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SOCCES - Current practices in defining and understanding transferable skills and competences

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Current practices in defining and understanding transferable skills and competences

(at the example of 6 European Higher Education Institutions)

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Introduction

The aim of the European project SOCES (“SOCial Competences, Entrepreneurship and Sense of Initiative – Development and Assessment Framework”) is to develop and pilot a framework for the methodical assessment for two competences that are very important for working life - namely the Sense of Initiative and Entrepreneurship, and Social competences. The developed framework will be translated to a concrete assessment module that can be used in different educational environments. The module will include a collaborative, virtually enabled assignment and will be accompanied with virtually enabled teacher instructions.

The critical importance of transferable competences in future employment is widely recognized. However, in most countries the educational practices are still under development and transversal competences are taught using different methods. Related subjects may have cross-curricular status, they may be integrated into existing curriculum subjects or they may be introduced as separately. Transferable competences (OECD, 2012) are defined as competences that can be transferred from one job to another. They are sometimes also called generic, soft or employment competences. You can learn those within an educational or a social context and then transfer them to a career. These competences are used and developed in all areas of your life.

The objective of this report is to analyze and draw conclusions based on the understanding of transferable skills and competences in selected curricula at the SOCES partner institutions - Coventry University, Laurea University of Applied Sciences, University of Bologna, University of Montpellier, VTU, NHTV University. The information has been collected, consulted and gathered by the SOCES project team at the respective university based on discussions with other colleagues, teachers, administration and management of the respective university.

Background theory

Education authorities in all countries issue guidelines on what should be taught or learnt in schools. Usually these guidelines are included as part of curriculum documents or syllabuses. In recent years, reforms in many countries have reshaped curricula on the basis of new concepts such as 'key competences' and 'learning outcomes' and some have introduced achievement scales. In many countries, a subject-based organisation with a focus on subject content has given way to a more complex curricular architecture built, in part, on practical skills and cross-curricular approaches. In addition, new curriculum areas have been either introduced or given a higher profile in many European curricula. This is notably the case with entrepreneurship education, ICT and citizenship education.

As OECD (2009) states: “Globalisation and modernisation are creating an increasingly diverse and interconnected world. To make sense of and function well in this world, individuals need for example to master changing technologies and to make sense of large amounts of available information. They also face collective challenges as societies – such as balancing economic growth with environmental sustainability, and prosperity with social equity. In these contexts, the competences that individuals need to meet their goals have become more complex, requiring more than the mastery of certain narrowly defined skills.”

Generally speaking, concepts are socially constructed notions that facilitate the understanding of reality while also constructing it. Notions such as “key competencies” and “core skills” have become very fashionable in social policy discourse. However, these terms often have very vague meanings. Therefore, their clarification was considered a necessary prerequisite for defining and selecting key competencies. However, based on recent commissioned reports (OECD; European Commission; DeSeCo, etc.), it is recognized that in social sciences there is no unitary use of the concept of competence, no broadly accepted definition or unifying theory. In fact, the meaning of such terms varies largely depending on the scientific perspective and ideological viewpoints involved and on the underlying objectives associated with their use, both at scientific and political levels. As such, DeSeCo (2012) adopts a pragmatic conceptual approach, limiting the use of the concept with criteria which are more or less explicit, plausible, and scientifically acceptable.

Since they refer to broad, multi-functional areas of human ability, key competences are difficult to define and organize in the same way as subject knowledge. A number of international bodies such as the OECD, the World Bank, UNESCO and the European Commission have undertaken research leading to the recognition of the importance of key competences and created frameworks intended as clarification and guidance for policy makers and educational professionals. Several non-governmental organizations have also developed frameworks for key competences, for example the Assessment and Teaching of 21st Century Skills (AT21CS) consortium.

The concept of key competences originated with the adoption of the Lisbon Strategy in 2000 and it resulted in the European Reference Framework. Key competences in the EU framework are those that “all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment”. The development of key competences should include both subject-based and transversal competences that will motivate and equip students for further learning.

Based on the European framework for eight key competences, defined in 2006 (ANC 2006/962/EC), the transferable (transversal) competences 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.

These competences are fundamental in a knowledge-based society to meet the needs of the labour market, social cohesion and active citizenship. The idea is to ensure greater flexibility and adaptability, satisfaction and motivation.

In addition to social and economic motivations, there are some prominent theoretical traditions which highlight the need for key competences, and have influenced ideas about how they should be taught, for example:

- Dewey's social perspective: The American philosopher, psychologist and educational reformer John Dewey (1859-1952) was the first to argue that learning occurs within a social system rather than being confined to mental processes. This focuses attention on the context in which knowledge is acquired, which has led to various ideas about how learning environments should be structured in order for learners to make connections between knowledge and the social world.
- Constructivist learning theories: Educational research has repeatedly addressed the issue of transfer – what is the most effective way to encourage learners to apply their knowledge to novel and real life situations? Constructivist learning theories suggest that effective transfer is more likely if learning is an active process. Rather than learning being a process of knowledge transfer from expert to learner, learners should construct knowledge themselves by interacting with the environment (Kriz, 2010). Researchers argue that this process ideally occurs in an environment that reflects the real world, wherein learners work actively on tasks.
- Professional origins: Reference to competences started to be made in the professional world in France in the 1970s to refer to what employees need beyond qualifications to act effectively in a range of work situations (Legendre, 2008). In the 1980s, competence-based approaches started to be developed in some countries for vocational education and training.

The European Commission also identifies the following 'transversal skills' that are relevant across the eight key competences:

- Critical thinking
- Creativity
- Initiative
- Problem solving
- Risk assessment
- Decision taking
- Communication
- Constructive management of feelings

Transferable competences often also referred to as transversal (OECD, 2012) are defined as competences that can be transferred from one job to another. They are sometimes also called generic, soft or employment competences. One can learn these skills within the educational or social context and then transfer them to a career. These competences are used and developed in all areas of one person's life.

Transversal competences per definition (European Commission, 2011) encompass the following range of sub-skills:

<i>No</i>	<i>Type of skills</i>	<i>Sub-skills</i>
1.	Communication Skills: the skillful expression, transmission and interpretation of knowledge and ideas.	<ul style="list-style-type: none"> • Speaking effectively • Writing concisely • Listening attentively • Expressing ideas • Facilitating group discussion • Providing appropriate feedback • Negotiating • Perceiving nonverbal messages • Persuading • Reporting information • Describing feelings • Interviewing • Editing
2.	Research and Planning Skills: the search for specific knowledge and the ability to conceptualize future needs and solutions for meeting those needs.	<ul style="list-style-type: none"> • Forecasting, predicting • Creating ideas • Identifying problems • Imagining alternatives • Identifying resources • Gathering information • Solving problems • Setting goals • Extracting important information • Defining needs • Analyzing • Developing evaluation strategies
3.	Human Relations Skills: the use of	<ul style="list-style-type: none"> • Developing rapport

	interpersonal skills for resolving conflict, relating to and helping people.	<ul style="list-style-type: none"> • Being Sensitive • Listening • Conveying feelings • Providing support for others • Motivating • Sharing credit • Counseling • Cooperating • Delegating with respect • Representing others • Perceiving feelings, situations • Asserting
4.	<p>Organization, Management and Leadership Skills: the ability to supervise, direct and guide individuals and groups in the completion of tasks and fulfillment of goals.</p>	<ul style="list-style-type: none"> • Initiating new ideas • Handling details • Coordinating tasks • Managing groups • Delegating responsibility • Teaching • Coaching • Counseling • Promoting change • Selling ideas or products • Decision making with others • Managing conflict
5.	<p>Work Survival Skills: the day-to-day skills that assist in promoting effective production and work satisfaction.</p>	<ul style="list-style-type: none"> • Implementing decisions • Cooperating • Enforcing policies • Being punctual • Managing time • Attending to detail • Meeting goals • Enlisting help • Accepting responsibility • Setting and meeting deadlines

		<ul style="list-style-type: none"> • Organizing • Making decisions
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There are three main ways in which the transversal key competences may be integrated into the curriculum in higher education: they may have cross-curricular status, they may be integrated into existing curriculum subjects or they may be introduced as separate curriculum subjects.

Where the transversal key competence is given a cross-curricular status, related learning objectives or outcomes are incorporated into the parts of the curriculum that are not subject-bound. They are often included in sections dedicated to cross-curricular objectives, themes or competences. Alternatively, they may be included in introductory sections devoted to general objectives or, in some cases, a distinct cross-curricular learning area is designated which all teachers have a duty to implement. Indeed, a cross-curricular status implies that all the different learning areas and subjects constituting the curriculum should contribute to the acquisition of the related competences. Regarding teaching of digital competences, in particular, it requires teachers across the different curriculum subjects to use ICT as a tool for demonstration purposes and students to use it to perform specific tasks.

Transversal competences may also be integrated into existing curriculum subjects. Where this occurs, learning objectives or outcomes related to digital, civic or entrepreneurship competences feature within the specific curricula for these subjects. The choice of subject is relatively consistent across countries, although some differences are apparent. For instance, the subjects which incorporate citizenship education are mostly the social sciences, languages, and ethics/religious education; but sciences and mathematics, as well as artistic education are also mentioned by some countries. ICT is in most cases taught as part of a technology subject.

Finally, a specific subject can be wholly dedicated to one of the transversal competences, which is expressed here by the 'separate subject' label.

The teaching of IT, entrepreneurial and social (citizenship) skills is fundamental for preparing young people for today's job market, but, in general, universities still need to pay more attention to these transversal skills compared to basic skills in literacy, mathematics and science, according to a new European Commission report. Part of the problem is rooted in difficulties with assessment. For example, only 11 European countries (Belgium Flemish community, Bulgaria, Estonia, Ireland, France, Latvia, Lithuania, Malta, Poland, Slovenia and Finland) have standardised procedures to assess social (citizenship) skills, which aim to develop critical thinking and active participation at university and society. Such testing does not exist at all for entrepreneurship and IT skills in any of the 31 countries which took part in the survey (27 EU Member States, Croatia, Iceland, Norway and Turkey). The reports mentioned above also outline progress in teaching six

of the eight key competences defined at EU level for lifelong learning in knowledge, skills and attitudes.

Findings

The first aspect that has been explored by the study is the understanding of transferable competences (skills) within the SOCCEs partner institutions, providing a wide or more practical explanation.

In terms of Understanding of Transferable skills, the University of Coventry states that:

All programmes are required to indicate through Programme documentation how they deliver the following transferable skills:

- Learning to Learn
- Working with others
- Problem solving and innovation
- Numeracy
- IT and online learning
- Communication
- Career management
- Information management
- Personal development planning

In addition as part of the University Teaching and Learning Strategy all courses are required to embed/develop:

- Employability skills
- Intercultural competences
- Digital literacies
- And research skills

Each department/course can interpret these in their own context.

Through the annual monitoring process all courses are required to report on the how they support employability and entrepreneurship. This includes responding to prompts such as, Do students have an opportunity to develop key enterprise skills (innovation, creativity, problem solving, personal development planning etc)? Where?

The University does run Add+vantage modules, this is scheme of a mandatory employability modules is designed to help students develop more of the practical skills and capabilities sought-after by employers (<http://www.coventry.ac.uk/study-at-coventry/student-support/enhance-your-employability/add-vantage/>).

In addition the University runs schemes such as (Student Placements for Entrepreneurs in Education (SPEED). <http://www.coventry.ac.uk/research-bank/research-archive/business->

management/institute-of-applied-entrepreneurship-2/institute-of-applied-entrepreneurship-services-for-business/speed-plus/?theme=main

Laurea University of Applied Sciences describes its interpretation of the transferable skills in the following way:

Laurea has a competence based curriculum. The whole curriculum is aimed to enhance entrepreneurship education.

Laurea follows the operating model of Learning by Developing (LbD). It is based on authenticity, partnership, experiential learning and research. The learning process is built on teamwork and development projects that are rooted in the working life and aim to produce new practices. This requires genuine collaboration between lecturers, students and working life experts.

Laurea's strategic choice shows that the importance of transferable skills is recognized and that we are committed to a learning process that delivers them.

For more information see Laurea's publications on our LbD model.

NHTV University of Applied Sciences has adopted the understanding of transferable skills into the translation of competencies:

Competencies: Definition

A competency is a persistent pattern of behavior resulting from a cluster of knowledge, skills, abilities, and motivations. Competency models formalize that behavior and make it persistent. They prescribe the ideal patterns needed for exceptional performance. They help diagnose and evaluate employee (student) performance.

The University of Bologna looks at the transferable skills as follows:

Almost all the under graduation, graduation or master programs dealing with entrepreneurship and management promote transferrable competences mainly enhancing an interdisciplinary curricula. Transferrable competences are considered as transversal to many disciplines and the link between hard and soft skills is given by the presence of both theoretical and practical approaches as well as science, technology, engineering and economics or social sciences.

The University of Montpellier described its understanding as stated below:

Our institution understands transferable competences as an asset for students' employability.

Our institution sets up mandatory internship from the second year to the fifth year and makes most of our curriculum with national and regional professional associations.

VTU has also formulated its understanding of transferable skills:

Transferable skills may be defined as skills that can be applied in different professional careers. For example project design in computer science and communications.

The second part of the study looks into examples of curricula that are being studied within the framework of the project for further interpretation:

No	Partner Institution	Curricula addressed
1.	University of Coventry	<p>Integrated Projects 1, 2, 3 & 4 for the following courses</p> <ul style="list-style-type: none"> • MEng Civil Engineering • BEng Civil Engineering • BSc Civil Engineering • BSc Architectural technology • BSc Architecture • BEng Building Services Engineering • BSc Building Surveying • BSc Construction Management • BSc Quantity Surveying and Commercial Management <p>These are where we teach and assess our transferable work skills.</p>
2.	Laurea University of Applied Sciences	<p>Business Management /Liiketalous, Bachelor of Business Administration</p> <p>The scope of a Bachelor's degree in Business Administration is 210 credits, and it takes on average 3.5 years to complete.</p> <p>The degree studies at Laurea consists of core competence and complementary competence modules. Core competence modules impart competence that is part of the degree's compulsory requirements. Complementary modules make it possible to deepen or extend the knowledge.</p> <p>The scope of core competence modules is 30 credits.</p>

		<p>The modules contain the following types of studies: basic studies, professional studies, practical studies and a Bachelor's thesis.</p> <p>The remaining part of the degree consists of complementary competence modules. The scope of the complementary competence is 30 credits. The modules can be freely selected.</p>
3.	NHTV University of Applied Sciences	<p>There shall be two curricula addressed:</p> <ul style="list-style-type: none"> - One Bachelor programme – International Leisure Management (taught in English) - One Master programme – Master in Imagineering (taught in English) <p>We would like to address the above two so that we can see if and what similarities/differences there are and what kind of diversity there exists.</p> <p>The International Leisure Management English-taught professional bachelor's programme prepares the students for a career in the international leisure industry. In 3 or 4 years' time, they become professionals in this creative and dynamic industry. During this education they learn how to create memorable and meaningful experiences which contribute to a more beautiful world. The International Leisure Management programme is delivered thematically. This means that subjects such as economics, psychology, management, communication and market research are dealt with in content-related projects, rather than in separate topics. Examples of modules are: Project management, Leisure basics, Leisure direction, Event Organization, Imagineering and Marketing and Communication. The International Leisure Management programme is competency-oriented. A competency is a mix of knowledge, attitude and skills. If you take a look at</p>

job vacancies, you will see a large number of competencies mentioned, we aim to help you to develop these. The course emphasizes building knowledge, then work on applying it in projects. In the skills training sessions you learn how to apply the appropriate attitude and skills. At the beginning of each term, you work on a new assignment requested by real clients. In a project team of four to eight students you work on this real-life problem to develop your competencies.

Master in Imagineering

In a creative economy there is a growing need for high level professionals who can create and innovate value from the experience perspective. This English-taught master's programme in Imagineering is designed as a methodology for that new 'outside-in enterprise logic'.

Imagineering, value creation and value innovation from the experience perspective is a new approach towards the trinity of branding. It is a way to discover a new kind of convergence between consumers' desires, technological capabilities and organisational innovations. Imagineering, value creation and value innovation are the fundamental processes of the creative economy. They are methods of finding 'a blue ocean of uncontested market space' - a space that inspires stakeholders to co-create.

The Master's programme in Imagineering focuses on the specific concept of designing for organizational emergence using the imagination to involve other stakeholders as co-designers of the future. The Master's programme offers you a deeper theoretical insight in issues of organizational design in the context of enterprise logic transformation. It enables

		<p>you to develop analytical, pro-active, problem-solving attitudes and design-skills towards these issues. Next to this, you develop knowledge and skills required to design and implement professional advice in an organizational and cross-cultural setting. Further, expertise to innovate, participate and lead processes of collaboration, creativity, and emergence are built and strengthened through this master's programme in Imagineering.</p> <p>This master's programme has been set up to educate business innovation oriented students to become Imagineering experts who: understand conditions in which organizations may require a design intervention; increase awareness of multiple ways for orchestrating organizational development; develop the personal competencies needed to design an imaginative narrative for adaptive management; reflexively understand their own approaches and responses to development; increase their effectiveness as a designer in dealing with multiple aspects of organizational (and societal) development.</p>
4.	University of Bologna	<p>Second cycle degree/Two year Master in Management engineering</p> <p>The 2nd cycle degree programme in Management Engineering specifically aims to produce professional figures who are able to cover management roles with high levels of organisational responsibility which demand technological knowledge combines with a solid background in economics and the various aspects of business management.</p> <p>Graduates in Management Engineering have in-depth knowledge of the specific subjects of this class, particularly in the fields of processing technologies and systems, industrial systems, business organisation</p>

		<p>and management, automation systems and processes.</p> <p>The career opportunities for management engineering graduates in particular include roles which require specific skills in managing complex problems characterised by technological constraints and opportunities through the application of advanced economic and management tools and skills, with particular focus on situations in which physical, financial and human resources need to be optimised in highly complex conditions, assuring quality as well as product and process safety, analysing the problems linked to the environmental impact and constraints, examining the opportunity to adopt new technologies assessing the organisational and competitive aspects.</p>
5.	University of Montpellier	<p>Socces could address the curriculum of the licence (Bachelor) degree of Hospitality and Tourism Management.</p> <p>One of the Team member is responsible of this degree in face-to-face and the other is responsible of this degree in e-learning.</p> <p>This Bachelor Degree prepares students to enter the professional world as managers with a strategic and operational approach. It combines management theory, professional internships and a business specialization.</p>
6.	VTU	<p>Computer Science Bachelor degree 8 semesters</p> <p>On graduating the specialty "Computer Science" the students should be qualified specialists that are able to develop and support computer-based systems for the science, technologies and business in the new century. They will be able to design, develop, apply and support the computer systems and the</p>

		<p>information and communication technologies. The students will have theoretical knowledge in the area of: the computer science's concepts and the theory; the computer-based systems and network design; the usage of appropriate design theories; the application of the computer science. They will be able to work with office applications; to design applied and system software; to assess the developed systems; to program with object-oriented, logical and Internet-oriented languages; to operate effectively with the computer hardware; to use the network technologies; to manage projects and to work in team. The students will be well prepared in English or other foreign languages. The curriculum is balanced according to the lectures and seminars, as accent is put on the practice. The system for receiving and transferring credits is also included. The students have the opportunity to continue their education in master or PhD degrees.</p>
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The third element of the study discusses the types of transferable skills addressed in the above presented curricula (see below):

No	Socces partner institution	Transferable skills addressed
1.	University of Coventry	<p>Academic skills are covered, such as - correct use of citations & references to the CU Harvard style, critical and analytical writing for technical reports; Technical Reports; Synopsis/Summary; Aims/Objectives; Calculations; Library information skills;</p> <p>Communication and Presentation skills are covered, such as - formal and informal presentations, technical posters and reports.</p> <p>Team working skills skills are covered, such as - team roles and group dynamics; motivation, meeting minutes and actions, review and objective setting,</p>

		giving and responding to feedback, influencing and negotiation, emotional intelligence, assertiveness, conflict management; Team selection; Target setting; Operation and Production control; Decision-making; Problem-solving; Feedback; analysis & action
2.	Laurea University of Applied Sciences	<p>The following generic working life competences are listed and criteria to assess them are defined as learning outcomes together with concrete examples. They are the same for all curricula at Laurea.</p> <ul style="list-style-type: none"> • Reflection competence • Ethical competence • Communication competence • Innovation competence • Management competence
3.	NHTV University of Applied Sciences	<p>Within the Master in Imagineering, there have been defined the following transferable competences:</p> <ul style="list-style-type: none"> - Transformative - This is the capacity to transform perspectives. Based on the appreciative understanding, the critical analysis and reflection on situations and assumptions – you can orchestrate processes offering meaningful and diverse perspectives, helping people to look at situations at different angles. Orientation towards redesigning meaning schemes in order to transform thinking and dialogues. This process can help participants transforming themselves into co-creators of knowledge while helping transforming others. - Reflective - It is about paying critical attention to the values that informs everyday life and actions taken as well as paying attention at the theories and concepts examining them reflectively. This ‘reflection on values and actions’ leads to practice-based professionals, who make decisions

	<p>that are in harmony with the local context.</p> <ul style="list-style-type: none">- Inspiring - It is about embracing the idea that ‘leaders inspire by example’. To inspire means to fill someone with the urge or ability to do or feel something meaningful, something creative, and to affect, guide, or arouse creative passion through innovative ways.- Appreciative - While a traditional attitude of approaching problems starts with analyzing the problem, an appreciative attitude starts with questioning what is strong and generative to ‘embrace the challenge’. It is about being committed to fostering an environment in which every member of the value creating network feels appreciated in order to embrace and fully capitalize on our professional human community.- Leading - it is about inviting and guiding people to a future together by starting in the present; by starting with what is already happening around and build from there. The competence of leading has its core in inspiring and guiding people to develop themselves, starting from their own capacities. <p>Within the Bachelor International Leisure Management Programme there have been defined the following:</p> <ul style="list-style-type: none">• is client-orientated• has strong communication skills• is creative• is innovative• is proactive and enterprising• is able to network• can bring parties together• can think and act strategically but has operational skills
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		<ul style="list-style-type: none"> • can empathise with various parties and interests • can empathise with various cultures and social backgrounds • is interested in social developments • can inspire.
4.	University of Bologna	<p>A list of transferable competences is listed in the curriculum as:</p> <p>ABILITY TO APPLY KNOWLEDGE AND UNDERSTANDING</p> <p>JUDGEMENT SKILLS</p> <p>COMMUNICATION SKILLS</p> <p>LEARNING SKILLS</p> <p>More in general these goals refer to:</p> <p>Management related skills</p> <p>Creativity</p> <p>Project management planning</p> <p>Problem solving</p>
5.	University of Montpellier	<p>Team Working</p> <p>Plan/manage projects</p> <p>ICT-skills</p> <p>Time-management</p> <p>Motivation skills</p> <p>Data analysis</p> <p>Collaboration</p> <p>Forming independent conclusions</p> <p>Critical, Analytical, Logical,creative thinkings</p>
6.	VTU	<p>Team working, creative thinking, logical thinking, communication skills, data analysis, innovation, decision-making, analytical skills, collaboration, time-management, ICT skills, information literacy/analyse skills.</p>

The study goes further in exploring whether the transferable competences (skills) are defined within the selected curricula as learning outcomes:

For the **University of Coventry**:

Level 1 covers -

Present information using verbal, written and visual methods.

Demonstrate good practice in academic skills and team-working.

Other ILOs relate to “construction industry practice” content, which is assessed by examination.

Level 2 covers -

Demonstrate an understanding of the range of personal development skills and qualities needed by their chosen discipline and profession and its place within the Construction Industry.

Through a personal learning plan demonstrate development of teamwork skills and good professional practice as a reflective and conscientious team member.

Demonstrate integration within a group project previously learnt knowledge and skills

Level 3 covers -

Demonstrate a range of visual and verbal communication skills, with a range of professionals, in response to a given clients brief.

Demonstrate through a BIM process, integration within a group of various construction professions, previously learnt knowledge and skills, including health, safety and welfare and environmental sustainability, for a major scenario-based project, within a design and construction environment.

Demonstrate a critical approach to skills through team work and continuous personal improvement

Demonstrate good professional practice as a conscientious student in a team-work environment

Level 4 covers -

Demonstrate the ability to integrate knowledge and skills from other studies and (where appropriate) from work experience/personal study to analyse civil engineering / construction problems in a comprehensive manner.

Make judgements about alternative solutions to realistic problems, and recommend a particular course of action by the presentation of supporting material in a professional manner.

Demonstrate understanding of group-work processes and of original research, and of the integration of technical, economic, socio-political, sustainable, ethical and interpersonal aspects of the project process.

Demonstrate communication and presentational skills (written, verbal, presentation) at a level appropriate to the profession.

Laurea states that:

Transferable skills listed in the curriculum as learning outcomes (incl. only core competences)

- act independently and plan competence development
- communicate interactively and effectively in an organization
- act ethically and safely in ICT environments
- work in a goal-oriented manner in international teams and in an entrepreneurial manner in projects
- communicate as a professional in field-specific tasks and in intercultural contexts
- identify personal communication needs and develop realistic strategies for improvement
- make business decisions in various business contexts and consider the multidimensional aspects of these decisions
- make business decisions in groups
- develop a wider approach to organizational values and ethical issues
- promote well-being at a workplace as a member of the work community
- apply creative problem-solving and develop working methods
- apply into practice what he/she has learnt
- analyze and structure the contents and methods of his/her work
- participate with his/her input in the development work of a company's practices and business processes
- develop his/her business competencies
- evaluate his/her competencies and their development
- evaluate his/her competencies and the requirements of working life
- develop and deepen his/her business competencies
- develop the business operations of an organization as a member of a professional team
- establish personal working life connections and act in networks
- evaluate his/her competencies and their development
- plan his/her study path and career
- plan his/her own studies and professional development from the perspective of working life
- use different learning methods and tools successfully to support studies
- act independently and as a member of a team
- reflect, evaluate and develop himself/herself as an expert
- describe his/her competences by using a portfolio and job application documents
- recognize existing opportunities in the international labor market
- identify the characteristics of working life and different work cultures

- network with other actors in the field
- prepare him/herself for a job interview and present his/her strengths as an applicant
- apply his/her knowledge of employee rights and responsibilities for his/her employment
- plan, implement and evaluate a practical project in multi-professional cooperation
- apply his/her own communication competencies into his/her development project
- discuss and argue the studies related to his/her own field and development work
- evaluate the meaning and effectiveness of his/her own actions
- present justified suggestions for development in relation to working life
- conceptualize phenomena related to working life based on research results
- act in development projects cooperatively and in a responsible manner with working life and other partners
- evaluate his/her own activities and solutions critically

NHTV describes the set up as follows:

Within the Master the student is taught to become someone who is:

- understanding conditions in which organizations may require a design intervention; increasing awareness of multiple ways for orchestrating organizational development;
- developing the personal competencies needed to design an imaginative narrative for adaptive management;
- reflectively understanding his or her approaches and responses to development.

Within the Bachelor the student is being taught to become a person who:

- Thinks about and reflects on his/her own action, improves and is accountable for it.
- Develops a professional attitude.
- Contributes to developing his/her professionalism.
- Sees through his/her own learning processes/learning styles/learning strategies.
- Reflects on his/her own experiences and knows what is necessary for his/her own development.
- Is able to critically process feedback and self-reflection in plans for improvement.
- Actively looks for points for development and undertakes action in this.
- Learns because he/she likes learning and wants to use it in a profession.
- Perseveres despite setbacks and criticism.
- Plans and organises his/her own learning process/academic career.
- Monitors his/her learning process by registering whether the learning activities he/she is employing are producing the correct results.

- Is able to place his/her own behaviour in an intercultural perspective.
- Recognizes that his/her own norms, values and behaviour are not universal.
- Consciously looks for various different perspectives and confrontations in relation to the core and other competencies which he/she is developing.
- Acts on the basis of a suitable attitude and ethical norms.

According to the national profile for the Bachelor, to be able to operate in the work field Leisure Managers should have the following competencies at their disposal:

1. Developing a vision concerning changes and trends in the external environment and developing relations, networks and chains.
2. Analysing policy issues, interpreting them in terms of policy objectives and alternatives and preparing decision making.
3. Directing in networks.
4. Initiating, creating and marketing products, services, independently and enterprisingly.
5. Applying HRM in the light of the strategy of the organization.
6. Organizing, managing and improving business or organizational processes.
7. Analyzing and implementing financial and legal aspects, internal processes and the business or organizational environment for strengthening cohesion and interaction.
8. Developing, implementing and evaluating a process of change.
9. Social and communicative competency (inter-personal, organization).
10. Self-guidance competency (intra-personal, leisure manager or professional).

The University of Bologna discusses this aspect in the following way:

This is the list of all curriculum learning outcomes, transferrable skills are transversally present for each goal but are less explicit in the first :

KNOWLEDGE AND UNDERSTANDING:

Graduates will have in-depth knowledge of the methodological and operational aspects of mathematical disciplines, basic sciences, industrial and information technologies and will be able to use this knowledge to interpret and describe even highly complex and innovative technological and organizational problems that are typical to management engineering in both industrial and information fields.

They will have developed the learning skills required to keep abreast of advanced subjects concerning methods, techniques and instruments in the field of management engineering, both in terms of industrial and information technologies applied to management processes, and in

economic and organizational terms, as well as to carry out innovative design activities applied to products and processes.

The achievement of the ability to apply the above knowledge and understanding will be accomplished through the learning activities organized in the “Management Engineering” programme, supplementary and complementary activities as well as further activities including work placement and laboratories. The teaching methods include participation in seminars and exercises in the classroom and in the laboratory, individual and group projects, guided self-study and autonomous study. Assessment of the achievement of the described learning outcomes shall be mainly through tests, written and oral exams and project work.

ABILITY TO APPLY KNOWLEDGE AND UNDERSTANDING:

2nd cycle graduates:

- will use their knowledge and skills to demonstrate a professional approach to work, and will possess advanced skills in the management engineering field for reasoning and solving specific problems in the manufacturing and tertiary sectors and in a freelance environment;
- will know the structural and operational management of production and logistics systems in terms of technological, organizational and economic components, and will have developed systems analysis and innovative development skills;
- will have developed knowledge and specific skills to identify and use appropriate analysis tools of an economic and organizational nature applied to highly complex specific technological problems and contexts, with particular focus on cases which require innovative solutions for the integration and optimization of management of technical, financial and human resources;
- will be able to critically use appropriate methodologies for establishing the performance of technological systems to support the main management processes and to develop innovative solutions;
- will be able to identify and implement research, development and engineering programmes for innovative products or services and the relative technological and organizational processes.

The achievement of the ability to apply the above knowledge and understanding will be accomplished through the learning activities organized in the “Management Engineering” programme, supplementary and complementary activities as well as further activities including work placement and laboratories.

The teaching methods include participation in seminars and exercises in the classroom and in the laboratory, individual and group projects, guided self-study and autonomous study. Assessment of the achievement of the described learning outcomes shall be mainly through tests, written and oral exams and project work.

JUDGEMENT SKILLS:

2nd cycle graduates:

- will be able to identify, formulate and solve problems linked to the management of production, logistics, administrative and technical-commercial processes;
- will be able to gather, integrate and interpret technical and economic data and information in order to formulate an autonomous opinion on their importance and management implications, and formulate original and innovative solutions;
- will be able to keep abreast of methods, techniques and instruments in the field of management engineering, both in terms of industrial and information technologies applied to management processes, and in economic and organizational terms, comparing them and selecting them according to technical and economic convenience criteria.

The aforementioned judgement skills are accomplished through the learning activities organised in the “Management Engineering” programme, as well as further activities including work placement and laboratories and the preparation for the final examination. The teaching methods include participation in seminars and exercises in the classroom and in the laboratory, individual and group projects, guided self-study and autonomous study. Assessment of the achievement of the described learning outcomes shall be mainly through tests, written and oral exams and project work.

COMMUNICATION SKILLS:

Graduates will be able to communicate data, information, ideas, problems and solutions of a technical and economic nature effectively in writing and orally also in English (B2 level) to both specialist and non-specialist interlocutors.

They will be able to cover roles with organisational and management responsibilities.

The aforementioned communication skills are accomplished through the participation in core and supplementary learning activities as well as further activities including work placement and laboratories and the preparation for the final examination. The teaching methods include participation in exercises in the classroom and in the laboratory, individual and group projects and guided self-study. Assessment of the achievement of the described learning outcomes shall be mainly through written and oral exams and project work.

LEARNING SKILLS:

2nd cycle graduates will develop learning skills to such a high level that they will be able to autonomously keep abreast of the methods, techniques and instruments in the Management Engineering field, marked by a high level of complexity and innovative problems relative to various professional fields of management engineering, in particular in the field of materials procurement and management, organization and management of production, organization and automation of production systems and logistics, analysis of business processes, management and

technical-commercial monitoring, as well as continuing studies to a high level of autonomy (e.g. 2nd level Master's degree) and/or in the field of research or other academic activities.

The aforementioned learning skills are achieved through learning activities in the disciplinary fields laid down in the degree programme system and in particular the activities carried out partly in an autonomous manner. The specific teaching methodologies include tutorials. Assessment of the achievement of the learning skills shall be through the various exams organized throughout the programme.

The University of Montpellier argues that within the curricula selected the transferable skills are not defined in the learning outcomes.

VTU states that there is a definition within the syllabus without details being provided.

The fifth aspect of the study explores the separate courses of the curricula, where the transferable skills have been defined:

No	SOCCES partner institutions	Separate courses
1.	University of Coventry	<p>They are defined in the degree programme specification across all courses within the department. They are contained within the integrated project modules, level 1-4, for the following courses.</p> <p>MEng Civil Engineering BEng Civil Engineering BSc Civil Engineering BSc Architectural technology BSc Architecture BEng Building Services Engineering BSc Building Surveying BSc Construction Management BSc Quantity Surveying and Commercial Management</p>
2.	Laurea University of Applied Sciences	<p>Usually no but the few exceptions are linked to tutoring and internships:</p> <ul style="list-style-type: none"> • Tools for Professional Development • Career Planning • Working Life Competences • Research Communications and Project

		<p>Management Skills</p> <ul style="list-style-type: none"> • Placement 1 & 2
3.	NHTV University of Applied Sciences	<p>Within the Master: no, they are embedded within the entire programme.</p> <p>Within the Bachelor - yes, within the following courses:</p> <p>Creative Leadership</p> <p>Intercultural Communication</p>
4.	University of Bologna	<p>Not completely, most of the courses include goals and activities focused on the transferable competences.</p> <p>Only the Business Creation Laboratory is focused on transferrable skills</p>
5.	University of Montpellier	<p>Yes (at least in 5 courses) :</p> <p>Information technology</p> <p>Portfolio of skills and experiments</p> <p>Human resource Management</p> <p>Project engineering</p> <p>Mathematics and Statistics</p> <p>Internship report</p>
6.	VTU	<p>No, except the courses Working in team and Project management, where the team working plan/manage projects and communication skills are defined separate.</p>

The last aspect entails the definition of transferable competences as part(s) of the courses within the curricula:

No	SOCCES partner institutions	Transferable skills as part of existing courses
1.	University of Coventry	<p>In addition to the specific integrated project modules, other modules within the courses address the ability to show transferable skills, but are not specifically assessed for them in these modules. This allows greater integration of the curriculum. This is the case for all the courses mention previously.</p>
2.	Laurea University of Applied Sciences	<p>The main rule is that the learning of transferable competences is integrated into courses.</p> <p>Examples of integrated courses:</p>

		<ul style="list-style-type: none"> • Development towards Professional Expertise and Interaction • Finnish Language and Communication • Professional Communication in English • Business Game • Corporate Social Responsibility • Organizational Management and Leadership • Service Innovations • Business Models and Entrepreneurship <p>There are some exceptions like basic language studies and some professional studies that do not by definition in the curriculum include any transferable competencies in learning objectives. In spite of that, following the LbD action model means that transferable competencies are practiced and learned almost in all study units.</p>
3.	NHTV University of Applied Sciences	<p>Within both programmes transferable competencies are embedded in almost all courses because of the Professional profiles of respectively a Bachelor in International Leisure Management and a Master in Imagineering, which have been approved and accredited by the Ministry of Education.</p>
4.	University of Bologna	<p>In the following courses:</p> <ul style="list-style-type: none"> • Work Placement • Organisational Behaviour • Human Resources Management • Value Stream Management • Economics and Management of Innovation • Algorithms for decision making • Business Intelligence <p>Basically because transferable skills are considered to be crucial in order to develop entrepreneurship.</p>
5.	University of Montpellier	Not applicable
6.	VTU	<p>Yes, for example:</p> <ul style="list-style-type: none"> - Creative thinking – in the course “Human –

		computer interaction”; - Innovation – in “Multimedia technologies”; - Decision making – “E-business”; - Collaboration – “Working in team” and “Project design and development”; - Problem solving – “Image processing”; - Time – management – “Project management”; - Resolve conflicts – “Computer networks”, etc.
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Conclusions and Remarks

The transversal competence development of every young person is one of the long term objectives of the updated strategic framework for European cooperation and this can only be confirmed by the study realized within the SOCCES partnership network. Most of the SOCCES partners have formulated and at least have begun to implement policies that move their educational systems from being predominantly input led and subject-oriented towards curricula which include competences, cross-curricular activities, active and individual learning, as well as a focus on learning outcomes, which is as well one of the main aims of the European Commission (EACEA/Eurydice, 2012c).

Part of the principle behind transferable competences is to break from 20th century structures which separate the transmission of knowledge into disciplines, thought by some to be an invention of teaching that does not reflect the worlds of culture, science or economics (Gauthier, 2006). While none of the SOCCES partners has adopted a ‘subject-free’ approach, it is generally recognised that the majority of transferable competences are not tied to any particular subject and are needed alongside all areas of study. Hence developing a cross-curricular framework is the approach taken by most of the SOCCES educational institutions that have explicitly addressed key and in particular transferable competences. This is also because key competences in general are not learned discretely but more than one may be developed at the same time.

A commonly noted approach to teaching transferable competences is to provide interactive learning environments that facilitate active learning. These learning environments, which promote collaborative and multidisciplinary learning, are increasingly technology enhanced. They allow several transversal competences to be addressed simultaneously. As suggested by constructivist learning theories, learners can develop key competences, and therefore transfer their knowledge, if they learn through authentic activity, rather than solely through instruction. The study confirms that learning environments need to reflect real world contexts. Such simulation has three main

purposes: it can motivate learners more than traditional approaches (Lepper and Henderlong, 2000; Garris et al., 2002); learners are more likely to remember concepts they discover on their own (de Jong and van Joolingen, 1998); and it provides a meaningful environment for problem-based learning (McFarlane et al., 2002). Through games or other activities, learners can be presented with real life problems, which they can attempt to solve through debate, experimentation, exploration and creativity. Problems should be complex and with multiple solutions. The end product – the learners’ solution – can take a variety of forms. While interactive learning environments encourage learners to be active and autonomous, they also require collaboration between learners, developing social and communicative competences.

In most of the cases it is seen that learning environment does not have to be classroom based. Virtual worlds are also types of interactive learning environments. Placement, intern, study trip programmes are potential sites for key/transferable competence development. These often have an applied focus and became a site of experimentation and innovation, a place where educators catch up with the changing culture and teach new subjects that expand children’s understanding of the world. They may also enhance student engagement and promote collaborative learning, even at a young age (Denis and Hubert, 2001).

In addition, the examples presented of using tools like mobile technology can connect learners’ lives inside and outside the educational environment. Learners’ responses to real world problems may be conceived of in terms of a longer term, cumulative activity that may take place individually or in groups, and usually requires a final practical outcome. This type of project-based learning as it is stated by the educational institutions part of the study is typically cross-curricular rather than subject-specific; projects may address several subjects and also several key competences and transversal competences simultaneously.

However, the provision of interactive learning environments alone is not sufficient; activities are being supported by scaffolding and by explicit instruction where relevant. In particular, learners receive support to develop their ability to learn independently. The SOCCES partner institutions take into consideration the learners’ social and emotional wellbeing and allow learning to be more self-directed. Teachers are as well supported to develop these new methods, both through the re-orientation of initial teacher training frameworks, and through continuous learning and peer-to-peer support. Knowledge of ICT and familiarity with assessment methods are particular areas for development.

As the study shows the implementation of transversal (transferable) competences requires attention to the social context of learning, and consideration of all the influences upon a learner’s ability to both acquire and transfer what they learn at university.

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Annex 1 Questionnaire

Transferable competences (skills) – how are they being addressed in the curricula of the SOCCES Partner institutions

What are Transferable Skills?

Transferable Skills are skills that can be transferred from one job to another. They are sometimes also called generic, soft or employment skills. You can learn these skills at school, on a sports team or at home and then transfer them to a career. These skills are used and developed in all areas of your life.

Who is the target group of this questionnaire?

This questionnaire has to be answered by the SOCCES project team of the SOCCES partner institutions – Coventry University, Laurea University of Applied Sciences, University of Bologna, University of Montpellier, VTU, NHTV University. The information to be collected can be consulted, discussed and collected from and with other representatives – teachers, administration of the respective Universities.

No	Issue	Information
	Name of the Partner Institution	
1.	What is the understanding of transferable competences (skills) within your institution? Could you please provide a wide or more practical explanation?	
2.	Which curriculum/la shall be addressed at your institution for the SOCCES project implementation and why? Please provide a brief description of the curricula selected.	
3.	Which transferable competences are defined within the selected curricula?	
4.	Are transferable competences (skills) defined within the selected curricula as learning outcomes? If	

	yes, please kindly provide a list of the learning outcomes.	
5.	Are transferable competences (skills) defined within separate courses of the curricula? If yes – what types of courses?	
6.	Are transferable competences defined as part(s) of the courses within the curricula? If yes, in which courses and why?	

Annex 2 Key terms

1. *Transferable skills* (European Framework ANC 2006/962/EC) - Transferable Skills are skills that can be transferred from one job to another. They are sometimes also called generic, soft or employment skills. You can learn these skills at school, on a sports team or at home and then transfer them to a career. These skills are used and developed in all areas of your life.
2. *Competency* (OECD, 2005) - A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual's knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating.

(TRACE project, 2005): Based on the examination of published literature from France, the United Kingdom, Germany and the United States of America, the following composite definition of competence is offered. Competence includes: i) cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially; ii) functional competence (skills or know-how), those things that a person should be able to do when they are functioning in a given area of work, learning or social activity; iii) personal competence involving knowing how to conduct oneself in a specific situation; and iv) ethical competence involving the possession of certain personal and professional values.

The concept is thus used in an integrative manner; as an expression of the ability of individuals to combine – in a self-directed way, tacitly or explicitly and in a particular context – the different elements of knowledge and skills they possess. The aspect of self-direction is critical to the concept as this provides a basis for distinguishing between different levels of competence. Acquiring a certain level of competence can be seen as the ability of an individual to use and combine his or her knowledge, skills and wider competences according to the varying requirements posed by a particular context, a situation or a problem. Put another way, the ability of an individual to deal with complexity, unpredictability and change defines/determines his or her level of competence.

3. *Key competences* - The DeSeCo Project's (2003) conceptual framework for key competencies classifies such competencies in three broad categories. First, individuals need to be able to use a wide range of tools for interacting effectively with the environment: both physical ones such as information technology and socio-cultural ones

such as the use of language. They need to understand such tools well enough to adapt them for their own purposes – to use tools interactively. Second, in an increasingly interdependent world, individuals need to be able to engage with others, and since they will encounter people from a range of backgrounds, it is important that they are able to interact in heterogeneous groups. Third, individuals need to be able to take responsibility for managing their own lives, situate their lives in the broader social context and act autonomously.

Each key competency must:

- ❖ Contribute to valued outcomes for societies and individuals;
- ❖ Help individuals meet important demands in a wide variety of contexts; and
- ❖ Be important not just for specialists but for all individuals

4. *Transversal skills and competences* (OECD, 2006): The skills and competences individuals have which are relevant to jobs and occupations other than the ones they currently have or have recently had. These skills and competences may also have been acquired through non-work or leisure activities or through participation in education or training. More generally, these are skills and competences which have been learned in one context or to master a special situation/problem and can be transferred to another context.

5. *Entrepreneurship and Sense of Initiative* In addition, to having the personal attributes, behaviours and values associated with being enterprising, entrepreneurs and social entrepreneurs also need a range of skills to successfully start-up, develop, manage and grow their business or organization. Many of these skills are also required by intrapreneurs to be effective change agents within organizations and businesses. The core skills for being entrepreneurial (outlined below) are in addition to, or higher level versions of, the core skills associated with general employability for graduates. As being entrepreneurial is all about creating, doing, learning and adapting, then developing the required skills is very much about having a go and doing, so sitting in a class room or reading a book or perusing the internet will not suffice. Your best learning is likely to be associated with situations and contexts where you can experience being entrepreneurial or intrapreneurial. *“Entrepreneurship is the ability to **create and build** something from practically nothing. It is **initiating, doing, achieving and building** an enterprise or organisation, rather than just watching, analysing or describing one. It is the knack of **sensing an opportunity** where others see chaos, contradiction and confusion. It is the ability to **build a founding team to complement your own skills and talents**. It is the **know-how to find, marshal and control resources** and to make sure you don’t run out of money when you need it most. Finally, it is the **willingness to take calculated risks**, both personal and financial, and then*

to do everything possible to get the odds in your favour” (Jeffrey Timmons, Professor of Entrepreneurship, Babson College 1989). *“Employers are no longer satisfied with a good degree, basic transferable skills and a little work experience, enterprise skills and commercial awareness are now pre-requisite skill and knowledge sets across all sectors”*. (Blackmore, P. *Enterprising Enough?* Phoenix 116 35-37) These are needed as companies and organizations strive to be competitive and effective in the face of constant, speedy and unpredictable economic, technological, social and political change.

Skill	Why needed	Opportunities to develop
Research & Analysis	Primarily required to help you find information on your target market, customers, competitors and suppliers and make sense of it. Also useful for identifying sources of financing, advice and expertise that you will need at the various life cycle stages of your enterprise or organization. As an intrapreneur these skills will help you identify and clarify opportunities for change and make a supporting case for taking action.	At undergraduate and postgraduate levels there are multiple opportunities, though course work, projects, dissertations and research assistantships to develop research and analysis skills. Through part-time and vacation jobs, internships and volunteering these can be further developed in an applied way.
Communication	We are talking here about the higher level communication skills, verbal and written, of being able to inform succinctly, inspire, sell ideas and/or products and services, and persuade a wide range of audiences. Required for communicating with partners, funders, staff, customers, colleagues and other stakeholders.	Public speaking, e.g. debating and course or work-based presentations. Taking part in formal meetings, e.g. staff-student liaison forums, student society committees or in work situations. Writing abstracts, executive summaries, cover letters and presentations with impact.
Idea generation & creative thinking	Whether working as an entrepreneur or intrapreneur it is not sufficient just to have lots of ideas you also need to be able to evaluate these, clarify the needs they each meet, estimate what	Identifying new ways to make money for a student society or charity. Developing a proposal for a more efficient way of working during an internship or other work experience.

	would be required in terms of time, resources and skills to realize them, and to analyze whether this would generate sufficient value in return for the expenditure of time and resources required.	
Networking	Needed to build awareness for your product or service but also to develop relationships with people who have knowledge, expertise or connections that you need to win agreement and/or to get things done.	Actively participating in recruitment fairs, employer presentations and open days, student societies' events by introducing yourself, making a positive impact and making connections. Practicing your skills and building your contact list while doing part-time and vacation jobs, internships and volunteering, or organizing departmental or student society events.
Financial literacy	Whether you plan to be a sole-trader, set-up a not for profit organization or a commercial enterprise you will need to a basic understanding of forecasting, budgeting, balance sheets, cash flows and Profit & Loss statements. This is also a valuable skill when working within an organization, e.g. to understand the financial consequences of actions or to make the business case for change.	Learn by doing, e.g. manage your own finances, with a budget and monthly review of expenditure and income or, take on the role of Treasurer in a student society.
Commercial awareness	While financiers or funders may require a business plan a formal business plan may not be an essential requirement, especially at the early stages of your organization or	Through part-time and vacation jobs, internships and volunteering. Being proactive in learning how the business, charity or organization works and the environment in which it

	<p>business's life cycle. More important is having or developing the ability to get into the market place (or the environment you want to operate in), understand what is going on there, learn from it and adapt while at the same time thinking strategically and paying attention to the day to day needs of your enterprise or activity.</p> <p>It is not just about content knowledge it is about developing a commercial instinct.</p>	<p>has to operate. Thinking about how things might be done differently and opportunities that are not being exploited. Take advantage of any opportunities to work directly with clients or customers.</p> <p>This is a skill area where there is no substitute for learning by doing but, attending employer led skills sessions, focused on commercial awareness, organised by the Careers Service or working through business cases can help you to gain a better understanding of what is meant by commercial awareness.</p>
Leadership	<p>This is different from being a manager it is about providing vision and direction, inspiring others to work with you towards that vision and enabling them to do so. It is as crucial for an intrapreneur as it is for an entrepreneur as the former often have to work in situations where they have to motivate and persuade people over whom they have no managerial authority.</p>	<p>Seeking out opportunities to take on responsibility and to inspire others to do things that they would not have done otherwise or to do existing things better, e.g. talking part in LSEs Tutoring scheme, coaching, leading an expedition, organizing and maintaining a study group.</p>
Negotiation	<p>You will well need to negotiate with financiers, funders, suppliers, staff, partners, customers, maybe even government agencies.</p>	<p>Taking opportunities to practice through your daily experiences, e.g. tariff packages for your mobile, getting your needs met in shared accommodation, agreeing the division of labour in a study or project group or during work experience.</p> <p>Attending employer led skills sessions</p>

		on negotiation, organized by the Careers Service.
Management	The type and level of skills required will depend on such issues as whether you are working alone or with others, whether the development of your product or service is simple or complex and whether you are working to tight deadlines. This is about the ability to manage time (your own and others'), people, processes and resources. As a sole trader, in a start-up or as an intrapreneur human and operational resources are usually scarce so being able to use them to good effect is a valuable skill.	Through part-time and vacation jobs, internships and volunteering. Consciously managing the multiple demands of completing your degree, maybe working part time, involvement with extracurricular activities and having some social life. Learning what works and what doesn't and adapting what you do accordingly.

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6. *Social competences* (TRANS, 2014) - Ample social capacities and facilities to initiate, communicate, interact and maintain positive social relationships with others in work and life. Acquired traveling, researching, living, working and collaborating with different people, professionals, teams, institutions, organizations from different multicultural environments and countries.

Social competence is a complex, multidimensional concept consisting of social, emotional (e.g., affect regulation), cognitive (e.g., fund of information, skills for processing/acquisition, perspective taking), and behavioral (e.g., conversation skills, prosocial behavior) skills, as well as motivational and expectancy sets (e.g., moral development, self-efficacy) needed for successful social adaptation. Social competence also reflects having an ability to take another's perspective concerning a situation, learn from past experiences, and apply that learning to the changes in social interactions. Social competence is the foundation upon which expectations for future interaction with others is built, and upon which individuals develop perceptions of their own behavior. Often, the concept of social competence frequently encompasses additional constructs such as social skills, social communication, and interpersonal communication

Annex 3 Ideation workshop outcomes: staff, student and business experience

Report on EU café workshop

Helsinki July 2015-07-02

This session at the EU café was focused on staff experiences assessing transversal competences. The table was given the following prompt questions:

What are/is your best/greatest experience(s)/challenge(s) as a lecturer/assessor of transversal competences and why?

What are the most fascinating outcomes you have observed while using technology, virtual platforms, etc. when lecturing and/or assessing transversal competences and why?

In considering these prompt questions the discussion, across the three groups, followed an evolution from the issues involved in assessing transversal competences to developing an outline idea as to how this might be supported. The notes below reflect the evolution of the discussion.

Process vs Product

The discussion highlighted how current assessment practices tend to focus on outputs from activities rather than the learning processes that are developed whilst working on the creation/production of the output: process vs. product. Assessing the product cannot be seen as a good measure of transversal skills. So it was recognised that many activities are set-up to develop transversal skills it is a challenge to make these explicit and visible and assess them.

The discussion also highlighted the importance of formative assessment in the development of transversal competences. Formative feedback could come from a number of sources, self, peers, teacher and employer. All were important though self-assessment is important for future employability.

The challenge of assessing transversal competences was also linked to their being no clear definition and linked to that no clear criteria that could be used to support the assessment process.

The discussion shared examples of how greater emphasis could be placed upon the process; these included using portfolio type assessments that assessed reflection on the process rather than the product and use of technology tools that allow for peer-review in team-based activities. For the latter concern was expressed as to whether students were able to effectively and objectively evaluate the work of their peers.

Thresholds

Having identified challenges associated with the assessment of transversal competences the discussion developed onto identifying potential solutions that could assist. The discussion identified the need for thresholds that could be used, providing a framework for assessment. Such a framework would need to recognise different contexts and cultural differences.

This discussion started to suggest having a defined framework that would provide a basis for assessing competences, but a framework that could be individually owned and used to help demonstrate and reflect development. The latter was considered important in helping make explicit competences to demonstrate employability.

Two suggestions were proposed for how the framework could be represented and used. The first (Table 1) is a simple table in which each transversal competence has identified level criteria statements providing a baseline for use and interpretation.

Competency	Level 1	Level 2	Level 3
Critical thinking / Problem solving			
Creativity & Innovation			
Team-work and collaboration			
Communication			
Initiative			
Risk assessment			
Project management			
Constructive management of feelings			

It was also proposed this could be represented as a 'web/radar diagram' (see Fig 1) , which could be used as a self-assessment tool to show development.

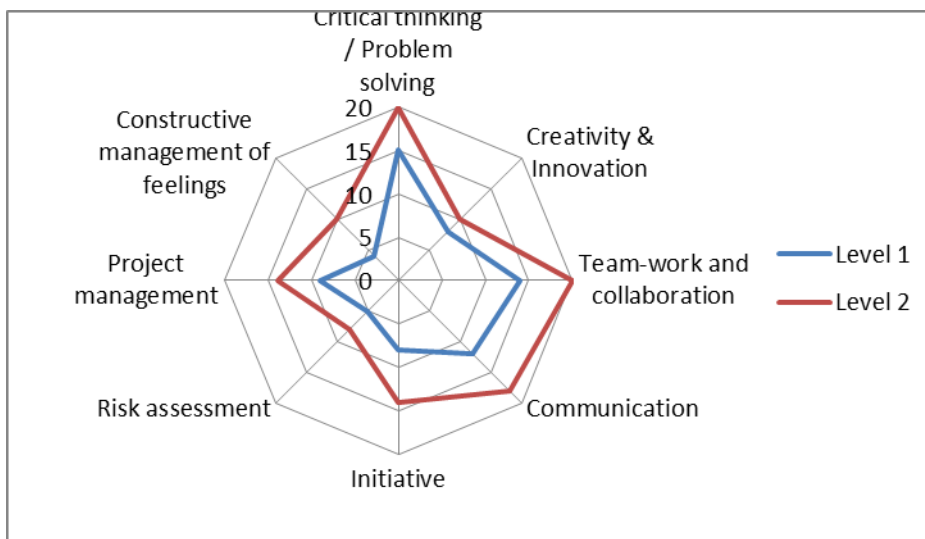


Fig 1

The discussion also highlighted the importance of having case studies available that would help illustrate the application of such a framework.

Report on EU café workshop

Helsinki July 2015-07-02

The EU café was dedicated to answering the following question:

Imagine that a student was to describe the advantages and the possibilities of teaching and assessing Entrepreneurship and Sense of Initiative as well as Social competences to the European Commission. How do you think he/she will do it and why?

The groups tackled this topic examining a few aspects of this:

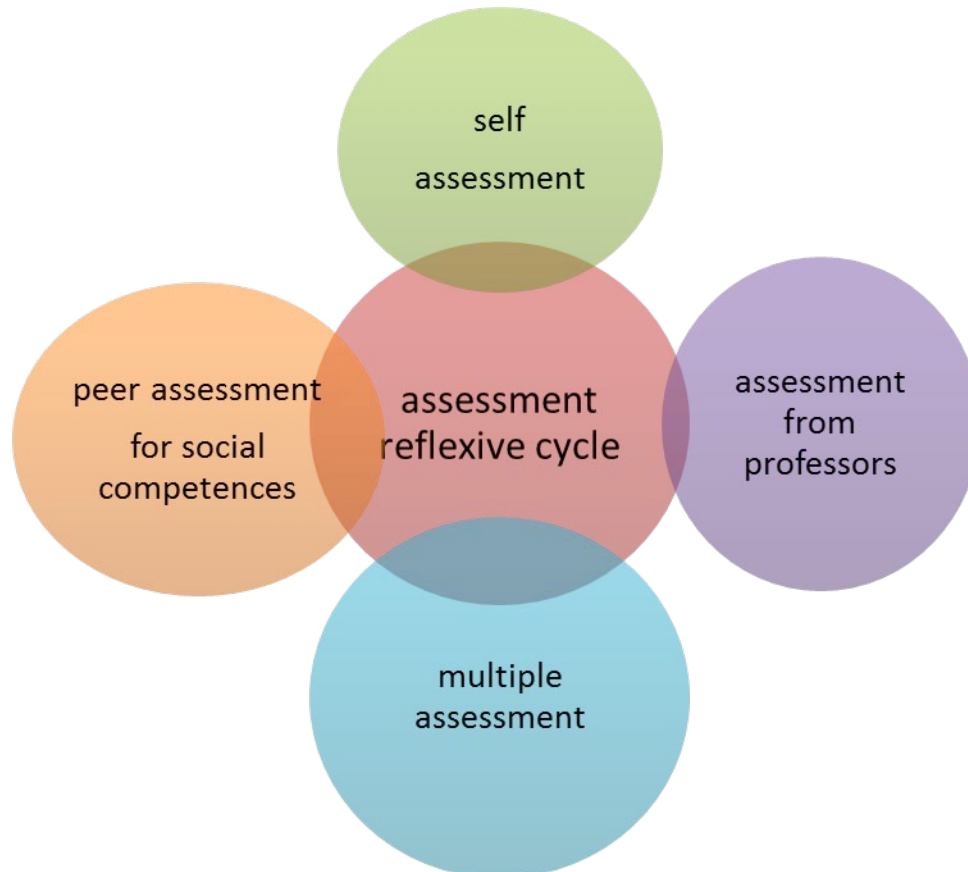
1. a general overview on the question
 2. the key competences for an entrepreneur
 3. the social competences' composition
 4. the assessment of transversal/transferrable skills for entrepreneurs.
-
1. In general the groups agreed on a few key issues:
 - there is a strong need to build up bridges between theory and practice, between business and universities, students need to acquire competences in the practice (places, joint projects, internship);
 - the key transferrable competences are related to employability and self employability
 - internationalisation is a great opportunity for students, this is why entrepreneurship courses should promote: students' mobility, international environments and interchangeability of curricula.
 2. Concerning entrepreneurship competences-skills-attitudes all agreed on the following set of capabilities:
 - the ability of risk taking and facing challenges (courage);
 - critical thinking and critical attitude;
 - problem solving and goals' achievement attitude;
 - self management and career building;
 - creativity and vision: capability to see new opportunities;
 - a balanced locus of control;
 - orientation to action;
 - stress resistance;
 - growth mindset;
 - flexibility/adaptability
 - commitment
 3. The social competences that have been recognised to be fundamental in entrepreneurship are:
 - effective communication that can be acquired through:
 - o role models
 - o interviews
 - o speech
 - o role playing
 - team management
 - o team building
 - o team working
 - o team facilitating
 - o giving the right feed back to a team
 - divergent thinking
 - conflict resolution
 - adaptability to different roles
 - intercultural competences
 - work-life balance
 - socio-structural competence

- code of conduct
- hierarchy of an organisation

4. Concerning assessment the groups agreed on the following principles and proposals:

- Assessment must be strictly connected to learning goals and learning activities
- Assessment must be formative, in order to provide feed back for constant and progressive improvement
- Assessment must be free of judgement: we assess behaviour or outputs we don't assess, evaluate or judge a person.

Assessment should be based on the following reflexive circle:



Report on Speakers Corner café workshop

Helsinki July 2015-07-02

The Speakers Corner café was dedicated to answering the following question:

Imagine that you are invited to deliver a speech at a Business forum about the role of Entrepreneurship and Social competences for efficiency and employability based on the SOCCES Baseline – what would you say and why??

The groups tackled this by first highlighting some of the commonality between the baseline for Employers and Students:

What does the business need? (SOCCES survey)	What do the students find important? (SOCCES survey)
<ol style="list-style-type: none">1. Team-work and collaboration2. Critical and analytical thinking or problem solving3. Communication4. Creativity and Innovation5. Positive attitude and work ethic6. Social responsibility	<ol style="list-style-type: none">1. Team-work and collaboration2. Communication3. Creativity and Innovation4. Project Management5. Positive attitude and work ethic

Initial discussions

1. Employers consider critical and analytical thinking as the 2nd most important skill while students consider project management as the 4th most important. This led to the initial discussion in 'are there similarities between critical thinking and project management.' The reason for this possible linkage was that the 4 other criteria were the same for both employers and students. Why/ is there a difference between critical thinking and project management as perceived by employers and students?

It was perceived that employers expect the employee to identify the problem/project and propose actions, where the students experience is that they are generally given problems/projects to solve and see the process of solving this as project management, irrespective of whether they are undertaking critical thinking and problem solving to solve the project. In addition, do future employers expect more autonomy and a sense of initiative than what is currently provided in education or is it that students don't recognise those skills even if they are doing them, as they are fixated on the final goal, usually assessment. In addition, education requires that assessment of these skills takes place, but clarity is needed on what we are exactly assessing them on.

2. Students recognise the importance of teamwork and collaboration, which is the same as employers. However, students are in real-life very concerned about how their peers will perform. This seems to in conflict in the study as both students and employers consider positive attitude as only 5th important.

Second discussions were based on the initial thoughts and stem from the initial comment that the '5 most important issues are very similar between employers and students'. A series of questions and thoughts were developed from this similarity in relation to business and students. The points raised would be what would be said and why to the business forum.

