

TEMPLATE OF CROSS-LITERATURE REVIEW RESULTS

beFORE - Becoming-Oriented Entrepreneurs in universities and companies

Project funded by European Commission Erasmus + Programme – Key Action 2
Knowledge Alliances - Agreement n. 2016 - 2858 / 001 - 001 Project n. 515842-EPP-1-2016-1-PL-EPPKA2-KA

for top publications presenting core foresight and entrepreneurial competences excluding domestic publication

Analysis of at least 10 publications

We would like to direct your attention that filling the last page in this questionnaire is obligatory

Guidelines: The aim of this template is to identify core foresight and innovation/entrepreneurship competences in relation to knowledge, skills and social competences that a future-oriented manager should possess. The source of data for the analysis are key books in the field and the other printed works on foresight and entrepreneurship (even popular-scientific studies), as well as peer review articles coming from leading journals such as *Technological Forecasting and Social Change, Futures, Long Range Planning,* to name but a few. Each partner involved in the task (universities) is free to select at least ten articles/books on the subject matter. The partners are also free to add any relevant articles/books. In the first place, we suggest to work on the publications which deal with the convergence among futures studies, entrepreneurship and innovation. In case of difficulty with the identification of core foresight and innovation/entrepreneurship competences in these sources, we suggest to work on the articles/books from three fields of expertise (namely foresight, entrepreneurship and innovation) separately.





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| Title of the publication | Disentangling competences: Interrelationships on creativity, innovation and entrepreneurship |
| Journal title* | Thinking Skills and Creativity |
| Number of journal*/year of publication/pages | 16 (2015) 27–39 |
| Database of the scientific article's retrieval* | http://dx.doi.org/10.1016/j.tsc.2014.11.006 |
| Keywords (or phrases) by which the publication was identified | Entrepreneur, creativity, competence, education |
| Main keywords/phrases of the publication | Creativity, Innovation, Competences, Entrepreneurial competences, Engineering students' perceptions |
| Core foresight and entrepreneurial competences | 1)European Key Competence Framework 'entrepreneurship' key competence refers to an individual's ability to turn ideas into action. a) open-minded to perceive opportunities, b) creativity c) innovation and risk-taking, d) the ability to plan and manage projects in order to achieve objectives 2)'underlying characteristics' and 'abilities' to envisage new realities and making them come true a) know-why (attitudes, values, motives), b) know-how (skills), c) know who (social skills), d) know when (insights) and e) know-what (knowledge) (Bird, 1995) 3) opportunity, relationship, conceptual, organizing, strategic, and commitment competencies. (Man, Lau, & Chan, 2002) 4) opportunity recognition and innovative competence is a function of creativity (Hayton & Kelly, 2006) (all pg. 29) |
| Convergence among futures studies and entrepreneurship | |
| Convergence among futures studies and | |





| innovation | |
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| Convergence among futures studies and entrepreneurship and innovation | |
| Main highlights of the article (in bullets, up to 2500 characters including spaces) | The main purpose of the paper is how entrepreneurship, creativity and innovation correlate. Questioning engineering students in Spain and the USA their perspective was analysed by comparing the education in their country and the notion of entrepreneurship. The paper includes for one a distinct analysis of theoretical approaches for entrepreneurship. This includes an exploration of the terms "competence", "competency", "skill", "capability", "creativity" and more. |
| | The finding show that " even though students seem to agree in the relevance of creativity in entrepreneurial contexts, educational institutions do not seem to promote it within their training plans" (pg. 36). |
| | The authors of the paper suggest that creativity and innovation as 'meta-competences' can be learned in the field of entrepreneurship, but education – in the USA or Spain have not payed enough attention to these when it comes to the field of engineering: "It highlights the need to include CIE competences as elements that are still far from being understood and integrated into the curriculum. Maybe it should not be a surprise that adding insights to the dilemma concerning why engineers are often seen as innovators but, paradoxically, tend to create far fewer enterprises than business graduates"(pg 37) |
| Other observations or comments | Though the paper has no direct link to Futures Studies or Futures Literacy its literature review could help to make better distinctions and define the terms e.g. competence, creativity, entrepreneur etc For example the tables on pg. 32-33 give a good overview of "Theoretical approaches to analyze entrepreneurial competences entrepreneurship" and "The role of perceptions, creativity and innovation according to different theoretical approaches" |

^{*}Fill the following fields for the articles exclusively