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## SOCCES - Assessment framework

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## INTRODUCTION

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In the last decades, international policy-making organizations in the field of education have recognized the increasing importance of transferable key competences for working life. In Europe, the European framework for key competences (ANC 2006/962/EC) defines eight key competences, which are: communication in the mother tongue; communication in foreign languages; mathematical competence and basic competences in science and technology; digital competence; social and civic competences; sense of initiative and entrepreneurship; learning to learn; cultural awareness and expression.

While the critical importance of key competences in future employment is widely recognized, in most countries the educational practices are still under development. In particular, while the status of the basic competences (literacy, mathematics, science), as well as foreign language, is well established, the promotion of transferable skills (digital, civic, and entrepreneurship) is lagging behind (EACEA/Eurydice, 2012; International Bureau of Education, 2016).

The project SOCCES – SOCIAL Competences, Entrepreneurship and Sense of initiative – addresses the issue of assessing transferable competences with regard to two specific transferable competences which are very important in working life, namely entrepreneurship and sense of initiative. To date, these two competences are evaluated through different assessment methods, but very few practical tools exist, and no consistent and standardized assessment framework can be found. The aim of SOCCES is therefore to develop a framework for the methodical assessment of these two competences, which can be used for assessment and quality assurance. The goal of this assessment framework is to provide teachers and evaluators with a unique and consistent list of entrepreneurial competences, their definitions and operationalizations, and a set of practical assessment tools which allow to measure students' mastery in entrepreneurial transversal competences.

The final proposed assessment framework has been developed through a multi-step method including (1) a baseline analysis mapping the current educational environments and practices in teaching and assessing transversal competences, (2) the selection of assessment elements, methodology and tools, (3) the pilot testing of the assessment framework through two virtually-enabled, real-life business cases, (4) analysis of data and further refining of assessment tools.

The developed assessment framework has been incorporated in a concrete assessment module that can be used in different educational environments. The module includes a collaborative, virtually enabled assignment and is accompanied with teacher instructions.

This assessment framework provides the first step to a modular European assessment and certification system for entrepreneurial competences, an "EuroComPass" for higher education, similar to the European Computer Driving Licence. SOCCES has also elaborated a specific proposal for an EuroComPass to measure Social, Entrepreneurship and Sense of Initiative competences.

## THEORETICAL BACKGROUND

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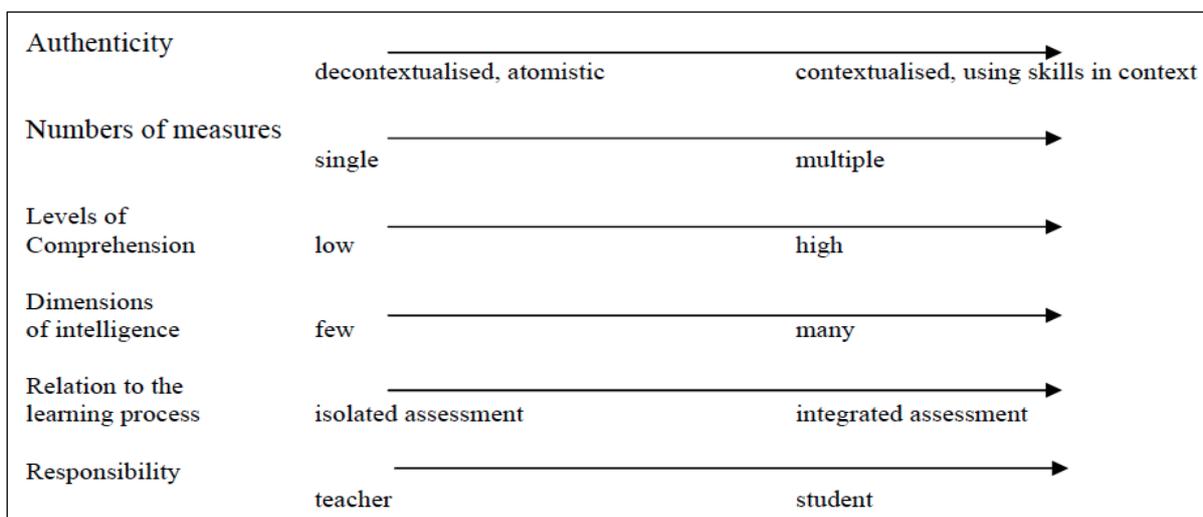
### Assessment in education

Assessment in education is defined as a process of gathering evidence, making judgments and drawing inferences about student's achievements and performances (Curtis, 2010). Pellegrino, Chudowsky, and Glaser (2011, p. 42) described assessment as "a tool designed to observe students' behaviour and produce data that can be used to draw reasonable inferences about what students know".

To date, the theoretical debate on assessment has suggested that "the aim of assessment is primarily to educate and improve student performance, not merely to audit it" (Wiggins, 1998, p. 7). Therefore, assessment not only plays a role of certification or final stage of a teaching a learning program, but it is considered as part of building knowledge process (Segers, Dochy, & Cascallar, 2003). Teaching is increasingly seen as a scaffolding activity aimed at supporting students to operate at the edge of their competences. In this perspective, assessment should provide feedback on where students are and how they could be supported to progress further, in order to promote meaningful learning. This occurs when learners are actively involved and have the opportunity to take control of their own learning process. Under this perspective the main role of assessment consist in providing feedback to learners, emphasising metacognition, self-assessment and the transferability of knowledge and competences acquired within other settings (Packer & Goicoechea, 2000)

In the last decade, literature has therefore pointed out a change in the perspective regarding the practices, tools and aims of assessment. As summarized by Segers et al. (2003), new directions in assessment regard a shift from de-contextualisation to authenticity, from single to multiple measurements, from a low to a high assessment of comprehension, from assessing a few to assessing many dimensions of intelligence, from the separation to the integration between assessment and learning processes, and from the idea that assessment is teacher directed to the notion of student's responsibility in evaluation (see Figure 1).

**Figure 1 – New directions in assessment (Segers et al., 2003)**



Mixed models of assessment, which include assessment elements as suggested from classical measurement, cognitive, and constructivist theoretical approaches to learning, can be seen in line with these new directions.

## **Assessing transferable competences**

Transferable competences are defined as competences that can be transferred from one job to another (OECD, 2012). They are sometimes also called transversal, generic, soft or employment competences. They can be learned within an educational or a social context and then transferred to a career, and generally be used and developed in all areas of people's life.

The assessment of transferable competences is particularly challenging since those competences are not easily definable, neither completely separated from competences related to contents. In fact, as highlighted by Gibb (2014), soft or transferrable skills represent a broad set of competences referring to many complex constructs and lead to the definition of multiple related skills. The assessment of transferable competences should therefore be concerned on three key issues (Gibb, 2014). First, the contexts (inputs), i.e., transferable competences should be clearly specified in order to define "good performances" and to contextualise it into the educational or organisational goals, characterising the broader learning environment. Second, the content of transferable skills assessment, which is related to quality and asks for fair methods and tools for evaluating such competences, using observations, data and inferences and quality information. Third, the consequences (outcomes) of soft skill assessment, which should consist in making learners aware of their behaviour, reflect on their own experiences, self-motivate and going on in a path of formative assessment for receiving constant feed-back for self-improvement. At the same time soft skills assessment outcomes have a formative impact on the further teaching and training activities (Gibb, 2014, p. 466).

In line with these considerations, assessment of transferable competences should serve diagnostic, formative, summative, and certification purposes. To this extent, a few principles to assess soft competences have been summarized by Ketchagias (2011, p. 121-122) as the following:

- reflecting the development of transversal competences goals and clearly specify the expected soft skills, and their development, from novice to expert;
- include adaptability to different circumstances where such competences are actually used and adopted, even taking into account unexpected situations;
- be based on performance, to give evidence to the ability to apply knowledge to critical thinking, problem solving and analytical tasks, which are key aspects connected with soft skills expertise;
- be formative for teaching and learning processes, offering directions, suggestions and feedback for improving soft competences;
- providing information and improving knowledge on student's cognitive and metacognitive learning strategies;
- assess fairly all learners, even adopting adjustment when necessary, in order to reduce the impact of difficulties and come to an authentically equal evaluation;
- be accurate and reliable, according to assessment purposes, and clearly specify its

- technical and statistical qualities or limits in order to give the possibility to the evaluator and the evaluated to assess the impact or generalisation of results;
- provide information that can act as feedback not only for learners, teachers but also for policy makers and for a wider public to be sensitised to the importance of soft competences;
  - contribute in improving competences and strategies for promoting such competences for educators, teachers, trainers;
  - be integrated in a wider assessment system that can authentically improve lifelong learning.

The assessment of transversal competences should therefore use models of competence development based on cognitive research, but transforming psychometrics to deal with new kinds of assessment and making students' thinking visible; account for new modes of communications (e.g., ICT); include collaboration and teamwork (i.e., integrate individual performance evaluation by assessing collaborative tasks); include local and global citizenship; interpreting assisted performance (i.e., ensuring accessibility and customization of items for students with special needs); ensuring validity; and consider cost and feasibility (Ketchagias, 2011, p. 129-130).

## METHOD

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To develop this assessment framework, a method was adopted which accounted for the following steps:

- 1) A baseline analysis aimed at mapping:
  - a) the current educational environments and practices at SOCCES partners' institutions, their perceived main development needs regarding the assessment framework and the defined competences (see project Reports "Current practices in defining and understanding transferable skills" and "Current practices in transversal competences assessment");
  - b) the approach and methods in teaching entrepreneurial transversal competences, available assessment methods and tools at the European level, through a review of existing programs, policy documents, and existing literature on entrepreneurial skills and competences (see project Report "Currently known related assessment frameworks for transferrable competences").
- 2) Development of a draft framework and methodology, including the choice of the essential elements of the framework and the assessment methodology. The development of a draft framework was based on
  - a) the baseline analysis (step 1)
  - b) group discussions (with the method EU Cafè, during the second partners' meeting)

At the end of this process, the proposed assessment framework to assess social and entrepreneurial transferable competences regards the following five areas of competence:

1. Positive attitude and initiative

2. Communication and interaction
  3. Team-work and collaboration
  4. Critical and analytical thinking or problem solving, including risk assessment
  5. Creativity and Innovation
- 3) Pilot testing of the assessment framework through two virtually enabled, real-life business cases to assess the defined transversal competences, with the aim of providing a common monitoring and assessment tool that can be used in different curriculum settings.
  - 4) Analysis of data from the pilot testing of the assessment tools.
  - 5) Refinement of the tools and of the set of guidelines and recommendations that the teachers can use to evaluate training programs.  
During this phase, a careful refinement and choice of non-redundant, testable competences and skills was made in order to offer also a shorter version of the assessment framework. For example, it was noted that the specific competences pertaining to the area of team-work and collaboration consisted of more granular and basic competences linked to interpersonal communication. The elaboration of a shorter version of the assessment framework represented also a first step towards the definition of an EuroComPass proposal.
  - 6) Development of a final version of the assessment framework and of a toolkit to be disseminated via web-portal.

The assessment is intended to be based on a reflexive circle, including self-assessment, assessment from peers, assessment from teachers, and multiple assessment.

For each of the five identified areas of competence, a list of detailed competences has been developed and operationalized. Each competence can be assessed according to three levels of mastery or expertise: low, medium, and high. These three competence levels were determined according to the data regarding the normative assessment on the students participating in SOCCES pilot tests. Specifically, the competence medium-level mastery is calculated as the average pre-test and post-test median  $\pm$  one standard deviation.

For each competence one or more assessment tools are proposed, with the aim of proposing a mixed-method assessment framework and obtaining multiple assessment measures. To facilitate the use and diffusion of these assessment tools, an extended version of the assessment framework and a shortened, more parsimonious, and more widely applicable version of the assessment framework are proposed. As underlined above, the short version was developed according to the results of the pilot testing of the extended assessment framework, carrying out a selection the most effective, valid, and reliable tools of the assessment framework.

An overview about the assessment framework, comprehensive of a list of competences and assessment tools, is found in Appendix A.

The assessment tools proposed to measure the full set of competences (i.e., extended version) are shown in Appendix B, whereas a more refined choice of assessment tools (i.e., short version) are shown in Appendix C.

## AREA OF COMPETENCE: POSITIVE ATTITUDE AND INITIATIVE

Positive attitude and initiative have been highlighted in different forms as key to an entrepreneurial mindset, endowing people with capacities in reflecting on needs, aspirations, personal strengths and weaknesses, believing in their abilities to influence the course of events, despite uncertainty, and overcome setbacks and failures (Bacigalupo, Kampylis, Punie, & Van den Brande, 2016).

### Self Assessment

#### *Definition*

The competence of self-assessment is related to the ability of reflecting on needs, aspirations, and wants in the short, medium, and long run, to identify and elaborate on ones' strengths and weaknesses (Bacigalupo et al., 2016).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Does not recognise his/her own strengths and weaknesses	Recognises a few of his/her own strength and weaknesses but cannot find improvement strategies	Is aware of his/her own strengths and weaknesses and can find improvement strategies.

#### *Assessment tools*

It is proposed to measure this competence through self-assessment, using an adapted version of the empowerment scale elaborated by Rogers, Chamberlin, Ellison, and Crean (1997). The scale presents the following 28 items measured on a 4-points Likert scale (ranging from 1 - strongly agree, to 4 - strongly disagree):

1. I can pretty much determine what will happen in my life.
2. People are only limited by what they think is possible.
3. People have more power if they join together as a group.
4. Getting angry about something never helps.
5. I have a positive attitude toward myself.
6. I am usually confident about the decisions I make.
7. People have no right to get angry just because they don't like something.
8. Most of the misfortunes in my life were due to bad luck.
9. I see myself as a capable person.
10. Making waves never gets you anywhere.
11. People working together can have an effect on their community.
12. I am often able to overcome barriers.
13. I am generally optimistic about the future.
14. When I make plans, I am almost certain to make them work.
15. Getting angry about something is often the first step toward changing it.
16. Usually I feel alone.
17. Experts are in the best position to decide what people should do or learn.

18. I am able to do things as well as most other people.
19. I generally accomplish what I set out to do.
20. People should try to live their lives the way they want to.
21. You can't fight bureaucracy.
22. I feel powerless most of the time.
23. When I am unsure about something, I usually go along with the rest of the group.
24. I feel I am a person of worth, at least on an equal basis with others.
25. People have the right to make their own decisions, even if they are bad ones.
26. I feel I have a number of good qualities.
27. Very often a problem can be solved by taking action.
28. Working with others in my community can help to change things for the better.

A suggested version of the instrument to be administered to students can be found in Appendix B and in Appendix C.

The items are set to account for the following factors:

- Self-esteem and self-efficacy (items n. 5, 6, 9, 12, 14, 18, 19, 24, 26)
- Power-powerless (items n. 7, 8, 10, 16, 17, 21, 22, 23)
- Community activism and autonomy (items n. 3, 11, 20, 25, 27, 28)
- Optimism and control over the future (items n. 1, 2, 13, 27)
- Righteous anger (items n. 4, 7, 10, 15)

The assessment score is obtained by summing and averaging the raw scores on all items. Scores in the range 2.51-4.00 are considered low level of competence; scores in the range 1.51-2.50 as medium level; and scores in the range 1.00-1.50 as high level.

## Growth Mindset

### *Definition*

People have implicit theories of intelligence, which can be “entity theories”, which view intelligence as fixed, or “incremental theories”, which view intelligence as malleable (Dweck, 1999). People having an incremental implicit theory of intelligence have a “growth mindset” and believe that intelligence can be learned and that the brain can grow from exercise and practice. This determines the goals they pursue, their responses to difficulty, and their task performance (Dweck, 2006).

This competence can be assessed according to the following three students’ mastery levels:

Low level	Medium level	High level
Believes that intelligence is static; does not apply for improvement; avoids effort, criticism and challenges and feels threatened by the success of others.	Considers intelligence both static and dynamic; sometimes applies for improvement; can afford a few effort and moderate challenges; does not care about criticism and the success of others.	Believes that intelligence is dynamic; applies for improvement; sees effort as a path to mastery; embraces challenges, learns from criticism; feels inspired by the success of others.

### ***Assessment tools***

To measure growth mindset, two measures have been identified, tested, and proposed. First, in a longer version of the test, assessment can be carried out through self-evaluation using a validated psychometric scale developed by Dweck (1999). The scale presents the following 8 items measured on a 6-points Likert scale (ranging from 1 - strongly agree, to 6 - strongly disagree):

1. You have a certain amount of transversal competences, and you can't really do much to change it.
2. Your transversal competences is something about you that you can't change very much.
3. No matter who you are, you can significantly change your transversal competences level.
4. To be honest, you can't really change the amount of transversal competences you have.
5. You can always substantially change the amount of transversal competences you have.
6. You can learn new things, but you can't really change your basic transversal competences
7. No matter the amount of transversal competences you have, you can always change it quite a bit.
8. You can change even your basic transversal competences level considerably.

A suggested version of the instrument to be administered to students can be found in Appendix B.

The items are set to account for the following factors:

- Entity beliefs (static mindset) (items n. 1, 2, 4, 6)
- Incremental beliefs (growth mindset) (items n. 3, 5, 7, 8)

The assessment score is obtained by summing and averaging the raw scores on all items. Scores in the range 1.00-3.00 are considered low level of competence in using a growth mindset; scores in the range 3.01-4.00 as medium level; and scores in the range 4.01-6.00 as high level.

A second assessment tool that is proposed is a short version of the mindset scale (Dweck, 2006), measuring on a 10-points scale the extent to which the respondent:

1. Avoids challenge vs. embrace challenge
2. Sees effort as fruitless or worse vs. sees effort as the path to mastery
3. Ignores criticism or useful negative feedback vs. learns from criticism
4. Feel threatened by success of others vs. finds lessons and inspiration in the success of others

This scale is proposed to be both self-assessed and peer- or teacher-assessed. A suggested version of the instrument to be administered to students can be found in Appendix C.

The assessment score is obtained by summing and averaging the raw scores on all items. Scores in the range 1.00-6.50 are considered low level of competence in using a growth mindset; scores in the range 6.51-8.50 as medium level; and scores in the range 8.50-10.00 as high level.

## Emotional intelligence

### *Definition*

Emotional intelligence describes adaptive interpersonal and intrapersonal emotional functioning (Kirk, Schutte, & Hine, 2008) and indicates the extent to which a person can appraise and regulate emotions in self and others, and utilize emotions for problem solving (Schutte et al., 1998).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Does not recognise emotions and their impact on him/her self and on others	Recognises emotions and their impact on him/her self and on others	Recognises, gives value and manages emotions and their impact on him/her self and on others

### *Assessment tools*

Emotional intelligence can be measured through the Brief Emotional Intelligence Scale developed by Davies, Stankov, and Roberts (1998). The scale presents the following 10 items measured on a 5-points Likert scale (ranging from 1 - strongly disagree, to 5 - strongly agree):

1. I know why my emotions change
2. I easily recognize my emotions as I experience them
3. I can tell how people are feeling by listening to the tone of their voice
4. By looking at their facial expressions, I recognize the emotions people are experiencing
5. I seek out activities that make me happy
6. I have control over my emotions
7. I arrange events others enjoy
8. I help other people feel better when they are down
9. When I am in a positive mood, I am able to come up with new ideas
10. I use good moods to help myself keep trying in the face of obstacles

The scale is proposed to be used both as self-assessed and etero-assessed (e.g., peer- and teacher-assessment). A suggested version of the instrument to be administered to students can be found in Appendix B.

The assessment score is obtained by summing and averaging the raw scores on all items. Scores in the range 2.51-5.00 are considered low level of competence in emotional intelligence; scores in the range 1.51-2.50 as medium level; and scores in the range 1.00-1.50 as high level.

## Perseverance

### *Definition*

The competence of perseverance refers to the ability to sustain goal-directed action and energy when confronting difficulties and obstacles impede goal achievement (Morris, Webb, Fu, & Singhal, 2013).

This competence can be assessed against the following three students' mastery levels:

Low level	Medium level	High level
Abandons an assignment when tired or under distraction; abandons a task when experiencing failure; does not work with clear goals.	Risks to abandon an assignment when tired or under distraction; risks to abandon a task when experiencing failure; does not always work with clear goals	Finishes an assignment even if tired of; keeps on working in a concentrated way even if there is a distraction; continues with the task even after a setback or failure; works with clear goals

### **Assessment tools**

The proposed measure to assess the competence of perseverance is the perseverance scale developed by Kyndt and Baert (2015) as part of their general entrepreneurial competences scale. In addition, it is proposed to add a free narrative form to allow description of students' experiences of perseverance. The perseverance scale is measured as a 7-items Likert scale ranging from 1 to 6 (with 1=Never, and 6=Always):

1. If I start an assignment, I finish it, even if I am tired of it
2. Even if there is distraction, I keep on working in a concentrated way
3. I place high demands on myself when I am working
4. Even after a setback or failure I continue with the task at hand
5. I work with clear goals
6. Only important reasons can make me change my plans
7. Even if the assignment is difficult, I start working on it immediately

The scale is proposed to be used both as self-assessed and etero-assessed (e.g., peer- and teacher-assessment). A suggested version of the instrument to be administered to students can be found in Appendix B and Appendix C.

The assessment score is obtained by summing and averaging the raw scores on all items. Scores in the range 1.00-3.50 are considered low level of perseverance; scores in the range 3.51-5.00 as medium level; and scores in the range 5.01-6.00 as high level.

## **Coping strategy**

### **Definition**

Coping refers to the activation of specific behaviors aimed at solving problems and stressful situations. A coping strategy is an action (both behavioral and cognitive) that a person is able to perform to deal with a stressful or difficult situation (Horney, 1939).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Cannot find ways to cope with difficult situations; does not see growth possibilities when dealing with difficult situations; cannot control reactions; cannot ask for help.	Cannot always find ways to cope with difficult situations; does not always see growth possibilities when dealing with difficult situations; can control reactions only in some cases; can ask for help only under certain conditions.	Looks for creative ways to alter difficult situations; believes that positive growth is possible when dealing with difficult situations; can control reactions; asks for help when needed.

### **Assessment tools**

To assess the competence of coping strategy it is proposed to use three scales developed by Kyndt and Baert (2015): the self-knowledge, the orientation towards learning, and the planning for future scale. The multi-item scales, reported in the following, are measured on 6-points Likert scale (ranging from 1 – Never, to 6 – Always).

1. I ask others what they think about my approach
2. If I cannot figure it out myself, I ask for help
3. I learn from the critique of others
4. I admit my mistakes spontaneously
5. I learn by cooperating with others
6. I attend courses in order to do my job better
7. I investigate which training and courses are available
8. I know where I can go for specific trainings
9. I am willing to make additional efforts in order to learn
10. I always know which new developments are occurring in the sector I am working with
11. I like to learn
12. If a situation changes, I adjust my plans
13. If I notice that I do not obtain the necessary results, I adjust my plans immediately
14. I adjust my planned approach when new opportunities arise
15. If my plan goes differently than expected, I make a new plan

The items belong to the following constructs:

- Self-knowledge: items from n. 1 to n. 5;
- Orientation towards learning: items from n. 6 to n. 11;
- Planning for future: items from n. 12 to n. 15.

The scale is proposed to be used both as self-assessed and etero-assessed (e.g., peer- and teacher-assessment). A suggested version of the instrument to be administered to students can be found in Appendix B.

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-3.75 are considered low level of competence in using coping

strategies; scores in the range 3.76-5.25 as medium level; and scores in the range 5.26-6.00 as high level.

A shortened version of the assessment tool to be administered to students was built only using the planning for future scale, to be used both as self-assessment and etero-assessment. The proposed tool can be found in Appendix C, and the evaluation criteria follows the same evaluation ranges described above.

## **AREA OF COMPETENCE: COMMUNICATION AND INTERACTION**

Competences in communication refer to the capacity to convey effective messages to external audiences, either orally or in written form. As shown by literature, competences in communication are key to successful entrepreneurs and managers (Florés, 2006; Hood & Young, 1993) because an effective communication is the base for persuasion, negotiation, and leadership (Bacigalupo et al., 2016).

### **General communication**

#### ***Definition***

“Communication is a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior” (Webster, 1983, p. 266). We define the competence in general communication as that of being able to transmitting and receiving messages clearly, in such a way to engage the audience and helping them to retain the message (Harvard University, 2014).

This competence can be assessed according to the following three students’ mastery levels:

<b>Low level</b>	<b>Medium level</b>	<b>High level</b>
Is not aware about the components of communication (verbal, non verbal and paravaerbal); does not listen and does not understand messages someone is sending; cannot send clear and concise messages to others.	Is partially aware about the components of communication (verbal, non verbal and paravaerbal); partially listens and understands messages someone is sending; can send clear and concise messages to others only if a few conditions are satisfied.	Is aware about the components of communication (verbal, non verbal and paravaerbal); listens and correctly understand messages someone is sending; always sends clear, concise messages to others.

#### ***Assessment tools***

It is proposed to measure the competence of communication through two self-assessment tools. First, using a shortened version the Interpersonal Communication Competence Scale developed by Rubin and Martin (1994). Second, by asking students to list what are their strengths, their weaknesses, and how to improve their competences, as a free narrative content. In addition, it is proposed to use this narrative content also as etero-assessment (e.g., peers or teachers).

The Interpersonal Communication Competence Scale is a multi-item scale as described in the following, measured on a 5-points Likert scale (anchored 1 – Strongly disagree to 5 – Strongly agree):

1. It is difficult to find the right words to express myself. (R)
2. I accomplish my communication goals
3. I can persuade others to my position.
4. I express myself well verbally..
5. Others would describe me as warm.
6. I reveal how I feel to others.
7. I tell people when I feel close to them.
8. Other people think that I understand them.
9. When I've been wronged, I confront the person who wronged me.
10. I take charge of conversations I'm in by negotiating what topics we talk about.
11. I have trouble standing up for myself. (R)
12. I stand up for my rights.
13. I let others know that I understand what they say.
14. In conversations with friends, I perceive not only what they say, but also what they do not say
15. I allow friends to see who I really am.
16. My friends truly believe that I care about them.
17. I try to look others in the eye when I speak with them.

Items indicated as (R) are reverse scored.

The listed items were set to account for the following factors:

- Expressiveness (items n. 1, 4)
- Environmental control (items n. 2, 3)
- Supportiveness (items n. 5)
- Self-disclosure (items n. 6, 15)
- Immediacy (items n. 7, 16, 17)
- Empathy (item n. 8)
- Assertiveness (items n. 9, 11, 12)
- Interaction management (items n. 10, 14)
- Altercentrism (item n. 13)

A suggested version of the instrument to be administered to students can be found in Appendix B and Appendix C.

The assessment score is obtained by summing and averaging the raw scores (transforming those reverse coded) on all items for each scale. Scores in the range 1.00-1.50 are considered low level of competence in general communication; scores in the range 1.51-2.50 as medium level; and scores in the range 2.51-5.00 as high level.

## Interaction

### *Definition*

The competence of interaction refers to a person's ability to manage interpersonal relationships in communication settings (Rubin & Martin, 1994).

This competence can be assessed according to the following three students' mastery levels:

<b>Low level</b>	<b>Medium level</b>	<b>High level</b>
Has marked difficulty in keeping up with the discussion and contributes only occasionally.	Keeps up with the discussion and can justify an opinion; responds and interacts adequately with other speakers; uses communication strategies well when unsure about (e.g., idiomatic use).	Can present ideas articulately in a complex discussion; can use sophisticated arguing and turn-taking strategies; has no difficulty in understanding idiomatic language use or different registers

### *Assessment tools*

As for general communication, the competence of interaction can be measured through two self-assessment tools. First, using a shortened version the Interpersonal Communication Competence Scale developed by Rubin and Martin (1994). Second, by asking students to list what are their strengths, their weaknesses, and how to improve their competences, as a free narrative content. For further instructions on the tools, see description in "General communication" and Appendix B and Appendix C.

## Presentation

### *Definition*

The competence of presentation can be defined as preparing and delivering ideas effectively to individuals or groups, demonstrating of being cognizant of audience response and able to adapt content and style accordingly to characteristics and needs of the audience, exhibiting mastery of materials, comfortable delivery style and handling of enquiries (Harvard University, 2014).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Structure lacks coherence. Speaker unfamiliar with topic. Transitional elements largely missing.	Evidence of a standard three part structure and some use of transitional elements. Maintains contact with the audience. Level is appropriate, but the listener is not totally convinced that the presenter knows his/her topic well.	Is thoroughly familiar with the topic and can respond confidently and spontaneously to complex questions. Presentation is well structured, uses transitional elements, and follows the conventions of the field. Good eye contact, no reading from his/her paper. Level appropriate for intended audience.

**Assessment tools**

As for general communication, the competence of interaction can be measured through two self-assessment tools. First, using a shortened version the Interpersonal Communication Competence Scale developed by Rubin and Martin (1994). Second, by asking students to list what are their strengths, their weaknesses, and how to improve their competences, as a free narrative content. For further instructions on the tools, see description in "General communication" and Appendix B and Appendix C.

**Negotiation and persuasion**

**Definition**

The competence of negotiation and persuasion is key to entrepreneurship because it refers to the capacity of fairly convincing others of own point of view, plan, or products (Kyndt & Baert, 2015).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
<p>Utilises facts to support claims. Helps to find solutions that contribute to positive outcomes. Contributes to resolving differences with other staff or parties. Responds to conflict without worsening the situation and refers to a supervisor where appropriate. Knows when to withdraw from a conflict situation.</p>	<p>Negotiates from an informed and credible position. Leads and facilitates productive discussions with staff and stakeholders. Encourages others to talk, shares and debates ideas to achieve a consensus. Recognises and explains the need for compromise. Influences others with a fair and considered approach and sound arguments. Shows sensitivity and understanding in resolving conflicts and differences. Manages challenging relations with internal and external stakeholders. Pre-empts and minimises conflict</p>	<p>Engages in a range of approaches to generate solutions, seeking expert inputs and advice to inform negotiating strategy. Uses sound arguments, strong evidence, and expert opinion to influence outcomes. Determines and communicates the organisation's position and bargaining strategy. Represents the organisation in critical negotiations, including those that are cross jurisdictional, achieving effective solutions in challenging relationships, ambiguous and conflicting positions. Pre-empts and avoids conflict across organisations and with senior internal and external stakeholders. Identifies contentious issues, directs discussion and debate, and steers parties towards an effective resolution.</p>

### **Assessment tools**

It is proposed to measure the competence of negotiation and persuasion through two self-assessment tools. First, using the ability to persuade scale developed by Kyndt and Baert (2015). Second, by asking students to narratively describe an experience where they used their persuasion competences. Both the two tools are proposed to be used both as self-assessed and etero-assessed (e.g., peer- and teacher-assessment).

A suggested version of the extended instrument to be administered to students can be found in Appendix B, whereas a shortened version is shown in Appendix C.

The Ability to persuade scale is a 10-item scale, measured on a 6-points Likert scale (anchored 1 – Never to 6-Always), accounting for the following items:

1. I can build a strong line of argumentation
2. I convince others with arguments
3. I explain my ideas in a clear and coherent manner
4. I am able to make people enthusiastic for my idea
5. I make it clear to others what I want to achieve

6. I can name to pros and cons of my idea
7. I adjust my arguments to the person I am talking to
8. I explain to others why I took a certain decision
9. I can convey my message in an enthusiastic manner
10. When I decide something, I know exactly why

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-3.50 are considered low level of competence in negotiation and persuasion; scores in the range 3.51-5.00 as medium level; and scores in the range 5.01-6.00 as high level.

## **AREA OF COMPETENCE: TEAM WORK AND COLLABORATION**

Competences in Team work and Collaboration refer to working collaboratively together with others to achieve group goals and objectives. As shown by literature, competences in team work and collaboration, also recognized as human relations competences (Mitchelmore & Rowley, 2010) are of significant important importance for entrepreneurship (Bacigalupo et al., 2016; Komarkova, Gagliardi, Conrads, & Collado, 2015).

### **Group work and team management**

#### ***Definition***

The competence of group work and team management refers to being able to manage relationships with other people (Chell, 2013), in order to exploit entrepreneurial opportunities and implementing ideas (Komarkova et al., 2015; Moberg et al., 2014).

This competence can be assessed according to the following three students' mastery levels:

<b>Low level</b>	<b>Medium level</b>	<b>High level</b>
Works uniquely alone, does not cooperate, avoid working with persons different each other's, does not take into account other people's ideas and contributions, avoid sharing information.	Is able to work in groups with a low level of complexity, cooperate only under certain conditions, can manage moderate diversity in a group, partially listen other people's ideas and contributions, and share a few information.	Is able to work interdependently and to contribute in a variety of work teams, promote cooperation, give value to diversity in a group, respects ideas and contributions of others, shares information assists in mentoring others.

#### ***Assessment tools***

It is proposed to measure the competence of group work and team management through exposing students to a creative challenge (e.g., "The Marshmallow challenge", Wujec, 2010) and then use the Belbin Role method (Belbin, 1981) to have students reflecting on their roles.

The proposed self-assessment tool is based on students' evaluations about the following areas:

- 1) What they can contribute to a team
- 2) Their possible shortcomings in team work

- 3) Their characteristic behaviour in a project with other people
- 4) Their characteristic approach to group work
- 5) Their sources of satisfaction from a job
- 6) Their answers to difficult tasks with limited time and unfamiliar people
- 7) Their characteristic answers to problems in a group

The assessment leads to understanding the role covered by student in team work (e.g., shaper, implementer, completer finisher, coordinator, teamworker, resource investigator, plant, monitor evaluator).

A suggested version of the tool to be administered to students can be found in Appendix B.

## Conflict resolution

### *Definition*

Because conflict is often pervasive in team and interorganizational relationships, the manner in which people resolve conflict has implication on team and organizational performance (Behfar, Peterson, Mannix, & Trochim, 2008; De Dreu & Weingart, 2003). Conflict can emerge with regard to tasks or cognitions (i.e., disagreement over differences in ideas, viewpoints, and opinions pertaining to the group’s tasks), relationships (i.e., disagreement resulting from interpersonal incompatibilities), and processes (i.e., conflict about dividing and delegating responsibility and deciding how to get work done) (Behfar et al., 2008). Whereas conflict can be resolved with destructive techniques (e.g., domination, confrontation), these techniques have a negative effect on team and organizational performance (Mohr & Spekman, 1994). The competence of conflict resolution therefore refers to finding peaceful solutions to disagreement among two or more parties through constructive techniques (e.g., joint problem solving, persuasion), which have a positive effect on organizational performance (Mohr & Spekman, 1994).

This competence can be assessed according to the following three students’ mastery levels:

Low level	Medium level	High level
Avoids difficult conversations, does not listen nor empathise with others, tries to find guiltiness, is not focused on the outcome, take comments as personal attacks, is not able to negotiate, privilege competition and win-lose outcomes.	Stands but cannot completely manage difficult conversations, listens others but does not always empathise, is partially focused on the outcome, rarely takes comments as personal attacks, tries to negotiate, promotes win-win outcomes when participants adhere.	Use assertiveness in initiating difficult conversations, listens in an objective, empathic way, avoids the blame game, is focused on the outcome, does not take comments as personal attacks, is able to negotiate, promote win-win outcomes

### **Assessment tools**

It is proposed to measure the competence of conflict resolution through a self-assessment tools using a shortened version the Interpersonal Communication Competence Scale developed by Rubin and Martin (1994). For description of this tool, see description in “General communication” and Appendix B.

## **AREA OF COMPETENCE: CRITICAL AND ANALYTICAL THINKING OR PROBLEM SOLVING, INCLUDING RISK ASSESSMENT**

A fundamental area of entrepreneurial competence regards decision-making capabilities with regard to new ideas and opportunities in an uncertain environment (Bacigalupo et al., 2016; Chell, 2013).

### **Problem solving attitude**

#### **Definition**

Competences in problem solving refer to the ability to relate previously unrelated objects or variables to produce novel and appropriate or useful outcomes (Morris et al., 2013), through a process or problem identification, new idea generation and realization.

This competence can be assessed according to the following three students’ mastery levels:

<b>Low level</b>	<b>Medium level</b>	<b>High level</b>
Does not recognise and is not able to analyse problems; is not oriented to quickly find solutions; does not involve others; tends to avoid decision-making or takes unclear decisions; prefers traditional models, even if out-dated; does not challenge the status quo; gets lost in the detail and cannot see the bigger picture.	Identifies and tries to analyse problems; can distinguish relevant from irrelevant information in low complexity situation; try to seek for best solutions not necessarily quickly and/or involving others; can see alternative and innovative solutions to problems but cannot always apply them; can imagine good but not necessarily innovative ways to tackle problems; adopts lateral thinking if accompanied; makes decisions; acts with integrity.	Identifies and appropriately analyse problems; distinguishes relevant from irrelevant information; quickly searches for best solutions involving others; considers different approaches, disciplines and points of view when generating solutions; uses resources creatively; originates alternatives to conventional thinking; produces imaginative or unique responses to a problem makes clear, consistent, transparent decisions; acts with integrity in all decision making.

### **Assessment tools**

As an assessment tool to evaluate competences in problem solving, it is proposed to use a self-assessment psychometric measure represented by the Creative problem solving scale – Producing

creative solutions scale (Morris et al., 2013). The tool is a multi-item scale, measured on a 5-points Likert scale (ranging from 1 – Strongly disagree, to 5 – Strongly agree), comprising the following statements:

1. I demonstrate originality in my work
2. I am creative when asked to work with limited resources.
3. I identify ways in which resources can be recombined to produce novel products.
4. I find new uses for existing methods or equipment.
5. I think outside of the box.
6. I identify opportunities for new services/products.
7. Freedom to be creative and original is extremely important to me.

A suggested version of the instrument to be administered to students can be found in Appendix B and in Appendix C.

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-1.50 are considered low competence level in problem solving; scores in the range 1.51-3.00 as medium level; and scores in the range 3.01-5.00 as high level.

## Recognizing opportunities

### *Definition*

The competence of recognizing opportunities refers to the capacity to perceive changed conditions or overlooked possibilities in the environment that represent potential sources of profit or return for an individual or an organization (Morris et al., 2013).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Is poorly aware of data/information/research available to inform and develop areas of work; seldomly keeps up to date with information and its quality in order to make judgements; tends to treat information from different pieces of information as separate.	Is aware of data/information/research available to inform and develop areas of work; moderately keeps up to date with information and its quality in order to make judgements; is able to see some new connections and patterns from available data.	Is an avid information seeker, always carrying out activities of search for new information/data/research; is good at "connecting the dots", seeing links between seemingly unrelated pieces of information; has ideas about developing novel products, policies, and strategies for the future.

### *Assessment tools*

The competence of recognizing opportunities is measured through two self-assessed psychometric measures developed by Morris et al. (2013): (1) the opportunity recognition scale, and (2) the conveying a vision scale. The items represented in the scales, which are measured on a 5-points Likert scale (ranging 1 – Strongly disagree, to 5 – Strongly agree) are the following:

1. I am an avid information seeker.
2. I am always actively looking for new information.
3. I often make novel connections and perceive new or emergent relationships between various pieces of information.
4. I see links between seemingly unrelated pieces of information.
5. I am good at “connecting dots”.
6. I often see connections between previously unconnected domains of information.
7. I am always seeking new opportunities in my life
8. I believe in a bold and daring view of the future.
9. I am able to paint an interesting picture of the future.
10. The future is very hard to see or envision.
11. I find it difficult to get others committed to my vision or dreams.
12. I find that I am able to inspire others with my plans for the future.

The items are therefore set to account for the following constructs:

- Opportunity recognition (items from n. 1 to 6)
- Conveying a compelling vision/seeing the future (items from n. 7 to 12)

A suggested version of the instrument to be administered to students can be found in Appendix B.

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-2.00 are considered low level of competence in recognizing opportunities; scores in the range 2.01-3.00 as medium level; and scores in the range 3.01-5.00 as high level.

For a shortened version of the assessment framework, it is proposed to use the opportunity recognition scale only, as shown in Appendix C. Also in this case, the assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-1.50 are considered low level of competence in recognizing opportunities scores in the range 1.51-2.50 as medium level; and scores in the range 2.51-3.00 as high level.

## **Risk management**

### ***Definition***

The competence of risk management refers to the competence in taking actions to reduce the probability of a risk occurrence or to reduce the potential impact if the risk were to occur (Morris et al., 2013).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Is scarcely able to recognize and assess risk; is not able to accept risk; feels that being able to deal with risk is not important and cannot be learned.	Has a moderate ability to recognize and assess risk; is able to accept risk under certain conditions; feels that being able to deal with risk is somewhat important and be learned.	Has a high ability to recognize and assess risk; is able to accept risk; feels that being able to deal with risk is important and can be learned.

### **Assessment tools**

The competence of risk management can be measured through a self-assessment psychometric tool consisting in the risk management/mitigation scale proposed by Morris et al. (2013). The tool consists in a 5-items, 5-points Likert scale (ranging 1 – strongly disagree to 5 – strongly agree), measuring agreement with the following statements:

1. My skills in recognizing and assessing risks are strong.
2. There is not much that people can do about risk.
3. Risks cannot really be managed.
4. I understand a lot about how to manage risks
5. Dealing with risk is a learned skill.

A suggested version of the instrument to be administered to students can be found in Appendix B.

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-2.50 are considered low level of competence in risk management; scores in the range 2.51-3.50 as medium level; and scores in the range 3.51-5.00 as high level.

## **AREA OF COMPETENCE: CREATIVITY AND INNOVATION**

Creativity and innovation have been highlighted as extremely relevant area of entrepreneurial and social competences (e.g., Bacigalupo et al., 2016; Moberg et al., 2014). Creativity encompasses the development of new ideas to create value, including better solutions to existing challenges (Bacigalupo et al., 2016), and innovation concerns those processes regarding the introduction and application of new or improved ideas, processes, products or procedures (West, 2002).

### **Creativity and lateral thinking**

#### **Definition**

The competence of creativity and lateral thinking refers to solving problems through an indirect and creative approach, using reasoning that is not immediately obvious and involving ideas that may not be obtainable by using only traditional step-by-step logic (De Bono, 1970).

This competence can be assessed according to the following three students' mastery levels:

Low level	Medium level	High level
Can only see the immediate problem and easy connections between topic or ideas, prefers traditional models, even if outdated, does not challenge the status quo, gets lost in the detail and cannot see the bigger picture.	Can see alternative and innovative solutions to problems but cannot always apply it, can imagine good but not necessarily innovative ways to tackle problems, adopt lateral thinking if accompanied.	Considers different approaches, disciplines and points of view when generating solutions, uses resources creatively, originates alternatives to conventional thinking, produces imaginative or unique responses to a problem

### ***Assessment tools***

As an assessment tool to evaluate creativity and lateral thinking, it is proposed to use a self-assessment psychometric measure represented by the Creative problem solving scale – Producing creative solutions scale (Morris et al., 2013). For further details on this tool, see description above in “Problem solving attitude”.

A suggested version of the instrument to be administered to students can be found in Appendix B.

## **Adaptability**

### ***Definition***

The competence of adaptability in the work context refers to being able to respond to changes in the environment and performing well in a changing task context (LePine, Colquitt, & Erez, 2000), trying to understand change, displaying a willingness to learn new ways to accomplish work objectives, with a positive attitude (Bowdoin College, 2016; Harvard University, 2014).

This competence can be assessed according to the following three students’ mastery levels:

Low level	Medium level	High level
Willingly takes on new tasks/adopts new approaches as required as appropriate to job role. Takes responsibility for keeping professional skills and knowledge up to date.	Embraces and manages change. Seeks opportunities for change, supporting colleagues in implementing new ways of working, effectively and supportively communicating the rationale for change.	Instigates and leads programmes of change, working in close collaboration with team mates/ colleagues. Identifies resource implications of strategic developments and manages them accordingly.

### ***Assessment tools***

As an assessment tool to evaluate adaptability, it is proposed to use the empowerment scale developed by Rogers et al. (1997). For a description of the content of the tool and of the assessment levels, see “Self-assessment” competence.

A suggested version of the instrument to be administered to students can be found in Appendix B.

## **Innovation**

### ***Definition***

The competence of innovation refers to those processes regarding the introduction and application of new or improved ideas, processes, products or procedures (West, 2002).

This competence can be assessed according to the following three students' mastery levels:

<b>Low level</b>	<b>Medium level</b>	<b>High level</b>
Seeks out, reviews and integrates new ways of working into role.	Reviews, tests and implements new concepts, models and approaches to practice in support of service development and delivery.	Develops and implements new concepts, models, approaches to practice and products that have a significant impact on the longer term success of the team/organization/company. Drives strategic thinking.

### ***Assessment tools***

As an assessment tool to evaluate innovation, it is proposed to use a self-assessed psychometric measure of innovativeness (Mueller & Thomas, 2001). The tool consists in a 8-items, 5-points Likert scale (ranging 1 – strongly agree to 5 – strongly disagree), measuring agreement with the following statements:

1. I often surprise people with my novel ideas.
2. People often ask me for help in creative activities.
3. I obtain more satisfaction from mastering a skill than coming up with a new idea.
4. I prefer work that requires original thinking.
5. I usually continue doing a new job in exactly the way it was taught to me.
6. I like a job which demands skill and practice rather than inventiveness.
7. I am not a very creative person.
8. I like to experiment with various ways of doing the same thing.

A suggested version of the instrument to be administered to students can be found in Appendix B.

The assessment score is obtained by summing and averaging the raw scores on all items for each scale. Scores in the range 1.00-2.50 are considered low level of competence in innovation; scores in the range 2.51-3.50 as medium level; and scores in the range 3.51-5.00 as high level.

## APPENDIX A – SUMMARY ASSESSMENT FRAMEWORK FOR ENTREPRENEURIAL TRANSVERSAL COMPETENCES

Area of competence	Specific competence	Low level	Medium level	High level	Assessment tool	
					Extended version	Short version
Positive attitude and initiative	Self assessment	Does not recognise his/her own strengths and weaknesses	Recognises a few of his/her own strength and weaknesses but cannot find improvement strategies	Is aware of his/her own strengths and weaknesses and can find improvement strategies.	Empowerment scale (Rogers et al., 1997) (self-assessed)	Empowerment scale (Rogers et al., 1997) (self-assessed)
	Growth mindset	Believes that intelligence is static; does not apply for improvement; avoids effort, criticism and challenges and feels threatened by the success of others.	Considers intelligence both static and dynamic; sometimes applies for improvement; can afford a few effort and moderate challenges; does not care about criticism and the success of others.	Believes that intelligence is dynamic; applies for improvement; sees effort as a path to mastery; embraces challenges, learns from criticism; feels inspired by the success of others.	Mindset Scale (Dweck, 1999) (self-assessed)	Short mindset scale (Dweck, 2006) (self-assessed and etero-assessed)
	Emotional intelligence	Does not recognise emotions and their impact on him/her self and on others	Recognises emotions and their impact on him/her self and on others	Recognises, gives value and manages emotions and their impact on him/her self and on others	Brief Emotional Intelligence Scale (Davies et al., 1998) (self-assessed and etero-assessed)	-

	<b>Perseverance</b>	Abandons an assignment when tired or under distraction; abandons a task when experiencing failure; does not work with clear goals.	Risks to abandon an assignment when tired or under distraction; risks to abandon a task when experiencing failure; does not always work with clear goals	Finishes an assignment even if tired of; keeps on working in a concentrated way even if there is a distraction; continues with the task even after a setback or failure; works with clear goals	Perseverance scale (Kyndt & Baert, 2015) and narrative form (self-assessed and etero-assessed)	Perseverance scale (Kyndt & Baert, 2015) (self-assessed and etero-assessed)
	<b>Coping Strategy</b>	Cannot find ways to cope with difficult situations; does not see growth possibilities when dealing with difficult situations; cannot control reactions; cannot ask for help.	Cannot always find ways to cope with difficult situations; does not always see growth possibilities when dealing with difficult situations; can control reactions only in some cases; can ask for help only under certain conditions.	Looks for creative ways to alter difficult situations; believes that positive growth is possible when dealing with difficult situations; can control reactions; asks for help when needed.	Self-knowledge, orientation towards learning, and planning for future scale (Kyndt & Baert, 2015) (self-assessed and etero-assessed)	Planning for future scale (Kyndt & Baert, 2015) (self-assessed and etero-assessed)
<b>Communication and interaction</b>	<b>General communication</b>	Is not aware about the components of communication (verbal, non verbal and paravaerbal); does not listen and does not understand messages someone is sending; cannot send clear and concise messages to others.	Is partially aware about the components of communication (verbal, non verbal and paravaerbal); partially listens and understands messages someone is sending; can send clear and concise messages to others only if a few conditions are satisfied.	Is aware about the components of communication (verbal, non verbal and paravaerbal); listens and correctly understand messages someone is sending; always sends clear, concise messages to others.	Interpersonal Communication Competence Scale (Rubin & Martin, 1994) and narrative form (self-assessed and etero-assessed)	Interpersonal Communication Competence Scale (Rubin & Martin, 1994) (self-assessed and etero-assessed)

	<b>Interaction</b>	Has marked difficulty in keeping up with the discussion and contributes only occasionally.	Keeps up with the discussion and can justify an opinion; responds and interacts adequately with other speakers; uses communication strategies well when unsure about (e.g., idiomatic use).	Can present ideas articulately in a complex discussion; can use sophisticated arguing and turn-taking strategies; has no difficulty in understanding idiomatic language use or different registers	Interpersonal Communication Competence Scale (Rubin & Martin, 1994) and narrative form (self-assessed and etero-assessed)	Interpersonal Communication Competence Scale (Rubin & Martin, 1994) (self-assessed and etero-assessed)
	<b>Presentation</b>	Structure lacks coherence. Speaker unfamiliar with topic. Transitional elements largely missing.	Evidence of a standard three part structure and some use of transitional elements. Maintains contact with the audience. Level is appropriate, but the listener is not totally convinced that the presenter knows his/her topic well.	Is thoroughly familiar with the topic and can respond confidently and spontaneously to complex questions. Presentation is well structured, uses transitional elements, and follows the conventions of the field. Good eye contact, no reading from his/her paper. Level appropriate for intended audience.	Presentation exercise and Interpersonal Communication Competence Scale (Rubin & Martin, 1994) and narrative form (self-assessed and etero-assessed)	-

	<b>Negotiation and persuasion</b>	<p>Utilises facts to support claims. Helps to find solutions that contribute to positive outcomes. Contributes to resolving differences with other staff or parties. Responds to conflict without worsening the situation and refers to a supervisor where appropriate. Knows when to withdraw from a conflict situation.</p>	<p>Negotiates from an informed and credible position. Leads and facilitates productive discussions with staff and stakeholders. Encourages others to talk, shares and debates ideas to achieve a consensus. Recognises and explains the need for compromise. Influences others with a fair and considered approach and sound arguments. Shows sensitivity and understanding in resolving conflicts and differences. Manages challenging relations with internal and external stakeholders. Pre-empts and minimises conflict</p>	<p>Engages in a range of approaches to generate solutions, seeking expert inputs and advice to inform negotiating strategy. Uses sound arguments, strong evidence, and expert opinion to influence outcomes. Determines and communicates the organisation's position and bargaining strategy. Represents the organisation in critical negotiations, including those that are cross jurisdictional, achieving effective solutions in challenging relationships, ambiguous and conflicting positions. Pre-empts and avoids conflict across organisations and with senior internal and external stakeholders. Identifies contentious issues, directs discussion and debate, and steers parties towards an effective resolution.</p>	<p>Entrepreneurial competences scale (ability to persuade scale (Kyndt and Baert, 2015) and narrative form (self-assessed and etero-assessed)</p>	<p>Entrepreneurial competences scale (ability to persuade scale (Kyndt and Baert, 2015) (self-assessed and etero-assessed)</p>
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<b>Team work and collaboration</b>	<b>Group work and team management</b>	Works uniquely alone, does not cooperate, avoid working with persons different each other's, does not take into account other people's ideas and contributions, avoid sharing information.	Is able to work in groups with a low level of complexity, cooperate only under certain conditions, can manage moderate diversity in a group, partially listen other people's ideas and contributions, and share a few information.	Is able to work interdependently and to contribute in a variety of work teams, promote cooperation, give value to diversity in a group, respects ideas and contributions of others, shares information assists in mentoring others.	Belbin role self-assessment tool (self-assessed)	-
	<b>Conflict resolution</b>	Avoids difficult conversations; does not listen nor empathise with others; tries to find guiltiness; is not focused on the outcome; takes comments as personal attacks; is not able to negotiate; privileges competition and win-lose outcomes.	Stands but cannot completely manage difficult conversations; listens others but does not always empathise; is partially focused on the outcome; rarely takes comments as personal attacks; tries to negotiate; promotes win-win outcomes when participants adhere.	Uses assertiveness in initiating difficult conversations; listens in an objective, empathic way; avoids the blame game; is focused on the outcome; does not take comments as personal attacks; is able to negotiate; promotes win-win outcomes.	Interpersonal Communication Competence Scale (Rubin & Martin, 1994) (self-assessed)	-

<b>Critical and Analytical Thinking or Problem Solving, including Risk Assessment</b>	<b>Problem solving attitude</b>	Does not recognise and is not able to analyse problems; is not oriented to quickly find solutions; does not involve others; tends to avoid decision-making or takes unclear decisions.	Identifies and tries to analyse problems; can distinguish relevant from irrelevant information in low complexity situation; try to seek for best solutions not necessarily quickly and/or involving others; makes decisions; acts with integrity.	Identifies and appropriately analyse problems; distinguishes relevant from irrelevant information; quickly searches for best solutions involving others; makes clear, consistent, transparent decisions; acts with integrity in all decision making.	Creative problem solving scale (Morris et al., 2013) (self-assessed)	Creative problem solving scale (Morris et al., 2013) (self-assessed)
	<b>Recognizing opportunities</b>	Is poorly aware of data/information/research available to inform and develop areas of work; seldomly keeps up to date with information and its quality in order to make judgements; tends to treat information from different pieces of information as separate.	Is aware of data/information/research available to inform and develop areas of work; moderately keeps up to date with information and its quality in order to make judgements; is able to see some new connections and patterns from available data.	Is an avid information seeker, always carrying out activities of search for new information/data/research; is good at “connecting the dots”, seeing links between seemingly unrelated pieces of information; has ideas about developing novel products, policies, and strategies for the future.	Opportunity recognition scale + conveying a vision/seeing the future scale (Morris et al, 2013) (self-assessed)	Opportunity recognition scale (Morris et al, 2013) (self-assessed)

	<b>Risk management</b>	Is scarcely able to recognize and assess risk; is not able to accept risk; feels that being able to deal with risk is not important and cannot be learned.	Has a moderate ability to recognize and assess risk; is able to accept risk under certain conditions; feels that being able to deal with risk is somewhat important and be learned.	Has a high ability to recognize and assess risk; is able to accept risk; feels that being able to deal with risk is important and can be learned.	Risk management scale (Morris et al., 2013) (self-assessed)	-
<b>Creativity and Innovation</b>	<b>Creativity and lateral thinking</b>	Can only see the immediate problem and easy connections between topic or ideas, prefers traditional models, even if out-dated, does not challenge the status quo, gets lost in the detail and cannot see the bigger picture.	Can see alternative and innovative solutions to problems but cannot always apply it, can imagine good but not necessarily innovative ways to tackle problems, adopt lateral thinking if accompanied.	Considers different approaches, disciplines and points of view when generating solutions, uses resources creatively, originates alternatives to conventional thinking, produces imaginative or unique responses to a problem	Creative problem solving scale (Morris et al., 2013) (self-assessed)	-
	<b>Adaptability</b>	Willingly takes on new tasks/adopts new approaches as required as appropriate to job role. Takes responsibility for keeping professional skills and knowledge up to date.	Embraces and manages change. Seeks opportunities for change, supporting colleagues in implementing new ways of working, effectively and supportively communicating the rationale for change.	Instigates and leads programmes of change, working in close collaboration with team mates/ colleagues. Identifies resource implications of strategic developments and manages them accordingly.	Making Decisions scale (Rogers et al., 1997) (self-assessed)	-

	<b>Innovation</b>	Seeks out, reviews and integrates new ways of working into role.	Reviews, tests and implements new concepts, models and approaches to practice in support of service development and delivery.	Develops and implements new concepts, models, approaches to practice and products that have a significant impact on the longer term success of the team/organization/company. Drives strategic thinking.	Innovativeness scale (Mueller & Thomas, 2001) (self-assessed)	-
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## APPENDIX B - ASSESSMENT TOOLS (EXTENDED VERSION)

### Self-assessment

The following statements relate to one's perspective on life and to making decisions.

For each of the statements, please indicate how much you agree or disagree.

Indicate how you feel now. First impressions are usually best. Do not spend a lot of time on any one question.

Please be honest with yourself so that your answers reflect your true feelings.

	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
1. I can pretty much determine what will happen in my life. 2. People are only limited by what they think is possible. 3. People have more power if they join together as a group. 4. Getting angry about something never helps. 5. I have a positive attitude toward myself. 6. I am usually confident about the decisions I make. 7. People have no right to get angry just because they don't like something. 8. Most of the misfortunes in my life were due to bad luck. 9. I see myself as a capable person. 10. Making waves never gets you anywhere. 11. People working together can have an effect on their community. 12. I am often able to overcome barriers. 13. I am generally optimistic about the future. 14. When I make plans, I am almost certain to make them work. 15. Getting angry about something is often the first step toward changing it. 16. Usually I feel alone. 17. Experts are in the best position to decide what people should do or learn. 18. I am able to do things as well as most other people. 19. I generally accomplish what I set out to do. 20. People should try to live their lives the way they want to. 21. You can't fight bureaucracy. 22. I feel powerless most of the time. 23. When I am unsure about something, I usually go along with the rest of the group. 24. I feel I am a person of worth, at least on an equal basis with others. 25. People have the right to make their own decisions, even if they are bad ones. 26. I feel I have a number of good qualities. 27. Very often a problem can be solved by taking action. 28. Working with others in my community can help to change things for the better.				

### ***Growth mindset***

The following statements relate to one's perspective on mindset.  
Please show how much you agree or disagree with each statement.

	<b>1 Strongly Agree</b>	<b>2 Agree</b>	<b>3 Mostly Agree</b>	<b>4 Mostly Disagree</b>	<b>5 Disagree</b>	<b>6 Strongly Disagree</b>
1. You have a certain amount of transversal competences, and you can't really do much to change it. 2. Your transversal competences is something about you that you can't change very much. 3. No matter who you are, you can significantly change your transversal competences level. 4. To be honest, you can't really change the amount of transversal competences you have. 5. You can always substantially change the amount of transversal competences you have. 6. You can learn new things, but you can't really change your basic transversal competences 7. No matter the amount of transversal competences you have, you can always change it quite a bit. 8. You can change even your basic transversal competences level considerably.						

**Emotional intelligence (self-assessed)**

The following statements regard the role of emotions in your life. Please indicate how much you agree or disagree with each statement.

Please note that the format of the scale differs from the previous ones.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I know why my emotions change 2. I easily recognize my emotions as I experience them 3. I can tell how people are feeling by listening to the tone of their voice 4. By looking at their facial expressions, I recognize the emotions people are experiencing 5. I seek out activities that make me happy 6. I have control over my emotions 7. I arrange events others enjoy 8. I help other people feel better when they are down 9. When I am in a positive mood, I am able to come up with new ideas 10. I use good moods to help myself keep trying in the face of obstacles					

**Emotional intelligence (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you agree or disagree with each statement as representative of **STUDENT NAME**.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. STUDENT NAME knows why his/her emotions change 2. STUDENT NAME easily recognizes his/her emotions as he/she experiences them 3. STUDENT NAME can tell how people are feeling by listening to the tone of their voice 4. By looking at their facial expressions, STUDENT NAME recognizes the emotions people are experiencing 5. STUDENT NAME seeks out activities that make he/she happy 6. STUDENT NAME has control over his/her emotions 7. STUDENT NAME arranges events others enjoy 8. STUDENT NAME helps other people feel better when they are down 9. When STUDENT NAME is in a positive mood, he/she is able to come up with new ideas 10. STUDENT NAME uses good moods to help himself/herself keep trying in the face of obstacles					

**Perseverance (self-assessed)**

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If I start an assignment, I finish it, even if I am tired of it 2. Even if there is distraction, I keep on working in a concentrated way 3. I place high demands on myself when I am working 4. Even after a setback or failure I continue with the task at hand 5. I work with clear goals 6. Only important reasons can make me change my plans 7. Even if the assignment is difficult, I start working on it immediately						

Could you please describe an experience that describes how did you use/not use these competences?

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**Perseverance (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If <b>STUDENT NAME</b> starts an assignment, he/she finishes it, even if he/she is tired of it 2. Even if there is distraction, <b>STUDENT NAME</b> keeps on working in a concentrated way 3. <b>STUDENT NAME</b> places high demands on himself/herself when he/she is working 4. Even after a setback or failure <b>STUDENT NAME</b> continues with the task at hand 5. <b>STUDENT NAME</b> works with clear goals 6. Only important reasons can make <b>STUDENT NAME</b> change his/her plans 7. Even if the assignment is difficult, <b>STUDENT NAME</b> starts working on it immediately						

Could you please describe an experience with **STUDENT NAME** that describes how did you use/not use these competences?

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**Coping strategy (self-assessed)**

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. I ask others what they think about my approach 2. If I cannot figure it out myself, I ask for help 3. I learn from the critique of others 4. I admit my mistakes spontaneously 5. I learn by cooperating with others 6. I attend courses in order to do my job better 7. I investigate which training and courses are available 8. I know where I can go for specific trainings 9. I am willing to make additional efforts in order to learn 10. I always know which new developments are occurring in the sector I am working with 11. I like to learn 12. If a situation changes, I adjust my plans 13. If I notice that I do not obtain the necessary results, I adjust my plans immediately 14. I adjust my planned approach when new opportunities arise 15. If my plan goes differently than expected, I make a new plan						

**Coping strategy (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. <b>STUDENT NAME</b> asks others what they think about his/her approach 2. If <b>STUDENT NAME</b> cannot figure it out himself/herself, he/she asks for help 3. <b>STUDENT NAME</b> learns from the critique of others 4. <b>STUDENT NAME</b> admits his/her mistakes spontaneously 5. <b>STUDENT NAME</b> learns by cooperating with others 6. <b>STUDENT NAME</b> attends courses in order to do his/her job better 7. <b>STUDENT NAME</b> investigates which training and courses are available 8. <b>STUDENT NAME</b> knows where he/she can go for specific trainings 9. <b>STUDENT NAME</b> is willing to make additional efforts in order to learn 10. <b>STUDENT NAME</b> always knows which new developments are occurring in the sector he/she is working with 11. <b>STUDENT NAME</b> likes to learn 12. If a situation changes, <b>STUDENT NAME</b> adjusts his/her plans 13. If <b>STUDENT NAME</b> notices that he/she does not obtain the necessary results, he/she adjusts his/her plans immediately 14. <b>STUDENT NAME</b> adjusts his/her planned approach when new opportunities arise 15. If his/her plan goes differently than expected, <b>STUDENT NAME</b> makes a new plan						

**General communication (self-assessed)**

**Interaction (self-assessed)**

**Presentation (self-assessed)**

The following statements relate to one's perspective on communication competences.

For each of the statements, please indicate how much you agree or disagree.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. It is difficult to find the right words to express myself. 2. I accomplish my communication goals 3. I can persuade others to my position. 4. I express myself well verbally.. 5. Others would describe me as warm. 6. I reveal how I feel to others. 7. I tell people when I feel close to them. 8. Other people think that I understand them. 9. When I've been wronged, I confront the person who wronged me. 10. I take charge of conversations I'm in by negotiating what topics we talk about. 11. I have trouble standing up for myself. 12. I stand up for my rights. 13. I let others know that I understand what they say. 14. In conversations with friends, I perceive not only what they say, but also what they do not say 15. I allow friends to see who I really am. 16. My friends truly believe that I care about them. 17. I try to look others in the eye when I speak with them.					

Please, in the following list your strengths, weaknesses and tasks for improvement in communication.

<b>Competences in communication/presentation which are my Strengths</b>	<b>Competences in communication/presentation that I need to improve</b>	<b>What can I do to improve?</b>

**General communication (peer- or teacher-assessed)**

**Interaction (peer- or teacher-assessed)**

**Presentation (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**.

Please write what are **STUDENT NAME** strengths and weaknesses in communication competences – and what **STUDENT NAME** could do to improve these competences.

<b>Competences in communication/presentation which are STUDENT NAME's strengths</b>	<b>Competences in communication/presentation that STUDENT NAME's needs to improve</b>	<b>What can STUDENT NAME do to improve?</b>

**Negotiation and persuasion (self-assessed)**

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. I can build a strong line of argumentation 2 I convince others with arguments 3. I explain my ideas in a clear and coherent manner 4. I am able to make people enthusiastic for my idea 5. I make it clear to others what I want to achieve 6. I can name to pros and cons of my idea 7. I adjust my arguments to the person I am talking to 8. I explain to others why I took a certain decision 9. I can convey my message in an enthusiastic manner 10. When I decide something, I know exactly why						

Could you please describe an experience that describes how did you use/not use these competences?

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**Negotiation and persuasion (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. <b>STUDENT NAME</b> can build a strong line of argumentation 2. <b>STUDENT NAME</b> convinces others with arguments 3. <b>STUDENT NAME</b> explains his/her ideas in a clear and coherent manner 4. <b>STUDENT NAME</b> is able to make people enthusiastic for his/her idea 5. <b>STUDENT NAME</b> makes it clear to others what he/she wants to achieve 6. <b>STUDENT NAME</b> can name to pros and cons of his/her idea 7. <b>STUDENT NAME</b> adjusts his/her arguments to the person he/she is talking to 8. <b>STUDENT NAME</b> explains to others why he/she took a certain decision 9. <b>STUDENT NAME</b> can convey his/her message in an enthusiastic manner 10. When <b>STUDENT NAME</b> decides something, he/she knows exactly why						

Could you please describe an experience with **STUDENT NAME** that describes how did he/she use/not use these competences?

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### **Group work and team management (self-assessed)**

For each section distribute a total of exactly 10 points between the sentences in each section that you think most accurately describe your behavior. There are 7 sections, so you have to use exactly 70 points.

There are no right or wrong answers. These points may be distributed between several sentences. Try to avoid either extreme

<b>What I believe I can contribute to a team</b>	
	I think I can quickly see and take advantage of new opportunities.
	I can work well with a very wide range of people.
	Producing ideas is one of my natural assets.
	My ability rests on being able to draw people out whenever I detect they have something of value to contribute to group objectives.
	I am prepared to be blunt and outspoken in the cause of making the right things happen.
	I can handle temporary unpopularity, if my actions will lead to a favorable
	I can usually tell whether a plan or idea will fit a particular situation.
	I can offer a reasoned and unbiased case for alternative courses of action.
<b>If I have a possible shortcoming in team work, it could be that:</b>	
	I am not at ease unless meetings are well structured and controlled and generally well conducted.
	I am inclined to be too generous towards others who have a valid viewpoint that has not been given a proper airing.
	I have a tendency to talk a lot once the group gets on to a new topic.
	My objective outlook makes it difficult for me to join in readily and enthusiastically with colleagues.
	I am sometimes seen as forceful and authoritarian when dealing with important issues.
	I find it difficult to lead from the front, perhaps because I am over-responsive to group atmosphere.
	I am apt to get too caught up in ideas that occur to me and so lose track of what is happening.
	My colleagues think I am sometimes unnecessarily worried about the details and the possibility that something can go wrong
<b>When involved in a project with other people:</b>	
	I have an aptitude for influencing people without pressurising them.
	I am generally effective in preventing careless mistakes or omissions from spoiling the success of an operation.
	I like to press for action to make sure that the meeting does not lose sight of the main objective.
	I can be counted on to produce something original.
	I am always ready to back a good suggestion in the common interest.
	I am quick to see the possibilities in new ideas and developments.
	I believe that my capacity for judgment will be appreciated by other team members
	I can be relied on to bring an organised approach to the demands of a job.
<b>My characteristic approach to group work is that:</b>	
	I maintain a quiet interest in getting to know colleagues better.
	I am not reluctant to challenge the view of others or hold a minority view myself.
	I can usually find an argument to refute unsound propositions.
	I think I have a talent for making things work once a plan has been put into operation.
	I prefer to avoid the obvious and to open up lines that have not been explored.

	I bring a touch of perfectionism to any job I undertake.
	I like to be the one who makes contacts outside the group or firm.
	While I am interested in hearing all views I have no hesitation in making up my mind once a decision has to be made.
<b>I gain satisfaction in a job because:</b>	
	I enjoy analysing situations and weighing up all the possible choices.
	I am interested in finding practical solutions to problems.
	I like to feel I am fostering good working relationships.
	I can have a strong influence on decisions.
	I have a chance of meeting new people with different ideas.
	I can get people to agree on priorities.
	I feel I am in my element where I can give a task my full attention.
	I like to find opportunities to stretch my imagination.
<b>If I am suddenly given a difficult task with limited time and unfamiliar people:</b>	
	I would feel driven-in a corner and would try to get out of this deadlock before starting the work.
	I would be willing to cooperate with any person who shows the most positive attitude to the problem, no matter how difficult character he or she might have.
	I would find some way of reducing the size of the task by establishing how different individuals can contribute.
	My natural sense of urgency would help to ensure that we did not fall behind schedule.
	I believe I would keep my cool and maintain my capacity to think straight.
	In spite of conflicting pressures I would press ahead with whatever needed to be done.
	I would take the lead if the group was making no progress.
	I would open up discussions with the view to stimulating new thoughts and getting something moving.
<b>With reference to the problems I experience when working in groups:</b>	
	I am apt to overreact when people hold up progress.
	Some people criticise me for being too analytical.
	My desire to check that we get the important details right is not always welcome.
	I tend to show boredom unless I am actively engaged with stimulating people.
	I find it difficult to get started unless the goals are clear.
	I am sometimes poor at putting across complex points that occur to me.
	I am conscious of demanding from others the things I cannot do myself.
	I hesitate to express my personal views in front of difficult or powerful people.

**Conflict resolution (self-assessed)**

For each of the statements, please indicate how much you agree or disagree.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. It is difficult to find the right words to express myself. 2. I accomplish my communication goals 3. I can persuade others to my position. 4. I express myself well verbally.. 5. Others would describe me as warm. 6. I reveal how I feel to others. 7. I tell people when I feel close to them. 8. Other people think that I understand them. 9. When I've been wronged, I confront the person who wronged me. 10. I take charge of conversations I'm in by negotiating what topics we talk about. 11. I have trouble standing up for myself. 12. I stand up for my rights. 13. I let others know that I understand what they say. 14. In conversations with friends, I perceive not only what they say, but also what they do not say 15. I allow friends to see who I really am. 16. My friends truly believe that I care about them. 17. I try to look others in the eye when I speak with them.					

**Problem solving attitude (self-assessed)**

Please consider each of the following statements as if applies to you at present.  
For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I demonstrate originality in my work. 2. I am creative when asked to work with limited resources. 3. I identify ways in which resources can be recombined to produce novel products 4. I find new uses for existing methods or equipment. 5. I think outside of the box. 6. I identify opportunities for new services/products. 7. Freedom to be creative and original is extremely important to me.					

**Recognizing opportunities (self-assessed)**

Please consider each of the following statements as if applies to you at present.  
 For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I am an avid information seeker. 2. I am always actively looking for new information. 3 I often make novel connections and perceive new or emergent relationships between various pieces of information. 4. I see links between seemingly unrelated pieces of information. 5. I am good at "connecting dots". 6. I often see connections between previously unconnected domains of information 7. I am always seeking new opportunities in my life. 8. I believe in a bold and daring view of the future. 9. I am able to paint an interesting picture of the future. 10. The future is very hard to see or envision. 11. I find that I am able to inspire others with my plans for the future.					

**Managing risk (self-assessed)**

Please consider each of the following statements as if applies to you at present.  
For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. My skills in recognizing and assessing risks are strong. 2. There is not much that people can do about risk. 3 Risks cannot really be managed. 4. I understand a lot about how to manage risks 5. Dealing with risk is a learned skill					

***Creativity and lateral thinking (self-assessed)***

Please consider each of the following statements as if applies to you at present.  
For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I demonstrate originality in my work. 2. I am creative when asked to work with limited resources. 3. I identify ways in which resources can be recombined to produce novel products 4. I find new uses for existing methods or equipment. 5. I think outside of the box. 6. I identify opportunities for new services/products. 7. Freedom to be creative and original is extremely important to me.					

**Adaptability (self-assessed)**

The following statements relate to one’s perspective on life and to making decisions.

For each of the statements, please indicate how much you agree or disagree.

Indicate how you feel now. First impressions are usually best. Do not spend a lot of time on any one question.

Please be honest with yourself so that your answers reflect your true feelings.

	<b>1 Strongly Agree</b>	<b>2 Agree</b>	<b>3 Disagree</b>	<b>4 Strongly Disagree</b>
1. I can pretty much determine what will happen in my life. 2. People are only limited by what they think is possible. 3. People have more power if they join together as a group. 4. Getting angry about something never helps. 5. I have a positive attitude toward myself. 6. I am usually confident about the decisions I make. 7. People have no right to get angry just because they don’t like something. 8. Most of the misfortunes in my life were due to bad luck. 9. I see myself as a capable person. 10. Making waves never gets you anywhere. 11. People working together can have an effect on their community. 12. I am often able to overcome barriers. 13. I am generally optimistic about the future. 14. When I make plans, I am almost certain to make them work. 15. Getting angry about something is often the first step toward changing it. 16. Usually I feel alone. 17. Experts are in the best position to decide what people should do or learn. 18. I am able to do things as well as most other people. 19. I generally accomplish what I set out to do. 20. People should try to live their lives the way they want to. 21. You can’t fight bureaucracy. 22. I feel powerless most of the time. 23. When I am unsure about something, I usually go along with the rest of the group. 24. I feel I am a person of worth, at least on an equal basis with others. 25. People have the right to make their own decisions, even if they are bad ones. 26. I feel I have a number of good qualities. 27. Very often a problem can be solved by taking action. 28. Working with others in my community can help to change things for the better.				

***Innovation (self-assessed)***

Please consider each of the following statements as if applies to you at present.  
For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I often surprise people with my novel ideas. 2. People often ask me for help in creative activities. 3. I obtain more satisfaction from mastering a skill than coming up with a new idea. 4. I prefer work that requires original thinking. 5. I usually continue doing a new job in exactly the way it was taught to me. 6. I like a job which demands skill and practice rather than inventiveness. 7. I am not a very creative person. 8. I like to experiment with various ways of doing the same thing.					

## APPENDIX C - ASSESSMENT TOOLS (SHORT VERSION)

### *Self-assessment (self-assessed)*

The following statements relate to one's perspective on life and to making decisions.

For each of the statements, please indicate how much you agree or disagree.

Indicate how you feel now. First impressions are usually best. Do not spend a lot of time on any one question.

Please be honest with yourself so that your answers reflect your true feelings.

	<b>1 Strongly Agree</b>	<b>2 Agree</b>	<b>3 Disagree</b>	<b>4 Strongly Disagree</b>
1. I can pretty much determine what will happen in my life. 2. People are only limited by what they think is possible. 3. People have more power if they join together as a group. 4. Getting angry about something never helps. 5. I have a positive attitude toward myself. 6. I am usually confident about the decisions I make. 7. People have no right to get angry just because they don't like something. 8. Most of the misfortunes in my life were due to bad luck. 9. I see myself as a capable person. 10. Making waves never gets you anywhere. 11. People working together can have an effect on their community. 12. I am often able to overcome barriers. 13. I am generally optimistic about the future. 14. When I make plans, I am almost certain to make them work. 15. Getting angry about something is often the first step toward changing it. 16. Usually I feel alone. 17. Experts are in the best position to decide what people should do or learn. 18. I am able to do things as well as most other people. 19. I generally accomplish what I set out to do. 20. People should try to live their lives the way they want to. 21. You can't fight bureaucracy. 22. I feel powerless most of the time. 23. When I am unsure about something, I usually go along with the rest of the group. 24. I feel I am a person of worth, at least on an equal basis with others. 25. People have the right to make their own decisions, even if they are bad ones. 26. I feel I have a number of good qualities. 27. Very often a problem can be solved by taking action. 28. Working with others in my community can help to change things for the better.				

### **Growth mindset (self-assessed)**

The following statements can describe opposite ways for people to generally behave. There are no good or wrong behaviours.

The bar represents you. For each sentence, please place the bar at the closest point that you feel as representative of your behaviour.

<b><i>I avoid challenging situations</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>I embrace challenging situations</i></b>
<b><i>When faced with obstacles, I feel like giving up</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>When faced with obstacles, I feel like persisting</i></b>
<b><i>I see effort as fruitless</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>I see effort as the path to mastery</i></b>
<b><i>I ignore negative feedbacks or criticisms, even if useful</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>I can learn from negative feedbacks and criticism</i></b>
<b><i>I feel that the success of others threatens me and my image</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>I find lessons and inspiration in the success of others</i></b>

### **Growth mindset (peer- or teacher- assessed)**

Now please think about **STUDENT NAME**. In the following, the bar represents **STUDENT NAME**. For each sentence, please place the bar at the closest point that you feel as representative of **STUDENT NAME**'s behaviour.

<b><i>Avoids challenging situations</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>Embraces challenging situations</i></b>
<b><i>When faced with obstacles, feels like giving up</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>When faced with obstacles, feels like persisting</i></b>
<b><i>Sees effort as fruitless</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>Sees effort as the path to mastery</i></b>
<b><i>Ignores negative feedbacks or criticisms, even if useful</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>Can learn from negative feedbacks and criticism</i></b>
<b><i>Feels that the success of others threatens me and my image</i></b>	<b><i>...1...2...3...4...5...6...7...8...9...10...</i></b>	<b><i>Finds lessons and inspiration in the success of others</i></b>

***Perseverance (self-assessed)***

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If I start an assignment, I finish it, even if I am tired of it 2. Even if there is distraction, I keep on working in a concentrated way 3. I place high demands on myself when I am working 4. Even after a setback or failure I continue with the task at hand 5. I work with clear goals 6. Only important reasons can make me change my plans 7. Even if the assignment is difficult, I start working on it immediately						

***Perseverance (peer- or teacher-assessed)***

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If <b>STUDENT NAME</b> starts an assignment, he/she finishes it, even if he/she is tired of it 2. Even if there is distraction, <b>STUDENT NAME</b> keeps on working in a concentrated way 3. <b>STUDENT NAME</b> places high demands on himself/herself when he/she is working 4. Even after a setback or failure <b>STUDENT NAME</b> continues with the task at hand 5. <b>STUDENT NAME</b> works with clear goals 6. Only important reasons can make <b>STUDENT NAME</b> change his/her plans 7. Even if the assignment is difficult, <b>STUDENT NAME</b> starts working on it immediately						

***Coping strategy (self-assessed)***

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If a situation changes, I adjust my plans 2. If I notice that I do not obtain the necessary results, I adjust my plans immediately 3. I adjust my planned approach when new opportunities arise 4. If my plan goes differently than expected, I make a new plan						

***Coping strategy (peer- or teacher-assessed)***

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. If a situation changes, <b>STUDENT NAME</b> adjusts his/her plans 2. If <b>STUDENT NAME</b> notices that he/she does not obtain the necessary results, he/she adjusts my plans immediately 3. <b>STUDENT NAME</b> adjusts his/her planned approach when new opportunities arise 4. If his/her plan goes differently than expected, <b>STUDENT NAME</b> makes a new plan						

**General communication (self-assessed)**

**Interaction (self-assessed)**

**Presentation (self-assessed)**

The following statements relate to one's perspective on communication competences.  
For each of the statements, please indicate how much you agree or disagree.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. It is difficult to find the right words to express myself. 2. I accomplish my communication goals 3. I can persuade others to my position. 4. I express myself well verbally.. 5. Others would describe me as warm. 6. I reveal how I feel to others. 7. I tell people when I feel close to them. 8. Other people think that I understand them. 9. When I've been wronged, I confront the person who wronged me. 10. I take charge of conversations I'm in by negotiating what topics we talk about. 11. I have trouble standing up for myself. 12. I stand up for my rights. 13. I let others know that I understand what they say. 14. In conversations with friends, I perceive not only what they say, but also what they do not say 15. I allow friends to see who I really am. 16. My friends truly believe that I care about them. 17. I try to look others in the eye when I speak with them.					

**General communication (peer- or teacher-assessed)**

**Interaction (peer- or teacher-assessed)**

**Presentation (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**.

Please write what are **STUDENT NAME** strengths and weaknesses in communication competences – and what **STUDENT NAME** could do to improve these competences.

<b>Competences in communication/presentation which are STUDENT NAME's strengths</b>	<b>Competences in communication/presentation that STUDENT NAME's needs to improve</b>	<b>What can STUDENT NAME do to improve?</b>

**Negotiation and persuasion (self-assessed)**

The following statements relate to different competences, which might, or not, be familiar to you. Please show to which extent you practice them in your life.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
1. I can build a strong line of argumentation 2 I convince others with arguments 3. I explain my ideas in a clear and coherent manner 4. I am able to make people enthusiastic for my idea 5. I make it clear to others what I want to achieve 6. I can name to pros and cons of my idea 7. I adjust my arguments to the person I am talking to 8. I explain to others why I took a certain decision 9. I can convey my message in an enthusiastic manner 10. When I decide something, I know exactly why						

**Negotiation and persuasion (peer- or teacher-assessed)**

Now please think about **STUDENT NAME**. For each sentence, please indicate how much you think that **STUDENT NAME** practices them in his/her life – as you have perceived during the activities that you carried out together during the project/course.

	<b>1 Never</b>	<b>2 Seldom</b>	<b>3 Someti mes</b>	<b>4 Often</b>	<b>5 Most of the times</b>	<b>6 Always</b>
<p>1. <b>STUDENT NAME</b> can build a strong line of argumentation</p> <p>2 <b>STUDENT NAME</b> convinces others with arguments</p> <p>3. <b>STUDENT NAME</b> explains his/her ideas in a clear and coherent manner</p> <p>4. <b>STUDENT NAME</b> is able to make people enthusiastic for his/her idea</p> <p>5. <b>STUDENT NAME</b> makes it clear to others what he/she wants to achieve</p> <p>6. <b>STUDENT NAME</b> can name to pros and cons of his/her idea</p> <p>7. <b>STUDENT NAME</b> adjusts his/her arguments to the person he/she is talking to</p> <p>8. <b>STUDENT NAME</b> explains to others why he/she took a certain decision</p> <p>9. <b>STUDENT NAME</b> can convey his/her message in an enthusiastic manner</p> <p>10. When <b>STUDENT NAME</b> decides something, he/she knows exactly why</p>						

**Problem solving attitude (self-assessed)**

Please consider each of the following statements as if applies to you at present.  
For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I demonstrate originality in my work. 2. I am creative when asked to work with limited resources. 3. I identify ways in which resources can be recombined to produce novel products 4. I find new uses for existing methods or equipment. 5. I think outside of the box. 6. I identify opportunities for new services/products. 7. Freedom to be creative and original is extremely important to me.					

**Recognizing opportunities (self-assessed)**

Please consider each of the following statements as if applies to you at present.  
 For each of the statements, please place an "X" in the space that best describes you.

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Nor agree nor disagree</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I am an avid information seeker. 2. I am always actively looking for new information. 3 I often make novel connections and perceive new or emergent relationships between various pieces of information. 4. I see links between seemingly unrelated pieces of information. 5. I am good at "connecting dots". 6. I often see connections between previously unconnected domains of information					

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