



EUROPEAN COMMISSION
Directorate General Education and Culture

Europe 2020: Policy development and country analysis
Skills and qualifications strategies; Multilingualism policy

Thematic Working Group on Entrepreneurship Education Third meeting, 29-30 May 2012

Draft Minutes

1 Introduction

Under the Strategic Framework for European cooperation in Education and Training (ET 2020), DG Education and Culture coordinates the Thematic Working Group on Entrepreneurship Education. This group works within the 'Open Method of Coordination' framework.

The third meeting of the group took place on 29-30 May in Brussels. The meeting was dedicated to the subject of measuring the impact of entrepreneurship education.

On Day 1, four presentations were given:

- Nick Henry, Director at ICF GHK presented a study commissioned by DG EAC in 2011, giving an overview on approaches to measuring entrepreneurship education and indicators used across countries.
- Jonathan Levie, University of Strathclyde, presented an overview of GEM and the results of the 'GEM Special Topic Report on Education and Training' that was published in 2010.
- Lene Vestergaard from the Danish Foundation for Entrepreneurship presented a longitudinal study that has been started in 2011, to measure the impact of entrepreneurship on a cohort of approximately 900 students born in 1996.
- Paul Collard, Creativity, Culture and Education (CCE) discussed the work of CCE and the existing instruments of measuring learning outcomes (e.g. PISA) and their suitability to measure creativity.

All these presentations have been uploaded to the Sinapse platform.

On Day 2, three presentations were given:

- Filip van Depoele, European Commission, presented the new 'Erasmus for all' programme;
- Tapio Saavala, European Commission presented the results of a previous group working on the assessment of key competences;
- Kjartan Steffensen, European Commission & Ernesto Villalba-Garcia, Cedefop, presented the results of an expert group working on creativity.

Thereafter, the four sub-groups worked on the further outline of their work programmes and agenda.

A next meeting was announced for September 2012. The meeting has been scheduled to give the participants an opportunity to work on the agenda set out for their sub-groups.

A formal invitation to the next meeting will be sent out to the participants shortly.

2 Day 1

2.1 Welcome

Elin McCallum, Policy officer at DG EAC, opened the meeting and welcomed the participants. Elin is the successor of Sannie Fisker, who established the TWG and hosted the first two meetings. Elin is a thematic expert on entrepreneurship education and in that role, she presented the work she has done in Wales during the last meeting of the TWG. Hence, she is familiar with the group and their work already.

Elin reminded the group of the main aims of the TWG. The group has been initialised to provide

- A set of advice to policy makers;
- Facilitate advance of EE in MS.

As an outcome of the group, a policy handbook is planned which should be launched by June 2013.

Elin introduced the subject of the day. The first day is dedicated to approaches of measuring the impact of entrepreneurship education. Elin mentioned that measuring impact serves the following purposes:

- Improved programme management - more effective planning - more effective evaluation;
- Increased understanding of the impact of the work;
- Stronger communication of the value of the work to 'the people that matter' (internal and external stakeholders); and
- Enhanced attention to the social and economic value created by entrepreneurship education.

Four presenters will present different approaches, which will give the group the opportunity to see the wider context. An enhanced understanding and feedback provided from the members of the group will then contribute to guiding the European Commission on this subject and identify what is missing

2.2 Check-In

The check-in session was led by Jan Hein Nielsen, and participants discussed what they would like to achieve throughout the day at their group tables. Feedback from tables included:

- The need for further clarity on a working definition of EE for the group.
- There was discussion around the vision of the policy handbook, to ensure that the group understands what this is and how their work will contribute and form part of this.
- The importance of the link between the policy level and what happens in the actual classroom, and that this must be at the forefront.
- The Learning Outcomes subgroup would like to make their work more compatible with the recent Eurydice report on the state of play of EE in Member States. The sub group also announced that they will need to gather information from the group via a survey.
- Concern at the length of time since the last meeting, and the distance this causes.
- Discussion of how to motivate teachers to include EE in their teaching.
- To focus on action, moving forward the work of the group.
- The need of governments and public bodies to do more with less, and the importance of measuring to show the impact of work done.

2.3 Setting the Scene I: Current Policy Context

Ana Carla Pereira - Head of Unit A2, Skills and Qualification

TWG Overview:

The first area focussed on information on the future of the TWG. At the moment, 24 TWGs initialised by the European Commission are running. The groups are seen as essential to move the Europe 2020 Agenda forward. In June 2012, a High Level Group will meet to discuss the balance of the first cycle of ET 2020. It will be assessed whether the government structures in place meet the priorities set; and new priorities are coming up.

Depending on the outcomes of those discussions it will be decided by the national ministers and the Member States whether the current groups will carry on, merged or whether new groups will be initialised.

However, it is the intention of the European Commission to move this group from temporary to permanent (after they have completed their task in 2013) and blend the current group with the group working on ICT and education; since there a lot of thematic overlap.

Rethinking Skills:

The 'Rethinking Skills' communication is currently being developed within the Commission and will be presented in October/November, together with the Annual Growth Survey.

The European Commission wants to raise the visibility of skills in Education & Training policies. The aim of the new Communication is to steer the modernisation of Europe's education and training systems, in order to increase the quantity, quality and relevance of skills supply for higher economic outcomes and stronger social and generational inclusion effects.

It is based on two main strands:

- A short term strategy: What can be done short term to ensure the skills supply
- A long-term strategy: Do education policies always need to follow labour market or can they help shape the skills demand, take on a more proactive role?

Ana Carla Pereira presented the current state of discussion regarding the 'Rethinking Skills' strategy:

- Acquiring key competences for all:
 - Acquiring basic skills (literacy, numeracy, and science) is the gateway to further learning, employment and social inclusion.
 - People need competences to meet the challenges of a globalised and changing world (creativity, sense of initiative, digital and media literacy, entrepreneurship).
 - Foreign languages are key requirements for the employability in a context of increasing mobility and migration.
 - The policy handbook developed by the TWG would be a core action within this section. Furthermore, with regard to EE, the creation of an entrepreneurship hub is being explored.
- Training more agents for innovation and change:
 - The amount of people learning scientific and technology-driven curricula remains insufficient for the development of creative and innovative industries and services.
 - A higher number of graduates and students in those educational sectors (e.g STEM) need to be secured. Targeted action to attract female learners in these areas needs also to be a priority.
- Improving and measuring learning outcomes:
 - Skill improvements can only lead to job-creating growth if learning is focussed on real outcomes and not only on qualifications or periods of schooling. Actions undertaken in recent years need to be reinforced.
 - Transparency on the skills held by countries could build peer pressure among Member States and contribute to push the agenda forward.
 - Individuals should also be able to measure how they perform in comparison to the rest of the population.

- Promoting excellence:
 - Excellence in higher education and vocational institutions is the most powerful engine for innovation, and the best way to attract foreign talent.
 - A number of current actions in different education sectors will be reinforced.

The European Commission has also been promoting intensified cooperation between the various stakeholders and partners of the worlds of education, work and research through Knowledge Alliances (between universities and business) and Sector Skills Alliances (between education and training providers and business). These are aimed at developing innovative teaching and training methods and putting the EU wide recognition instruments into practice. In the end, it is estimated that some 400 alliances will be created and 4 000 institutions involved thanks to the new Erasmus for All programme running during the period 2014-2020. The Commission is also taking steps to promote entrepreneurship education in education policy, but learning about entrepreneurship through youth participation is also important.

Beyond that, the strategy addresses the question of how training systems work and how systems can help to enhance flexible learning, e.g. by

- *Spreading new pedagogical approaches*: Delivering the right skills and competences calls for radical pedagogical changes. Too often, school systems are not conducive to critical or creative thinking; they could also benefit more extensively from the experience of the dual systems, and adopt curricula that provide opportunities for pupils to get acquainted with the realities of companies at an early stage.
- *Unlocking the potential of digital learning*: Technological change is a unique opportunity to develop new pedagogical approaches. Schools and other learning institutions need to reap better the benefits of ICT and fully exploit the potential of open educational content/knowledge ("open educational resources"), practices and networking.
- *Supporting teachers*: Teachers and trainers should be the main drivers for innovation. Evidence demonstrates that better quality of teachers is the most important determinant of student outcomes. Attracting future excellence in teaching, training and continuing professional development of high-quality teachers is a key priority to increase quality and diversity in education.
- *Promoting pathways across education and training sub-systems*: Education and training systems are generally segmented into distinct sub-systems (e.g. higher education and VET). Member States have started introducing more flexible learning programmes through the credit systems and the national qualifications frameworks. These trends should be encouraged alongside a wider recognition of skills developed in more informal contexts or in another country.

The strategy also addresses the question on how smart funding and partnerships in times of severe constraints can be promoted, e.g. by

- Evaluate what funding is available and how funding can be improved;
- What can COM do to improve things;
- The 'Erasmus for all' programme will be introduced and funding possibilities will also be presented.

2.4 Setting the Scene II: Entrepreneurship Action Plan 2020

Simone Baldassarri & Elin McCallum, Policy Officers at DG ENTR and DG EAC introduced the new Entrepreneurship Action Plan – Entrepreneurship2020 – to be launched in autumn 2013. This is being driven from President Barroso, as a key contribution to Europe's efforts to tackle the current economic crisis. Promotion of entrepreneurship, key changes to the framework conditions to support entrepreneurs, and the development of an entrepreneurial culture are seen as key components for growth. A chapter on entrepreneurial learning is planned, with three actions currently being consulted on:

1. Ensuring that EE is embedded across all education systems
2. Practical entrepreneurial experience for all young people leaving secondary school
3. Establish a European Hub for Entrepreneurship Education

One of these was discussed in detail, due to the potential impact and resource implications for Member States:

All young people should go through at least one "entrepreneurial experience" before they leave secondary school = a practical, hands-on experience through which young people can learn entrepreneurial skills (responsibility, creativity, risk assessment and management, project management, negotiation, teamwork, staff management etc.)

This experience could be a classical EE method like running a mini-company, but could also be something practical like working with local community; organising a social project or charity etc.

The group was asked to provide feedback to three main questions. Participants are invited to discuss the idea at their tables.

- Is this happening in your country?
- Should it be introduced to all learners?
- Where are the challenges and how could they be overcome?

Group Feedback:

Is this happening?

- To varying extents
- In most MS it does not happen for all learners

Should it be introduced?

- Majority of participants confirmed that they indeed see EE as vital for economies all over the world and think that it is good idea to provide this experience to every child

Challenges:

- Clear identification of the educational theory behind the proposal is needed
- In some countries, the concept of entrepreneurship education as defined by the Commission is not yet really understood
- Stakeholders need to get on board
- Teachers need support and training
- Curriculum change is needed, to embed it across the education system and ensure that it is not an extra on top of what students need to do. EE is not just another assignment, if it is supposed to have impact then it should be longer lasting and progressive.
- Learning Outcomes need to be defined, and clear guidelines on how they should be assessed
- A mandatory minimum of EE training should be defined
- This type of action would need a marketing campaign
- Country context – what might work in one may not be effective in another

The group reinforced the idea of an entrepreneurship hub and emphasises that high profile advocates of EE should be involved in the hub.

2.5 Introduction: Framing our Discussion

Elin McCallum opened the session with presentations on measuring the impact of EE by framing the topic. She pointed out that evidence-based data are important to support policy makers in deciding how successful specific policies actually are.

Therefore, it is important to decide **what is measured**:

- Inputs What goes in
- Outputs The immediate objective i.e. entrepreneurial knowledge, skills and attitudes
- Results What the result is – enhanced positivity / self-confidence / interest in entrepreneurship
- Impact Change at the macro level e.g. reduced early school leaving / sustainable businesses/ creative employees

At what levels:

- Individual / School-College / Region / National / European

And with what causality:

- When specific interventions have been shown to contribute to specific global impact.

It was pointed out that it is often very difficult to define what intervention caused what change. But it is crucial to identify the evidence and arguments that support EE as a key factor in various impact areas e.g. social cohesion, early school leaving, active citizenship or increased business start-ups. Providing guidance for policy makers on this is vital.

2.6 Presentation GHK Report on Indicators for Entrepreneurship Education

Nick Henry, Director of the Birmingham office of ICF GHK, presented a study commissioned by DG EAC in 2011 to give an overview on approaches to measuring entrepreneurship education and indicators used across countries.

He emphasised that the aim of measuring impact and defining indicators is to provide an evidence base for policy makers – every policy area competes with other areas. Hence it is important to make a case supported by good arguments.

The study has looked at the levels of primary/secondary/VET education. 10 case studies have been prepared – countries have been selected that have a strategy on entrepreneurship education in place, under the work assumption that if a country has put a strategy in place, they would hopefully monitor it.

Indicators for impact on individual, economic, societal factors have been mapped. Indicators on longitudinal effects have been taken into account (if you have an experience in secondary school, when is that going to turn into an impact that is going to impress a policy maker).

In a nutshell, the following observations have been made:

- Limited and patchy availability of data;
- A broad mix of data sources, very difficult to compare across MS and regions;
- Some recent initiatives in recognition of this gap: EU, GEI (WEF), OECD;
- A substantial number of entrepreneurship education could be identified – however, there is little systematic monitoring or assessment.

Concrete outcomes of the study are

- Only 7 of the 13 case studies had an enterprise or entrepreneurship strategy which made reference to entrepreneurship education;
- Only Belgium (Flanders) and Denmark were identified as having a 'monitoring framework' of sorts in place for entrepreneurship education;
- Just over 30 common indicators – of which 20 mentioned 4 or more times (out of possible 13 mentions).

The main conclusions were that

- Policy and activity in entrepreneurship education continues to grow – but monitoring and evaluation frameworks underdeveloped;
- Recent distinct and common European intervention model has been developed based on key competence – which could form the basis for framework and cross-country monitoring;
- Study suggests skeletal framework of indicators ('hard' and 'soft') and data sources exist to populate this framework;
- Data are weighted towards outcome and impact indicators and especially economic outcomes (as against key competence outcomes) – and limited longitudinal dimension;
- International surveys in situ – GEM, Barometer - alongside national labour force statistics.

On the Output and impact level, common initiatives (GEM and Eurobarometer) can be identified. The impact level is the level that is most systematically monitored. Projects are monitored very well, but then the impacts are on a very small scale.

As an aim, it would be interesting have 2-3 common indicators across Europe on each level to point out connections and have an evidence base that supports policy making.

2.7 Case Study 1: GEM

Jonathan Levie, University of Strathclyde, presented an overview of GEM and the results of the 'GEM Special Topic Report on Education and Training' published in 2010.

He reported that the GEM was first introduced 15 years ago when stakeholders questioned how many entrepreneurs there are in specific countries. To date, 85 countries are regularly monitored. GEM measures different forms of entrepreneurial activities across the world. It comprises standard measures that are updated on a yearly basis, but also addresses special topics. In 2008, a special topic report on education and training was carried out.

2000 people were asked at random whether they ever had entrepreneurial training; and if yes,

- What effect does it have;
- Does the effect vary across contexts;
- Does the type of training make a difference;
- Has it been general or specific training;
- Did it take place in school, HE or CPD.

The caveats to be taken into account were: Representativeness, self-selection, delayed effect, multiple sources of training, and levels of evaluation.

The main outcomes showed that:

- 21% had received training (the proportion varies from 6% in Turkey to 49% in Finland)
- Assessing the gain from training (propensity), very small numbers (2%) in terms of start-up rates were found. Interestingly, countries like Finland and Denmark who do a lot in EE show no significant 'gain from training'.
- The higher the population numbers, the lower the gain from training.

The key conclusions were

- Training can increase awareness of entrepreneurship, increase skills self-perception and heighten intentions.
- However, the gain in early-stage entrepreneurial activity from training is lessened in countries with high TEA rates and/or high levels of trained individuals.

Jonathan Levie acknowledged that the outcomes are not quite understood yet – e.g. there might be quality issues (what training was it and how good was the training). Hence, further research could also look at quality, type and source of training as possible additional effects on gain from training.

In a national level study (The effect of general and specific training in starting a business on nascent entrepreneurial activity: Does the source of intervention make a difference? - UK), more detailed research was undertaken. It was asked whether types and sources of entrepreneurship training affect an individual's propensity to try starting a business.

Here it was found that

- General business or enterprise training has no significant effect on propensity to try to start a business;
- **HOWEVER:** compulsory specific training in starting a business at school does have positive effects on both nascent entrepreneurship and intrapreneurship;
- **ALSO:** compulsory specific training in starting a business at college/university has positive effects on nascent intrapreneurship;
- **BUT:** no significant effect found of any compulsory training on the odds of being a new business owner-manager (just possible self-selection effects) after controlling for previous start-up experience.

Hence, while the impact of EE on immediate start-up activities seems to be quite insignificant, there seems to be empirical evidence that EE has an impact on intrapreneurial activities. So in some countries, there may be a significant spill-over to established businesses through more entrepreneurial employees. Also, there are hints in the results that context matters: context specific training is more likely to be experiential and this may be key to impact.

However, there is still a lot of additional research potential within the data and significant work that can be done, to get solid results on the impact of entrepreneurship education and training.

2.8 Case Study 2: Denmark

In Denmark, a joint strategy implemented by four ministries in a Partnership (• Ministry of Business and Growth, Ministry of Science, Innovation and Higher Education, Ministry of Children and Education, Ministry of Culture) is in place. The strategy is supported by large Danish companies and organisations. The aim is to give all students in Denmark an introduction to EE, understood as follows

'Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social.'

However, currently (2010) only 10% of students in Denmark (from first grade to PHD level) participate in EE– which is far away from the benchmark 'all students'. To improve this figure, it is the objective to have more and better courses in EE and to map if each year: more students get interested in EE.

Lene Vestergaard from the Danish Foundation for Entrepreneurship presented a longitudinal study that has been started in 2011 to measure the impact of entrepreneurship on a cohort of approximately 900 students born in 1996. The effects of EE are measured as behaviour, not as outcome.

That cohort has been asked questions after participating in a compulsory 9th grade EE project. Students indicate themselves that they were

- Happier about school
- More confident of the future
- Have higher ambitions regarding education and future career
- Are more aware of their value to society
- Most young people (95%) are positive towards entrepreneurship
- A small percentage (2,4%) are in the process of starting a company
- More than fifty % (53%) would like to become entrepreneurs.

On graduate level 556 students enrolled in 15 different EE programmes have taken part in a survey started to measure entrepreneurial self-efficacy. The results are specifically interesting with regard to nascent entrepreneurs:

- 31% of students enrolled in a EE programme are in the process of starting up a business;
- 11 % in the control group do so.

Apart from that there was no significance difference between the EE group and the control group.

The study will be continued, with the hope of establishing a correlation between EE activities and entrepreneurial activities.

A participant asked if the study considers a possible correlation between to the actions / the personalities of the teachers and the outcome. Teachers delivering EE might teach differently – it might be worthwhile to look at the style of teaching: Maybe the happiness of teachers might reflect the happiness of students.

The presenter answers that this hasn't been done yet, but might be an interesting factor to take into account.

2.9 Case Study 3: Creative Partnership Programme

Paul Collard, Creativity, Culture and Education (CCE) discussed the existing instruments of measuring learning outcomes (e.g. PISA) and their suitability to measure creativity.

He points out that there is a test-score/interest paradox: The students in those countries that score high on passing tests, score low on interest and motivation (measured by answers to the competence: 'I believe I can make a difference').

Consequently, no correlation between being good at passing tests and having a motivation to make a difference can be stated. It might even be fair to say that the competence to pass tests makes pupils feel less competent and less effective.

When it comes to entrepreneurship, this is a fundamental issue. Teaching knowledge is senseless if teachers fail to stimulate confidence.

Paul Collard referred to the UNESCO 4 pillars of learning

- Learning to know
- Learning to do
- Learning to be
- Learning to live together

He stated that if the two last bits are left out, a society will end up without entrepreneurs. Therefore, he thinks teachers should be equipped with a simple 'language' to detect creativity and should be able to reinforce it.

A simple definition of creativity would be

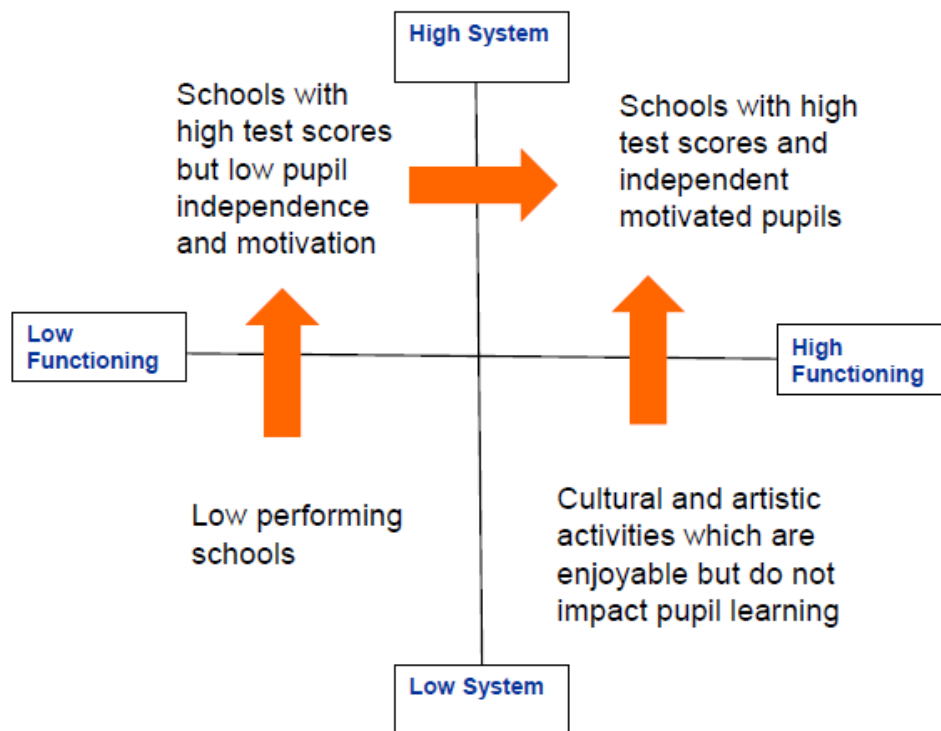
Being Inquisitive	Wondering and Questioning Exploring and Investigating Challenging assumptions
Being Persistent	Managing uncertainty Sticking with difficulty Daring to be different
Being Imaginative	Playing with possibilities Making connections Using intuition
Being Disciplined	Crafting and Improving Developing techniques Reflecting critically
Being collaborative	Cooperating appropriately Giving and receiving feedback Sharing the 'product'

Paul Collard stated that he is aware that teachers don't have much time in a school day to allow for learning like that. Children turn up full of creativity and are being muffled. Creative behaviours are actively suppressed due to constraints of time and space; which makes schools a place to educate those skills out of children.

But: If children are not allowed to come up with own ideas, they don't learn it.

Paul Collard then presented a diagram which points out that in order to achieve the best results in creativity and test scores, schools need to be highly functional with a high input on system level.

The diagram is presented below:



Currently, there is too much teaching, not enough learning. But, according to his experience, if teachers are being shown what they can do differently and what the gain is, they can be convinced quite quickly.

2.10 Check-out

Elin McCallum closes the day by summarising the feedback of the participants who stated that it is important for the measurement specialists to involve the education community in the process. Teachers and schools need to have a say in what is being measured and how that can be done.

Furthermore, she pointed out that on Day 2, there would be more time for participants to work on the topics chosen for the sub-groups.

3 Day 2

3.1 Introduction to Day 2

Elin McCallum greets the participants and pointed out that the day would consist of the following elements:

- The wider context: Making links to other activities in DG EAC (the new 'Erasmus for all' programme, the work of a TWG on measuring key competences and the work of an expert group on measuring creativity);
- Group work on processing the presentations heard on Day 1 and Day 2 on measuring impacts;
- Group work on the outcomes of the sub-groups;
- Group work on refining the work programme of the sub-groups and on planning the upcoming meetings.

3.2 Making Links

In order to make sure that the participants are informed about other programmes and activities in DG EAC that might be linked to their work, three short presentations were given.

3.2.1 Erasmus for All – the single Programme for Education & Training 2014-2020

Filip van Depoele, DG EAC, explained the rationale and the content of the new 'Erasmus for all' programme for 2014-2020.

The programme will contribute to the policy frameworks Europe 2020 and Education and Training 2020. It will combine the existing programmes in the fields of Lifelong Learning (Grundvig, Erasmus, Leonardo, Comenius), non-formal and informal learning (Youth in Action) and Higher Education (Tempus, Erasmus Mundus etc.) and will put them all together into one integrated programme that tackles

- Learning mobility
- Cooperation
- Policy support

The new programme will be dealing with all educational sectors with an overall budget increase of 70%. This shows that education has moved up considerably on the policy agenda and has considered being of high importance.

The funding is defined by a multiannual framework (2014-2020). The main aims are to

- Create added value: Show that it is better to spend at EU level rather than on national level;
- Create relevance: Link between policy objectives and spending : Show systemic impact by putting our money at service of policies;
- Simplify and bring programmes together that have the same objectives;
- Create sustained impact at different levels: individual, institutional, systemic/policy; improve comparability of funding (e.g. mobility);
- Build on a solid basis of adaptation and innovation (25 years Erasmus).

The following activities will be funded under the new programme:

- Mobility (students, institutions, programmes, mobility of staff, will also be possible to go outside of Europe – increased opening to countries outside Europe) – a share of 65% of the total volume;
- Cooperation between countries (HE, VET, schools – e.g. work together with companies; Knowledge alliances – create collaboration between HE and enterprises, bring together businesses and HE) – a share of 25% of the total volume;
- Support for policy reform;
- Jean Monnet actions: Promoting excellence in teaching.

The programme will be implemented through the Lifelong Learning National Agencies as well as centralised actions.

The programme has been adopted in November 2011; the main principles are agreed. It will now be taken forward for launch in 2014.

3.2.2 Assessment of Key Competences

Tapio Saavala, DG EAC, presents the work of the TWG on assessment of key competences. Eight key competences have been defined by the European Commission and set out in a reference framework; 'a sense of innovation and entrepreneurship' being one of them.¹

The reference framework has been set out to

- 1) Identify and define the key competences necessary for personal fulfilment, active citizenship, social cohesion and employability in a knowledge society;
- 2) Support Member States' work in ensuring that by the end of initial education and training young people have developed the key competences to a level that equips them for adult life and which forms a basis for further learning and working life, and that adults are able to develop and update their key competences throughout their lives;
- 3) Provide a European-level reference tool for policy-makers, education providers, employers, and learners themselves to facilitate national- and European-level efforts towards commonly agreed objectives;
- 4) Provide a framework for further action at Community level both within the Education and Training 2010 work programme and within the Community Education and Training Programmes.²

Tapio Saavala reported that according to Member States reports, there is much more emphasis now on key competences and cross-curricular competences in schools. Many curricula are open, all possibilities are there. But there is still much work to do to turn schools into an open learning environment.

Assessment has been found a key issue regarding the teaching of key competences. Assessment is important because it gives them goals and orientation – what do I need to learn to pass the test (the notion of 'learning for life' may be too abstract).

- Formative assessment – building structures, to promote that (more process oriented);
- Summative assessment - trying to take into account the skills like team work etc. (summing competences);
- Growing use of peer assessment and self-assessment;
- Assessment as part of the learning process – embedded, not feedback but feed forward. Understanding that assessment is part of learning.

With regard to EE, in the group, the following issues have been discussed

- EE is a very broad ambitious goal. What does that mean for teachers in their everyday life? What tangible learning outcomes should be there?
- How is EE assessed? Is it a competence, is it a subject?
- Which methods of teaching are used and how does that reflect back to assessment methods?
- When you know what you want, you need to find out how to assess it (portfolios, peer assessment, self-assessment, useful tools, examples)
- School culture and learning culture are important factors to take into account when developing assessment methods
- Schools should be involved in process of development to create ownership

Since the group has no concrete examples for assessing EE yet; an email will be send out to participants to collect examples.

¹ http://ec.europa.eu/dgs/education_culture/publ/pdf/ll-learning/keycomp_en.pdf

² Ibid, page 3.

3.2.3 Expert Group in Creativity

Kjartan Steffensen, DG EAC and Ernesto Villalba-Garcia, CEDEFOP, present the work of a technical expert group on indicators on creativity and learning to learn. The group has met 3 times from October 2010 – June 2011.

Its main activities were

- Providing advice on the use of already existing international surveys to measure these competences;
- Discuss the possible use of input (curricula) and process (learning processes, learning environment, teaching styles) indicators as possible complements to outcome indicators;
- Discuss possible pilot actions to take forward the development of instruments;
- Exchange on national experiences in measuring cross curricula competences.

The group found that creativity is not one of the eight key competences, but cuts across all of them. Subsequently the group worked on the development of a set of indicators and benchmarks to measure creativity, by

- Advising on the use of already existing surveys;
- Advise on how to exploit existing material;
- Develop additional measures.

The following possible next short term steps for measuring creativity have been defined:

Step A: Creativity is a complex structure, without an agreed definition and potentially covering many different aspects. To move forward with work towards an indicator on creativity, it is thus necessary to focus the discussion and pin down which aspects of creativity are politically most relevant to measure from the perspective of education and training.

Step B: Identify how these aspects can be made more concrete, i.e. how the aspects link with a set of tangible options/single elements of creativity that can be measured.

Step C: The set of options that could constitute the focus of measurement should be further delineated based on an assessment of usefulness and feasibility (e.g. data availability, costs, comparability across time and space etc.). This should lead to a framework for measuring creativity, determining what aspects are included in the measurement and what is left out.

However, a few open questions are still there in terms of measuring creativity, e.g. to agree on what should be measured - the competences of one individual, the process or the outcomes. It is important to define beforehand what is aimed at; hence, the Member States need to define what evidence they need to promote creativity as key competence.

Consequently it has hitherto been difficult to launch a new tool across Europe. Up to date, it has seemed more feasible to look into how to amend existing assessments and surveys with aspects that are relevant for measuring creativity.

3.2.4 Wrap-up

Elin McCallum made clear that COM will link the different strands of action and look into how a common instrument can be developed. She announced that the rest of day will be dedicated to interactive discussions.

3.3 Measuring Entrepreneurship Education Part 2

3.3.1 Round table discussions:

The members of the group were asked to discuss the following questions in round table discussions.

Based on what we know now about measuring impact of entrepreneurship education

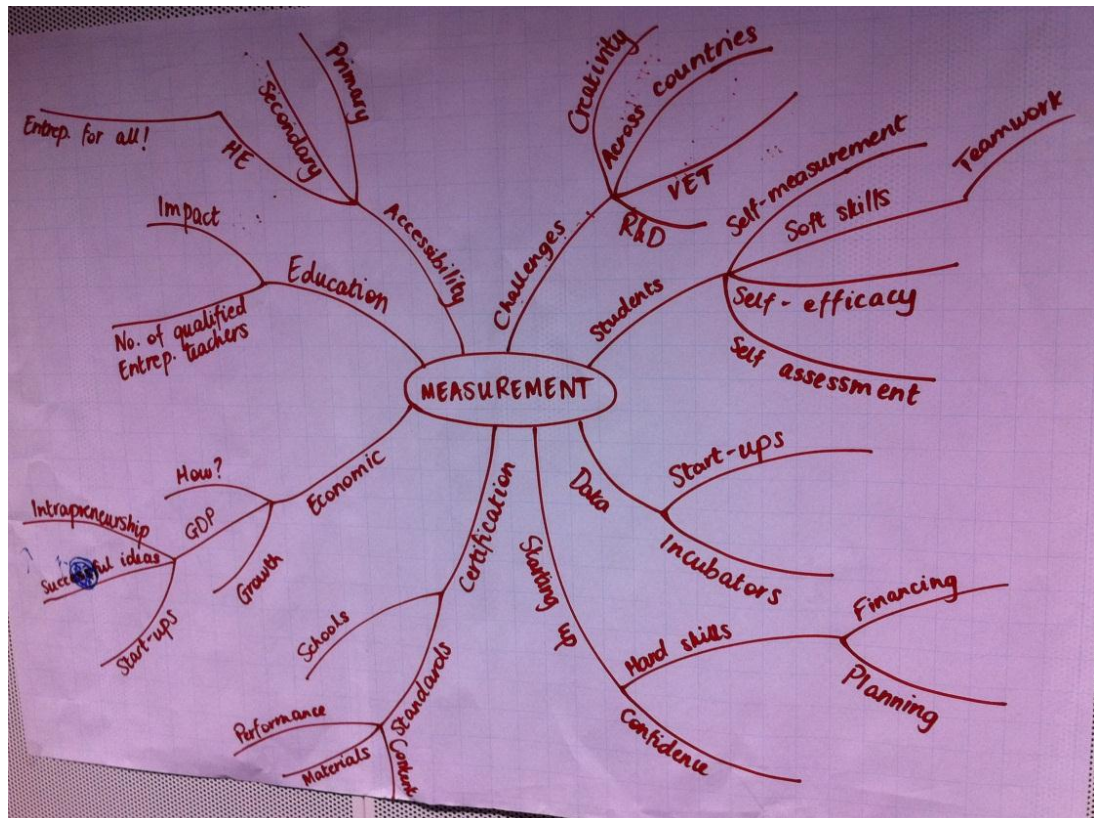
- 1) What is important to include in our Policy Handbook (our recommendations)?
- 2) What is still missing?

3.3.2 Group 1: Two Mind-Maps

Group 1 presented two mind-maps, one related to measurement and one related to the Policy Handbook.

The first mind-map related to measurement shows that according to the members of the group, measuring direct impact of entrepreneurship should be linked to

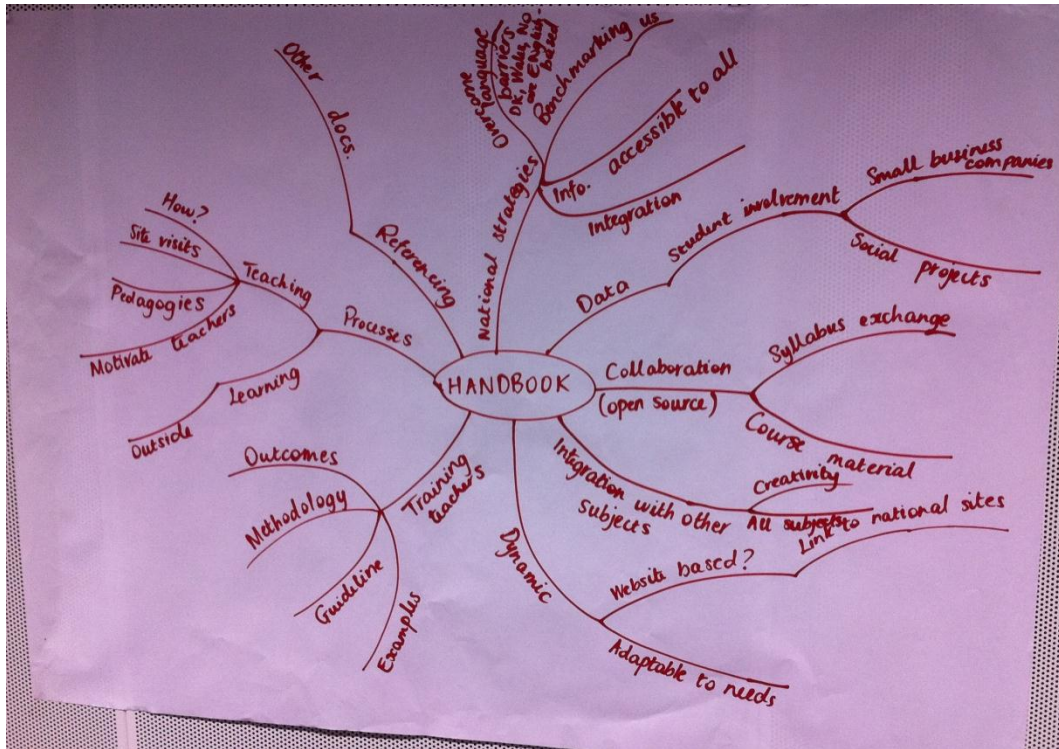
- Output factors such as economic development and GDP development, no of start-ups etc.;
- Input factors such as education, the accessibility of EE for all students;
- As indicators the soft skills of students (e.g. ability to work in teams) could be measured by self-assessment and self-efficacy.



As to the Policy Handbook, the group stated that their departure point was the current agenda of EE in the Member States. They summarised that the policy handbook should contain chapters, addressing

- The Processes of teaching and learning;
- The question of how to integrate EE with other subjects;
- Methods of training teachers;
- Data (from measuring exercises);
- An overview on national strategies.

The Handbook could also be a platform for collaboration (open source).



3.3.3 Group 2: The Russian Doll

Group 2 discussed mostly the definition of EE, which was seen as a Russian doll. The group agreed that EE should not be about the number of start-ups only. Since the concept needs to be 'sold' to policy makers, parents and children alike, it has to have an 'entitlement' for all.

Consequently, it should also be possible to measure each subset differently (each doll in the doll), and for each layers a different matrix should be used. Besides, measurement, assessment was seen as a critical point ('If it isn't assessed; it isn't seen as important'). Since there is not one right answer to the question of how and what to assess, the development of a quality benchmark could maybe be helpful.

Furthermore, the group talked about the idea of a 'template for the report' (an entrepreneurial passport or a transcript of records). This should it be developed on European level and implemented on different national and regional levels; it should allow for a certain flexibility.



The group agreed that a Policy Handbook will only be successful if it is implemented all the way through to the basic level (to practitioners). It should give benchmarks, give templates and methods.

3.3.4 Group 3: Measuring Impact at different levels

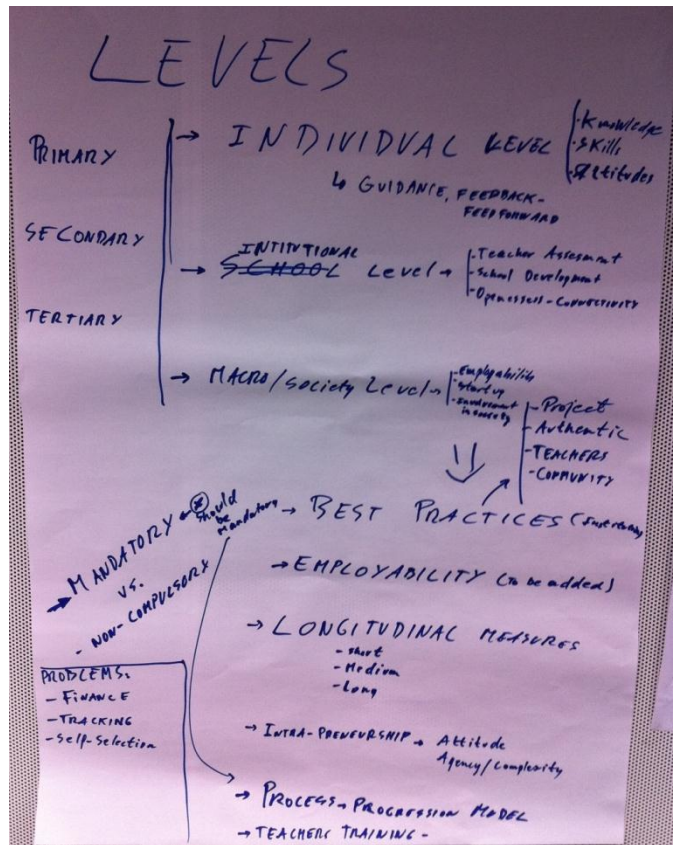
Group 3 argued that any impact measurement has to be designed differently for different levels.

- At the individual level; KSC, attitudes and intrapreneurship should be assessed/measured – differentiating between mandatory or eligible education.

- At the level of institutions, it should be measured how teachers are prepared to deliver that type of education (at all different sectors of education);
- At all levels, longitudinal studies are important. EE might have impact years after delivery. A tracking system for students needs to be built.

For the policy handbook, the group agreed that

- A framework or a progression model is needed to give orientation to practitioners and set benchmarks to be able to identify where you come from and where you go (how much has changed);
- Best practice is important for people to see that how things are done in other countries;
- We need to define a set of tangible learning outcomes for EE at each educational level that are assessable and measurable.



3.3.5 Group 4: What do we measure?

Group 4 stated that, whatever recommendation will come out of the group, they will need to be clear, targeted and simple. There are already so many constituencies and so many regulations.

A simple measurement process should be developed, evolving around

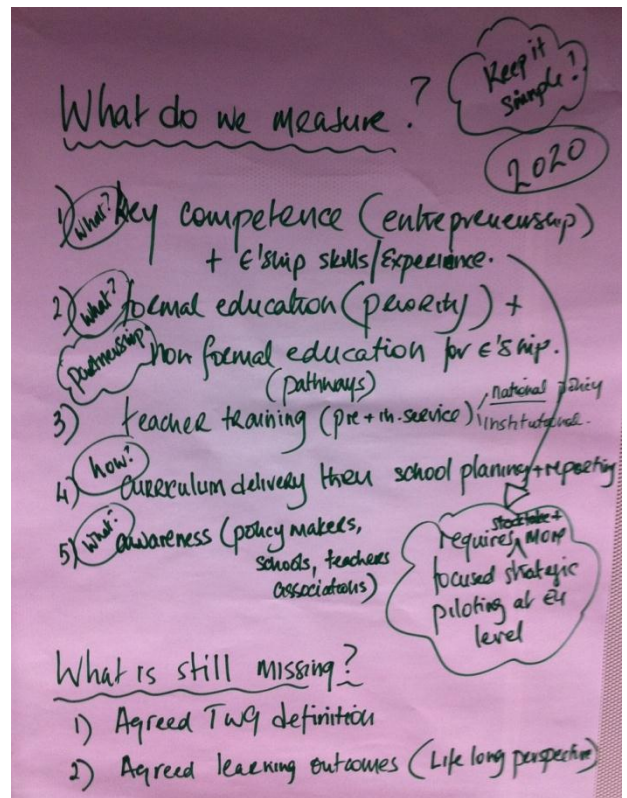
- Key competences;
- And more tangible and concrete EE business type skills.

The group stated that but before something can be measured; a definition of what it is that should be measured is needed. And before that, it needs to be understood what the learning outcomes are. Both are pre-conditions to measuring. Therefore, the 'key competence' EE needs to be demystified, unpacked.

Then, formal and informal educational systems need to join. Each agent needs to take responsibility for what they need to measure.

As to the question how to measure, the group states that if every school had a teaching plan, that would be a primary instrument to capture what happens there. It should be clarified whether all schools have that.

Measurement should take place at country



level and in teacher training institutions. Furthermore, awareness-raising is also a factor that should be measured (how much awareness for the importance of EE is there?). Indicators need to be developed.

In general, a stock-taking exercise is seen to be the first step. Who is working on the issue, and where are piloting projects? How could these help with the further implementation of what happens? And how is this already being measured and assessed?

3.3.6 Q & A

The group reiterates that there is a certain level of confusion about the question of defining EE. Since the understanding of the subject differs in the Member States, the need has been repeatedly stated.

However, on European level, there is already a definition. Elin McCallum introduces the definition so far, developed at the second meeting of the TWG.

A definition so far:

Developing a mind-set to fit a changing context

Mind-set; developing a positive attitude towards entrepreneurship (build on Social Entrepreneurship) and creating an entrepreneurial culture in community, encouraging self-belief and learning through mistakes, a sense of initiative and autonomy.

Partnership & Mutual understanding

Partnership; building a common understanding between all stakeholders to reach a shared goal. Link to - education – business – community. Definition must address multi-constituency target groups.

Skills for Life / 21st century skills.

Qualification development & innovative assessment. Working on employability by ensuring entrepreneurial skills for everyone including skills like innovation, meeting challenges, creativity, questioning, problem solving and working in a team. Financial capabilities and giving students the ability to innovate in all fields incl. social sphere were also suggested.

Future of Learning

Teacher / educator development. The entrepreneurial learning process, empowering peoples own ideas. This is not a textbook course (content and process need to go hand in hand).

Continuity

Entrepreneurship Education between economic educational philosophy and key competence. All learning linked to Entrepreneurship Education. Entrepreneurship Education is a lifelong and life wide issue.

The definition needs to be agreed in the group. A consensus needs to be found and then it needs to be underpinned with learning outcomes.

Regarding the question of **'demystifying the key competence'** raised by one group, Elin asked if there are some individuals who would like to work together with her on recommendations regarding that question. The work task would be to look at definitions, compare them and work out a definition that is then communicated to the other group members and validated.

Frank, Tony, Maria, Anna, Ernesto and Friederike volunteered. They will gather information, put into a more coherent document and **distribute it before the next meeting for agreement.**

TWG LINKS – MID WORKSHOP SESSION:

As it was the wish of the group to get to know better the work that previous or on-going Thematic Working Groups tackling similar subjects have done, four DG EAC policy officer visited the TWG to inform about the processes and results of four other TWGs.

- Paul Holdsworth: Teacher professional development
- Anita Kremo: Learning Outcome, EQF
- Kuhn Nomden: European Lifelong Guidance Policy Network
- Lieve van den Brande: ICT and Education

Suspending their on-going group work, the groups split up for a few minutes. In order to make sure that one member of each group has the chance to grasp the input of the four Policy Officers about their group.

After the short interventions, the group members are asked to feed back into their sub-groups and to exchange briefly about what they have heard and how this could be exploited for their own work.

After the group work session, the groups present their results.

3.5.1 Learning Outcomes:

The 'Learning Outcomes' group aims at defining LO for EE. They would like to 'fill the gaps' from ISCED 3 level on. Their idea is to collect information from Member States of existing practice (in English language). They would then try and collate that information and, on that basis, produce a comparative report with recommendations.

The group envisages this to be done during a PLA that could take place beginning of December in Zagreb.

3.5.2 Stakeholder Involvement:

The 'Stakeholder Involvement' group reports that they have to deal with many entities, and it has been difficult for them to decide which are most important. They finally decided to focus on the partnership between industry and education. Their aim will be to reduce the gap between industry and education, identifying obstacles in order to improve communication and collaboration.

The group has not made a decision yet as to when they could prepare a meeting.

3.5.3 Teacher education and support:

The 'Teacher education and support' reports that used the time to continue their planning for the PLA, focusing on collecting and reviewing data (existing practice) regarding teacher education.

They would like to prepare a PLA that is envisaged to take place beginning of November (either in Denmark or in Wales).

3.5.4 Entrepreneurship – Future of Learning

The 'Future of Learning Group' will continue working together on the frame of reference for curricula – partly oriented at the Common European Framework for Languages – for the fields of entrepreneurial attitudes, business knowledge and skills. Besides the framework, the group would like to structure examples of teaching methods and work out a 'training map'.

Concretely, the group aims at

- Designing a frame of reference for curricula – across all levels of education, pointing out what a learner should be able to do at what level. The frame of reference will show a 'Continuum of learning' and acknowledge various educational structures within the EU member states;

- Giving an illustrated map of methods in entrepreneurship education linked to the frame of reference.

A draft version for the framework already exists in German, which will be translated and checked. Each member of the group will try and find at least two examples of teaching methods. It is envisaged to finalise the work until March 2013. The results of the group work should feed into a group meeting; the framework and teaching map should be validated and finalised with the entire group.

The group will submit a concrete proposal for date, which they have tentatively scheduled for 14-15 March, either in Brussels or Vienna.

3.6 Amended work programme

Since the groups feel that there is still a lot of work to do to prepare meetings and PLAs, Elin McCallum offers to insert an additional one-day meeting in the first half of September 2012. This additional so called 'developmental meeting' will offer time to the group to continue working on their sub-group themes and input into the policy handbook.

Consequently, the work programme for the remainder of the meetings was amended as follows:

Amended work programme

Date	Topic / Type of meeting
Week commencing 10 Sep 2012 (date tbc)	4th meeting (1 day 'breathing meeting' to continue work in sub-groups on preparing meetings and PLAs), Brussels
Nov 2012 (tbc)	1st PLA – Denmark/Wales (tbc) 'Teacher education and support'
December 2012 (tbc)	2nd PLA – Zagreb (tbc) 'Learning outcomes'
Jan 2013 (tbc)	5th meeting – Brussels (tbc)
14-15 Mar 2013 (tbc)	6th meeting - Vienna/Brussels (tbc) 'Entrepreneurship Education in curricula / Future of learning'
Apr 2013 (tbc)	7th meeting – Brussels (tbc) 'Policy Handbook - Strategies for dissemination'
Jun / Jul 2013 (tbc)	Final Conference (tbc) (explore possibilities of linking to Irish/Lithuanian Presidency)

3.7 Rethinking Skills

Elin McCallum reminded the group of the draft to the 'Rethinking Skills' strategy that Ana Carla Pereira has presented on Day 1 and that has been sent out ahead of the meeting. The group then is asked to have a look at the 'Rethinking Skills' templates and to provide ideas on what how to improve then current draft. A range of ideas were contributed.

3.8 Closing

Elin McCallum announced that next meeting will be held in September 2012. A doodle will be sent out to set dates for upcoming meetings PLAs.

She thanked the participants for their attendance and contribution and closed the meeting.

ACTIONS

- 1. Task group to be set up to develop a working definition of EE for the wider group**
- 2. Task group to be set up to provide concrete ideas on the output or product of the TWG, in addition to or to complement the policy handbook**
- 3. Calendar of dates for meetings until March 2013 to be confirmed and disseminated to all group members**