



ENTREPRENEURSHIP PACKAGE

BUSINESS CREATION APPROACH

Prepared by the WEXHE project consortium, led by the University of Ljubljana as part of WP4 of the WEXHE project

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Hard pure (e.g. physics etc.)

Soft pure (e.g. literature etc.)

Hard applied (e.g. engineering etc.)

Soft applied (e.g. management studies etc.)

WEXHE research has showed that there are no substantial differences between these four sectors regarding the implementation of Work Based Learning in Higher Education. Therefore this document represents the four sectors mentioned.

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SUMMARY

This Business Creation Package is composed of two main parts: the learning and training arrangements and the organisational arrangements. Learning and training arrangements focus on goals and objectives, key competences and learning outcomes, forms and methods of learning and teaching, admission criteria and assessment of students. This Business Creation Package is a response to a plea from the European Commission addressed to universities to be more entrepreneurial in terms of motivation of students for entrepreneurship career, development of their dispositions towards entrepreneurial competences, and encouraging and assisting them to start their own business. The WEXHE project case studies reveal that the accent of courses and modules aimed at entrepreneurship creation is on the development of transversal/ generic competences. The WEXHE project identifies the following transversal/ generic competences combined with those from other relevant research:

- Ability to communicate and negotiate
- Ability to search opportunities, value ideas and take initiative
- Capacity to generate new ideas (creativity and innovation)
- Capacity to think critically, ethically and sustainable – (self- reflection and self-awareness)
- Ability to design and manage projects and finances
- Ability to motivate people and move towards common goals (leadership)
- Ability to make a business planning and modelling
- Ability to make reasoned decisions (decision-making), to plan and manage time (organisational skills) and to cope with uncertainty, ambiguity and risk
- Ability to work in a team (teamwork)
- Ability to learn and stay up to date with learning

For each of the above-mentioned competences methods of development are suggested through acquirement of additional knowledge, skills, autonomy and responsibilities during a course and project work setting. Admission of students in a business creation programme,

assessment of students and the certification of their study and project results is also dealt with in this section.

Organisational arrangements include the steps necessary to effectively implement a business creation programme. It starts with motivating, admitting and preparing students, engaging experienced entrepreneurs and the formation of business teams, continues with elaborating and implementing business plans until the newly founded business takes-off or closes down and ends with assessing and rewarding students, evaluation and reporting. Universities can make these steps themselves or in cooperation with or authorisation of supportive institutions, such as career centres, incubators, technological parks, accelerators etc. Special attention is paid to the specification of the main roles (e.g. mentors, experienced entrepreneurs and coordinators) including tasks and responsibilities necessary for a successful business creation programme. The package ends with suggestions for the financial, quality assurance, evaluation and accreditation arrangements.

The package is prepared as reference material, which can help universities dealing with entrepreneurship promotion to find the ways, which suits their conditions best. Therefore, this package also contains some appendices that serve as examples of practical solutions taken from various WEXHE (and other) cases and from literature.

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INTRODUCTION

Looking at the three modes of work-based learning Work Placements, Traineeships and Entrepreneurship (Hereafter: WBL), entrepreneurship might be the one with the most variations in design. WEXHE research shows that it is very difficult to be taught and trained for entrepreneurship without involvement in concrete organisational and business situations. Such an involvement requires some entrepreneurial skills from the student, which we believe can be identified and developed further. Some universities, for instance, highlight formally 'bad students' who turned out as successful entrepreneurs. This indicates that an appropriate approach to learn entrepreneurship is often missing. In addition, the success of entrepreneurial activities depends on the cultural/ national context in which individuals are brought up and in which they set up their 'entrepreneurial projects'.

Struck by observations, such as a lack of entrepreneurial spirit in Europe and the fact that young generations prefer security over risk-taking (one of the core characteristics of entrepreneurs) several appeals have been sent to societal institutions calling for their engagement in the promotion and development of entrepreneurship. In 'The Entrepreneurship 2020 Action Plan' of the European Commission there are three areas of immediate intervention put forward: i) entrepreneurial education and training, ii) removing administrative barriers and iii) reigniting the culture of entrepreneurship. Universities have been urged to become more entrepreneurial (EC, 2019). If to some extent new entrepreneurs have to stand up the role of universities is to identify students with entrepreneurial dispositions, to motivate them to engage in entrepreneurial activities and to help develop their entrepreneurial competences. As Welsh et al (2015) research indicates the longer students are involved in entrepreneurship education the more positive their attitude is towards entrepreneurship, which results in a bigger number of those who decide to pursue an entrepreneurial career and persist in it. In addition, the shift towards knowledge-based production requires an increase in knowledge and decrease of capital investments. Subsequently, this situation would provide universities with the opportunity to create new jobs directly by establishment of new students' and graduates' enterprises. Thus, the support and development of entrepreneurship has become a part of many universities' missions to serve the society.

The WEXHE cases reveal a great variety of activities universities carry out in order to develop entrepreneurial competences and skills. In general, these activities can be placed into three categories:

- Entrepreneurship promotion – Create Entrepreneurial Awareness
- Business creation, and
- Intrapreneurship/ innovation enhancement.

This package deals with business creation at universities and their foundations, career centres, incubators, technological parks, accelerators and similar supportive institutions. Business creation activities usually start where entrepreneurship promotion activities end. They are focused on further elaborating and fine-tuning business ideas and business plans, on registering new businesses, on providing space, material and human resources to start the production, on creating or further elaborating prototypes and setting up production processes, marketing and sales activities, fund raising etc. For all these activities new entrepreneurs need a supportive environment which universities and specialised supportive institutions can provide.

The purpose of the Business Creation Package

This Business Creation Package is based on information from actual entrepreneurship cases which are practiced in various work environments in seven EU countries (Cyprus, Germany, Netherlands, Poland, Slovenia, Spain and United Kingdom), and on information from other relevant projects and literature. Its purpose is to systemize this information in a user-friendly form and to make it available to all institutions making efforts to raise social responsibility of universities in terms of enabling and empowering their students and graduates to create new businesses and new highly proficient jobs. Public and private investments in one's education are high. Therefore, adequate returns on investments, such as the quality of labour, individual (self) employment and career prospects and personal satisfaction are reasonably expected. Universities and supportive institutions may expect some financial returns also.

This package is not intended as a set of rules to be strictly followed. Rather it presents a variety of approaches, practices and solutions applicable in the surroundings of various organisations and traditions. It should be taken as a reference and a source of inspiration for those experts who are in charge of business creation or who plan to deal with it. It is not a recipe but a menu out of which one can take solutions that fit best to the local conditions.

The package is prepared primarily for universities and (their) supportive institutions, which strive to:

- Identify potential entrepreneurs among students and graduates
- Motivate them to pursue a business career and help develop their entrepreneurial competences and skills by generating business ideas and elaboration of business plans
- Assist them in implementing business plans in terms of registering, starting and development of a new business.

It is expected that students already are equipped with up-to-date competences in their professional fields of study. However, the creation of a new business requires development of students' entrepreneurial skills and competences. Students should be encouraged to call upon their entrepreneurial spirit and to explore, elaborate and present their business ideas.

They should be empowered to implement their business ideas and assisted in overcoming the barriers they encounter on the way from idea to registration of a new business unit. Students will need some assistance after starting up a new business until its take-off. By doing so, students will not only develop entrepreneurial skills and competences, but will also mature in risk taking and apply theoretical knowledge in practice. They can create their own jobs and jobs for other employees, fulfil their career aspirations and create value for themselves and for society.

LEARNING AND TRAINING ARRANGEMENTS: CONTENT OF THE MODULE

A learning module represents a kind of general curriculum, which can serve as a basis for the elaboration of concrete programmes. These programmes can be adjusted to groups of students enrolled in the same study programme. Generally, the WBL programme consists of several components (Schmidt and Gibbs, 2009):

- a reflective learning review that articulates and documents experiences, learning outcomes achieved and competences held;
- a learning interview to ensure the suitability of learners to the programme;
- flexible recognition of prior learning;
- clearly defined learning outcomes for study modules and programmes;
- a learning agreement between stakeholders that establishes the learner's programme of study;
- support from the organisation/company;
- assessment including recognition of experiential learning gained in the workplace, recognition of ability to apply theoretical learning and demonstration of related competences in the workplace, mapping of experiential learning onto a template of standard, and assessing modules/projects undertaken;
- officially recognised award of learning outcomes.

The following paragraphs contain the characteristics of a learning module aiming at the business creation. The curriculum components will be addressed first, followed by organisational arrangements.

Most universities only offer a few specific entrepreneurship study programmes. They rather insert entrepreneurship courses/ subjects, project work and similar forms of education and training into other programmes or offer them as specific elective modules and forms of entrepreneurship promotion and development. As stated in the 'Entrepreneurship Education' (EC, 2019a) an entrepreneurial mind-set and skills can only be effectively built through hands-on, real life experiences, and project work. It can be taught across all subject areas, as a separate subject or combined with others. Business creation universities and other entrepreneurship supportive institutions may require that students first finish an entrepreneurship promotion module and present a viable business idea/ plan before they enter a Business Creation Programme (BCP) unless an entrepreneurship promotion module and elaboration of a business plan are part of BCP. The core of BCP is focused on the

implementation of a business plan/ project by the (student) business team which is supported by various consultancy services and trainings where and when needed. Although the main goal is to create a new business that will stand on its own feet as soon as possible a BCP should also be conceived as a learning process in which involved students upgrade existing and acquire additional competences. It should determine which competences students develop while participating in BCP activities, which learning and training methods are implemented, how learning outcomes are assessed, if credit points are awarded, the time frame of BCP, what are the entry requirements, etc.

Goals and objectives

The main goal of offering a BCP at universities is to help students with an entrepreneurial mind-set to develop their entrepreneurship competences and to encourage students to pursue an entrepreneurship career including registering their own business. Other frequently mentioned motives for business creation, some of which identified also in the WEXHE project are:

- For students: to try out their competences and business ideas in real business environments, to create their own jobs and jobs for other employees, to advance business competences and to realistically shape expectations about business environments;
- For universities: to promote and develop entrepreneurial activities and responsibility for society among students, to contribute to students' personal development and self-employment, to help build the name of a university addressing local and regional issues, to contribute to regional employment and business development, and to generate income.

Concrete objectives of the business creation are:

- to identify competences to be developed by BCP
- to identify prior knowledge and skills needed for a successful participation in BCP
- to motivate students with an entrepreneurial mind-set, competences and viable business ideas to take part in BCP
- to attract experienced entrepreneurs who are eager to share their experiences with students as their mentors
- to prepare students for participation in BCP including their participation in entrepreneurship promotion module (courses and projects)
- to establish a network of business creation supportive institutions which provide consultancy and trainings to business teams

- to advance students' entrepreneurial competences,
- to establish new businesses, and
- to assess acquired competences and award certificates to students.

Key competences and expected learning outcomes

In the WEXHE study we understand competences as a general term embracing knowledge, skills and autonomy/ responsibility (Wagenaar, 2019, p.391-425) where skills are developed on the basis of relevant knowledge and autonomy/ responsibilities on the basis of both knowledge and skills. In other words, only a proper combination of knowledge, skills and autonomy/ responsibilities that a student acquires make him/ her competent.

During their study students acquire competences that are in line with a certain study programme. If a programme includes entrepreneurial components (such as an entrepreneurship promotion module or individual courses) a lot of knowledge and competences can be delivered to students in the classroom. In some disciplinary areas, such as economics and business, a lot of entrepreneurial courses, exercises and projects are included into a study programme. Programme directors invite experienced practitioners to give (guest) lectures, students study real business cases and simulate business situations, e.g., 'learning enterprise' (Amant, 2003) where students establish an enterprise and play different entrepreneurial roles. In the area of engineering, on the other hand, the same approach has not been widely used due to the lack of experiences and focus on technical issues. In this case an entrepreneurship promotion module and courses should be offered to students in order to prepare them for the creation of an own business. However, the core of business creation programme are not courses but a business creation project.

In a study on entrepreneurship competences (Bocigalupo et al, 2016) the authors identified three areas of which each contains five entrepreneurship competences. These three areas are:

1. Ideas and opportunities: spotting opportunities, being creative, having vision, value ideas, being ethical and the ability to think sustainable;
2. Resources: self-awareness and self-efficacy, motivation and perseverance, ability to mobilise resources and people, being financial and economic literate;
3. Into action: taking the initiative, ability to plan and manage, ability to cope with uncertainty, ambiguity and risk, ability to work with others and to learn through experience.

The cases collected in the WEXHE project indicate that training for entrepreneurship is very much focused on the development of transversal/ generic competences and skills although they differ to some extent from competences and skills developed by work placement and traineeship. The obtained list overlaps significantly with the one presented by Bocigalupo et

al (2016). The difference is rather in phrasing than in the content. Since WEXHE cases cannot be considered representative, a merged list of entrepreneurship competences is presented below. The only important WEXHE competence not included in the Bocigalupo et al list is 'communication and negotiation', and only 'vision', and self-efficacy' from the Bocigalupo et al list are missing. The list includes ten competences as follows:

- Ability to communicate and negotiate (able to read, understand, write and interpret various texts and reports; orally communicate and present clearly with adjustment to individual and group situations; understand and manage body language; communicate in different languages; understand communication in different cultural contexts; manage various styles of communication; eager to communicate with others; have sense of empathy; negotiate with co-workers, partners and customers effectively; recognise partners' messages; manage convincing argumentation; being self-confident in communication; search compromises; etc.)
- Ability to search opportunities, value ideas and take initiative (identify and seize opportunities to create value by exploring the social, cultural and economic landscape; identify needs and challenges that need to be met; establish new connections and bring together scattered elements of the landscape to create opportunities to create value; judge what value is in social, cultural and economic terms; recognise the potential an idea has for creating value and identify suitable ways of making the most out of it; initiate action when needed; initiate processes that create value; take up challenges, act and work independently to achieve goals; stick to intentions and carry out planned tasks; etc.)
- Capacity to generate new ideas (creativity and innovation) (able to originate new ideas to create value, to think out of the box, to seek improvements of existing processes and to focus on details; ready to share one's thoughts and elaborate proposals; open minded; look at challenges as opportunities; etc.)
- Capacity to think critically, ethically and sustainable – (self) reflection and self-awareness (assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment; reflect on how sustainable long-term social, cultural and economic goals are, and critically examine the course of action chosen; act responsibly; reflect on own needs, aspirations and wants in the short, medium and long term; etc.)
- Ability to design and manage projects and finances (able to manage various fields, especially projects and finances; estimate the cost of turning an idea into a value creating activity; able to identify, analyse and solve problems; able to deal with several variables simultaneously and effectively; able to find material, non-material and digital resources to turn ideas into action and take appropriate decisions; make the

most of limited resources; ready to take decisions and responsibility for the consequences; etc.)

- Ability to mobilize and motivate oneself and others to move towards common goals (leadership) (inspire and enthuse relevant stakeholders; get the support needed to achieve valuable outcomes; able to coordinate complex work, to set out common goals and to assign tasks to co-workers properly; engaged for goals' attainment, able to spread enthusiasm among co-workers, able to recognise others' abilities and skills and to motivate them for their utilisation; ready to assist co-workers, to fairly assess their contributions and to give clear positive and negative feedback – recognition and critique; able to transfer and ready to share knowledge and skills with co-workers, empathy and assertiveness; being accepted by co-workers; be determined to turn ideas into action and satisfy own and others' need to achieve; be prepared to be patient and keep trying to achieve long-term individual or group aims; be resilient under pressure, adversity, and temporary failure; etc.)
- Ability to make a business planning and modelling (set long-, medium- and short-term goals; define priorities and action plans; able to select appropriate business idea and elaborate it in terms of concrete products or services; able to apply knowledge from the fields of finances, marketing, human resources and other relevant technical fields; able to design production process, able to realistically put business idea into a time frame, able to evaluate business idea from the perspective of technical feasibility and market analysis; able to adapt to unforeseen changes; etc.)
- Ability to make reasoned decisions, to plan and manage (organisational skills), to cope with uncertainty, ambiguity and risk (make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes; within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce risk and failing; handle fast-moving situations promptly and flexibly; etc.)
- Ability to work with others (teamwork) (work together and co-operate with others to develop ideas and turn them into action; network; understand one's and others roles in teams; accept co-workers having different personal characteristics; seek team synergy; able to defend or withdraw own attitudes; ready to listen and able to understand others' arguments; adjust to the changing interpersonal situations and to different personalities; ready to contribute to the common goals and success; ready to share information, efforts and results; make others interested for own ideas; solve conflicts and face up to competition positively when necessary; etc.)
- Ability to learn and stay up to date with learning (learning from failure) (use any initiative for value creation as a learning opportunity; learn with others, including

peers and mentors; reflect and learn from both own and others success and failure; etc.).

A more precise analysis of competences shows that every transversal competence should be put in the organisational and professional context. Such analysis reveals that the same competence may have different contents and could be expected at different levels of mastery in different contexts. For instance, initiation of innovative ideas in a production system requires detailed insight into the characteristics of a certain product and into the sequence of work operations, while elaboration of a proposal for a new performance appraisal system requires attentive observation of workers' and leaders' attitudes and checking of their opinions. For an engineer, required communication skills are excellent/ precise reading and drawing skills, and excellent presentation skills including figures, formulas and graphs. For a cultural events manager however, excellent verbal skills are required, understanding implicit meanings of messages and empathy. This does not mean that engineers do not need verbal skills and that cultural event managers do not need to know how to deal with figures and graphs. They both need to develop these components of communication competence at different levels, one at a more basic/ lower and the other at a more advanced/ higher level.

A grading of competences is already embedded in the tables 2 - 4 where knowledge needed for certain competence represents the basic level, skills added to this knowledge an intermediary level and autonomy/ responsibility represent the highest level of competence/ mastery. Referring to Lundvall and Johnson (1994) one could say that knowledge gives an answer to WHAT, skills to HOW and autonomy/ responsibility to WHY. Looking at competences' grading from a behavioural perspective one could apply additional grading for knowledge, skills and autonomy/ responsibility separately as follows:

- Basic level: expected standards are met on the basis of written or oral instructions
- Average level: expected standards are met independently with no particular instruction
- Advanced level: expected standards are surpassed even in non-standard situations
- Highly advanced (expert) level: expected standards are surpassed including the ability to transfer knowledge and skills on to the co-workers.

An example of how both gradings of competences can be combined is presented in table 1.

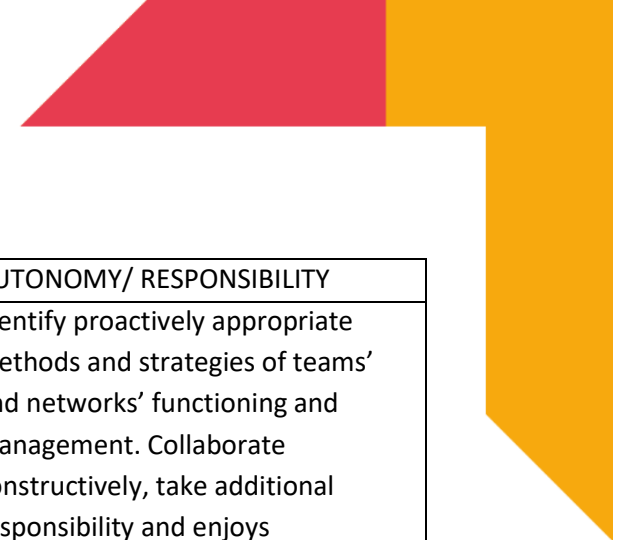


Table 1: A two-dimensional grading of competences – the case of ‘teamwork and networking competence’

BEHAVIOURAL D. / CONTENT D.	KNOWLEDGE	SKILLS	AUTONOMY/ RESPONSIBILITY
HIGHLY ADVANCED	Demonstrate highly advanced knowledge and understanding of methods of team composition, networks and attitude to work collaboratively including ability to teach about teamwork and networks.	Function independently and effectively in national and international working/ project teams and networks able to instruct new teams and networks formation.	Identify proactively appropriate methods and strategies of teams’ and networks’ functioning and management. Collaborate constructively, take additional responsibility and enjoys recognition from mates.
ADVANCED	Demonstrate advanced knowledge and understanding of methods of team composition, networks and attitude to work collaboratively.	Function independently and effectively in national and international working/ project teams and networks taking initiative and being a pattern for mates.	Identify appropriate methods and strategies of teams’ and networks’ functioning and management. Collaborate constructively and voluntarily take additional responsibilities.
AVERAGE	Demonstrate good knowledge and understanding of methods of team composition, networks and attitude to work collaboratively.	Function independently and effectively in national and international working/ project teams and networks.	Identify appropriate methods and strategies of teams’ and networks’ functioning and management. Collaborate constructively.
BASIC	Demonstrate basic knowledge and understanding of methods of team composition, networks and attitude to work collaboratively.	Function in national and international working/ project teams and networks on the basis of instruction.	Collaborate constructively.

The more one achieves higher levels of knowledge, skills and autonomy/ responsibility the higher his/ her mastery in a certain competence. One's competency is a sum of all different competences. However, for a successful performance of a certain profession as well as for the design of a study programme including its entrepreneurship component a proper selection of competences must be made and all competences do not need to be developed to the highest level.

The number of competences and the level of competence proficiency/ mastery to be achieved represent the basis for the allocation of credit points in a certain course or programme. This usually implies also the expected workload of students expressed in the number of hours needed to acquire certain competence.

A competency model provides basic information for preparing an entrepreneurship component of a study programme. The other information comes from the study programme that students are involved in. The core of the entrepreneurship component should focus on the achievement of learning outcomes in line with the formula:

Competency/ skill gap = Required KSAR in the programme – Acquired KSAR by the student
where

K stands for knowledge, S for skills and AR for autonomy/ responsibilities. The result of such an analysis on the study programme/ module in comparison to the expected entrepreneurial environment shows for each competence one of the options, such as:

- Training is not needed
- Some training is needed
- Substantial training is needed
- Competence is not relevant.


Ideally, one would adjust an entrepreneurship creation programme to an individual student where his/ her acquired knowledge, skills and autonomy/ responsibility as well as possibilities to further develop them in the entrepreneurship project are taken into account.

For the preparation of ECPs and for their monitoring and evaluation the learning outcomes to be achieved at the end of a business creation cycle are presented in generalized form. The outcomes are described with reference to the Tuning CALOHEE project (Wagenaar, 2019, p. 391-425) separately for the graduates of the 6th (Bachelor) and 7th (Master) level of education. Each competence is described in terms of expected knowledge, skills, autonomy and responsibility (see tables 2 and 3).

In case of entrepreneurship (creation) this approach has some limitations. Entrepreneurship is, by definition, focused on something new: new products, services and concepts, new technologies of their production and provision, new markets, new sources and new organisational approaches. Although certain generic competences are needed for successful entrepreneurial activities, as outlined above on the basis of the WEXHE cases and the EntreComp study (Bocigalupo et al, 2016), equally important are personal characteristics of

student entrepreneurs. A check of numerous web pages focused on entrepreneurship reveals that among most frequently mentioned characteristics of entrepreneurs are: (self) motivation and passion, risk taking, creativity and similar which are included into EntreComp model also. These characteristics are partially determined by personality traits and their socialisation in early childhood. However, to some extent they can be developed further in the education process (Robinson and Stubberud, 2014). Therefore, an objective of BCP is to enable students with an entrepreneurial mind-set to develop this further by direct involvement into business creation activities. Experienced entrepreneurs that take up the role of mentors can be a particular help in this process.

Table 2: TRANSVERSAL/ GENERIC COMPETENCES AND GENERALIZED LEARNING OUTCOMES DESCRIPTION FOR ENTREPRENEURSHIP – LEVEL 6

QF EHEA descriptors	SQF dimensions	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts. Take responsibility for managing professional development of individuals and groups.
I - Demonstrate knowledge and understanding	Competences 			
II - Apply knowledge and understanding	- Ability to design and manage projects and finances	-Establish methods of analysis/ solution of problems from the professional and business fields by linking concepts with basic strategies, procedures and tools. Demonstrate awareness of the key aspects of professional, ethical and social responsibilities linked to management of activities in the professional and	-Analyse a complex problem, recognise its structure, devise, execute and validate a plan for its solution in the professional and business fields. Manage work context in the business area. Find funding options and manage a budget for value creating activity.	-Identify appropriate concepts, methods of analysis/ solution of complex problems in the professional and business fields. Identify appropriate and relevant approaches to manage work contexts in the business area and reflect on professional, ethical and social responsibilities in taking


	<ul style="list-style-type: none"> - Ability to make a business forecasting, planning and modelling 	<p>business areas, decision making and judgement formulation.</p> <ul style="list-style-type: none"> -Demonstrate knowledge of business forecasting, planning and modelling: methods, structure, processes and environment. 	<ul style="list-style-type: none"> -Find a viable business idea and elaborate it from technical, financial, commercial, marketing and human resources perspectives in order to pass a feasibility check. Create an action plan, which identifies the priorities and milestones to achieve goals. 	<p>decisions and formulating judgements.</p> <ul style="list-style-type: none"> - Identify appropriate methods of business risks analysis. Reflect on consequences and responsibilities in application of business plans and models.
<p>III - Gather and interpret relevant data</p>	<ul style="list-style-type: none"> - Capacity to generate new ideas (Creativity and innovation) -Ability to make reasoned decisions (Decision-making), to plan and manage time to cope with uncertainty, 	<ul style="list-style-type: none"> -Demonstrate knowledge of the on-going nature of research and debate in the professional area and the business making field. -Demonstrate knowledge of organisational principles and decision-making. 	<ul style="list-style-type: none"> - Approach issues with curiosity, creativity and critical awareness. Retrieve and handle information from a variety of sources, identifying business opportunities. Test and refine ideas that create value for others. -Take decisions and formulate judgements. Deal with several variables simultaneously, set goals and prioritise activities. Evaluate the benefits and risks 	<ul style="list-style-type: none"> -Reflect on one's own perspective, capabilities and performance to improve and use them in a creative way. Think in business terms, point at opportunities, gather and analyse data to estimate risks. - Identify appropriate methods of decision-making and risk minimization. Anticipate measures to ameliorate undesired consequences of decisions.

	<p>complexity, ambiguity and risk</p> <p>-Ability to search opportunities, value ideas and take initiative</p> <p>- Capacity to think critically, ethically (self-reflection and self-awareness)</p>	<p>-Demonstrate knowledge of evaluation and application of business ideas in practice.</p> <p>-Demonstrate knowledge and awareness of business ethics and responsibilities, and of sustainability concepts.</p>	<p>of alternative options and make choices that reflect own preferences.</p> <p>-Recognize opportunities to address needs that have not been met. Map the environment and network to identify business ideas. Initiate value-creating activities.</p> <p>-Make decisions based on ethical and sustainability standards. Avoid partners who do not respect human rights, environmental, anti-corruption and similar standards.</p>	<p>Take responsibility for decisions made in unpredictable work contexts.</p> <p>-Take responsibility for own business initiative and respect the authorship of others business ideas. Identify methods for ideas valuation. Take responsibility for initiated ideas and mobilising others for them.</p> <p>-Reflect on ethical and social consequences and responsibilities in application of business plans and models.</p>
IV - Communicate information, ideas, problems and solutions	-Teamwork – ability to work in a team	<p>-Demonstrate knowledge of social dynamics and understanding of methods of team composition and networks.</p> <p>-Demonstrate knowledge and understanding of established</p>	-Function effectively in national and international working / project teams to create value. Demonstrate ability of own team composition.	<p>-Identify appropriate methods and strategies of teams' functioning and management. Collaborate constructively and share responsibility for teamwork effects.</p> <p>-Identify appropriate and relevant communication</p>

	<p>-Ability to Communicate and negotiate</p> <p>-Ability to mobilising and motivating oneself and others (leadership)</p>	<p>communication methods and tools, including ICT, and of their limitations for conveying information in a broader public context including negotiation.</p> <p>-Demonstrate knowledge of entrepreneurship, leadership, management and teams. Demonstrate knowledge of psychology, personality and motivation.</p>	<p>-Communicate effectively, clearly and unambiguously complex information, activities and their results to wider national and international audiences in oral and written form. Negotiate effectively with co-workers, superiors, customers and partners.</p> <p>- Able to initiate, elaborate and implement a simple new business. Able to supervise, persuade, involve and inspire colleagues and junior staff in value-creating activities. Able to analyse consequences of different choices and to manage diversity. Willing to put effort and resources into following own passion and create value for others.</p>	<p>methods, tools and terminology. Demonstrate ability to listen and to understand different viewpoints and to discuss with diverse audiences fostering transparency and responsibility.</p> <p>-Ready to take risks associated with business projects. Able to work inter-culturally and inter-professionally with lay and professional groups. Committed to build a sense of social responsibility in the choices made at personal, professional and contextual levels. Identify appropriate methods and techniques to keep self and others motivated.</p>
V - Undertake further study with high	- Ability to learn and stay up to date with learning	-Demonstrate advanced knowledge and understanding of the learning and working	-Engage in independent learning and follow developments in business,	-Identify appropriate learning methods to follow developments in science and

degree of autonomy	(learning from failure).	methods necessary to follow developments in science and technology in the professional and business field. Identify relevant competences needed for pursuing further studies and career goals.	science and technology autonomously. Organize own study. Reflect and judge achievements and failures and learn from these.	technology in the business and professional fields. Enter new fields of study through a positive attitude. Evaluate own personal and professional competences and take responsibility for own learning.
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Table 3: TRANSVERSAL/ GENERIC COMPETENCES AND GENERALIZED LEARNING OUTCOMES DESCRIPTION FOR ENTREPRENEURSHIP – LEVEL 7

QF EHEA descriptors	SQF dimensions	Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
I - Demonstrate knowledge and understanding	Competences 			
II - Apply knowledge and understanding	- Ability to design and manage projects and finances	-Demonstrate comprehensive knowledge and understanding of the process and methods of analysis/ solution of problems from the professional and business fields by linking concepts with strategies, procedures and tools. Demonstrate critical awareness of the key aspects of professional, ethical, business and social responsibilities linked	Analyse/ solve very complex, context rich and unfamiliar business problems, recognise their structure, devise, execute and validate creative plans for their solution in the professional and business fields. Manage work contexts in the business area and within broader or multidisciplinary contexts that may be unpredictable and require new	-Identify appropriate concepts, methods of analysis and creative solution of very complex problems that occur even in unfamiliar situations in the professional and business fields. Identify and justify appropriate and relevant strategic approaches and analyse professional, business, ethical and social responsibilities linked to the

	<p>- Ability to make a business forecasting, planning and modelling</p>	<p>to management of work contexts, decision making and judgement formulation in the subject area.</p> <p>-Demonstrate knowledge of complex business forecasting, planning and modelling: methods, structure, processes and environment.</p>	<p>strategic approaches. Make a plan for the financial sustainability of a value creating activity.</p> <p>-Find a complex business idea and elaborate it in detail from technical, financial, commercial, marketing and human resources perspectives in order to pass a feasibility check. Create an action plan, which identifies the priorities and milestones to achieve goals in changing circumstances.</p>	<p>management of work contexts in the business area and within broader or multidisciplinary contexts, taking coherent decisions and formulating coherent judgements.</p> <p>- Identify appropriate methods of a complex business risks analysis. Reflect on consequences and responsibilities in application of business plans and models.</p>
<p>III - Gather and interpret relevant data</p>	<p>-Capacity to generate new ideas (creativity and innovation)</p>	<p>-Demonstrate detailed knowledge and understanding of the on-going nature of research and debate in the professional and business field contributing to innovative perspectives.</p>	<p>- Approach issues with curiosity, creativity and critical awareness. Retrieve and handle information from a variety of sources, integrating it critically into a business plan. Formulate original interpretations and innovation proposals. Transform</p>	<p>-Reflect on one's own perspective, capabilities and performance to improve and use them in a creative way. Think in business terms, point at opportunities, gather and analyse data to estimate risks. Deal with business problems in</p>

	<ul style="list-style-type: none"> - Ability to make reasoned decisions (Decision-making), plan and manage time and to cope with uncertainty, complexity, ambiguity and risk -Ability to search opportunities, value ideas and take the initiative -Capacity to think critically, ethically and sustainable (self-reflection and self-awareness) 	<ul style="list-style-type: none"> -Demonstrate knowledge of organisational theory and decision-making models. -Demonstrate knowledge of business theory and evaluation theory and their application in practice. -Demonstrate knowledge and awareness of business ethics and responsibilities, and of sustainability concepts. 	<ul style="list-style-type: none"> ideas into solutions that create value for others. -Take decisions and formulate judgements on complex problems. Deal with a big number of variables simultaneously. Weigh up risks and make decisions despite uncertainty and ambiguity. -Size and shape opportunities to respond to challenges and create value for others. Map the environment and network to identify business ideas. Take initiative to add or create value. -Make decisions based on high ethical and sustainability standards. Refuse partners who do not respect human rights, environmental, anti-corruption and similar standards. 	<ul style="list-style-type: none"> an original manner. Organize complex efforts integrating the results of diverse studies and analyses. - Identify appropriate methods of decision-making and risk minimization. Anticipate measures to ameliorate undesired consequences of decisions. Take responsibility for decisions made in unpredictable contexts. -Take responsibility for own business initiative and respect the authorship of others business ideas. Identify methods for ideas valuation. Take responsibility for initiated ideas and mobilising others for them. -Apply ethical standards in reflection on social and environmental consequences of business plans and models implementation. Take responsibility for eventual breaching of standards. Ready to
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				take risks associated with complex business projects.
IV - Communicate information, ideas, problems and solutions	-Teamwork – ability to work in a team -Ability to Communicate and negotiate	-Demonstrate knowledge and understanding of methods and theories of social relations and teams’ management strategies that may be composed of different disciplines and operate on different levels. -Demonstrate knowledge and understanding of principles and tools of intercultural and interdisciplinary communication, as critical understanding of the use of social media and communication technologies in the professional, business and wider social contexts including negotiation. -Demonstrate knowledge of theories and models of	-Function effectively in national and international working / project teams as a member or leader to create value. Demonstrate ability to create a team or network based on value-creativity needs. -Communicate effectively, clearly and unambiguously complex information, activities and their results to wider national and international audiences in oral and written form using various media in more than one language. Communicate activities’ results and the knowledge and rationale underpinning them. Negotiate effectively with co-workers, superiors, customers and partners most sensitive issues. - Able to initiate, elaborate and implement a new complex	-Identify and justify appropriate methods and strategies of teams’ functioning and management. Collaborate constructively and share responsibility for teamwork effects. -Identify appropriate and relevant communication strategies, methods, tools and terminology for highly sensitive issues and situations. Demonstrate ability to listen and to understand different viewpoints and to discuss with diverse audiences’ ideas, problems and solutions fostering transparency and responsibility. - Able to work inter-culturally and inter-professionally with lay and professional groups.

	-Ability to mobilise and motivate oneself and others to move toward common goals (leadership)	entrepreneurship, leadership, management and teams. Demonstrate knowledge of psychology, personality and motivation theories.	business. Able to supervise, persuade, involve and inspire colleagues and junior staff in value-creating activities despite complex and unpredictable situations. Able to analyse consequences of different choices and to manage high diversity, and to prevent, resolve and manage conflicts. Stay focused on own passion and keep creating value despite setbacks. Teaches others.	Committed to build a sense of social responsibility in the choices made at personal, professional and contextual levels. Identify and chose appropriate methods and techniques to keep self and others motivated.
V - Undertake further study with high degree of autonomy	- Ability to learn and stay up to date with learning (learning from failure)	-Demonstrate advanced specialised knowledge and understanding of the learning and working methods necessary to follow developments in science and technology in the professional field. Undertake further studies in new and emerging technologies.	-Engage in independent learning and follow developments in business, science and technology autonomously. Organize own study. Improve abilities to create value by building on previous experiences – successes and failures and interactions with others.	- Identify and justify appropriate learning and working strategies and methods to follow developments in business and science and technology in the professional field. Enter new fields of study through a positive attitude. Evaluate own personal and professional competences and take responsibility for own learning.

The description of competences with respect to the expected learning outcomes is generalized, meaning that it suits to various professional fields to which it should be adjusted in concrete organisations. Adjustment means that in each case (organisation, programme) a list of competences which serves as a starting point for further steps should be determined. From the list of competences presented in this package one can drop some out, add additional generic competences, and add profession, organisation and job specific competences. In short, the list of competences dealt with in this package represents a core menu of generic competences from which some can be left out and others added, as appropriate to the situation. It is also advised to identify the level to achieve as illustrated in table 1.

The following step to be made is to find appropriate ways for competences development.

Forms and methods of learning/ teaching – defining learning format

“School-based learning appeals to other competencies than work-based learning does. In school-based learning, mainly verbal information has to be memorized, which can be done by: passive reception, active reproduction, and active reconstruction of knowledge. In work-based learning, memorization plays a much smaller role. Instead, gathering experiential knowledge is the main task. This can be done by: learning by doing (surrender to experience), guided learning (following instructions and assignments), and reflective learning (experimenting and making sense of experience)” (De Jong et al, 2006).

“What work-based learning seeks to develop in learners is a metacompetence that transcends the application of immediate skills in order to adapt to variability in work demands... Faced with unpredictable circumstances, participants rely on reflection-in-action and incorporate activities such as on-the-spot reframing, re-evaluation of standard practices, and spontaneous testing of available knowledge to arrive at a solution to the immediate problem... Their learning arises not from prepared scenarios controlled by classroom instructors but from working through the messy, implicit, and real questions of practice... Classroom learning of this experiential nature can be preparatory for the ultimate application of the desired metacognitive critical skills in natural settings” (Raelin, 2016).

Learning and teaching of students should be organised in proper physical, social and organisational environments which enhance competence development. Students should attend appropriate courses supplemented by a number of active teaching and study methods. In fact, the creation of businesses is an active approach of entrepreneurship. The main reason lays in the nature of entrepreneurship, which combines personality characteristics with acquired knowledge in search for business ideas, their elaboration and implementation. More important than studying for a career as an entrepreneur is to detect and develop entrepreneurial competences among a wider scope of young students from various disciplinary fields. The final step is to involve those students who have well-developed competences and business ideas into business creation activities where they test and improve their entrepreneurial competences.

The main forms and methods of learning and teaching of students revealed in the WEXHE cases and relevant for business creation could be structured as follows:

- **Course work** Course work in a BCP is rather limited in terms of focus and the time devoted to it. It is assumed that students already acquire basic knowledge of their study field as well as basic knowledge of entrepreneurship before they start participating in a BCP. However, courses about entrepreneurship promotion and preparation can also be included in a BCP. This would be especially needed for students involved in study programmes without any subjects/ courses on entrepreneurship. Some courses can be offered as a way to prepare for the business creation project and some can be offered in parallel with it. The WEXHE cases provide a long list of courses the examples of which can be structured in the following groups:

A) General courses from the field of social sciences, such as Economic theory, Organisational theory, Communication theory, Psychology and General management.

B) Applied courses:

Examples of applied courses from the field of **economics** are:

- Economic analysis of entrepreneurial projects
- Value creation
- Economic and financial planning/ forecasting
- Financial and cash flow analysis
- Market analysis/ research
- E-commerce
- Marketing strategies

Examples of applied courses from the **organisational** field are:

- Teamwork and group work dynamics
- Decision analysis
- Problem solving
- Intellectual property
- Logistics

Examples of applied courses from the field of **communication** are:

- Communication techniques
- Giving and receiving feedback
- Negotiation
- Conflicts resolution

In the field of **psychology** applied courses can be offered, such as:

- Techniques and methods of creativity and ideas generation

- Design thinking

Examples of **applied management** courses are:

- Personal leadership
- People/ talent management
- Gamification
- Validation practices
- Feasibility and evaluation analysis
- Change management

C) Courses which address entrepreneurship directly:

- Business models' design, analysis and tools
- Entrepreneurial opportunities
- How to create and register a company/ start-up?
- Business ethics
- Business planning
- Managing, presenting and defending innovative projects
- Personal branding
- Entrepreneurial processes
- Entrepreneurial ecosystems
- Sales techniques and customers management
- Resources and capability analysis
- IT support for businesses (the use of clouds, multi-platforms, internet of things)
- Legislation for entrepreneurs
- Business documents
- Success stories of entrepreneurs

D) There are some instructions that can be offered to students involved in entrepreneurial activities, such as:

- Thinking out-of-the-box
- Pitching
- Lean start-up
- How to present your project to investors?
-

- **Project work – preparation of a business plan** *“While WBL programmes often include course-based and peer-group activities, for most the central component of the programme is project-based. Projects normally address real workplace issues with which learners are involved, and they are often an extension of activities that learners are in the process of undertaking... Activities may be small and localised... or they can be major undertakings that produce significant organisational or professional change and lead to the award of a doctorate” (Lester and Costley, 2010).*

A business creation project/ plan is a central element of a BCP. The plan and/ or project is shaped by a business team made up of students, which is put together specifically for the purpose of business creation. A business project/ plan is the result of several business creation activities, such as the generation of business ideas, an analysis of competitive advantages and market potentials, technological development, prototyping, budgeting and fund raising, commercialisation, market targeting and pitching new business proposals. The elaboration of a business plan can be part of preparatory activities that take place before students start with a BCP, or it can be integrated into a BCP. As a plan, it mostly entails a report which includes designs of products, organisational charts, calculations, lists of collaborators and customers and similar. Some prototypes to develop product can be attached already. Business plans are elaborated under the supervision of tutors/ mentors (among which experienced entrepreneurs are most wanted). In some cases former students – fresh entrepreneurs can also take up the role of tutors/ mentors. Tutors/ mentors can assist either individuals or small entrepreneurial teams composed of 3 to 8 members.

Tutors/ mentors may already help students in the phase of team formation. Team members can bring their own business ideas into the team, face them and decide which one to develop/ explore further. A student with a clear and promising idea may want to form his/ her own entrepreneurship team. Another option is that the generating of and deciding which business ideas to explore (new or improved product or service, new technology of production of existing one, etc.) is the first step to be made by a new student entrepreneurship team.

When a business idea is chosen, a team starts with working on a detailed business plan/ model. It should include important dimensions, such as technology development, description of production operations, cost calculation, financial sources, identification of potential markets/ target groups and identifying the ways how to penetrate these markets.

An entrepreneurship team should meet frequently in order to discuss and choose a business idea, to elaborate a business plan, to develop prototypes, to evaluate ideas, past events and results, to discuss issues with tutors/ mentors and to get feedback from them, to prepare further steps and activities. Team members may need to do some field work and site visits, such as meeting and interviewing potential partners and customers, meeting of experienced entrepreneurs in their enterprises to brief business plan solutions, etc. On this basis, a business team makes analyses, such as market analysis, customers' segmentation, product-market fit, case studies etc.

Members of an entrepreneurship team are usually required to write journals on daily activities, to prepare interim, final and reflection reports in which they not only describe what has been done but also to evaluate their experiences with respect to how well they have been (theoretically) prepared for the entrepreneurship project, to evaluate the quality of mentors'/ tutors' support, to report on experiences with team members etc. Another obligation of team member should be to present their business ideas, business projects and plans or their

tangible products. Presentations can be organised in various ways. A frequently used form for the presentation of final results are elevator pitches/ nights. In some cases, the whole project is compressed into a 'kick-off' or 'start-up' weekend or week.

Entrepreneurship team members' reports, presentations and products are evaluated and validated by their tutors/ mentors who usually form a jury for the final evaluation. They evaluate business plans, prototypes and other final outputs using the criteria of innovativeness/ originality, feasibility, market potentials and similar. Since several entrepreneurship teams present their results, a jury selects the best which are awarded special recognition/ price and recommended to continue their activities towards business creation.

Project work – implementation of a business plan Implementation of a business plan is the most serious and demanding part of a BCP. It can be challenging for those involved and requires some (sometimes substantial) investments. Only well-prepared students with promising business ideas and well-designed plans are advised to make this step. Implementation of a business plan does not only include the transformation of ideas and paper work into products and services, organisational structures and technological processes. At this point a business team must find a space (rent a venue) for its production activities, purchase or borrow equipment, hire staff (if a business team cannot manage all needed jobs itself), register the business and get all necessary permissions and documents, decide on intellectual property strategy, start with fund raising including acquirement of business grants, available subsidies and tax reliefs, start with regular production, promotion and sales including supporting functions, such as purchasing of input, maintenance, accounting, transportation etc. A business team not only needs intensive support of a tutor/ mentor but a lot of specialist advice regarding legal, financial, technical and other fields. A university must provide a network of specialised consultancy services for this purpose either directly or via its supportive institutions. It can also provide (office) space for new enterprises in for example its incubators and business/ technological parks. Some short courses can be beneficial also if weak points in a business creation process are observed. The assistance of a university is needed until a new business takes off although some may never reach this point. From the successful start-ups a financial compensation or profit share can be expected. Although the ultimate goal of a BCP is to launch new businesses, it should not be forgotten that a BCP is also a learning process for student entrepreneurs. What students learn in the process of business creation depends on their successful or unsuccessful start-up experience.

Some examples of how to develop selected competences using various methods are given in table 4. They are mainly derived from out of the WEXHE project cases. It should be noticed, however, that some methods contribute to the development of more than one competence at the same time.

Table 4: MEANS OF STUDENTS' ENTREPRENEURIAL TRANSVERSAL/ GENERIC COMPETENCES' DEVELOPMENT

SQF COMPETENCES	Knowledge	Skills	Autonomy and responsibility
General	Lecturing, seminars, field visits, online modules, study of literature and cases	Project work, business simulations, research, workshops, round tables, discussion groups	Reflection on theories, authors, technical and social issues, individual and group evaluation meetings, students' lecturing, seminars, round tables
Ability to design and manage projects and finances	Courses on general and applied management and decision making, on organisational theory, on finances, on production process engineering and systems.	Students elaborate real technical and social problems' solutions, take managerial roles, prepare financial plans and balance sheets, raise funds, manage development, production, finances and sales from idea to output delivery.	Leave students to elaborate business idea and business plan autonomously and meet solution deadline, to find and select study sources, to raise money for business activities and to deal with finances.
Ability to make a business forecasting, planning and modelling	Courses on general and applied entrepreneurship, forecasting and planning methods, case studies of entrepreneurship models – success and failure stories.	Students are involved in entrepreneurship projects design. Experienced entrepreneurs take part in courses and project work.	Foster autonomous students' entrepreneurship teams and projects. Reflect on business social responsibility business project steps with students.
Capacity to generate new ideas (creativity and innovation)	Courses on general and applied psychology, techniques and methods of creativity, theory of innovation, intellectual property.	Foster generation and elaboration of business ideas among students. Organise and support students' entrepreneurship competitions, kick-of and start-up weekends.	Reward new ideas and proposals, allow mistakes, give a second chance, allocate time for incubation and reflection, avoid 'one solution only' situations.

		Introduce permanent discussion on improvements in the business team.	
Ability to make reasoned decisions (Decision-making), to plan and manage time (organisational skills), and to cope with complexity, uncertainty, ambiguity and risk	Courses on organisational theory, decision making and entrepreneurship	Enhance students to organise business project, simulation, field research on their own. Encourage students to participate in civil society activities.	Encourage students to organise autonomously extra-curricular activities including raising resources to finance them. Support students' business project with some university resources. Discuss critical situations with students and give support.
Ability to search opportunities, value ideas and take initiative	Courses on entrepreneurship, evaluation theory and methods.	Involve students in business ideas generation, business plans elaboration and implementation.	Encourage students to try out their business ideas and plans. Involve them in evaluation of business plan implementation and its results.
Capacity to think Critically, ethically and sustainable	Courses on social economy, business ethics and on theory and practice of sustainability.	Discuss ethical and sustainability issues with students during elaboration and implementation of a business plan; ask students to prepare their introductory statements.	Enhance formation of a students' ethical committee, encourage students to take part in civil society sustainability actions and to make business plans for social economy, discuss their experiences in evaluation meetings.
Ability to work with others (teamwork)	Courses on general and applied organisational theory, human resources management and psychology, team working	Encourage students to create their entrepreneurship team which elaborates and implements a business project.	Give feedback on student's performance in a team, monitor reactions of team members. Enhance reflection on team

	course (types, composition, functions and management of teams)		dynamics during elaboration and implementation of a business project.
Ability to communicate and negotiate	Courses on sociology, communication (written, oral, body), languages, negotiation, soft skills, intercultural communication course.	Students write and present reports, take part in the discussion and workshops, give lectures and seminars, bargain between groups of students and with potential customers and other business partners.	Provide clear business communication standards, provide opportunities for written and oral communication, for intercultural communication, initiate learning of languages.
Ability to mobilise and motivate oneself and others to move toward a common goal (leadership)	Courses on leadership, psychology, interpersonal skills, corporate organisation, change management, conflict resolution, intercultural leadership, business excellence.	Students chair sessions, workshops, seminars, coordinate projects, lead study groups, organise business ideas competitions, start-up weekends, elevator pitches. Students lead a business project elaboration and implementation.	Give students the opportunity to step in a coordinative role, to create their own teams, invite students to take leadership roles in groups. Organise discussions on entrepreneurship with experienced entrepreneurs and reflective discussions among students.
Ability to learn and stay up to date with learning (learning from failure)	Courses on pedagogics and didactics, blended learning, own learning/ learning how to learn.	Encourage students to organise and to participate in autonomous study groups. Devote time for study during the business project elaboration and implementation.	Make students aware of the need to be updated with the development in their professional and business fields. Support them to take failures as lessons.

Admission to BCP

BCP is offered to students involved in various study programmes. Because the creation of businesses involves certain costs and risks of failure, it is recommended that a university or supportive institutions establish entry criteria for the programme. These criteria can be specified as follows:

- Finished courses on entrepreneurship in the framework of an entrepreneurship promotion module (see the EPM package) as required prior learning for successful participation in the BCP. (Unless these courses are included in the BCP),
- Interview with a university mentor/ coordinator to check a student's prior learning, possible entrepreneurial experiences, personality characteristics and students' interests
- Student's elaboration of a business idea and a business plan (if these aspects are not included in the BCP),
- Possible entrepreneurial like experiences, such as those obtained in project work, extracurricular activities, volunteering, students' union etc.
- Application for BCP as a sign of student's interest.

In any case, a university and involved supportive institutions should require a high motivation, positive personal attitude and active approach towards entrepreneurship of students who are admitted. The selection of students for a BCP is an internal matter of a university or its supportive institutions.

Assessment of students and certification

Mentors/ tutors/ lecturers monitor students on the basis of their use of critical incident diaries, log books, or portfolios of work-based 'products' accompanied by evaluative comments highlighting what has been learnt. Other approaches could be the testing of and reapplying learning through discussion.

"Multiple and rigorous sources of information for assessment process is needed (e.g., up to date records of tasks and reflections in work-based learning, student journals, supervisors' comments, competence against the relevant industry standards and direct observation of competencies performed in workplace settings). Reflective processes may be captured through e-portfolios, portfolio building, journals and post experience reports and presentations that can be peer-assessed, self-assessed and or assessed by academics" (Henderson and Trede, 2017).

The WEXHE cases describe some assessment and certification procedures and instruments applied by students, their mentors, tutors and lecturers. Frequently mentioned assessment instruments are:

- Students' records/ diaries/ personal journals on daily/ weekly activities
- Students' written reports on the projects' realisation – interim and final

- Students' physical/ oral/ video presentations of project reports and results – business plans, prototypes
- Students' self-assessment and peer assessment
- Lecturers' examination and assessment of students during or at the end of coursework
- Mentors'/ tutors'/ lecturers' feedback to students
- Mentors'/ tutors'/ lecturers' progress and final reports
- Jury's assessment of business plans using a variety of criteria, such as: creativity/ innovativeness, relevance, feasibility, expected economic and social outcomes, investment needed, market potentials, level of elaboration, presentation, defence/ explanation of weak points, team quality
- Business project success using criteria such as survival rate/ time, time to positive business operation, return on investment, generated income and profit, number of new jobs, satisfaction of clients, etc.

Assessment methods and instruments should be specified in the BCP in order that every student and mentor/ lecturer/ tutor knows them in advance. According to Little (2000) this information should include: what and for what purpose will be assessed, who will be involved carrying out assessment, what criteria will be applied, and in what form public recognition of the learning will be given. Special attention should be paid to the assessment of competences and skills specified in the BCP.

The WEXHE cases demonstrate that BCP cannot be integrated into study programmes or as an integral part of a curriculum. Rather they are organised as a special and separate activity of a university or its supportive institutions such as career centres, incubators, technological parks and accelerators, which is not officially accredited. However, following the WEXHE research it can be advisable to provide students who have successfully completed a BCP with certificates if not also credits. This would be welcomed especially for those students whose business projects do not succeed or who do not continue to participate in the business teams, as a certificate or study points can be beneficial for a future career.

ORGANISATIONAL ARRANGEMENTS AND PROCEDURES REGARDING LEARNING AND TRAINING

A learning module includes elements that are closely focused on the learning process. In order for learning to run smoothly some organisational arrangements are required. The key arrangements for a BCP are in the hands of universities and supportive institutions and are described in the following paragraphs.

Process specification – sequence and description of activities

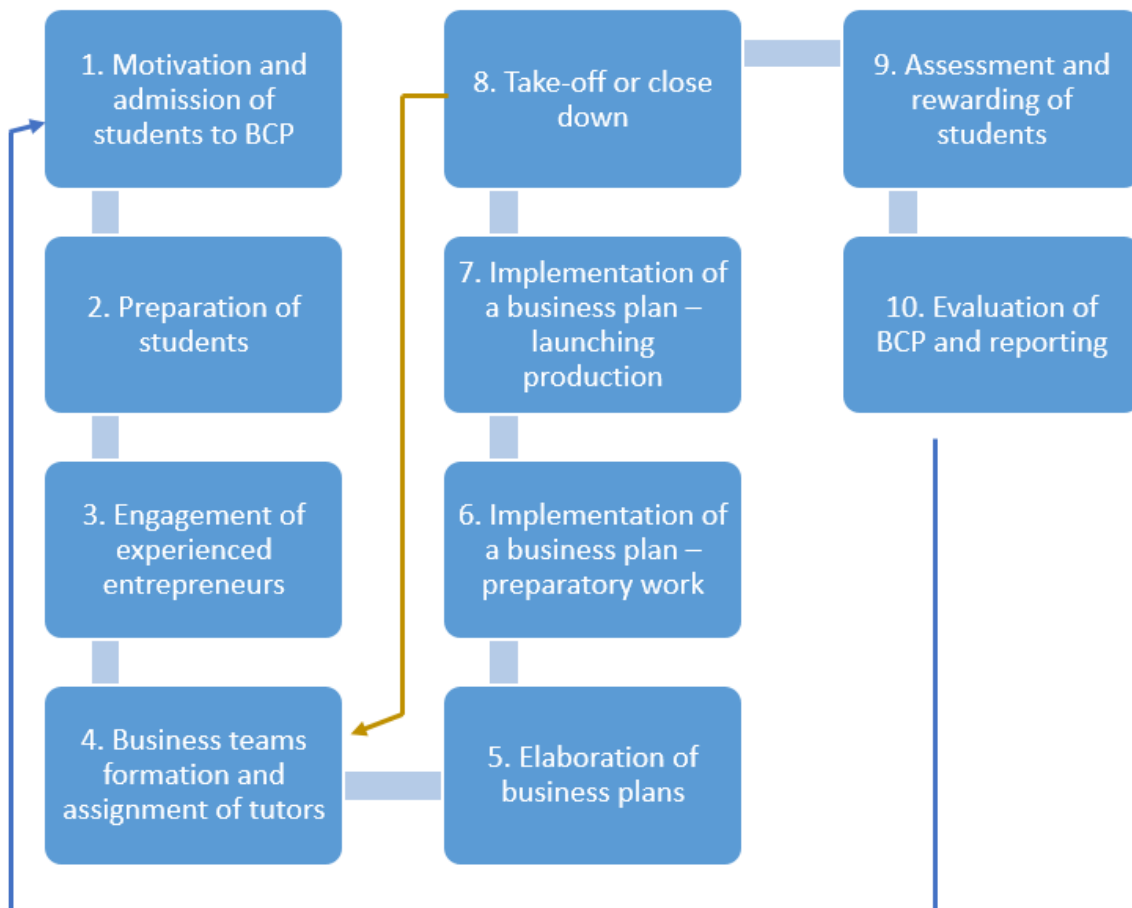
The business creation process is composed of several activities and steps. They will be shortly described in terms of ‘who does what’. The sequence of the steps is not linear and all the steps are not taken in every BCP. Business teams can be formed before engagement of experienced entrepreneurs. Close-down of a newly established enterprise may lead to a new start on the basis of acquired experiences etc. It should be noted that universities can implement a BCP on their own or can authorise supportive institutions – incubators, technological parks, career centres, accelerators, foundations, etc. which can be more or less independent from universities. The main steps are visible in the diagram 1. Some steps require deeper expertise that can only be mentioned and not presented in detail in this text.

Motivation and admission of students to BCP: The interests of students to participate in a BCP vary a lot from country to country and between universities and professional fields. An ideal situation would be that there are enough motivated students who are already prepared for a business creation process, meaning that they have relevant prior knowledge, have a clear business idea or even a business plan, have some business-like experiences and demonstrate entrepreneurial skills and mind-set. If this is not the case some of the entry criteria can be less strictly applied and a more demanding preparation follows in the next step. It is important not to raise the expectations of those students whose entrepreneurial dispositions are less developed in order to prevent their disappointments and to avoid difficulties in the BCP implementation. Students need realistic information on a BCP as well as on their entrepreneurial mind-set. The information can be given to groups of students. However, an interview with each student is recommended to find out his/ her preferences and expectations, eventual worries, strengths and weaknesses regarding prior knowledge, personal characteristics etc. This way, admission criteria can be checked also. This is a task of BCP directors/ coordinators.

Preparation of students first of all includes the transfer of basic entrepreneurial knowledge to students by means of course work which requires a reasonable amount of time. The more active approach is used in this course work the better. It includes also various kinds of training and exercises with the accent on generating and elaborating business ideas in the direction of business plans. Ideally such a preparation is done in an entrepreneurship promotion

module (see EPM package). If not, it should be included in the BCP in a concise form. This is a task of BCP directors/ coordinators.

Diagram 1: Business creation process specification



Engagement of experienced entrepreneurs is one of the crucial steps for the quality of BCP. Students need authentic information on the opportunities and risks associated with each step in the business creation process. This can be done best by persons who have gained experiences in practice. Experienced entrepreneurs can be engaged for some parts of the course work where they present cases and lead seminars, discussions and exercises. In particular they are needed in the business project work as tutors/ consultants to students' entrepreneurial teams in all phases of business plans elaboration and implementation. Their guidance of students in decision making about business projects critical situations is invaluable. Engagement of experienced entrepreneurs is a task of BCP directors/ coordinators.

Business teams' formation and assignment of tutors/ mentors is a necessary step before students start with a business project. There are several possibilities:

- A student with a clear business idea can form his/ her team by inviting his/ her fellow students.
- Students who know each other from participation in study programmes or business creation preparatory activities can join a team and start elaborating a business idea and a business plan.
- Professors and tutors may advise individual students to form a team.

According to the WEXHE cases there are 3 – 8 students in an entrepreneurship team. Smaller teams are easier to coordinate. More important is that students with different and complementary personality characteristics, knowledge and competences come together, e.g., one or two from a specific disciplinary field, one from the field of economics, one from the field of informatics, one with good organisational competences, etc. The composition of teams has been considered to be a special expertise (Belbin, 2010, Adizes, 1979).

At this point tutors/ mentors can step in and give their advice and opinion. They are assigned to do so by the BCP director/ coordinator or by students who ask them to join the team and to give advice. Tutors/ mentors can be from the university or from among experienced entrepreneurs. Two mentors/ tutors, an internal and an external can also be assigned. Both must be trained and qualified for this role. Mentors are in regular contact with students until the BCP is finished or until a business project reaches its take-off point. A mentor's task is to support and empower students through building up trustworthy relations which will rise a student's self-confidence (Clouder, 2009). University mentors assist students in their career planning, in establishing contacts with entrepreneurs and in keeping contacts with the university. Their role is also to enhance students' reflection on entrepreneurship experience which can be done in the reflection meetings. External mentors/ experienced entrepreneurs share their experiences with students, give advice on students' project work and evaluate projects' results.

Elaboration of a business plan can be part of the preparation of students for the BCP or it can be integrated into the BCP. It starts with a business idea (new product, new service, new technological or organisational solution in the production or marketing process etc.), continues with elaboration of technical, financial, marketing and personnel details, prototyping and presentation/ pitching of a finalised business plan to a mentor or a jury. The whole process can be organised as a competition between several entrepreneurship teams where each team elaborates its own business idea and presents a business plan. A jury assesses business plans, their presentation and defence, and awards prizes, credits or certificates. When business plan elaboration is included into a BCP a coordinator can decide to skip the competition between business teams. Elaboration of a business plan is a task of a student business team that receives the necessary assistance from mentors.

Implementation of a business plan can be divided in two phases: a preparatory phase and a production one. In a preparatory phase all the resources necessary for production must be

prepared and set up in a production system: space, equipment, finances, materials and energy, product/ service design and its prototypes, documentation related to the technological process, to business registration, intellectual property and other administrative permissions, workers, eventual production partners, customers and their orders, etc. When everything is ready the production process is launched and the first products and services are delivered. Usually it takes some time to synchronise all parts and actors of the production process. This is done during a previewed testing period, which should be as short as possible. Implementation is managed by the business team and assisted by mentors/ tutors.

Take-off or close down: A new business must prove its viability in terms that the production process runs smoothly and market/ customers/ clients accept the products and services at a price that covers the production costs and bring some profit to pay investments and accumulate for the development. This does not happen instantly. It takes some time before customers decide for a long-term cooperation and increase their orders, before new customers/ new markets are found and before initial production difficulties are eliminated in order to supply increasing demand, maintain and improve quality and keep delivery deadlines. Technological, financial and marketing functions play a crucial role. A business team in this phase still needs a lot of assistance from mentors/ tutors and consultancy services that a university and/ or supportive institutions can provide. When weaknesses are observed in the production and other functions some training can be offered to the business team and possible other employees. It is not quite clear when a take-off point is reached. One would expect that production is stabilised in technical terms and that sales bring enough income to pay the investments in the previewed period and to generate some profits. If this does not happen in a previewed time an extension is possible providing that financiers still support the project. Otherwise it is better for the business team not to make additional debts and to close down. However, this does not mean that the business team gives up completely. On the basis of acquired experiences a business team or some of its partners may revise their business idea or try out a new one. They can start with a new business plan leading towards foundation of a new enterprise. Providing a second chance depends significantly on the availability of risk capital.

Assessment and rewarding of students: Mentors/ tutors monitor business projects directly. They are involved in solving business issues on a daily or weekly basis and they can be involved as observers and consultants in new business managing bodies. They read reports of a business team and discuss results in group meetings. A core indicator of a business team performance is an economic success of a new business or a satisfaction of customers/ clients in case of provision of public services. Mentors/ tutors also care for the progress students make towards expected learning outcomes – development of competences and skills. This is of particular importance in case of new business failure or leaving a business team where the only gain for students is what they have learnt. On this basis mentors assess students and can award them credits and certificates according to the BCP.

Evaluation of BCP and reporting is focused on the assessment of an individual student and his/ her participation in a business team, on the project results that students'

entrepreneurship teams deliver, and on the overall results of a BCP edition in a certain generation of students or in a certain period. To some extent evaluation is carried out during the process of BCP implementation. Final evaluation is usually done at the end of a certain period. The WEXHE cases indicate that evaluation is generally internal. Evaluation results are reported to the management of the involved university and supportive organisations, especially financiers. Essential in the report are the new business success rate (how many new businesses have been established, what is their survival rate, how much income they generate, how many jobs have been created, what is a return on investment like, what is the satisfaction of customers/ clients like, etc.), reasons for eventual failures and also to what extent the learning outcomes are achieved. On this basis BCP can be improved. Reporting is a task of BCP coordinators.

Roles specification – tasks and responsibilities

The most frequently mentioned roles related to BCP at the universities are: coordinators/ directors and mentors/ tutors. Among the externals one should single out the role of experienced entrepreneurs who are invaluable in carrying out BCP. There is also administrative support to the BCP activities carried out by the university and supportive institutions staff. The main roles are shortly specified in the following paragraphs.

- **Mentors/ tutors/ coaches.** These roles are overlapping to a great extent. The difference is rather in the name and style than in the content. Mentors at the universities are usually lecturers or coordinators in charge of BCP. Mentors from outside university are invited from a network of experienced entrepreneurs. Mentors are assigned to students' entrepreneurship teams or invited by team directly. Mentors advise students on how to set-up the business project. They may turn attention of students not just to for-profit businesses but also to non-profit ones operating in the public sector and social economy. However, an important role of university mentors is overall guidance, support to students throughout their involvement in BCP, empowerment and trust building.

A mentor can advise business team members to participate in courses, seminars, workshops etc., helps in the formation of business teams, enhances brain storming sessions and selection of business ideas, instructs team members in elaboration and implementation of business plans and in seeking solutions for a business problem, monitors students' progress, keeps regular meetings with them and gives feedback on their project progress, discusses their career perspectives and possible issues, enhances students' reflection on the BCP, reports on the progress and performance of students, evaluates BCP etc. The main responsibility of a mentor is to guide a student towards successful business creation. In addition, his/ her concern is achievement of the agreed learning outcomes, i.e., to enable students' realistic view on their entrepreneurship potentials, to motivate them for entrepreneurship and to help them develop competences needed for it. Their role

is also to enhance students' reflection on entrepreneurship and to give career guidance. Mentors should in particular discuss with student's business ethics including social relations in the organisation, social responsibility towards customers, clients, business partners, local community, wider society, environment etc.

Lester and Costley (2010) add some more functions of mentors/ tutors. *"The role of the tutor often moves, on the one hand, from being a teacher to being both a facilitator and an expert resource, and, on the other, from supervisor to advisor or 'academic consultant'... The role of a WBL tutor... will include:*

- *helping learners to become active in identifying their needs and aspirations and managing the learning process;*
- *acting as a process consultant;*
- *helping learners develop their abilities of critical reflection and inquiry;*
- *helping learners identify and work with ethical issues;*
- *helping learners make effective use of workplace resources;*
- *developing learners' academic skills and helping them use them in the workplace;*
- *providing specialist expertise, and*
- *inspiring and encouraging learners"* (Lester and Costley, 2010).

It is highly desirable that people who take up the role of mentors are trained for it like 'meister' in German companies. In several countries, SME associations organize training of mentors who work in companies including recognition of prior knowledge/ experiences, examination and certification of mentors' competences. Only mentors having official certificates should be allowed to take up this role. In some countries the training of mentors has been included in the national qualification frameworks thus providing certification and public recognition to mentors. University mentors are supposed to be qualified for this role as university lecturers.

- **Experienced entrepreneurs** take up special role in the BCP. They can have a mentor's role. Having gone through several entrepreneurship projects they can guide business teams throughout their projects step by step enhancing students' creativity, sharing their experiences, evaluating solutions, expressing signs of warning etc. They can be first hand instructors to students. Their role is to work with business teams, bring to the surface and make explicit the knowledge that has become tacit through repeated exercise. *"The facilitator's role, in part, is to help create awareness of those habitual and unconscious behaviours that participants rely upon, in order to encourage them to re-evaluate their responses and develop fresh understandings... ...participant, industry specialist and facilitator are all learning from the process in which they are mutually engaged"* (Darlymple et al, 2014).
- **BCP coordinators/ directors** are located at the university or at one of the supportive institutions. They coordinate the activities of the other personnel

involved in BCP: mentors, lecturers and students. They also find and engage experienced entrepreneurs and set up contracts with them. Coordinators do everything necessary for the smooth running of BCP: motivation and admission of students, engagement of experienced entrepreneurs, organising students' business teams, assessment and rewarding of students, evaluations and reporting. The main responsibility of coordinators is to coordinate all the activities related to BCP in terms that all the participating parties get relevant information on how to take up their roles, and that all get assistance if needed. Henderson and Trede (2017) think that *"the establishment of centres in the university to facilitate purposeful, organized, and 'assessable' work-based learning in academic programs is beneficial. Such centres provide 'lead' individuals with specific education and expertise..."* *"Universities will have to establish specific structures that are responsible for the special needs of WBL pathways... and of the groups of learners engaged in this kind of learning experience. Specifically, trained teaching and tutoring staff with high academic qualifications as well as social awareness and human sensitivity must be employed in this field..."* (Schmidt and Gibbs, 2009). If a special unit is not organised at the university to care for the BCP than it should be outsourced to one of the supportive institutions.

FINANCING

BCP infers certain costs to universities and in particular to the business creation teams – the owners of new businesses. However, it can bring benefits also. These are presented in table 5.

Table 5: Costs and benefits of a Business Creation Programme

PARTNERS	COSTS	BENEFITS
UNIVERSITIES/ SUPPORTIVE ORGANISATIONS	<p>Labour costs:</p> <ul style="list-style-type: none"> - Coordinators - Mentors - Experienced entrepreneurs <p>Material costs:</p> <ul style="list-style-type: none"> - Awards to business teams - Initial capital provided for new enterprises - Space and services provided for new enterprises - Subsidies for supportive institutions (incubators, accelerators etc.) <p>Administrative costs:</p> <ul style="list-style-type: none"> - Running of BCP, - Regulation of intellectual property rights - Application and reporting to entrepreneurship supportive schemes - Fund rising activities 	<p>Income generated on the basis of investments in new business and on the basis of intellectual property rights</p> <p>Subsidies from public schemes supporting entrepreneurship, from sponsors and risk capital providers</p> <p>Increasing employability of students/ graduates</p> <p>Improved public image and long-term support from successful entrepreneurs</p>
STUDENTS/ BUSINESS TEAMS	<p>Labour costs:</p> <ul style="list-style-type: none"> - own labour - labour of eventual employees <p>Material costs:</p> <ul style="list-style-type: none"> - space - equipment 	<p>Self-employment and business career</p> <p>Income generated by new business</p> <p>Subsidies from the university, public schemes, sponsors,</p>

	<ul style="list-style-type: none"> - input materials and energy - products and services development - market research and promotion - costs of consultants and other services 	<p>business angels, risk capital providers</p> <p>Tax allowances</p> <p>Experiences gained and competences developed</p>
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There are some comments needed with regard to the outlined costs and benefits.

The costs of new business creation can be shared in various ways between partners: universities, their supportive organisations, students, governments and other supportive organisations, such as banks, business creation funds etc. This depends highly on the tradition, policies and organisation of national and local business supportive networks. It is quite clear that students themselves in most of the cases cannot take significant costs on their shoulders. Without support from the universities or from the wider environment new businesses would be rather limited and highly selective in favour of low-cost business, e.g., IT programming.

In Europe there are only a few cases where financial benefits of universities outweigh the costs meaning that incomes from intellectual property rights and other payments of new enterprises in which universities invested surpass the costs of direct investment in to entrepreneurship programmes and into supportive environment including maintenance of university incubators, accelerators, technological parks etc. While the labour costs of universities do not need to be very high the maintenance of business supportive environment including space, equipment, supportive institutions, such as incubators and seed money for new enterprises can cost millions. Therefore, universities usually make their supportive institutions (incubators, accelerators, career centres etc.) autonomous hoping that they will be able to attract additional non-university resources (from independent private and public funds, business angels, government schemes, successful new entrepreneurs) for entrepreneurship promotion and creation. Universities themselves count rather on indirect benefits, such as increasing employability of graduates, good public image and long-term support from alumni entrepreneurs. In addition, universities expect governments to financially assist these programmes which are considered to be an expression of universities' social responsibility and their long-term contribution to the economic and social development. Insertion of new business units into local, regional and national economy brings taxes to governments and jobs to the people. New enterprises in the social economy help provide services for which governments are responsible.

In case of good supportive environment students benefit most out of the business creation programmes. Although only some of them succeed in business the rest gain experiences, develop competences and increase their employability.

QUALITY ASSURANCE, EVALUATION AND ACCREDITATION

Quality assurance, evaluation and accreditation of BCP remain internal in most of the WEXHE cases. Various quality assurance and evaluation activities are mentioned that students and their mentors are expected to perform. The **quality** of BCP is usually assured by:

- Good preparation of students before they are admitted to BCP
- Well-designed business plans
- Well-structured and organised presentations of business ideas and plans
- High quality network of experienced entrepreneurs
- Training of mentors for their teaching and coaching roles
- Mentors' counselling and giving advice to business teams
- Regular meetings of mentors/ tutors with business teams including their reports to coordinator
- A strong support of a consultancy and supportive services network
- Availability of financial resources and space where new business is located

Evaluation procedures will include providing feedback regarding the quality assurance. It can be performed by those involved in a BCP – internal evaluation or by externals, e.g., evaluation agencies. There could be an overall evaluation of BCP with the accent on its effectiveness and efficiency, satisfaction of participants etc., or a more focused one, e.g., on the roles of mentors and coordinators, on the quality of projects, etc. It can take various forms, such as:

- Students' evaluation of BCP and its realisation by means of questionnaires
- Students' evaluation of business projects by means of questionnaires
- Mentors' evaluation of business projects by means of questionnaires or by means of reports to coordinators
- Evaluation seminars/ workshops organised for the group of students
- Coordinators' evaluation and reports
- External agency's evaluation.

The criteria of evaluation should be specified. Among the criteria special attention should be paid to meeting the goals and objectives of BCP, i.e., how many new businesses have been established, what is their survival rate, how much income they generate, how many jobs have been created, what is their return on investment like, how satisfied are customers/ clients with provided goods and services, to what extent the competences and skills specified in the BCP are developed in the course of business creation and to what extent the learning outcomes are achieved.

The WEXHE cases show that there are no special attempts made to get BCP publicly accredited. It tends not to be an integral part of a curriculum and study programme and is therefore not accredited and publicly recognised. A business project could nevertheless provide students with credit points, which contribute to meeting of study requirements. In

countries with well-developed national qualification systems there is a possibility to accredit BCP as a specific study module. However, some WEXHE cases indicate that not all universities are open for a BCP. It remains an elective or extra-curricular activity provided by university or supportive institutions. It usually does not result in study credits for students, but students can receive certificates after successful completion.

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APPENDICES

Appendix 1 – Examples of cases illustrating a business creation programme:

Programme YUZZ explorer (Spain)

Girl Power Murcia (Spain)

BSENN (United Kingdom)

Appendix 2 – Check List for UK Entrepreneurs Start-ups/ Incubators

Check List for UK Entrepreneurs Start-ups/Incubators

- Company registration (including directors' registration) as part of start-up process –
 - o Check the name you want is available at Companies House website <https://www.gov.uk/get-information-about-a-company>
 - o Registered office, doesn't need to be your physical location, especially if you are going to move frequently as you grow.
- Trademark check (ensure you can use the company and product names you have selected)
- Website – check domain name (url) for company name is available. Purchase URL (and any similar e.g. .co.uk .net). Hosting and web design. You may want an SSL or EV SSL certificate depending on your market. You may want secure hosting, depending on market and service provision.
- Email addresses – related to above, purchase URL and hosting.
- Bank account
- Accountant (Register with HMRC, National Insurance, Payroll, PAYE, Corporation Tax etc). You could use a book keeper, payroll service, etc for basic administration. Do you want to change your Accounting Reference Date (financial year end) to 31st March to tie in with tax year? All directors will need to register to file personal self-assessment tax returns. Any PAYE payments have to be reported to HMRC in real time via electronic payroll software.
- Maintain and file a PSC (person of significant control) register <https://www.informdirect.co.uk/company-records/psc-register-of-people-with-significantcontrol-what-is-it>
- Lawyer
- Logo
- Stationary (eg headed paper, fax cover sheet, email signature, including company number, registered office, VAT number. Business cards. Invoice)
- Website. Company details on website, including company number, registered office, VAT number). Privacy and cookie policies.
- Data protection licence

- o Self-assessment <https://ico.org.uk/for-organisations/data-protection-fee/selfassessment/>
 - o Fee £40 per annum for startups <https://www.highspeedtraining.co.uk/hub/dataprotection-licence-application/>
 - o Data security guidelines
 - Employer liability insurance (compulsory)
 - Indemnity insurance, Public Liability insurance and other business insurance
http://www.startinbusiness.co.uk/flowchart/8flowchart_ins.htm
 - VAT registration <http://www.hmrc.gov.uk/vat/start/register/> (not essential until you reach trading limit)
 - Do you need to pay council business rates?
 - Knowledge of Health and Safety requirements for employees.
 - Keeping minutes of board meetings.
 - Data backup off site (cloud?)
 - Standard legal documents such as licences for product, software, services, consulting, online sales, depending on your business.
 - Do you need regulatory approval for your company or your products eg FCA approval, or CE marking
 - Premises, furniture, fittings, computers, printers, phones,
 - If no premises – business address and phone answering service?
...and, get used to keeping records and receipts, your accountant will need them, and you will need to keep them for 6 years.
- Not a recommendation, but
<https://www.informdirect.co.uk/>
for company secretarial support and company formation, registered address service etc.

GLOSSARY

For composing this list of terms and their definitions, the following sources have been used among others: Tuning Educational Structures in Europe, *Universities' contribution to the Bologna Process. An introduction*. 2nd Edition, Bilbao and Groningen, 2008; Jenneke Lokhoff a.o. eds., *A Tuning Guide to Formulating Degree Programme Profiles. Including Programme Competences and Programme Learning Outcomes*. Bilbao, Groningen and The Hague, 2010; CEDEFOP, *Terminology of European education and training policy. Second Edition. A selection of 130 key terms*. Luxembourg: Publications office of the European Union, 2014. European Commission, *ECTS Users' Guide 2015*. Luxembourg: Publications office of the European Union, 2015.

Ability:

Acquired or natural capacity, competence, proficiency or talent that enables an individual to perform a particular act, job or task successfully.

Accreditation of an education or training programme:

A process of quality assurance through which a programme of education or training is officially recognised and approved by the relevant legislative or professional authorities following assessment against predetermined standards.

Active learning:

An approach to instruction that involves actively engaging students with the course material through discussions, problem solving, case studies, role plays and other methods. It is opposed to passively taking in the information.

Allocation of ECTS credits:

The process of assigning a number of credits to qualifications, degree programmes or single educational components. Credits are allocated to entire qualifications or programmes according to national legislation or practice, where appropriate, and with reference to national and/or European qualifications frameworks. They are allocated to educational components, such as course units, dissertations, work-based learning and work placements, taking as a basis the allocation of 60 credits per full-time academic year, according to the estimated workload required to achieve the defined learning outcomes for each component.

Apprenticeship:

Systematic, long-term training alternating periods at the workplace and in an educational institution or training centre. The apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation. The term originates and is in particular applied in Vocational Education and Learning. WEXHE advises to avoid using the term in higher education, with the exception of *dual learning*.

Competence:

The ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. Fostering competences is the object of all educational programmes. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any degree course). It is normally the case that competence development proceeds in an integrated and cyclical manner throughout a programme.

Course unit:

A self-contained, formally structured learning experience. It should have a coherent and explicit set of learning outcomes, expressed in terms of competences to be obtained, and appropriate assessment criteria. Course units can have different numbers of credits, although it is recommended that units carry a uniform number of credits or a multiple thereof. These units, with thesis work and work placements where appropriate, are the building blocks of programmes.

Degree programme:

The set of educational components leading to the award of a degree to a student after successful completion of all the requirements.

Diploma Supplement:

The Diploma Supplement (DS) is a document accompanying a higher education diploma, providing a standardised description of the nature, level, context, content and status of the studies completed by its holder. It is produced by the higher education institutions according to standards agreed by the European Commission, the Council of Europe and UNESCO. The Diploma Supplement is also part of the Europass framework transparency tools.

ECTS credits:

ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload. 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent, which normally comprises a number of educational components to which credits (on the basis of the learning outcomes and workload) are allocated. ECTS credits are generally expressed in whole numbers.

Elective:

A course unit that may be taken as part of a study programme but is not compulsory for all students.

Entrepreneurship:

Entrepreneurship is the act of creating a business or businesses while building and scaling it to generate a profit.

European Credit Transfer and Accumulation System (ECTS):

A learner-centred system for credit accumulation and transfer, based on the principle of transparency of learning, teaching and assessment processes. Its objective is to facilitate planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning.

European Qualifications Framework for Lifelong Learning (EQF):

The European Qualifications Framework for Lifelong Learning is a common European reference tool for describing and comparing qualification levels in qualifications systems developed at national, international or sectoral levels. The EQF uses eight reference levels based on learning outcomes that are defined in terms of knowledge, skills and autonomy and responsibility.

Evaluation:

Evaluation of teaching and academic studies in a subject or department and the related degree programmes comprises all those activities which aim at assessing quality and fitness for purpose and of purpose. Strengths and weaknesses of education and training can be identified by stocktaking, analysis and proposals formulated to ensure the sustainability of quality. Evaluation may be carried out through both internal and external procedures. Internal evaluation comprises the systematic collection of administrative data and obtaining feedback from staff, students and graduates, as well as holding structured conversations with lecturers and students. External evaluation may include visits by a review team to the department in order to review the quality of the academic studies and teaching, the use of external examiners, external accreditation, etc. A significant element in enhancing quality is ensuring that internal and external procedures are used to improve student learning.

Formal learning:

Learning typically provided by an education or training institution, which is structured (in terms of learning outcomes, learning time and learning support) and leads to certification.

Framework for Qualifications of the European Higher Education Area (QF-EHEA):

An overarching framework at European level that makes transparent the relationship between national higher education frameworks of qualifications of the different European countries and the qualifications they contain. It is an articulation mechanism between national frameworks. It is characterised by credit ranges.

Generic competences:

Generic Competences are also known as transferable skills or general academic skills. They are general to any degree programme and can be transferred from one context to another, although they have normally been developed in the context of a particular academic field of study.

Informal learning:

Learning resulting from daily activities related to work, family or leisure which is not organised or structured in terms of objectives, time or learning support; it may be unintentional from the learner's perspective; examples of learning outcomes acquired through informal learning are: skills acquired through life and work experiences, project management skills, ICT skills acquired at work, languages learned, intercultural skills acquired during a stay in another country, ICT skills acquired outside work, skills acquired through volunteering, cultural activities, sports, youth work and through activities at home e.g. taking care of a child (EU Council Recommendation 2012/C 398/01).

Internship:

A period of work experience offered by an organization for a limited period of time. Initially to medical graduates, internship is nowadays used for a wide range of placements in businesses, non-profit organisations and government agencies. They are typically undertaken by students and graduates looking to gain relevant skills and experience in a particular field. Interns may be high school students, college and university students, or post-graduate adults. These positions may be paid or unpaid and are temporary. An internship often comes in addition to the actual study programme. WEXHE advises to avoid the term internship and to use the term work placement in a higher education setting instead, because the last expresses that this mode of learning is an integral part of the programme.

Intrapreneurship:

Refers to a system that allows an employee to act like an entrepreneur within a company or other organization. Intrapreneurs are self-motivated, proactive, and action-oriented people who take the initiative to pursue an innovative product or service. Intrapreneurship is known as the practice of a corporate management style that integrates risk-taking and innovation approaches, as well as the reward and motivational techniques, that are more traditionally thought of being typical for entrepreneurship.

Learning Outcomes:

Statements of what a learner knows, understands and/or is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. Learning outcomes are attributed to individual educational components and to programmes at a whole. They are also used in European and national qualifications frameworks to describe the level of the individual qualification. In WEXHE they express level of intended and/or achieved competences.

Learner:

An individual engaged in a learning process (formal, non-formal or informal learning). Students are learners involved in a formal learning process.

Lecture:

A discourse given before an audience or class especially for instruction.

Lecturer:

A teacher at a university or college, who offers guidance to students in their learning process, e.g. offering instruction (lectures, seminars, assignments) and support and assess students work.

Levels:

Levels are understood to be a series of sequential steps to be taken by the learner (within a development continuum) expressed in terms of a range of generic outcomes, within a given programme.

Level descriptor:

Generic statements describing the characteristics and context of learning expected at each level against which learning outcomes and assessment criteria can be reviewed. They are also

intended to guide the learner, teacher and curriculum with respect to the complexity, relative demand and learner autonomy. These general descriptors can be applied to specific subject disciplines and ways of learning. Level descriptors are useful for curriculum design, assignment of credit, validation, guidelines for recognition of learning from experience and of non-formal learning and for staff development.

Lifelong learning:

All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective. Programmes and services contributing to lifelong learning within the higher education sector may include mainstream programmes, continuing education, evening classes, specific programmes for part-time learners, access to libraries/higher education institution resources, distance learning, training courses, targeted guidance and counselling services among other actions and initiatives.

Mentor:

A member of staff at a company or institution who gives a learner/student help and advice over a specific period of time at work or at a (higher) education institution.

Module:

A course unit in a system in which each course unit carries the same number of credits or a multiple of it.

National Qualifications Framework (NQF):

An instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society.

National qualifications frameworks encompass all education qualifications – or all higher education qualifications, depending on the policy of the country concerned – in an education system. They show what learners may be expected to know, understand and be able to do on the basis of a given qualification (learning outcomes) as well as how qualifications within a system articulate, that is how learners may move between qualifications in an education system. National qualifications frameworks are developed by the competent public authorities in the country concerned, in cooperation with a broad range of stakeholders – including higher education institutions, students, staff and employers.

Prior learning (assessment) (PLA):

Is learning gained outside a traditional academic environment, e.g. while working, participating in employer training programs, serving in the military, studying independently, volunteering or doing community service, and studying open source courseware. PLA is the evaluation and assessment of an individual's life learning for higher education credit, certification, or advanced standing toward further education or training.

Qualification:

Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a recognised programme of study.

Quality assurance:

The process or set of processes adopted nationally and institutionally to ensure the quality of educational programmes and qualifications awarded. Quality assurance should ensure a learning environment in which the content of programmes, learning opportunities and facilities are fit for purpose. Quality assurance is often referred to in the context of a continuous improvement cycle (i.e. assurance and enhancement activities).

Recognition (academic recognition):

Approval of courses, qualifications, or diplomas from one (domestic or foreign) higher education institution by another for the purpose of admitting students to undertake further studies.

Skill:

A learned capacity to achieve pre-determined results often with the minimum outlay of time, energy, or both. Skills are often divided into general/generic and subject specific skills.

Student:

A learner enrolled on a formal educational programme at a higher education institution.

Student-centred Learning:

A learning approach characterised by innovative methods of teaching which aim to involve both students and teachers in the learning process. This implies that students are active participants in their own learning, fostering both subject specific competences (knowledge and skills) and generic competences such as problem-solving, critical and reflective thinking, creativity and entrepreneurship, teamwork and project work.

Subject specific competences:

Competences related to a specific subject area. They cover both knowledge and disciplinary skills key to the subject area.

Supervisor:

Member of academic staff of the University who monitors the progress of a student by providing advice and guidance for thesis work, but also for work-based learning.

Teacher:

See lecturer.

Traineeship:

A type of work-based learning that is aimed at students who have finished their educational training (graduated students) but have not yet entered the labour market. It includes not just structured trainee programmes aimed to attract new talents and prepare them for leadership roles - normally offered by larger organizations, but also schemes for the reinsertion into the workforce.

Transformative learning:

Transformational learning is the process of deep, constructive, and meaningful learning that goes beyond simple knowledge acquisition and supports critical ways in which learners

consciously make meaning of their lives. It is the kind of learning that results in a fundamental change in our worldview as a consequence of shifting from mindless or unquestioning acceptance of available information to reflective and conscious learning experiences that bring about true emancipation.

Transversal skills:

See generic competences.

Tutor:

A staff member who gives individual or small group instruction. In a student-centred environment, he or she is also expected to help students help themselves, and to assist or guide them to the point at which they become independent learners.

Work-based learning:

Learning delivered by a university, college or other training provider in the workplace, normally under the supervision of a person from the same company as well as a professional teacher from outside the company.

Workload:

An estimation of the time learners typically need to complete all learning activities such as lectures, seminars, projects, practical work, work placements, individual study required to achieve the defined learning outcomes in formal learning environments. The correspondence of the full-time workload of an academic year to 60 credits is often formalised by national legal provisions. In most cases, student workload ranges from 1,500 to 1,800 hours for an academic year, which means that one credit corresponds to 25 to 30 hours of work. It should be recognised that this represents the normal workload and that for individual learners the actual time to achieve the learning outcomes will vary.

Work placement:

A planned period of experience outside the institution (for example, in a workplace) to help students to develop particular skills, knowledge or understanding as part of their programme. A work placement is an integral part of the curriculum.

Work Placement Certificate:

A document is issued by the receiving organization / enterprise upon the trainee's completion of the work placement, and it can be complemented by other documents, such as letters of recommendation. It aims to provide transparency and bring out the value of the experience of the student's work placement.