PLANNING UNITS OF PROFESSIONAL LEARNING:

THE ECIPAR EXPERIENCE IN ITALY

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Abstract

This paper intends to suggest some guidelines to create new methods in teaching, but also to analyse what kind of outcomes can be obtained. Through participant observation, it has been found that results in learning can be achieved only if: the focus is on the student; the skills are planned through a rolling approach; there is a strong coordination among teachers, tutors and coordinators; Learning by Doing is fully implemented. A new approach, defined "Units of Learning" (UoL), has been carried out, since September 2013, in a school for hair-dressers and beauticians in Bologna, managed by ECIPAR (institution for training, sponsored by the National Confederation of Crafts). UoL is a set of multi-disciplinary and coordinated activities, performed in a certain time, to get a cognitive an operative goal. The learners are 17-18 years old students (mainly girls); the educators are professional teachers, but also professional hair-dressers, beauticians and trade agents. The technical competences (hard skills) are melted up with teamwork, communication and negotiation (soft skills). Role-playing, video-making, hair-style/beautician labs are going along with traditional didactics. In this school, it has been detected that UoL method has an influence on creativity, communication, collaboration, critical thinking, and problem solving, which are considered by OECD as essential 21st century skills, highly required by labour market. In fact, according to several entrepreneurs, the mere technical competences are not enough. Good hands are as important as good brains.

Keywords: *Learning Environment, Units of Learning, skills, New Methods*

1. Introduction

At a time of persistent crises and pressing social challenges, "harnessing economic growth for sustainable and inclusive development is more important than ever" (UNCTAD, 2012, p. III). High general unemployment rates are making the transition from school to work more difficult for young people (OECD, 2013), so that their inclusion in labour market is troubled. In fact, people with more work experience are favoured over new entrants. To improve the transition of young people from school to work, whatever the economic climate could be, education systems should give people skills that match the requirements of the labour market, and minimise the proportion of young adults who are neither in school nor in work (OECD, 2013). European Parliament (2006) has defined *skills* as the "proven ability to individually use knowledge and expertise in work or study frames and in personal or professional development". Skills can be divided into *hard* (or technical) ones, on modern equipment, and *soft* ones, such as teamwork, communication, problem solving and negotiation (OECD, 2012). A mix of hard and soft skills is desirable to merely knowledge, because people are living in "an information everywhere society" (Ting, 2011) where *netizens* (citizens of net society) are bombed by a huge amount of information after a simple "Googling-click" (*ibidem*). In this fickle society, the *easy-click* could be a risk for naïve minds, so that schools cannot be just technocratic, but must be aware of their wider goals, built upon individual and social needs, in order to shape the learning process on micro and macro social frames (Brofenbrenner, 1986). Educational systems should not bring out just mere technicians because routine manual activities have been decreasing their relevance (Autor and Price, 2013). Instead, educational programmes should focus on "developing skills and knowledge through innovative approaches" (UNCTAD, 2013, p. 19). According to UNCTAD, these new methodologies are required "in order to create sustainable knowledge sharing processes, promoting networking and cooperation amongst beneficiaries, and continuously developing new learning tools" (*ibidem*). Good hands managed by hard skills are not enough for labour market which is demanding for more and more skills-intensive profiles. Non-routine interpersonal (teamwork, communication and negotiation) and non-routine analytic (problem-solving) tasks are soft skills, and, as pointed out by fig. 1, their importance has been increasing since the '60s. An education which allows to get these soft skills, positively affects employment rates. In fact, across OECD countries, people with these skills "are more likely to get a job, and working full-time, than those without. Unemployment rates are nearly three times higher among people who do not have an upper secondary education (13% on average across OECD countries) than among those who have a tertiary education (5%)" (OECD, 2013a, 38).

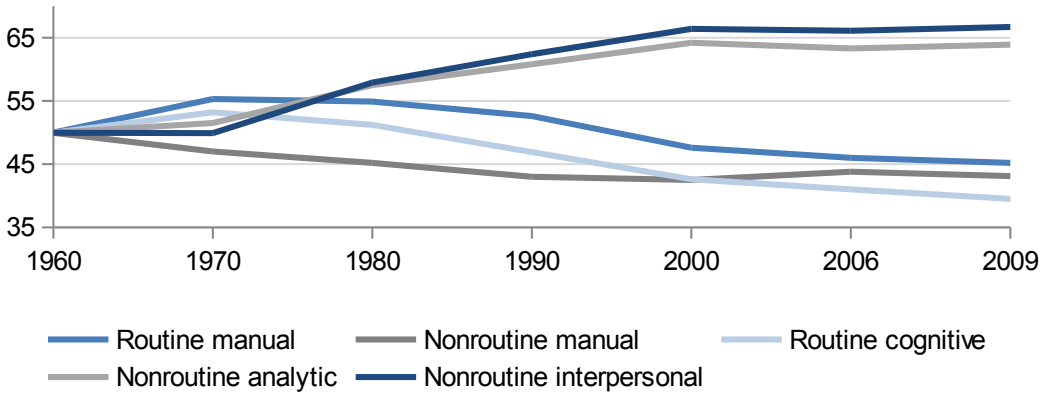

Figure 1 – Skills required by Labour Market. Source: Autor and Brendan (2013)

It can be so argued that "as economies develop, skills needs and job opportunities evolve, making constant adaptation and upgrading the education and human resource development (HRD) policies a necessity" (UNCTAD, 2012, 17). Soft skills are now fundamental in daily work experience, whatever the industrial sector could be, but HRD and educational strategies are essential "not just to provide the necessary skills to investors, but more crucially to ensure that the population can gain access to decent work opportunities" (*ibidem*). The creation of highly-skilled business entities is vital for economic growth and development because it generates: "value added, fiscal revenues, employment and innovation, and is an essential ingredient for the development of a vibrant small- and medium-sized business sector" (UNCTAD, 2012, 19).

1.1 Building competences through innovative methods

The potential for skilled-job creation and skills transfer should therefore be the main criteria in order to decide what the educational system's priorities are. HRD and investment are mutually connected, so that educational strategy "should inform HRD policy to prioritize skills building in areas crucial for development priorities, whether technical, vocational, managerial or entrepreneurial skills" (UNCTAD, 2012, 27). The educational strategy should match entrepreneurs' demands for skilled-workers and skills development even in professional training, which "prepares trainees for jobs involving manual or practical activities related to a specific trade or occupation is a key policy tool to enhance the capacity of local suppliers" (UNCTAD, 2012, 17). In fact, according to Luca Roversi[1], director of ECIPAR-Bologna[2], entrepreneurs now consider technical skills important, but *other* skills are now required by them, such as "to know how to behave in a company". These *other* skills have been defined as Citizenship skills since 2007, by the Italian Decree-Law n. 139/2007 which proposes to consider two different areas of learning, in order to better develop and assess these skills:
- *Cultural Axis*, standard for every school (Linguistic, Mathematics, Scientific-Technological, Historical-Social).

1 Speech addressed during a meeting with all the teachers, tutors and coordinators involved in the Units of Learning project for the hair-dresser/beautician school, in September 2013.
2 Ecipar is an institution for training, sponsored by the National Confederation of Crafts. It manages a professional school, connected with entrepreneurial world, in order to generate skilled-workers for several economic sectors, such as hair-dressing or beauticians.

- *Units of Expertise*, different for every kind of professional qualification.

Higher-order skills are prior in workplaces and in society as they include the capacities to:

- generate, process and sort complex information
- think systematically and critically
- make decisions weighing different forms of evidence
- ask meaningful questions about different subjects
- be adaptable and flexible to new information
- be creative
- be able to justify and solve real-world problems
- acquire a deep understanding of complex concepts
- media literacy
- teamwork, social and communication skills (Dumont et al., 2010, 8-9).

2. Aim of the research

Some guidelines are proposed here to build competitive high-skilled students through a new teaching method, whose outcomes are analysed. This innovative method is defined Units of Learning (UoL) and has been applied since September 2013 in a Ecipar's professional high-school, in Bologna. The UoL methodology tries to answer these questions:

- How to plan a new kind of learning?
- How to trigger collaboration between students and teachers?
- How to involve students?
- How can students become autonomous and responsible?
- How can students get and interpret informations?
- How can students detect connections among different subjects?
- How to trigger problem solving?

The findings of this paper derive from a participant observation of the author, who takes active part to the project as customer-care teacher in a class of 20 teenagers.

3. Literature Review

According to a socio-constructivist approach (Brofenbrenner, 1986; Au, 1998; Powell *et al.*, 2009), the analysis of new methods of learning should consider the process of learning as "shaped by the context in which it is situated and is actively constructed through social negotiation with others" (Dumont *et al.*, 2010, 3). Seven principles have been proposed to guide the design of learning processes:

1. Learners at the centre
2. The social nature of learning
3. Emotions are integral to learning
4. Recognising individual differences
5. Stretching all students
6. Assessment for Learning
7. Building horizontal connections

These principles (Dumont *et al.* 2010) can be the guidelines for the design of all the activities and relationships in Innovative Learning Environments. To be effective in ways confirmed by international research (*ibidem*), learning environments should:

- recognize the learners as their core participants, encourage their active engagement, and develop in them an understanding of their own activity as learners ("self-regulation").

- be founded on the social nature of learning and actively encourage group work and well-organized co-operative learning.
- Have learning professionals who are highly attuned to the learners' motivations and the key role of emotions in achievement.
- Be acutely sensitive to individual differences among the learners in it, including their prior knowledge.
- Devise programmes that demand hard work and challenge from all but without excessive overload.
- Operate with clarity of expectations and deploy assessments strategies consistent with these expectations; there should be strong emphasis on formative feedback to support learning.
- Strongly promote "horizontal connectedness" across areas of knowledge and subjects, as well as to the community and the wider world (OECD, 2013b, 16).

The relevance of the seven principles is not in each one isolated from the others. Instead, they provide a framework in which all *must* be present for a learning environment to be judged truly effective. This framework should be composed by three components: "the pedagogical core, the formative cycle within the organization (learning design, evaluation, feedback and redesign), and partnerships" (OECD, 2013b, 187). Learning Environments should therefore be: constructive, because self regulated learning is fostered; sensitive to the context and collaborative. Dumont's principles try to build a positive learning environment, in which emotions and motivation are exploited to trigger the process of learning. In fact, emotions and motivation are fundamental because they are *gatekeepers* of learning (Au, 1998; Dumont *et al.*, 2010). Positive emotions towards learning experience encourage participation and long-term recall. This deeply affects teaching and learning, "whether negative emotions are a result of classroom experiences or of outside experiences that are carried into the learning environment by students"(Dumont *et al.*, 2010, 3). Motivation can derive from learning in a sham workplace, obtained through labs or role-plays, or in a real workplace, outside the school. This approach allows students to develop hard and soft skills (OECD, 2012) and to become aware of what is relevant in labour world. They can also manage their resources and deal with real obstacles efficiently. This workplace-frame training can also help to motivate disengaged students to stay in or re-engage with the school and smooths the transition from education system into the labour market (OECD, 2012).

4. The UoL Methodology: definitions

Unit of Learning (UoL) is an organic and designed set of learning opportunities to allow a student to build a personal relation with learning, through a direct, personal action to achieve tasks and to create a real good to be proud of and which can be assessed. UoL's practical features are a set of educational activities and didactics methodologies which gives a value to student's abilities in order to create a good/service in a framework that imitates reality and requires multi-disciplinary approach. UoL's main characteristics are:

- Focus on the student
- Planning through a rolling approach: plan-do-check-act
- Formation for teachers, tutors and coordinators
- Learning by doing
- Authentic Assessment and Performance.

UoL is composed by multi-disciplinary and coordinated activities, performed in a certain time, to get cognitive and operative goals, to be accomplished through a creative cocktail of different skills. It is a learning experience which should be

- *Viable*: it is self-fulfilling, unique, multi-disciplinary
- *Purposeful*: it connects learning to identity
- *Assessable*: it allows to get a minimum standard whose results can be measured.

It is an opportunity to get a pleasant and personalized learning, which means a common task to achieve, but several personal behaviours and interpretations allow to get the skills. Contents are *not* adapted to student's capacity, but all the learning process is set by suitable goals for each student. Results can be achieved throughout the application of abilities on available capacities, in order to transform them in skills.

5. Planning the UoL

Step 1: Training Plan

The pedagogical core of the project begins from the skills which every student *must* have at the end of the learning process. The Training Plan is designed by a team composed by teachers and coordinated by tutors, but it is not defined *ex-ante* because it is integrated or modified *in itinere*. It is over only at the end of the course. In Ecipar the pedagogical core was discussed by all the teachers involved at the beginning of the school year and was composed by four elements: learners (who?), educators (with whom?), content (what?), and resources (with what?). Of course, these ingredients cannot affect by themselves the nature of the learning environment and of the outcomes. There is "no guarantee that these elements will be brought together and implemented in effective and innovative ways. But at the same time rethinking each of these core elements – each one by itself and especially all four together – is to address the deepest core of any learning environment" (OECD, 2013b, 187). The training plan should:

- Ensure that learning is social and often collaborative.
- Be highly attuned to learners' motivations and the importance of emotions.
- Be acutely sensitive to individual differences including in prior knowledge.
- Be demanding for each learner but without excessive overload.
- Use assessments consistent with aims, with strong emphasis on formative feedback.
- Promote horizontal connectedness across activities and subjects, in and out of the school (OECD, 2013b, 188).

In this first step, UoL is considered as a possible framework which can be modified afterwards, according to traditional Rolling Approach. This means that final skills (goals required by standards of qualification) come first, how to get the skills (UoL) come later. The questions to be answered by the planning team are:

- Who are our students?
- What do they need?
- Why are they here?

Ecipar's students are digital-natives and multi-cultural teenagers. Many of them have experienced underachievement at school, so that they consider themselves as losers and learning process as a frightening thing. Their development tasks are:

- to build an identity as a citizen and as a qualified worker
- to perform professional and social responsible behaviours
- to achieve emotive independence.

In order to trigger Teachable Moments, other questions must be asked in preliminary discussion:

- What can motivate students?
- Where are they strong? Where are they weak?
- How to get educational success?

In Ecipar, the main issues are: gratification, repetition, more roads to get the goal, collaboration, personal relations.
Finally, a discussion about the teachers should occur, to answer this question:

- What are teachers' difficulties?

In Ecipar, this question was not deeply answered, but it was detected that the main teachers' constraints are:

- To work with fragmented target with different abilities
- To raise cultural skills, but also to keep a professional identity
- To consider oneself as a teacher, and not just a hair-dresser, beautician or trade-agent
- To work with a lack of coordination between tutors (who have a daily relation with students) and teachers (who have an occasional relation with them).

Step 2: Planning a draft of the UoL
The training cycle (learning design, evaluation, feedback and redesign) is planned through the Rolling Approach (plan-do-check-act). This allows to avoid that a rigid project is applied to a living and fickle group. Planning is therefore just a draft, a guide, and changes are highly recommended.
Step 3: Identifying specific learning goals
It can be argued that teachers must deal with a great complexity, because specific learning goals must be detected for each class, which is a concrete group of students with different personal skills.
Step 4: Converting every learning goal in learning tasks
Tasks must be students-friendly: they must be perceived as something that can be individually achieved. For this reason, didactics must be based on *doing*, which is the reason for learning. Students understand why they are studying something and what they need to improve.
Step 5:Processing the UoL
Goals, activities, ways, time and methods, assessment must be defined.

6. Setting a UoL: the Ecipar's experience

Ecipar's project, whose title is “Promoting my Shop”, is composed by ten points.
1. Planning Educational objective: knowledge and abilities to be obtained
The objectives are: to get aware of a real shop dynamics and services; to build a visual merchandising project; to get customer satisfaction; to manage selling techniques.
2. Intermediate/final results
Teachers demand students for:

- an elaboration of a questionnaire and an analysis of it
- a creation of a concept-shop throughout the collaboration of different teachers (hair-dressers, beauticians and customer care for the Technical skills; for Citizenship skills, the teacher of Italian)
- a creation of a real shop, with the collaboration of the teachers of informatics, Maths (Citizenship skills) and safety, hair-dressing and cosmetology (Technical skills)
- an ideation of a leaflet, involving teachers of informatics, customer care, hair-dressing and cosmetology

3. Skills required
According to the Annex 4[3] of the *Conferenza Stato-Regioni* 27/7/2011, the minimum standard skills required at the end of the learning process are:

3 The headline is: *Standard minimi formativi nazionali delle competenze di base del terzo e quarto anno della Istruzione e Formazione Professionale*

- *linguistic skills*: these deal with a proper management of the communication in Italian language, and a correct choice of language forms and codes which are suitable for personal and professional frames.
- *maths, science and techs skills*: students must solve problematic situations dealing with their professional frame through maths-scientific models.
- *historical socio-economic skills*: students must identify the specific culture, the rules and the opportunities of their professional frame in order to satisfy personal, customer and company demands.

At the end of the process, every student involved in the UoL should:

- Properly communicate in a professional framework.
- Positively behave in a professional framework.
- Be able to build positive relations with the customers.
- Know and use the hair-dressing/beautician techniques.
- Properly analyse the customer's feature to suggest and sell a product/service which is relevant for the customer.

4. Target: *the features of the class as a whole, and of a part of it*

The class is composed by 21 teenagers (one male). Four girls come from Moldova; they all speak fluent Italian. A boy comes from China; he speaks a poor Italian. A girl comes from Albany; she speaks fluent Italian. A girl comes from Nigeria; she speaks a poor Italian. Many girls lived previous negative school experiences and had poor skills as defined by the Cultural Axis. The class has been often divided in small groups (4-5 members).

5. Prerequisite: the minimum level of competences required to begin

Just basic Technical and Citizenship skills were required. This is a weak point of the project, because the minimum level was not shared by all the group, even if it was taken for granted.

6. Time: the global amount of hours and how the calendar is structured

The UoL has been spread during all the school year: from September 2013 up to June 2014.

7. Methodology

Real services on puppets/models; role-playings; video-makings; art labs; traditional frontal lessons; computer labs. These activities are complementary to traditional methodology.

8. Resources

- *Who:* Teachers' background is highly diversified: there are professional teachers, but also hair-dressers, beauticians and trade-agents who work as teachers, even if their background deals not with education.
- *What:* Complete set of hair-dressing and beautician tools as didactics materials; camera; paintings.
- *How:* Meeting with external stakeholders (professional hair-dressers/beauticians).Visits to Business Fairs and real companies. These connections with external partners extend learning environment's boundaries and fill school with new ideas, expertise and perspectives.
- *Where:* Classrooms and labs of hair-dressing and beautician; computer lab; designing lab.

9. Assessment: how and through what is possible to obtained a valuation

Annex 4 of *Accordo Stato-Regioni* 27/7/2011 points out the standard to be assessed. Teachers make evaluation on: real services of cut, comb or colour, writings, designed plan, video-making, presentations in Power Point, role-playing. Video-making is a widely exploited tool (Seidel *et al.*, 2011), because observations can provide a detailed description of student behaviour and may therefore be a good method for assessment.

10. Sharing the advancement

The formative cycle composed by learning design, evaluation, feedback and redesign must imply a steady follow up to share the progresses among all the teachers involved. It can be obtained through mailing and meetings. This has been detected as a problematic area.

6. Findings: a SWOT analysis

Strength: The more students are involved, the more they learn

A clear difference has been detected in outcomes, deriving from different learning methodologies. When a traditional school model was adopted, the assessment's result was worse than when innovative learning models were adopted. In November 2013, a traditional written exam occurred which consisted in ten questions to be answered individually in 50 minutes. It was therefore part of a stereotyped schooling model. The average votes was 70/100. Students with poor Italian had bad votes. In March 2014, as part of the UoL project, the whole class was divided into four group to analyse what happened during their stage period in several companies. Every group exploited a questionnaire, created by the teacher, to get information and made four different research dealing with: business model of the companies; Non-Verbal Communication of customers; managing principles; trade models of the companies. Every research was summed up in a poster, created and painted by the students. At the end, every member of the group explained a part of their research in front of a video camera. The average votes was 95/100. Students with poor Italian also had good votes because they were involved in the project and helped by other students. In general, it has been found that creativity, public speaking and problem solving were positively exploited by the groups to accomplish their tasks. It can be so easily assumed that learner's engagement is fundamental. Positive emotions and motivation are triggered if students are involved in the learning process. Giving the learners a leading role in the design and implementation of their own learning means "to rethink one of the fundamental assumptions about schooling. The stereotyped traditional model is oriented towards conformity and control in which the students' role is essentially as a passive recipient, not an active player and designer" (OECD, 2013b, 190). Students' engagement is encouraged when they are compelled to build their personal learning process. It has therefore been found that UoL avoids the passive *conformity and control* schooling model.

Weakness: Lack in coordination

An educational organization operates informatively: information must be constantly fed back to the different stakeholders in order to check and, eventually, redesign strategies for further innovation, according to a Rolling Approach. This continuous formative cycle (learning leadership and design, evaluation, feedback and redesign) not only affects the organizational dynamics and choices, but it also strictly connects learners, educators, content, and resources (OECD, 2013b). Due to the multitude of stakeholders involved, a *strong leadership* is essential to coordinate the learning design and to check how it has been put in place. Teacher engagement in professional learning is another key aspect of the planning and implementation process. Information richness about learning strategies, students and learning outcomes quickly becomes overloaded unless information is gathered by a gatekeeper who knows what is relevant and how to convert information into meaningful knowledge for all the stakeholders. This means that "the feedback and reflection process is deliberate, not haphazard" (OECD, 2013b, 187). The UoL innovations must therefore refer to a cyclical and on-going nature of change, that involves design and redesign unfolding over time, and can lead to transformation only if sustained. Unfortunately, schooling routines are so familiar that they deeply affect what occurs. The predominant role of the single teacher, sometimes his/her laziness, highly segmented classrooms, standardized timetable structures, and traditional approaches to teaching and classroom organization (OECD, 2013b, 187) are the deep-rooted organizational structures that undermine innovation. Moreover, the lack in coordination between teachers and tutors and an inefficient sharing of information have been the worst organizational issues observed throughout the ECIPAR's project. Possible solutions could be: different ways of grouping teachers; regrouping learners; rescheduling learning; changing

pedagogical approaches and their mix; weekly and monthly reports of the progress, written by tutors and shared by all the teachers. By rethinking standard group sizes with educators and learners, sometimes with large amounts of learners working with several teachers through small group and individual study, greater flexibility would be introduced to do different things at different times. Innovating educational methods must go hand in hand with innovating the organizational dynamics (OECD, 2013b, 187).

Opportunities: avoid old models

It is commonly assumed that traditional school's main features are: whole-class teaching and poor personalization. These are considered as *social* elements. However, there is also an *individual* approach, because the highly personal understanding of learning is intended as something done by each individual inside their heads, without any collaboration with other learners. UoL methodology contrasts this stereotyped schooling, and points out a shift which involves the balance of what is social and what is individual in schooling. This is not "a linear matter of moving along a single dimension to have more or less social engagement or private activity, but a shifting balance" (OECD, 2013b, 189). UoL has often turned these stereotypes upside down. Many teachers have tried to operate *personalized* learning programs that rejects "one size fits all". They test different mixes of small group, individual research and study, off-site and community work. At the same time, UoL is open to other "stakeholders helping to define strategies, curricula and legitimate knowledge, and to serve as educators" (*ibidem*).

Threats: to manage a lot differences

In the class observed, interactions are not so easy and must be continuously stirred up by teachers. Furthermore, the poorer the Citizenship skills are, the more difficult interaction and communication are. In fact, daily activities in schools are made of large amount of differentiated students. Besides, education is affected by a social frame rich in diversified inputs. All these reasons should give a new function to schools: to build a personal awareness which can give a positive sense to individual experiences. This means that schools must be as inclusive as possible and accept "the responsibility to promote a cognitive self-development or cognitive flexibility" (Pacifico et al., 2012, 12). In Ecipar's schools, the main part of the teachers are professionals that are supposed to be also good trainers who can positively manage all these differences. This cannot always occur, but unfortunately a lack in *paid* training for educators has been detected. This could trigger a process of de-motivation among the teachers who could adopt the easiest, old learning methodologies based on discipline, order, and obedience. Students' curricula have changed, but the autocratic model of education keeps on being untouched.

7. Conclusions and suggestions

Promoting access to skills-intensive and high-quality job, is a key point for an inclusive economic growth, so that any educational project should trigger an improvement of hard/soft skills, but also of the ways these skills are used. It can be assumed that HRD "is a crucial determinant of country's long-term economic prospects. The availability of skilled, trainable and productive labour at competitive costs is a major magnet for efficiency-seeking investors" (UNCTAD, 2012, 17). Ecipar's experience offers a set of guidelines for HRD. In fact, the UoL approach is potentially social and interactive, and allows the students to be more involved "in intense interaction and indeed be active in the design of their own learning" (OECD, 2013b, 189). It has been detected that it can improve creativity, negotiation, problem solving and communication. All these 21st century skills deal with thinking unconventionally, having time to simply reflect, understanding that there is no single correct answer, and appreciating and valuing failure. For instance, students have been asked to come up with as many original or unusual functions he/she conceived for an innovative

hair-dress service. This means that student becomes an "active, autonomous and responsible in learning process which is not a mere transfer of the information as a content to be memorized, but it is also learning how to learn. [...] the student can embed the information in a personal way into a wider frame" (Spezzano, 2012, 9).

Ecipar's experience triggers a reflection on formative organizations which now should "transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (Baregheh *et al.*, 2009, p. 1334). Unfortunately, it has been detected that the embedding of new methodologies in *daily* practices rather than in isolated cases by particular teachers at particular times, is more difficult than expected. The main concerns should therefore be focused on:

1. Innovation of the elements and dynamics of the pedagogical core. Learning ought to be a pleasant activity.
2. Transformation of the school in a formative organization, strictly connected to entrepreneurial world.
3. Opening up to partnerships to grow social and professional capital; to sustain renewal and dynamism.
4. Paid formation for teacher's professional development, in order to be ready to face the challenges of modern education.
5. Strong connection among teachers, tutors and coordinators to better coordinate and share the learning actions, to be aware of the progresses.

Hence, the challenge must be to design learning environments and tests to assess the quantity and originality of responses to questions that do not demand a specific answer. The crisis is a sort of stress-test on entire economies, so education practice today should be honing student's ability "for independent and co-operative learning and decision-making in order to make sense of the situations in which they find themselves and contribute fully to society" (Cockerill, 2014, 16). In other words, education should forge not only good students, but also good *netizens*.

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