/EPICS** **http://www.danwilton.com/eportfolios/**	*Knowledge:* Knowledge and understanding on the technology *Active:* Gathering and preparing and delivering information *Affective:* Curiosity of other people's profiles	test, essay, discussion, observation

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
50	Podcast	Learning from a special auditive website, dedicated to a distinguished topic Wikipedia: A **podcast** (or non-streamed webcast) is a series of digital media files (either audio or video) that are released episodically and often downloaded through web syndication. The word usurped webcast in common vernacular, due to rising popularity of the iPod and the innovation of web feeds. The mode of delivery differentiates podcasting from other means of accessing media files over the Internet, such as direct download, or streamed webcasting. A list of all the audio or video files currently associated with a given series is maintained centrally on the distributor's server as a web feed, and the listener or viewer employs special client application software known as a *podcatcher* that can access this web feed, check it for updates, and download any new files in the series. This process can be automated so that new files are downloaded automatically. Files are	author, learner, teachers and developers content providers interviewers	reading, viewing, information/products can be exchanged Interacting search the web to find get specific information, looking for keywords, specifically provided learning contents (specific learning sites)	http://meltingpod.free.fr/ http://annie.viglielmo.free.fr/ http://education.podcast.com/ www.podcast.com	*Knowledge:* Knowledge and Understanding on the theme *Active:* Gathering information *Affective:* curiosity	discussion, observation of reactions and other postings

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
51	Video-Casting	Learning from an interlinked video repository, dedicated to a distinguished topic, be it musical, videographic, political etc.	Listener developers content providers designers up-loaders	reading, viewing, information/products can be exchanged, interlinked search the web to find get specific information, looking for keywords, specifically provided learning contents (also specific learning sites or features)	www.youtube.com Youtube may be used to upload own small documentations and interlink them with the own website	*Knowledge:* Knowledge and understanding on the theme *Active:* Gathering information, contributing (uploading) *Affective:* Curiosity, perspective taking	Questionnaires, results in the programme observation of reactions and other postings discussion, observation of activities
52	Online Communities	An online community gathers stakeholders who share the same interest or targets.	Editors, moderators, users authors	Reading, watching, discussing, exchanging, sharing, recommending gathering with likeminded persons	REVEAL XING	*Knowledge:* Less important *Active:* Gathering information, contributing (uploading), *Affective:* Curiosity, perspective taking,	Questionnaires, results in the programme observation of reactions and other postings discussion, observation of activities

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
53	WIKI	Learning via reading an Online encyclopaedia, holistic learning, Knowledge base on a specific issue (e.g. the	Authors, readers, editors	Reading, further reading (links), editing	www.wikipedia.com http://reveal-eu.org/wiki/index.php?title=Main_Page	*major impact on the cognitive dimension* *Knowledge:* *knowledge and understanding on the research and content matter* *Active:* *Editing, modifying and correcting the entries* *Affective:* ----	Questionnaires Test

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
54	Blog	A blog (a blend of the term web log) [1] is a type of website or part of a website. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. Most blogs are interactive, allowing visitors to leave comments and even message each other via widgets on the blogs and it is this interactivity that distinguishes them from other static websites	Bloggers Authors, readers, editors	Collecting and organising information Discussing Editing and commenting	An edublog is a kind of blog written by someone with a stake in education. Examples might include blogs written by or for teachers, blogs maintained for the purpose of classroom instruction, or blogs written about educational policy. The collection of these blogs is called the edublogosphere by some, in keeping with the larger blogosphere, although that label is not necessarily universally agreed upon. (Others refer to the community or collection of blogs and bloggers as the edusphere.) Similarly, educators who blog are sometimes called edubloggers. Communities of edubloggers occasionally gather for meetups or unconference sessions organized using a wiki	*major impact on the cognitive dimension* *Knowledge:* *knowledge and understanding on the research and content matter* *Active:* *Only reading, contributing or even development of an own blog* *Editing, commenting and* *Affective:* *Understanding the perspective of other bloggers (much less important)*	Observations of the content included Blogs used as Learning diaries

No.	Pattern	Description	Actors	Learning activities	Example **Proj.**	*Impact on 3D*	Assessment
55	Online Help	An online help is a variation of a technical manual in IT and websites. It is a context sensitive help, that shows up and explains issues that are just active in a software application.	Author User designer	Reading while applying the software.	LEVEL5 online help	major impact on the cognitive dimension *Knowledge:* *knowledge and understanding on the research and content matter* *Active:* *Only reading* *Affective:* --	Tests Questionnaires Observations

7.3.8. ILP related to learning in mobility (compilation)

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
1	**Travelling**	Travelling consists of multiple elements: decision of where to go, organisation and use of transport, deciding on the accommodation, creating a programme at destination, finding information as well as orientation in an unknown environment. It requires organisation and flexibility, as unforeseen events can happen at any time when somebody leaves his/her familiar action space. Beyond one gets insight into other countries and cultures having an impact on the	Participants, accompanying staff, hosts, guides, companion travellers, local residents	Excursion, organizing a trip, planning, getting information about destination, getting in contact to others in order to exchange experiences, anticipating what to expect and what will be needed for and during the trip, getting in contact to travel organizers or providers, photography, creating artworks	*Knowledge:* knowledge and understanding of aspects of the foreign country/surrounding reflection on what to expect *Active:* Actively moving in the foreign country/unknown surroundings, discovering new things, exploring, gathering information, exchanging with others, solving problems, communicating, searching	Readiness to be mobile, problem solving, autonomy, flexibility, self-reflection, virtual communication	Interview, test, evaluation of correspondence, questionnaire, observation, report, diary, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
		personal consciousness, which is described with a number of well-known proverbs: „Travel teaches how to see", „He that travels far knows much", "Travel broadens the mind, and raises the spirits"			*Affective:* Perspective change: getting an attitude towards the people in the visited country, gaining experiences/ self-confidence, experiencing a range of new feelings		
2	Excursion	An excursion is a visit to a place related to a topic of learning activity. The relevance is dependent on life situation and context. It may be a museum or a region (e.g. in regard to cultural competences), a visit to a town administration, etc. Dependent on the level of formality the excursion may be rather spontaneous or well-planned including guides and other learning facilitators. Excursion is a form of travel, but mostly much shorter in time and distance to destination, also having a clear objective of what is happening at destination.	Organizer, supplier, receiving institution, participant, guide	Moving into unknown contexts, packing luggage according to destination and duration of stay, taking walks, gathering information on travel and topic, lectures, visits, discussions, video documentary, taking pictures, guided tours	*Knowledge:* Understanding functionalities by an artificial haptic model, know how creation and deeper understanding Active: Trying out, activation, moving, watching, listening *Affective:* Curiosity, getting interested, getting a sense for different environments	Readiness to be mobile, cultural awareness, flexibility/adaptability, intercultural communication	observation, questioning, tasks, reporting, discussion, photos, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
3	Video feature / documentaries on foreign countries/cultures	Documentaries show what it looks like in other places, how people live elsewhere, display conditions of life different from participants living context. Learning from videos happens by consuming it as well as by producing it	producer, trainer participants/viewers	Selecting, watching, discussing, reporting, visualizing, doing further research, producing videos, contests	*Knowledge:* Understanding, forming a mosaic of knowledge-particles, analysing, comparing *Active:* Dreaming, discussing, researching, sharing *Affective:* Creation of curiosity, getting interested, motivation, conviction	Readiness to be mobile, cultural awareness, flexibility/adaptability	observation, tasks like answering questions, creating posters or reports
4	Newscast, newspaper, magazines	Learning from print messages/texts. The contextualisation has to be established by the reader. Newspapers and magazines report about different aspects of life, esp. political, social, economic, cultural life with different time scopes:	Publisher, author, distributor, reader	Reading, discussions with others about the articles, writing a reader's letter to the editor, creating posters or website contents, blogging, presentations, visualisations, contest	*Cognitive:* Understanding, forming a mosaic of knowledge-particles, analysing, comparing, contextualising *Active:* Reading, discussing	Readiness to be mobile, cultural awareness, flexibility/adaptability	Knowledge and understanding tests, questions, discussions, observation, reporting, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
		newspapers on current events, magazines concluding on longer term developments.			*Affective:* Creation of curiosity, getting interested, motivation, conviction		
5	Book, written text, report	Learning from a book, knowledge gained from reading or studying rather than from practical experience Narratives as well as nonfictional books. The first relates to "story telling" and arouses the reader's phantasy, the second to describing and/or discussing specifics of life in other environments. In difference to newspapers and magazines books have often less actuality but show their topics/information more broadly and deeply	author, reader designer (if pictures or graphics), salesperson or stuff of library	Reading, taking notes, discussing, displaying information gathered, reporting to others, book summaries written or oral, recommending, literature research on defined topics, contest	*Knowledge:* Knowledge, understanding, analysing, concluding *Active:* Reading, concentrating, reporting, further research, passing it on, self-reflection *Affective:* Perspective change, interest, empathy for persons in a book, motivation to learn/read more	cultural awareness, self-reflection, self-reliance	test, essay, report, summary, discussion, visualisation, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
6	Role model, idol	Someone known personally or from media who inspires imitation by showing new/different ways of behaving, speaking, acting, … Imitation is a fundamental form of learning (Albert Bandura). It takes place through passive observation or actively by provoking reactions which will then be imitated. Learning from a role model is rather complex, it implies not only opinions, argumentations etc. but also ways of expressive behaviours, like moving, making gestures etc.	Idol/role model, observer/learner	Observation, role plays, interviews, imitation, drama, contests	*Knowledge:* Knowledge of variety of behavioural patterns, evaluating different approaches Understanding and knowledge creation rather as side effect *Active:* Evaluating, imitating *Affective:* Perspective taking, inspiration, admiration, envy	Readiness to be mobile, problem solving, intercultural communication, self-reliance, flexibility, networking, teamworking, intercultural communication	Interviews, self-evaluations, questions, comparisons, observation
7	Small talk	Small talk is a form of communicating with people one doesn't know very well on random topics. It requires finding common interests and serves to fill breaks and happens on informal occasions. It helps getting to know each other and to create trust. It mostly stays superficial but can be the	Strangers, people one hardly knows, colleagues, anyone, customers, employers	Courses, conferences, meals in groups, breaks during meetings, online chats, in the street, supermarkets, in transport, generally can happen anywhere	*Knowledge:* Knowledge and opinion exchange, new information, knowledge and reflection about life and situation of others *Active:* Approaching unknown people, finding topics of common interest	Networking, teamworking, self-reflection, intercultural communication, flexibility	Observation, diary, questionnaire, interviews, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
		start for a deeper exchange or acquaintance.			*Affective:* Openness towards others, motivation to get in contact, empathetic concern		
8	Living in a group/flat share	People sharing a flat or room. Therefore, it's necessary to communicate about the ways and needs of living together, respecting each other's needs, solving conflicts and sharing resources. A certain amount of trust is necessary to live together.	Friends, strangers, host families, peers	Keeping the flat/apartment/house clean, time scheduling, shopping food, searching for an accommodation, communication or conflict training, talking to each other, cooking	*Knowledge:* Knowing needs of oneself and others, understanding that respect is required, knowing aspects of impendent life (e.g. paying rent, contracting, …), knowing communication strategies *Active:* Deciding on and fulfilling tasks and timing, behaving respectful, communicating, recognizing and solving conflicts, managing resources, ability to adapt, finding compromises	Teamworking, intercultural communication, problem solving, self-reliance, flexibility	Observation, photos, videos, questionnaires, interviews, reports, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
					Affective: Being motivated to get along well, accept compromise, feeling comfortable		
9	Social networks	Social networks are virtual tools of communication with indefinite spacial range, varying from near to very far, thus also for communication across cultural borders. They serve to exchange information about any topic of interest and contribute greatly to a global society. Depending on the system used (Facebook, google + etc.) specific technical skills and an understanding of the functioning of the system is required. These networks experienced a tremendous boom in recent years, leading to ambivalent effects on personal relationships, society and communication patterns.	Anyone who has access to computers	School, private life, workplace, university, cooperations. enterprises, civic and political initiatives, promotion, private networks, discussions, information exchange, support	*Knowledge:* Technical knowledge, understanding of functions and information transmission, knowing of critical aspects and dangers (e.g. Computer worms and viruses), knowing one's purpose of using it, knowing rules of respectful virtual communication *Active:* applying social networks, using a range of functions, communicating, time management *Affective:* Motivation to exchange, openness towards new techniques, interest, appreciation	Readiness to be mobile, problem solving, intercultural communication, intercultural awareness, self-reliance, flexibility, self-reflection, virtual communication	Observation, photos, videos, questionnaires, interviews, reports, self-evaluation, discussions

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
10	Job search	To find a job is a complex task with no formalised approach. It is rather an individually developed strategy in line with general recommendations and experiences. It comprises self-reflection, research skills and clarity of one's own capacities and expectations/goals, what opportunities are available, in which region one looks for work and setting up an adequate strategy. Further it's necessary to retrieve, structure and select information before getting into the application process. Also, one has to know sources of information, which can be formal like newspapers and databases, but informal as well, like asking among ones social contacts.	Participant, family, friends, suppliers of information	Often part of mobility projects with focus on employability: Courses or classes in school, research, games and exercises	*Knowledge:* Having an idea of one's own abilities, goals and priorities, knowing sources of information and research methods, strategic thinking *Active:* Planning, structuring information, self-directed acting, developing strategies *Affective:* Interest, motivation and self-discipline in order to find a job, optimism to have a chance	Problem solving, self-reliance, flexibility, networking, self-reflection, teamwork	Observation, report, questionnaire, interview, discussion, presentation, self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
11	Job application	The application process itself is a complex task which requires a number of abilities by the applicant. Applying for a job is a formal or informal declaration of interest and readiness of the applicant towards the offeror of the job. It includes setting up the contact, offering information about one's abilities and interests in a competitive situation with other applicants one doesn't know. Application can be either in a written form or orally by making phone calls or talking to the offeror directly.	Applicant, offeror of job, supporters	Courses or classes in school, research, games and exercises, phone talks, interviews, writing texts, presentations	*Knowledge:* Having an idea of one's abilities, goals and priorities, knowing methods of self-presentation, strategic thinking, knowing expectations of offeror, codes of conduct *Active:* Planning, structuring information, self-directed acting, developing strategies, communication, asking *Affective:* Interest, motivation and self-discipline, optimism to have a chance, courage to face failure	*Problem solving, readiness to be mobile, intercultural communication/awareness, self-reliance, flexibility, self-reflection, virtual communication*	Observation, assessment centres, report, questionnaire, interview, discussion, presentation, self-evaluation
12	Diary	A diary is a very personal document. One writes about own experiences and feelings, reflecting on events, interactions and	writer	Travelling, excursions, visits, culture events, courses etc. can be occasions for adding entries to a diary	*Knowledge*: reflecting, analysing, understanding, questioning	*Intercultural communication, teamwork, networking*	Self-evaluation

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
		philosophical questions. It helps to get rid of inner constraints and gain clarity on questions one is moved by. Normally a diary is secret.			Active: Trying out new ways Affective: Inner calmness, awareness, motivation, self-confidence		
13	**Manual work In inter-generational teams**	During the voluntary projects, seniors cooperate with their peers (senior and youth) to achieve a goal, often the restoration of infrastructures, cleaning a green space, restoration of an old path, etc. The work can be physically challenging for seniors. It is done in teams, where cooperation and mutual support play an important role.	Project coordinator, international volunteers, local volunteers	Learn how to use new working tools, coping with physical challenges, expressing needs, accepting limits, pursuing a concrete and visible goal, adjusting to the rhythm of the group, supporting other volunteers in need.	*Knowledge* *If applicable: understanding a certain procedure/technique* *Active* *Applying a certain technique, exercising* *Affective* *Developing personal relations to the team members*	Teamwork, self-awareness, flexibility, communication, intergenerational cooperation, problem solving.	Observation and recording, self-evaluation, letter to one's self, interview, writing an article, SWOT
14	**Organisation of a musical/art**	Volunteers often have the task to set up a public show for the local community.	Project coordinator,	Put ideas into practice, discover one own's skills and	*Knowledge* *Active*	Intergenerational cooperation,	Observation and recording, self-evaluation,

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
	show	Depending on the volunteer's skills, it can be a musical one, drama, circus, poetry, etc. Volunteers decide the content, plan and implement the show together, often in the framework of an existing festival or local celebration.	international volunteers, local public, local coordinator assistants	potential, valorise each person's role and potential, explain ideas to others, negotiate, adjust to other people's needs, try new roles, speak/act in public, speak/act in a foreign language, overcome unexpected difficulties, , stick to deadlines and a set timetable.	*Affective*	intercultural communication, flexibility, decision-making, problem solving, teamwork, diversity management.	letter to one's self, interview, writing an article, SWOT, telling a story
15	**Playing with/Teaching to children**	In teams, volunteers plan and implement entertaining activities for local children. It can be a one-day event or an ongoing activity (e.g. every afternoon). Within the set framework (time and place), volunteers decide what activities to organise, choose and often create the needed materials, implement and evaluate the activity.	Project coordinator, international volunteers, local children, children's parent, local volunteers.	Put ideas into practice, discover one own's skills and potential, valorise each person's role and potential, explain ideas to others, negotiate, adjust to other people's needs, interact with children and youth, speak/act in public, speak/act in a foreign language, overcome unexpected difficulties, stick to deadlines and a set timetable.	*Cognitive* *Active* *Affective*	Intergenerational cooperation, intercultural communication, flexibility, decision-making, problem solving, teamwork, diversity management.	Observation and recording, self-evaluation, letter to one's self, interview, presentation, SWOT, telling a story

No.	Pattern/name	Description	Actors	Related learning activities	Impact on 3D	Competences	Assessment
16	**Group evaluation**	During a short or mid term voluntary project, volunteers are required to participate in periodical evaluations, mostly done in the group. Depending on the project, they can be daily, or there is one interim and one final evaluation. Evaluations can be organized also whenever a problem arises within the group. They are usually called and facilitated by the project coordinator.	Peer volunteers, project coordinator	Understanding and expressing own needs, visualize/verbalize emotions. reviewing past activities, reflecting on one own's learning, active listening, communicate in a foreign language, participate in a non formal education activity, empathizing with others.	*Knowledge*	Self-reflection, intercultural communication, Evaluating/reflecting, team work, intergenerational cooperation	Painting, using objects as symbols, self-evaluation, letter to one's self, interview, writing an article, SWOT, telling a story.
xx	Please discover / describe your own patterns				Knowledge Active: Affective:		

7.4. Assessment and Assessment tools

7.4.1. Introduction

Assessing competences is a process of identifying the performance of a person in a particular situation and evaluate the quality of the performance. In traditional educational settings assessment was assumed to consist only of identifying the knowledge, skills and attitudes that were supposed to be included in a person's potential. The focus in such assessment approaches is on a person's potential rather than one person's actual performance. Nowadays views on learning with the focus on knowledge productivity, co- creation, social constructivism, connectivism etc. do assume that the knowledge is not a body of knowledge known to some expert people and now only to be transmitted to others; it rather is based on the idea that in mutual interaction all learners involved bring themselves further in their itineraries towards extended personal competence. Given this shift in views on competence, and on competence acquisition the challenge is to assess the actual behaviour a person demonstrates in a real(istic) context. Referring to the double triangle model this means that the assessment needs to be focusing on the right triangle rather than on the left. Nonetheless items may be included referring to the elements included in the left triangle, since these elements may be considered a valuable treasure of knowledge skills and attitudes that may clarify or explain why a level of performance/competence is present, or not present yet.

Dochy 2002 mentions a number of conditions to be fulfilled in a competence-oriented assessment:

1. The construction of knowledge is a must, not reproduction.
2. The goal of the assessment is basic knowledge as well as applying knowledge and skills.
3. Authentic or lifelike situations should be used, such as cases or problems.
4. The following characteristics are an ambition in assessment:
5. Learning should be involved actively in the design and performance of assessments.
6. The assessments are being integrated in the learning and instruction process (Dochy 2002:35).

Assessment types:

Examination, essay, seminar, project, individual, group, oral presentation, report/review, practical/field file, it file, field course file, portfolio, proposal, diary, report (Brown & Knight in Dochy 2009:37).

Self-assessment, peer-assessment, co-assessment, portfolio-assessment, overall-assessment, assessment centre, presentation, memorandum report, performance assessment, simulation, journalism, reflective journal, knowledge test (Dochy 2002:39).

7.4.2. Functions of assessing competences

Assessments may serve various purposes. This does not imply that each purpose requires a different tool; it does however seem to imply that a same or similar tool would need different guidelines/manuals when used for different purposes. This has to be taken into account while designing the tool. Now first we will clarify the concept of assessment functions/purposes.

Diagnostic

An assessment may be used to help a person acquire a view on his/ her own abilities at a particular moment in time. A diagnostic assessment is meant to provide feedback to a question as: What kind of competence profile do I have? What kind of person am I ? etc.

Orientation

Another kind of assessment function is focusing on providing the person with a clear image of what a competence includes or involves. By doing an assessment the learner gets an insight in the feature of the competences included in the assessment. It is like doing the test in order to know what the test is about rather than for being tested.

Formative/learning oriented

Once engaged in a learning process a learner may wish to get feedback on how much progress he or she makes and how this progress may be optimized. The basic need for information is based on the curiosity on how well one is doing, how far one has come and how the learning process may best be continued.

Collective learning

So far we consider learning as an individual process of acquiring competences. In learning situations, however we often come across collective learning situation in which the ultimate goal is to rais the level of collective performance (examples are sports, dancing, drama, teamwork, etc.) Assessments on competences with such a collective ambition will need to include ways of identifying the collective performance.

Summative assessment

Once a learning process is coming to a particular level considered to be the end, or the completion of the process, the assessment needs focus on the question, did I reach my goals? Do I meet the standards? In such cases we speak of summative assessment focusing on the identification of the eventual level of performance; the final judgment.

Selective assessment

Again, another purpose of assessing competence may be for purposes of selection. In such assessment the basic challenge is to rank the levels of performance to identify who are the best, or better than others.

Predictive assessment

Having gone through a learning process it may be interesting to identify the eventual level of performance; more interesting even may be the search for indicators of how the learning process may be continued and where that continuation may lead to. Formulated simpler, this would refer to finding the answer to a question like: How competent may I become?

The variety of functions does not necessarily imply that assessment tools need to vary accordingly; it may well be that one tool suits more, if not all purposes, provided it is presented with an appropriate user guide explaining the user, how the tool may be applied, shared, discussed, applied and interpreted.

7.4.3. Tools

The following catalogue gives an overview of possible methods applicable to assess the development of core competences for students and other learners.

The catalogue doesn't claim to be a complete list but is designed to be a growing compilation of approaches to support professionals in applying the LEVEL5 competence framework and to validate competence developments. The catalogues present a sample of methods that can be used in individual or group work, the examples shown should reflect a good balance of productive and responsive assessment methods. The annex provides materials that can be applied in certain assessment situations.

The assessment of competences on different competence levels acquires a good overview of suitable assessment methods. Not every method of data collection fits to each learning situation. We would like to provide a catalogue of methods which can be used for individual projects and settings.

Every method is presented with a short description, recommendations and instructions, and advantages as well as disadvantages of the method.

In many cases it is feasible to apply a set of methods to receive more and complementing data as basis for a rating on a competence level. In the design of the assessment setting you should consider the following aspects:

- Which target group do you work with and how many learners and assessors are involved?
- Which competences are to be assessed?
- How much time and interaction with the learners is available?
- For which purpose do you assess and evidence the competence developments? This determines the depth of the assessment, e.g. is it to show learners that they made any progress or is it to document achievements that shall benefit the learner in job-applications?

On the following pages you find the descriptions of different methods and approaches for data collection in different contexts.

Method of Data Collection	Short Description of the Method	Recommendation, Instructions	Advantages and Disadvantages
Reflective Learning Diary	A reflective diary is an instrument for learner´s self-evaluation. It enables learners to document and reflect upon their learning experiences with regard to a certain topic. As a learning activity reflective diary facilitate learner's self-reflection. As an assessment method reflective diary provide insight in learner's understanding, content knowledge, knowledge application but also critical self-reflection and awareness. For this method it is also possible to use a blog or other digital tools, offline or online.	Give regularly time (about 15 min. each day) for the learners to write down their learning experiences in a booklet. Explain that a reflective diary should focus on some basic elements: • A description of what happened • Personal feelings about what happened • A personal interpretation / evaluation of what happened • A conclusion from the experience • Take care that learners do not only report what happened! Let them focus on an issue related to the topic. .	**Advantages:** Gives a deep insight in the learning process Facilitates reflective learning. Digital documentation can be shared with others more quickly and more easily. **Disadvantages/Difficulties:** Takes time and discipline to keep the diary regularly Requires ability for self-reflection Sharing personal feelings with others might be a sensitive issue. Digital documentation may require certain IT skills.
Concept Map	A concept map is a diagram intended to illustrate the understanding of the relationships between concepts involved with a particular area of study. A list of words describing important aspects of a topic is assembled. The words are sorted into a hierarchy from most general to specific. They are arranged so that similar terms are near each other. Links are then drawn between the concept words, and statements written to describe or explain the links. The concept map can be created in the form of a mind map.	Use a concept map at the beginning and at the end of a learning activity to identify the progress the learners made. Identify basic concepts and ask the learners to come up with related concepts and skills.	**Advantages:** It helps individuals to establish logical connection among ideas seemingly related. **Disadvantages/Difficulties:** For individuals who are not used to thinking along a clear structure, it might be difficult to reflect themselves.

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Group Discussion	In group discussions for the purpose of assessing competence developments a learning group is interviewed by a moderator. A specific format of such a discussion are focus groups, which are in particular useful for exploring norms, beliefs, attitudes, practices and languages.	The optimal size group consists of six to twelve individuals. Choose a topic for the discussion and prepare a list of open-ended questions that are arranged in a natural and logical sequence. The discussion should be audio recorded for transcription, or even filmed. An alternative is to take careful notes during the discussion. Write a summary for each group discussion. Focus groups require trained moderators.	**Advantages:** Is very close to daily communication forms. Can be used to "explore the field", to get an insight on a particular subject. The information gained can be used to generate ideas and to prepare more structured methods (e.g. questionnaire) **Disadvantages/Difficulties:** Group discussions give information about a group not about individuals; and they do also not provide any information about the frequency or the distribution of beliefs in the target population. Much effort and time is needed.
Personal (informal) Interview	A purposeful exchange between two individuals to uncover perspectives, experiences, feelings and insights on a phenomenon. A powerful method of collecting in-depth and detailed qualitative data. Data can be analysed through content analysis with narrations and quotations.	Prepare an interview form with questions in line with the evaluation focus. Use open ended, clear questions with follow up prompts. Do not test knowledge but explore it through experience and description questions. Do not mislead respondents with biased, assumption loaded questions. Record conversation with permission (if audio recording is not possible, take shorthand notes)	**Advantages:** Uses the basic methods of communication and eliminates limitations & artificiality of writing/ filling in a questionnaire. Helps gather in-depth and detailed data. Flexible, open to follow up. **Disadvantages/Difficulties:** Much effort and time is needed. Small samples, generalization from sample to population cannot be done.

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Questionnaire/ Test/Exam	Questionnaires or tests can be used as a measurement tool for knowledge, skills and attitudes as well as experience gained through a training/programme. They could be used to assess initial knowledge, attitude and behaviour, improvement in these respects in the training process and outcomes reached at the end of training. Questions to test or measure learning can be in verbal or written formats: verbal questioning, e.g. a question and answer session at the start and end of a session; written format e.g. tests or exams. Questionnaires can be formal as in an examination, or informal as in a quiz.	Questionnaires or tests can be used in the 3 stages of assessment: Stage 1. Initial assessment to identify prior learning, experience or achievement. This allows the assessor to develop a baseline for learning and achievement. Stage 2. Formative assessment—to identify where the learner is, what progress is being made and how to "Fill Gaps" in knowledge, skills and understanding. Learners consider where they want to be and plan how to get there. Stage 3. Summative assessment-This is carried out to make judgements about the learner performance at the end of a training/ programme or activity. Examples of questions: • "Closed" questions which restrict the learner to answering YES or NO, TRUE or FALSE • "Open" questions which allow the learner to express an opinion or knowledge in sentences • Multiple choice questions which provide a range of answers for the learner to select the right one	**Advantages:** Provides written evidence of learning. Provides assessor with a quick way to test that learning has taken place. Can be used for both formative and summative assessment. Helps to identify the strengths and weaknesses of learners and provides feedback to both learners and trainers. Fits well into formal learning situations. **Disadvantages/Difficulties:** Questions can be misunderstood; results are determined by the interpretation of the reader. Formal style does not meet needs of learners with other learning styles. Can formalise the curriculum and suppress creativity. Does not fit easily with informal learning situations. Could cover only a limited extend of the set CPD goals and processes. Rather not suitable for higher competence levels

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Self-assessment	Self-Assessment involves learners in the process of assessment and allows them to reflect upon their learning and to review and record their achievements. Self-Assessment can be both formative and summative: In formative assessments the learner reflects on where they are and where they need to go next. In summative assessment the learner reflects on the knowledge that has been gained and the skills they have acquired, at the end of an activity. Self-assessment enables learners to manage their own learning and plan their progression while they gather evidence for portfolios and qualifications.	It is important that learners have the opportunity to reflect on their own contribution to activities as well as the skills and knowledge they have gained. Self-assessment can be used as a stimulus to provoke discussion and to encourage learners to develop their own techniques for reviewing their learning. The self-assessment process is a cycle of planning, reviewing and evaluating. It is useful for learners to undertake some form of initial self-assessment at the beginning of a learning activity, to identify existing knowledge or skills. The learner can then use this information as a baseline to monitor their progress and to recognise achievement. It is useful for the learner to develop a *logbook* as part of the planning process, which will help to identify what aim to achieve and how objectives will be achieved. Later, a comparison can be made to review progress. This is part of formative self-assessment. An *evidence chart* helps the learner to keep a record of the activities done and the skills used. This is used when reflecting on what has been learned. This is part of formative self-assessment An *assessment matrix* enables the learner to review their learning against pre-determined criteria by giving scores for each criterion. This gives a visual record of progress and enables to identify strengths and	**Advantages:** Gives ownership of learning. Builds confidence. Motivates learners to progress. Develops planning and reflective skills. Provides evidence of knowledge and competence. Improves decision making and communication skills. LEVEL5 offers an interface to e-learning platforms that enable learners to autonomously carry out their self-assessment and receive a respective certificate. **Disadvantages/Difficulties** Requires a disciplined and honest self-reflection Lack of objectivity and validity

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		weaknesses. This can be used for formative and summative assessment. *Evaluation sheets* act as a reflective diary and conclude the self-assessment process. The learner brings together the log, the evidence of achievements and assessment matrix to reflect on what was achieved and the progress made. This is summative self-assessment. Especially for target groups with little experience in self-reflection, it is recommended that a mentor is at hand to support the reflection.	

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Observation	The purpose of direct and indirect observation is to collect evidence of achievement by watching learners' performances while they take part in an activity, but without interfering in their work. The activity can be a real situation or a simulated situation e.g. role-plays. Observation allows you to see the knowledge being put into practice and is better used when assessing and evidencing competence-based learning. Direct observation is undertaken in person, either by an assessor, peer or workplace supervisor. Indirect observation takes place when using appropriate technology such as video recording. Analysis of documents is also a kind of observation. Here documents rather than behaviour are scrutinised.	Direct Observation by an assessor: Assessor fills in a prepared observation report form during the learner is undertaking the activity – he makes a judgement against pre-determined criteria. The assessor records what the learner does, how the learner behaves and interacts with others. Peer Assessment: This can be in the form of a discussion, a question and answer session or by recording information on pro-forma. The peer can be another learner who has taken part in the activity alongside the learner who is being assessed. The peer assessor will either record or provide verbal feedback what the learner has done during the activity. Witness Testimony: This is a statement from a "third party" who has witnessed the learner take part in the activity in verbal or written form. The witness could be a work supervisor or colleague. Indirect Observation: This can be a video or film of the learner taking part in an activity. The assessor can recognise competence or achievement by observing the activity on the video. This can be supplemented by asking the learner questions about what is taking place on the film. 360% Feedback: this is a deliberate confrontation of observations and views on the learner's performance from different perspectives – e.g. of trainer, supervisor and colleagues.	**Advantages:** Provides the learner with the opportunity to demonstrate competence and skills Allows learner to put knowledge into practice Provides creative and innovative method of assessment Contributes to the development of an activity-based curriculum Provides a range of evidence for Portfolios **Disadvantages/Difficulties:** Can be time consuming for assessor Can be difficult to observe and assess individuals within a group

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(E-)Portfolio	Portfolios are personal collections of information describing and documenting a person's achievements and learning. An electronic portfolio, is a collection of electronic evidence (artefacts, including inputted text, electronic files such as Word and PDF files, images, multimedia, blog entries and Web links etc.) assembled and managed by a user, usually online. (E-) Portfolios are both demonstrations of the user's abilities and platforms for self-expression, and, if they are online, they can be maintained dynamically over time.	Ask your learners/ learners to create their own portfolio/e-portfolio, e.g. on the REBUS Platform. Encourage them to include all kinds of activities. Review during your project how competence levels are changing.	**Advantages:** Enables the individual to be evaluated on various levels. Highlights all of an individual's skill sets. Extracurricular activities can also be highlighted. Allows the reader to understand the different dimensions of the individual. Empowers individuals to connect their formal education, work experience and extracurricular activities. **Disadvantages/Difficulties:** Learners might need individual help. E-portfolios require some technical skills as well as available soft- and hardware.

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Games	A tool to assess knowledge, skills or attitudes in a non-formal way. Learners of a group get questions or task in a playful surrounding.	Not all people like games or are open to participate. Consider this when you select games. Make a good balance between knowledge questions and creative tasks. The atmosphere must be friendly enough to protect "losers". The group must not be too big. Invent tasks, which are also nice or useful to the other participants that are not directly involved in the task. Play the game yourself first before using it in the group to see the traps and to make a timetable. Every game needs a games-master. The games-master makes notes about the answers and assesses the orders.	**Advantage:** Creates a nice atmosphere. The learner can demonstrate skills or knowledge in a creative way. Improves communication skills. **Disadvantages/Difficulties:** Not every group appreciate "just games". Because of the gamble part it is a roughly assessment. It takes time, to prepare it and to play it.
Case study	A strategy to describe events and processes within a framework through various data collection methods such as observation, interview, document analysis in order to understand and evaluate the case.	Use the case study strategy to evaluate the implementation and the effects of an event or process on individuals/groups, e.g. the REBUS learning project. Case studies focusing on implementation help the evaluator to make decision whether the implementation responds to the initial intent. Case studies focusing on program outcomes assess the impact of the program and help identify reasons for success and failure. Plans should be made to obtain longitudinal data in	**Advantages:** It helps to assess a complex activity or process through longitudinal, in depth and detailed description and contextual analysis. Both qualitative and quantitative data could be collected and analysed for triangulation. **Disadvantages/Difficulties:** Time consuming. Only small samples

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		depth and in detail.	can be included in the study.
Essay	An essay is, generally, a piece of writing that gives the author's own argument — but the definition is vague, overlapping with those of a paper, an article, a pamphlet, and a short story. Essays have traditionally been sub-classified as formal and informal. An Essay is an assessment question that requires an answer in a sentence, paragraph, or short composition. Essay assessments are usually classified as subjective assessments as there are normally a variety of responses.	An essay (depending on the types of essays) is usually expected to consist of an 1. Introduction/Aims/Objectives 2. Major points and ideas explained and summarized 3. Results/Related points/Issues/or others depending on the topic 4. Conclusion – future work In regard to the taxonomy essays can be used as project reports thus tackling higher competence levels or key competences of higher complexity like related to Entrepreneurship projects. An essay (depending on the types of essays) is usually expected to consist of an 1. Introduction/Aims/Objectives 2. Major points and ideas explained and summarized 3. Results/Related points/Issues/or others depending on the topic 4. Conclusion – future work Recommendations: - Let students know the assessment criteria and marking scheme, including grammar, spellings	**Advantages:** • Essays have the ability to assess all levels of learning objectives. • It encourages original and creative thinking. **Disadvantages/Difficulties:** • Due to the subjective nature of essay assessments, grading is very unreliable even for the same assessor at different periods. • Grading may be influenced by other factors such as handwriting and length of response. • As essays are very time-consuming to answer and to correct, they are not recommended if only low-level of learning outcomes are assessed which can be assessed by multiple choices or short answer questions.

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		and other issues. - Try to reduce ambiguity in the essay questions, clearly define the expected response such as compare, evaluate, summarize, critique etc. - Do not use essays to measure knowledge or understanding that can be assessed using less time consuming assessment methods.	• Although guessing is not possible in essay assessments, but “bluffing” is. • It is also not advisable to give the topic of the essay to the students at an early date. This may give rise to superficial learning where students concentrate all their efforts in completing the essay only.