



“Entrepreneurial education in non-economic subjects”

Final report

Brussels 19 October, 2010



the event

Latest EC report “Towards greater cooperation and coherence in entrepreneurship education” highlights the importance of enterprise education in the future to come and provides useful advice to member states in the shaping of future policies.

Enterprise education has covered a long way from the margins to the mainstream of the political agenda. Throughout this journey the meaning has also evolved and now enterprise education is increasingly considered a methodology that can be applied in any subject. There is an urgent call to make this transition happen. Integrating enterprise across the full spectrum of the curriculum, adopting whole-school approaches call for radical changes in the schooling system at all levels but some direction is needed in order to cross the vast chasm between policy and practice.

Luckily Europe is not lacking a support base of enthusiastic and committed teachers, students, headmasters and organizations who are putting a great deal of effort in making this happen but we need to raise awareness of the importance of this topic among all relevant stakeholders. How? Highlighting the work of early adopters, gathering people with different backgrounds and above all, providing opportunities to network and why not, stepping off the trodden path.

This is exactly what COPIE2 set out to achieve with “Entrepreneurial education in non-economic subjects” event.



the agenda

“Entrepreneurial education in non-economic subjects”

19th Oct, 2010. Brussels.

9.00 **Registration and coffee**

9.30 **Welcome and introduction to COPIE2** : Joeri Colson (ESF Flanders), Guzman García González-Posada (ESF Spain)

10.00 **Workshop 1: Enterprise in non-economic subjects**

Enterprise is not only a content but also a method of learning. This workshop concentrates on exploring what are the success factors, barriers, the do's and don'ts, and the most appropriate methodologies to embed enterprise in non-economic subjects.

Methodology: GPS method for Enterprises, an effective method to explore ways in which schools and education systems can react to this ongoing trend. (Flanders DC)

11.30 Coffee break

12.00 **Workshop 2: Enterprising teachers and training**

Teachers represent a critical success factor in the development of enterprising attitudes and skills of young people but they should not be left to their own devices. Teacher training is scarce and mostly focused on a narrow view of enterprise. What works best when we want to encourage non-economic teachers to adopt a more enterprising approach?

Methodology: Speed-dating session with keynote speakers

13.30 Networking lunch

14.30 **Conclusions from Workshops**

15.30 Close



the network

The Community of Practice of Inclusive Entrepreneurship (COPIE) is one of the learning networks of ESF Managing Authorities and Implementing Bodies created to improve training and employment policies in Europe during the programming period 2007-2013.

Its overall objective is to develop a comprehensive set of policies, interventions and support structures for business creation that meet the needs of disadvantaged groups. COPIE partners share a common concern to widen entrepreneurship and make support systems work better across diverse populations.

Inclusive entrepreneurship is more than starting an individual business, because it can be applied to self-employment, to starting or developing micro or small enterprises and to social enterprise using business-based approaches driven by a social mission. Indeed the personal qualities required for entrepreneurship are essential for success in the knowledge economy.

In order to do this, four thematic Communities of Practice (COPs) have been set up:

1. **Enterprise Education**
2. **Integrated start-up support,**
3. **Quality standards in start-up support services**
4. **Access to finance**

Overarching these 4 areas, the **Action Planning** subgroup will focus on the coordination of all these elements to create genuinely inclusive entrepreneurial environments in the different regions of Europe.

From 2009 to 2011 participant regions will be able to review, compare and reflect on entrepreneurship policies and practices that others are pursuing. The results of the activity will be a common understanding of practice, identification and testing of transferable good practices and the design of broader action plans.

The role of education, especially in the early stages, in creating the conditions for a more entrepreneurial society should not be downplayed. Consolidation, finance and start-up support are important but the first step in the entrepreneurial ladder is the creation of a favourable mindset towards entrepreneurship.

+ info: <http://www.wikipreneurship.eu> / <http://www.copie2.es>



the trends

GPS is a participant-friendly and well-structured methodology where individuals play an active role working in teams and reflecting on the topics displayed on the board building on the ideas of their team partners. Five main trends were previously identified with the aim to prompt the debate.

Trend 1: Integration and pathways

Enterprise should be embedded in all subjects and as a key transversal theme.

How can this be achieved? This effort should be integrated and continuous throughout all the education system, from primary school to university. Which approach do you suggest? How can teachers be more entrepreneurial in their courses?

Trend 2: Institutional support & leadership

Coherent policies both at national, regional or local level are needed. But it is even more important to have a clear leadership and vision within the schools. What's the profile of an enterprising headmaster or an enterprising teacher? How can students be stimulated to become enterprising students?

Trend 3: Expanded learning

Learning is no longer confined to the classroom or school walls. How can schools actively involve external stakeholders? How do we integrate different ways of learning? What about networks, both physical and virtual?

Trend 4: Recognition

Achieving teachers' buy-in is a top-most priority for the enterprise education agenda. This is particularly true for teachers of non-economic subjects. How do we convince sceptical teachers about the importance of enterprise? How do we empower them to put it into practice? Training teachers, celebrating good practice?

Trend 5: Links with creativity, innovation and other agendas

Enterprise overlaps with creativity and innovation and sometimes they may be even considered the same thing. What is the room for collaboration?

Can we learn from design thinking approaches that can be embedded in enterprising teaching? We are discovering new insights on how the brain learns. Can this be applied to enterprise education?



the post-it files

Budding ideas took the form of a multi-coloured landslide of post-its. What follows is an attempt to summarize what was written in them and draw out some conclusions.

Trend 1: Integration and pathways

A sound vision should precede any strategy for integration. Outcomes need to be clear from the outset as well as a common framework against which student progression can be measured throughout his/her schooling. The **ACRO model** found in the [Youth Enterprise and Entrepreneurship Strategy for Wales](#) was pointed out as a good example. As regards pathways, the pipeline example used in the [GPS session \(Flanders DC\)](#) could be adopted as a logic progression model from primary to higher education. This approach was already suggested in an earlier report of the [BEST procedure group of experts](#). Thus primary schools should focus mainly on creativity and the enterprise dimension will increase gradually as they progress through the school system.

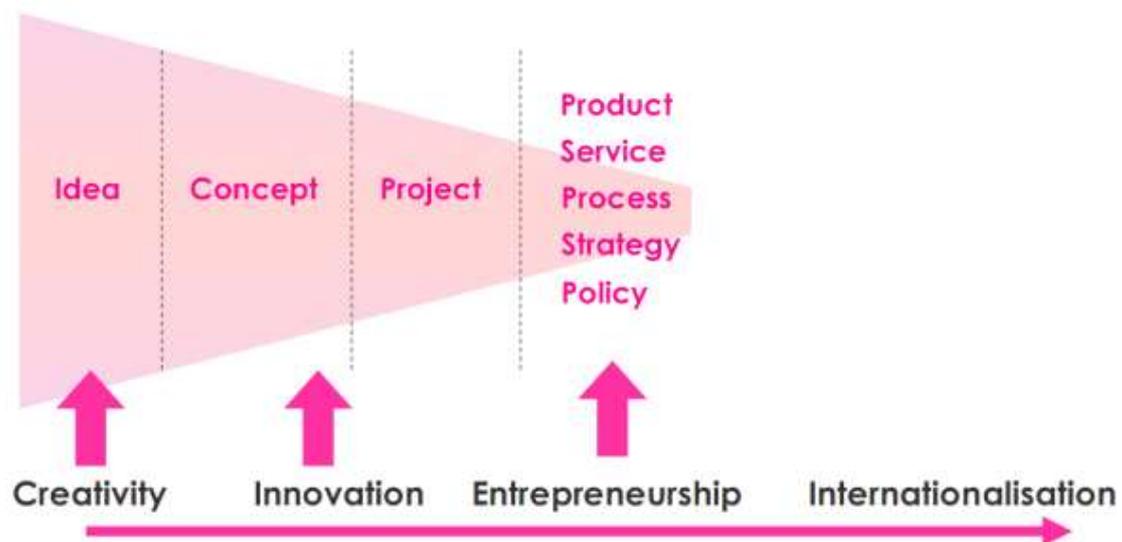


Fig 1. Flanders DC Creativity pipeline

Creativity, innovation and entrepreneurship are three overlapping concepts that need to be accommodated under the same banner. Otherwise we will yet again start piling up new silos. In this sense, the UK has attempted to make a clear distinction between **enterprise education** and **entrepreneurship education** where the former describes a broader approach. Unfortunately these 2 concepts tend to be mixed up elsewhere.



Consultation with stakeholders is a key success factors to achieve integration. This applies both at policy and school levels. Policies should be geared towards co-design and co-construction strategies in the delivery of public services taking into account this has already proved successful in some public sectors as can be found in [NESTA's report "Co-production: Right here, right now"](#)

Enabling risk and mistake-friendly learning environments, getting rid of timetables and books, mixing up different age cohorts, and allocating a 10% quota to enterprise in every subject represent some of the ideas that call for radicalism over incrementalism on the redesign of an enterprising school experience. Furthermore personalized learning could greatly reinforce the enterprising dimension of schooling experience. Funding individuals via a credit system instead of schools will allow students to negotiate, choose and tailor their training according to their interests and needs.

Some methods facilitate enterprising teaching: project-based learning, problem-based learning and cooperative learning to name but a few. An intercultural and international dimension, real-life links and a appealing topic can be added to the mix and you are set on track to launch a good enterprise education project. This was particularly the case of [ECE \(European Commitment to Entrepreneurship\)](#) a successful transfer of innovation project with a strong international dimension piloted last year in secondary schools of Flanders, Finland, Bulgaria and Spain

These was profusely illustrated with several examples ranging from contests (eg Dragon's Den, Fata Morgana, Ideefix, Young Inventor) to other activities pervading the whole spectrum of the curriculum: logo design in Arts, understanding of local labour, translation of brochures, charity projects, poster design for a fundraising camping, dealing with real figures in maths or design challenges (eg. [Finnup](#) (Sweden) are some of the examples provided to embed enterprise in different subjects and motivate students.

In stark contrast, some ideas focused on scaring the living daylight out of students. The looming menace of China and India as next superpowers and pensions at stake rank high on the list of favourites. Realistic or apocalyptic? We don't know but they are probably quite useless or even harmful in educational terms.

A good example of integration is Scottish Executive ["Determined to Succeed"](#) Strategy. Recently the majority of funding has been devolved to local authorities, enabling implementation to be delivered in a way that meets local needs. According to official documents "the Scottish Government will have invested a total of £153 million (2003-2011) [...] to enable the aims of enterprise in education to be fully embedded within the curriculum and ethos of every school in Scotland."

Finally greater efforts need to be made to keep an eye on developments taking place beyond Europe and not only the USA. For instance, [Australia](#) and [New Zealand](#) have gained a great deal of expertise in the design, implementation and evaluation of enterprise education policies.





Trend 2: Institutional support & leadership

School managers are best positioned to support staff and students enterprising endeavours. Senior Management Teams hold the key to widen and deepen the impact of enterprise education in the school. Whole-school approaches and specific enterprise education policies reinforce the vision and help raising awareness among the teaching staff, students and parents. Some participants attempted to draw a desirable profile for an enterprising school leader. A background on enterprise or at least experience in company management was identified as a “must” and somebody even suggested, controversial as it may sound, management teams should be civil servant-free areas just as it seems to happen in Germany. The ability to share its vision and engage the teaching staff play second and third fiddle. Yet, engagement is only possible should decision-making be decentralized and teachers and students empowered to take part in the planning process. Following this train of thought some interesting ideas were pointed out. The appointment of [enterprise champions](#) (UK) among teaching staff contributes to broaden the scope, raise the awareness and discover new connections among different departments. Teachers would definitely appreciate more flexibility in terms of time and space. Self-management could indeed nurture further collaboration between departments.

Good leadership skills have nothing to do with gene pools. Thus, continuing professional development should be made available for existing Senior Management Teams and staff willing to assume this role at some stage in the future. The [National College for Leadership of Schools and Children’s Services](#) (UK) is a good example of this. Students could also have a say on school leadership. Letting students run the school for a day was suggested as an idea.

As it was stated before, we may be approaching a paradigm shift in the very same definition of a school. Right now we don’t have any right answers as to what the future of schooling should look like but at least new ideas and approaches should be given a try in the form of pilot projects or pathfinders to come up with **new school models**. The EU could greatly accelerate this process by allocating some funds.



Trend 3: Expanded learning

The discussion about expanded learning tended to focus on learning opportunities outside school. Obviously business-school links need to be reinforced. Some ideas even advocated for a 1-week take over of the school by business people while others took a more easygoing approach, for instance, building on and scaling up existing good practice:

- ▶ role models
- ▶ mentoring schemes ([Dreamcoach initiative -Flanders](#))
- ▶ work on real problems. ([Space Unlimited – Scotland](#))

These strategies were considered to add relevance to the curriculum and keep the students grounded. But students should be given the chance to know different types of businesses, not only profit-driven companies (eg. Social economy)

Talk went beyond the common rhetoric on business-school links. Thus a lot of emphasis was put on the need to devise measures leading to a further involvement of former students, families, public sector and third sector.

But collaboration for the sake of collaboration or, even worse, on the grounds of Corporate Social Responsibility or any other charitable endeavour will put at risk the sustainability of any strategy. This is a win-win situation for both sides. Expectations from both sides need to be nailed down and the “What’s in it for me?” factor should be highlighted and described as precisely as possible.

Social networks, both real and virtual, were also considered as powerful tools to develop enterprising skills and bridge the gap between formal and informal ways of learning. By way of example, [Stimulating Entrepreneurial Education and Training](#) (SEET), a transnational network aiming to bring together all actors that want to stimulate the entrepreneurial spirit of young people through education and training has put up a group in LinkedIN to facilitate networking.



Trend 4: Recognition

Enterprising teaching has always taken place. It's happening right now at a school near to you but it's probably named differently. A mapping exercise of the enterprising activity of schools regardless of subjects could be a wise first move to achieve teachers and headmasters' buy in. This is what recognition is all about. Spotting good practice and awarding schools, headmasters, teachers that are [making a difference to the learning experience of their students](#). In this sense the [Center for Education & Industry at the University of Warwick \(UK\)](#) has developed a **National Standard for Enterprise Education** which "provides a quality framework through which schools and colleges could review, analyse and develop their enterprise education".

Awards are just a small part of the picture as they often appraise the work of a tiny minority of individuals. Recognition will be put on a stronger footing if it is tied to **professional standards**. Competence-based education has generally paid lots of attention to the knowledge, skills and attitudes our students need to develop. Focus needs to be tilted or zoomed out to answer the following question. Which is the right skill and attitude set for an enterprising teacher? Which are the indicators of enterprising teaching? This basic profiling exercise can lead to the development of tools and benchmarks against which teachers' can self-evaluate their performance. The [Institute for Curricular Development \(Netherlands\)](#) uses a e-profile tool to define the enterprising profile of teachers and tailor training needs accordingly. On the other hand it will represent a good screening method to improve **teacher training** both at initial and CPD level. A good example of this kind of training is the **30ECTS Entrepreneurship Education Course for teachers and school leaders** designed by [Hedmark University](#) (Norway)

Actions that may be included as part of teacher training include: Appointment of enterprise champions, encouragement of business start-up among teachers, elaboration of good guidebooks, websites, summer bootcamps, teacher exchange programmes "teach my course", Erasmus for teachers and "pimp my course" exercises.

At student-level there are systems in place that enable students capturing evidence of their enterprise learning . Most of them are **electronic-portfolio based tools**. Further work needs to be done in order to benchmark and unify criteria across Europe.



Trend 5: Links with creativity, innovation and other agendas.

Creativity, innovation and enterprise are more frequently than not pretty tangled up. Obvious overlaps make it difficult to draw boundaries among these 3 elements. But... who cares? Do we really think entrepreneurs, innovators or creators waste a single millisecond of their time trying to identify if they are acting one way or the other? The need for logic and neat progression models is deeply ingrained in our analytical mind. That's why we feel such a relief when we look at the creativity pipeline model but real life is more messy and luckily silo-free.

Neuroscientific research is providing new insights on how the brain learns and, more importantly, on how it does not learn. For instance, hemisphere dominance or multiple intelligences theories have been actually discarded as utter neuromyths on the basis of sound research evidence as stated in the report [“Intelligence in the flesh”](#) (Centre for Real World Learning). Could neuroscientific literacy add new insights into (enterprise) education and influence daily practice? This happened to be a controversial question. Merely mentioning the word imagination started roaming freely in worst-case scenarios as it was found on some of the comments (eg. Learning induced by drugs). However neuroscience has a friendlier face that needs to be further explored as it ultimately relates to engagement and motivation, for instance.

Design thinking opens up new possibilities to develop the same set of skills and attitudes. Bringing designers into the school was one of the ideas but learning about design is not the main goal but learning through design and no, design thinking is not about building a birdcage in the D&T workshop. Design thinking is a set of tools that could be successfully applied to any subject or content in the school. First tentative steps are being taken in Europe. In Denmark [INDEX: Design to Improve Life](#) is a pilot project for secondary schools has been set up with ERDF funding. Also, a LinkedIn group, [CREACIT – Design Thinking and Creativity in education](#) has been recently created. **Social innovation** is the new kid on the block. You will probably hear a lot about it in the next years. And this is not a trendsetter whim but a reality. Just look at this excerpt from the last EU report [Reinventing Europe through Innovation](#) : “The next 10 years requires as much attention to developing a social innovation system as in the last 20 years on developing the R&D based innovation system”. So probably schools need start taking care about this. The good news is that social innovation is not utterly alien to our field of interest and links can be drawn easily.

Neuroscience, design thinking, social innovation, global education, some may argue that we are losing focus. Others would not feel at ease with enterprise education predatory behaviour as enterprise education seems to converge with engaging education and they are probably right. But there is a third way, a way oblivious of tags and turf-wars where schools, teachers and students have the opportunity to tinker and choose what works best for them.



the speed-dating

Right after the GPS sessions participants had the chance to get a first-hand account of different experiences all over Europe. The speed-dating technique allowed 10-15 minutes discussions in small groups with the following experts.

Elizabeth Ronnevig Hedmark University College. Norway.

Elisabeth Rønnevig has worked with entrepreneurship in education for about 15 years. Now she is Assistant Professor at Hedmark University College in Norway and is among others occupied with formal and informal education for in-service teachers on all levels. She has taken part in developing and the implementation of a strategic plan for entrepreneurship in education on a national level. She also has experience working on entrepreneurship-projects on regional, national and international level. Recently she has been editor of an article collection on Social Entrepreneurship called *Willingness to Change*.

Eric Welp Institute for Curriculum Development SLO. Netherlands

Eric Welp works for SLO, the Netherlands national institute for curriculum development. His main interest is the development of curricular goals and content for various educational levels, from national policy to classroom practices. He will explain in his presentation the train-the-trainer programme that is being developed at this moment, which is aimed at stimulating a more enterprising teaching environment for all educational levels. The programme is based on the simple principle of 'teach what you preach'. The training course is leading the teachers and management staff via different activities out of their comfort zone and into the entrepreneurial approach of teaching.

Jean MacMillan Determined to Succeed. Scotland.

Determined to Succeed is the Scottish Government's (SG) strategy for Enterprise in Education, which aims to develop enterprise, entrepreneurial and employability skills in all young people 3-18. Jean has been a Senior Adviser within the SG Directorate responsible for this strategy for the last 6 years, developing and implementing policy and working closely with the Local Authorities (LA) across Scotland who are responsible for delivery. Jean has also been working on professional learning for teachers and leadership development for the LA Teams. Enterprise in Education is a key enabler for Curriculum for Excellence (CfE) which aims to achieve a transformation in education in Scotland by providing a coherent, more flexible and enriched



curriculum. DtS works with employers and other stakeholders helping bring the economy and education to closer alignment.

Malcolm Hoare

Centre for Education and Industry. University of Warwick. England.

Malcolm worked in secondary schools for twenty three years before moving into higher education, initially at Durham University Business School (DUBS) before joining the Centre for Education and Industry at the University of Warwick. His consultancy work has involved him working in schools in Denmark, Finland, Italy, Norway and Spain. He also contributed to the review of Enterprise Education for the Federal Government in Australia. As the author of the National Standard for Enterprise Education, he leads a team that works with schools across England, ensuring best use of the CEI Enterprise Education Quality Framework. His most recent European project, Supporting Business Innovation and Creativity (BINNOC) involves him working with a team of researchers from England, Finland, Lithuania and Spain.. His research interests focus upon entrepreneurial teaching and learning and social enterprise.

Ben Bruyndonckx

SYNTRA. Entrepreneurial Training Hub. Flanders

Ben Bruyndonckx is the coordinator of the Entrepreneurial Training hub of SYNTRA Flanders, The Flemish Institute for Entrepreneurial Training. He is a member of the Flemish Steering Committee for the Entrepreneurial Action plan, bringing together policy makers of the different Policy Depts. and Agencies involved.

Peter Coenen

VLAJO (Flemish Young Enterprises). Flanders

Peter Coenen has developed his career in close relationship with SMEs. His move into enterprise education happened as far back as 1993 when he joined the staff of “Young Enterprises”. In 2001 he was appointed director of VLAJO (Flemish Young Enterprises) and ever since he leads this organization whose goal is to promote the entrepreneurial spirit among young people by making bridges between education and business life to enhance the welfare and well being in the Flemish Society. To attain this goal VLAJO is coordinating several projects by which they want to reach 100.000 pupils by 2013.

Nathalie Briessinck

DBO. Flanders

Since 2006 she is project leader at DBO, the Service for Vocational Education and Training at the Flemish Ministry of Education. She is responsible for transfer, exchange and implementation strategies of good practices and evaluation methods concerning portfolio, competences and enterprise education. She has developed the digital portfolio MY DIGITAL ME for secondary education and is leading now the development process for a similar junior version for primary school. Currently she is national and international coordinator ECE, European Commitment to Entrepreneurship, an international and cross-disciplinary enterprise education project.



the feedback

Plenary session	% Good/very good
Welcome and introduction to COPIE2	75
Workshop conclusions	85
<ul style="list-style-type: none"> ▶ “Good overview of the project plus the opportunities for future involvement” ▶ “Very good networking initiative” ▶ “We were not really connected to SEED or COPIE 2, hence the introduction stayed a little abstract” ▶ The level of debate at the final ‘round’ discussion in the afternoon was excellent – I was a little disappointed that there were no tangible outcomes and that the debate did not move on from the passion and the theory! ▶ “Closing session very good – new perspectives on subjects discussed, some good critique and feedback” 	

Workshop1	% Good/very good
Level of debate	89
Methodology	100
Usefulness to work/project	89
<ul style="list-style-type: none"> ▶ “I liked the workshop design which was very interactive” ▶ “I thought it was too general and perhaps with a more focussed discussion we would have got ‘deeper’ into the issues and solutions” 	

Workshop2	% Good/very good
Level of debate	88
Methodology	88
Usefulness to work/project	100
<ul style="list-style-type: none"> ▶ “As a presenter I found this approach useful and I got better at it during the process” ▶ “Very effective methodology for both workshops” 	



Conference & aims	% Good/very good
Helped with networking	100
Lessons learned will be applied to my organisation	76
I was able to learn about COPIE2	94
Would you be able to transfer what you have learned?	82
<ul style="list-style-type: none"> ▶ “We can use some ideas learned during the speed dating. For example the teacher training project in the Netherlands” ▶ “I have already spread <i>the GPS for enterprises</i>- method to my students” ▶ “I am also aiming to network with a number of the people I met at the conference to build understanding in this area” ▶ “There were some good ideas; maybe we could try to make a new project with it.” ▶ “I will feed back and report to my colleagues at a formal session, my colleagues cover all the 9 government regions in England.” 	

Rate the following	% Good/very good
Conference materials	83
Helpfulness/support of organising team	94
Venue	100
Catering	94

	% Yes
Did the conference meet your expectations?	97
Did the conference meet its aims and objectives?	94
<ul style="list-style-type: none"> ▶ “I would like to add that we might have got more out of the conference if the focus had been more specific. As we were asked to discuss all aspects of Entrepreneurial Learning the outputs were all a little vague.” ▶ “I thought it would me more school people (teachers and head teachers) attending.” ▶ “It was aimed maybe more for primary and secondary school levels but still as the themes were common and there were so many ideas to take into account. Therefore expectations were bit different but outcome is very useful.” 	



the future

Although ESF is currently financing enterprise education measures in some regions and Member States, there is a strong need to make a better use of the ESF funds in the next programming period. For this purpose all organisations must have some knowledge on how to have access to ESF funds, and there is a need for a better coordination among ESF and the other European financial resources supporting enterprise education.

In fact enterprise education is at the heart of the reforms needed in Europe for the future. The combination of entrepreneurship and education is highlighted both in the Europe 2020 strategy and in the new European employment guidelines. Enterprise education can and must be one of the key elements of the foreseen smart and inclusive growth for Europe.

COPIE2 actions will resume in 2011 with a clear aim: to influence future ESF policies so that entrepreneurship education gains a stronger footing in the new operational programmes (2014-2020).

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