



Referential of Entrepreneurship Education

Quality of Entrepreneurship Programmes in Europe



Education and Culture

Socrates

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The Quality of Entrepreneurship Programmes in Europe Project is a partnership of:

- EFMD (European Foundation for Management Development) – coordinator for business/management education
- ENQHEEI (European Network for Quality of Higher Engineering Education for Industry) – coordinator for higher scientific and technical education
- RSM Erasmus University
- UPC (Technical University of Catalonia)
- CLUSTER (Consortium Linking Universities of Science and Technology for Education and Research)
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The referential has been edited by Professor David Watkins, Southampton Business School.

Context

The Lisbon Strategy for Jobs and Growth constitutes a challenge to higher economic, business, scientific and technical education as European universities continue to implement the Bologna process (de Wit, 2000). Entrepreneurship education provides specific training on how to start and run a business, including the capacity to draft a business plan and the skills associated with identifying and assessing business opportunities. Also, it may encourage and support embryonic business ideas (for instance by providing special loans, business facilities, mentorship, etc.) – so that well-researched projects can be put into practice and finally reach the market. More generally, entrepreneurship education seeks to help create that cadre of enterprising graduates that will reinvigorate European business through the effective management of innovation (Gibb, 2002).

The number of entrepreneurship programmes in Europe has already grown significantly in recent years and strong growth is also expected in future years. However, in most countries in Europe no precise figures are available on education for entrepreneurship (for instance, number of institutions offering programmes of this type and number of students involved). Moreover, quality standards and certification are lacking. The development of indicators is low in almost all countries. Where indicators exist they differ from country to country, as no agreed European indicators have been established so far in this area. Accreditation agencies do not provide any specialised label. Some institutions refer to “obscure” rankings and to differentiation rather than quality. Partial indicators for quality used by institutions are: “Bigger is better”, “The older the better”. That is why at this stage it is essential to proceed to an exchange of good practices and engage in a process of benchmarking among higher education institutions and companies.

Evaluation and measurement

In order to design and evaluate entrepreneurship education programmes it is necessary, to have a precise understanding of what the objectives of such educational interventions are. The evaluation of programmes is considered to be most effective when it is:

- Independent, i.e. not run by the same institution that organises the programme.
- Referenced to success criteria agreed between participants and providers in advance.
- Comparative:
 - Measurements should be made before the beginning of the programme and after its conclusion.
 - Benchmarking against similar programmes elsewhere should be undertaken where possible.
 - Systematically built into all programmes.

The survey organised by EFMD in spring 2008 provided some interesting insights into the state of entrepreneurship teaching in business focussed higher education institutions and its quality evaluation. A majority of the institutions declare that they have not introduced formal procedures to assess the quality of their entrepreneurship programmes. However, it does not automatically mean that the quality of the programmes is not monitored, since in many cases these programmes are evaluated with the common tools used by the institutions for all their curricula (such as all standard academic assessments, teaching quality assessment, etc.). When put in place, specific measures generally include the periodic monitoring of alumni to assess their career progress as entre/intrapreneurs, and in some cases the use of external experts to review programmes and progress.

● **Problems and Warnings**

The project team has identified some problems when it comes to measuring the quality of entrepreneurship education. An indicative list of main obstacles and warnings is set out below:

- Survival and growth rates depend on sectors
- Survival and growth rates depend on the state of the general economy
- Survival and growth rates vary by country whether or not there is any educational intervention
- It is difficult to decide when the quality should be measured (immediately after the entrepreneurship training or at a later stage) and if later when
- Data collection can be made at individual or aggregated level
- Difficulty in accessing alumni increases with time
- Evaluators have to deal with unclear causalities (Is the training the source of entrepreneurship spirit or can we consider that entrepreneurship spirit is at the root of the decision to take the course?)

● **Recommended indicators to monitor quality of Entrepreneurship Education**

The survey mentioned above suggested the following indicators and methods to be used for the assessment of Entrepreneurship Education:

- Selection of students and their motivation
- Mix of theory and practical aspects
- Teaching methods
- Links between the programme and the entrepreneurial community
- Degree of interaction with the entrepreneurial community
 - Entrepreneurs themselves
 - Other key participants, such as the venture capital community
- Student satisfaction with the content of programmes
- Ex-post surveys to check how students evaluate their entrepreneurial skills and attitudes before and after the course, their desire and understanding to start a new venture or their degree of entrepreneurial intentions
- Output
 - Number and quality/feasibility of the business plans
 - Number of ventures established after the students graduate (a gap of 5 years seems to be generally proposed). However, this indicator is often challenged as it assumes entrepreneurship relates only to independent start-ups while entrepreneurship is about capturing opportunities, whatever the environment.
- Use of outside evaluators to assess the programme formally

● **Feasibility of a Quality Label for Entrepreneurship Education**

Along with the survey, EFMD coordinated discussions and consultations involving experts in entrepreneurship education to evaluate the feasibility of a quality label. The idea of guidelines and the reliance on a label were rejected. On the contrary, sharp majority of participants supported the idea of exchanging best practises, whether through events and conferences or through specialised networks. It was also underlined that entrepreneurship education networks should not be restricted to Europe but also include other regions of the world. From these suggestions the project team concluded that no quality label for entrepreneurship education is appropriate at this point and concentrated on identifying quality criteria, which can be used when benchmarking entrepreneurship programmes. The main reason why the formalisation of a labelling system was considered difficult or impossible by the stakeholders lies with the diversity of the entrepreneurship education, including but not limited to:

- Different target groups
 - Entrepreneurs
 - Intrapreneurs
 - Descendants of family business owners

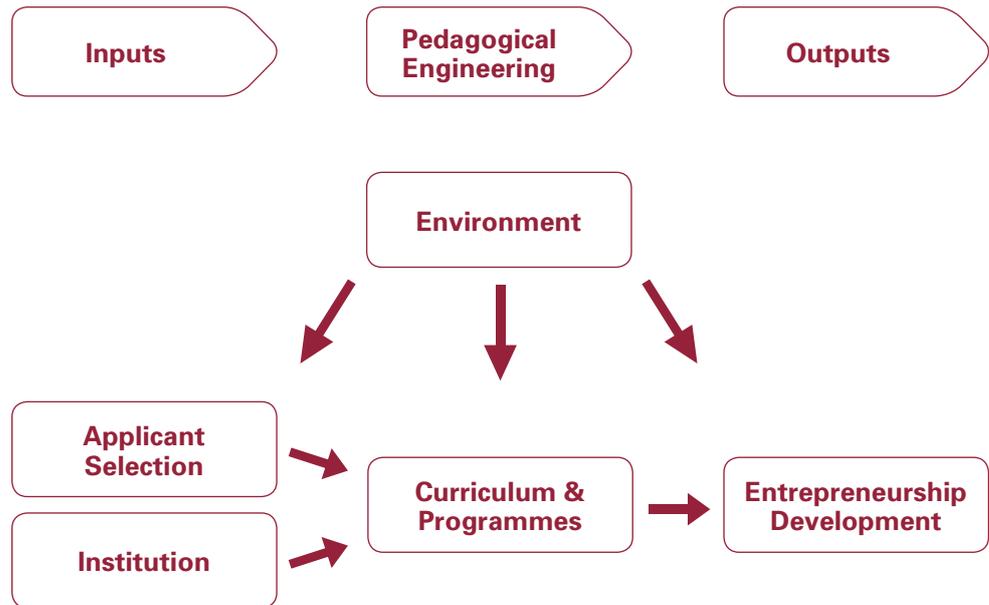
- All-round business administrator for SMEs
- Venture investment businesses
- SME consultants
- Employees of organisations that concentrate on SMEs or have frequent contacts with them (e.g. commercial bankers)
- Social entrepreneurs
- Different types of students (in business studies, in technological studies, etc.)
- Disadvantaged or minority groups
- People who just want to develop their entrepreneurial spirit
- Different level of background knowledge and diverse needs of the different target groups
- Entrepreneurship education can have different objectives, contents, pedagogical methods and organisation depending on the level and field of study
- Educators with different practical experience in the entrepreneurial field
- Cultural differences
- No consensus yet on what entrepreneurship is and if it can be taught
- Intrinsic nature of entrepreneurship which is by essence very creative and dynamic
- Inter-disciplinary approach to teach entrepreneurship
- Great flexibility in course design
- Need to use more interactive and experience-based teaching methods
- Difficulty in measuring the impact of entrepreneurship programmes at all levels: if the objective of the programme is to develop soft entrepreneurial skills, it will be more difficult to assess its quality as little is known about the required entrepreneurial competencies and how to measure them

● **Potential Quality Criteria for Entrepreneurship Education**

General

The diversity of entrepreneurship education has already been noted. While the following are likely to be general quality indicators, the needs of a group of mature people on a Master's course aimed at those who have already started a business would be quite different from those of beginning students on an optional course designed simply to encourage enterprising behaviour. Quality relates to 'fitness for purpose'; it is apparent from the studies that the purposes proposed when providing entrepreneurship education within HEIs, although similar differ spatially, by disciplinary focus, over time, and according to the stage of the Bologna cycle students have reached. Caution is therefore counselled in applying these general Quality Criteria in specific circumstances.

Entrepreneurship Education Referential



We begin with the most obvious but rather complex class of criteria affecting the outcome of the model: the environment. With its infinite string of intervening variables (usually considered as exogenous causes), the environment refers to the observed residual (i.e. unexplained) variation in the dependent variable of the model (entrepreneurship development). It is also an acknowledgement of the fact that no model can fully account for the vast complexity of phenomena. In doing so, it also stresses the fact that institutions operate in complex national and regional environments, embedded as they are in political, legal, social and cultural systems.

- ENVIRONMENT**
- Programme features pre-determined by the national system and environment
 - Student selection requirements within the national system
 - Regulatory frameworks
 - Degree certification procedures
 - Degree of freedom to innovate
 - Access to resources and support (funding, faculty)
 - Access to students
 - Internationalisation
 - National market and the nature of competition within the national system
 - Prevailing quality norms within the national system
 - National educational system(s) requirements

The first class of explanatory variable of the model is the applicant selection. Though selection obviously affects the “quality” of the student population for any given institution, institutions do not face the same situation with respect to student recruitment. For various reasons (location, reputation, language, ranking, tuition fee, etc.), they do not select from the same pool of students. Moreover, many HEIs have very little control over which students they may accept. The relevance of this factor for cross-comparisons is thus limited, despite the emphasis placed on it by institutions.

APPLICANT SELECTION

Quality of students

Admission/selection process:

- *Academic and professional curriculum*
- *Written tests, psychological and aptitude tests, group dynamics tests, self-evaluation tests*
- *Personal interviews (with particular emphasis on motivation and orientation)*
- *Selectivity rate: number of applicants / number admitted*
- *Composition of selection committee*
- *Existence of a professional project related to entrepreneurship*

The second class of independent (explanatory) variable of the model is linked to institutions' characteristics and resources.

INSTITUTION

Characteristics

- *Accreditation / reputation of the School / Educational Institution (the quality of the course cannot be separated from the value and prestige of the institution that manages it as well as to the fact that the accreditation process usually relates to the School as a whole more than to its products)*
- *Provision of 'student statement' (competence transcript) in accordance with Bologna principles*
- *Rankings for entrepreneurship programmes and general external rankings*
- *Prizes in national and international business plan competitions*
- *Alumni association / community*
- *Sponsorship by individual entrepreneurs*
- *Sponsorship by entrepreneurial companies*
- *Partnerships and networks with:*
 - *Businesses – corporate world*
 - *Top universities – exchange agreements*
 - *Recognised investors as partners*
 - *Public sector enterprise development agencies at national and local level*
- *Job fairs organised by the school*
- *'Entrepreneurship faculty' act as policy consultants nationally and internationally*
- *'Entrepreneurship faculty' visible as media commentators in this field*
- *Staff attending leading conferences on entrepreneurship*
- *Staff presenting papers to leading conferences on entrepreneurship*
- *Staff participating in leading networks for entrepreneurship educators*
- *Business advice on running a business / business start-up support from the University's Career Service*

Resources

- *Research Institute / Centre for Entrepreneurship within the school*
- *Existence of incubators*
- *Existence of specialist library / information facility*
- *Internal start-up finance available*
- *Prizes for entrepreneurs*
- *Entrepreneurs on institutional Board or similar*
- *Links to business angel networks*
- *Links with business world*

The third class of variable is curriculum and programmes, which encompasses various aspects of the pedagogical engineering from curriculum duration and structure to faculty research and teaching materials.

CURRICULUM AND PROGRAMMES

Duration and structure

- *Hours of didactic activities and involvement in individual or group field projects*
- *“In the field” activity / internship*
- *Compliance with Bologna principles facilitates international exchange*

Course Syllabus

- *Number and type of modules (core-elective)*
- *Percentage of the total number of hours of didactic activity devoted to entrepreneurship subjects*
- *Modules about social competences and soft skills / vocational skills*

Faculty

- *Number / profile of faculty involved in the programme*
- *Lecturers from appropriate investment institutions*
- *Ratio of entrepreneurs / practitioners who teach to non-entrepreneurs*

Teaching methods

- *Traditional teaching methods – lectures, taking exams and writing papers*
- *Group work – group assignments and discussions, projects and business plans*
- *Counselling / mentoring – individual and/or group mentoring by teachers, business people, experts, investors, venture capitalists or entrepreneurs*
- *Study visits – visits to companies, organisations, interest groups, entrepreneurs, visits abroad, etc.*
- *Seminars – conferences, presentations, workshops, seminars from invited lecturers or entrepreneurs, etc.*
- *Business simulation – simulations and case studies*
- *Games and competitions – business plan competitions*
- *Competition against students from other higher education institutions*
- *Practical training – internships, extracurricular activities, skills training programmes*
- *Setting up a real business – incubators and campus entrepreneurship centres*

CURRICULUM AND PROGRAMMES

Assistance and tutorship

- *Coaches / trainers*
- *Tutors (continuous assistance and learning support for students)*

Research and Teaching materials

- *Research activity carried out by the programme's faculty on entrepreneurship*
- *Staff publications on entrepreneurship in highly cited journals*
- *High rate of staff research publications in entrepreneurship generally*
- *Staff edit relevant journals and other publications*
- *Staff publish educational materials such as textbooks on entrepreneurship*
- *Prizes awarded for entrepreneurship cases in international competitions*
- *High rate of publication of entrepreneurship cases*
- *Production of original pedagogical materials that are made available to participants*

Given the diversity of entrepreneurship education and its objectives, it is not easy to operationalise the dependent (explained) variable of the model: entrepreneurship development. In order to estimate the outcome of the model, numerous proxies are available. Entrepreneurship development can be evaluated both by qualitative and quantitative variables listed under output, understanding and knowledge, skills and abilities, values and attitudes.

ENTREPRENEURSHIP DEVELOPMENT

Output

- *Number of firms created by recent graduates or participants*
 - *Employer firm birth rate*
 - *Employer firm death rate*
 - *Business churn (births + deaths)*
 - *Net business population growth*
 - *Proportion 3 & 5 year survival*
- *Career development / employability of graduates*
 - *Rate of high-growth firms based on employment growth*
 - *Gazelle rate based on employment*
 - *Launching one's own venture (alone or in a team) / ownership rate start-ups*
- *Joining a start-up / work close to new and small ventures (business advisors, consultants, technology transfer managers, etc.)*
- *Joining a large company – help established companies rejuvenate and grow by developing and building new business ventures as development managers in established firms*
- *Contribution to economy / wealth / poverty reduction*
 - *Rate of high-growth firms based on turnover growth*
 - *Gazelle rate based on turnover*
 - *Value-added by young firms*
 - *Productivity contribution, young firms*
 - *Innovation performance, young or small firms*
 - *Export performance, small firms*

Understanding and Knowledge

Students and participants:

- *Have deepened their knowledge of theories of entrepreneurship*
- *Have developed an understanding of how entrepreneurship theories and methods can be used to analyse various problems in today's society*
- *Understand the role of entrepreneurship and entrepreneurs for societal development and economic growth*

ENTREPRENEURSHIP DEVELOPMENT

Skills and Abilities

Students and participants are able to:

- *Critically examine and discuss how entrepreneurship theories and methods can be applied in different situations*
- *Critically examine and compile information into an effective feasibility plan for carrying out a new venture project*
- *Develop a business opportunity into a successfully launched venture*
- *Analyse the need of critical resources and capabilities for developing an opportunity into a viable new business*
- *Review and evaluate various entry strategies available to entrepreneurs*
- *Apply methods of planning appropriate for new venture projects in highly uncertain and/or fast-changing environments*
- *Identify and assess the potential for economically lucrative opportunities in both established and emerging industries*
- *Recognise managerial obstacles and challenges in the formation and early development of a new venture*
- *Communicate orally, in written form and through the use of IT-media a business concept (including marketing, financial projection and organisation) to external stakeholders/investors*
- *Search for, collect and evaluate information from various sources, in particular from both the theoretical and empirical literature within a specified area of entrepreneurship*
- *Undertake further studies in entrepreneurship with a high degree of autonomy as well as working in intercultural groups*
- *Students and participants have acquired, developed and deepened the ability to present their own and others' results in a clear, pedagogic and interesting manner*

Values and Attitudes

Students and participants:

- *Have developed an entrepreneurial mindset*
- *Are motivated to systematically explore new venture opportunities*

● Conclusion

The rejection of the idea to develop a quality label for entrepreneurship education at this point turned the purpose of this study into identifying the possible levers for entrepreneurship development through course training. With this intent, the referential presents a typology of factors benefiting entrepreneurship development (output), from student selection to institutional factors (inputs) to curriculum and programmes (pedagogical engineering). Similarly, it proposes a number of indicators, which can be used when benchmarking entrepreneurship programmes. The next part of this study relates some of the elements of the referential to case observations.

EFMD is an international, not-for-profit, membership organisation, based in Brussels, Belgium. With more than 680 member organisations from academia, business, public service and consultancy in 79 countries, EFMD provides a unique forum for information, research, networking and debate on innovation and best practice in management development.
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