



Taking action and *learning on the flight*...

Teacher2020

Funded by the European Commission 2014-16

© Jan Gejel 2014

Entrepreneurial fluency in teacher education Inspiration scenarios

The scenarios in this paper are fictions. They are created to inspire teacher students and other players in the project, not be models in the project.

The scenarios could have been about all sorts of things, subject or themes. The important thing is, however, not the WHAT, but the HOW.

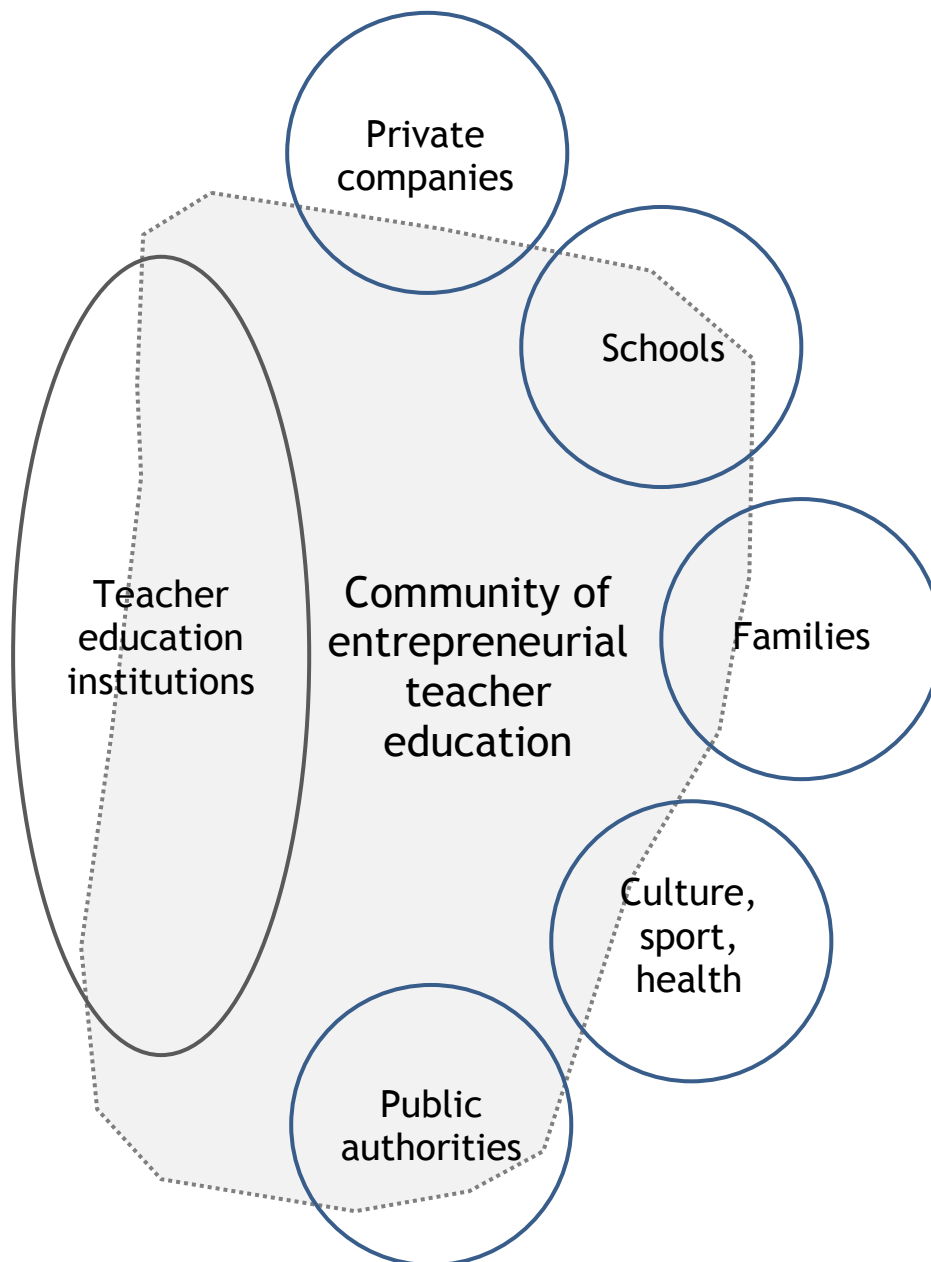
The difference between the small-scale and large-scale scenarios is, besides volume and time and complexity, that large-scale scenarios illustrate initiatives intending to create something in real life that was not there, which is the fully unfolded entrepreneurial scenario: impacting reality and learning through impacting reality. The difference is explained further in the paper.

Entrepreneurial learning looks very different depending on the point of view and the context. In this paper, as in the project, the point of view is fostering entrepreneurial mentality and fluency in teacher education, and this means that the focus is on the capacity building of teacher students and teacher educations.

[As this is a draft paper, proof-reading and further editing has not been undertaken in this version]

Communities of entrepreneurial learning from a teacher education perspective

The figure illustrates to what extent (grey field) different community sectors and players are involved in entrepreneurial teacher education



RECOMMENDATIONS

Not only classes can be involved, also teams of school kids, or even cross-age or otherwise mixed teams, as this fosters entrepreneurial spirit

Parents and families should be involved as resources whenever possible and realistic, as it bridges between public and private

School teachers and teacher education teachers should follow and capitalize from all entrepreneurial initiatives driven by teacher students

The school kids and the teacher students should exploit social networking as much as possible, as entrepreneuring is closely linked to such networking forms

All players should assume the role of reporters and journalists to document activities with creative media, as this is an important element in entrepreneuring

Small-scale scenarios - trying out...

[Small-scale scenarios are small ideas for “tasting” what entrepreneurial learning might mean. There is no intention to unfold the ideas into real-life projects or to create something in real life that was not there. They are foremost examples of how teacher students and schools step by step can open up to the community and create ideas that go beyond traditional schooling and with entrepreneurial potentials. In Teacher2020 such small-scale scenarios are in particular relevant to the 1st year’s 4 months experimentation. However, it is extremely important to be aware that some of the small-scale ideas might very well be tuned into large-scale scenarios later in the project]

General criteria

Link to real-life challenge

Involve community

Beyond school

(Small-scale entrepreneurial scenarios do not intent to create something that was not there)

SCENARIO IDEA 1



Gaming

AGE From 8

SUBJECT AREA Digital fluency

Digital gaming is a huge economy and has a great impact on social life and learning. Most kids are involved in digital gaming, including online gaming.

But, how do you create games? Who create games? How do you invent the story and the rules? What programs do you use? How can you learn more about digital games?

Teacher students can involve game designers, both local ones and designers reached in virtual spaces, to work on these challenges with the class along a number of sessions.

The work should include gaming in social networks.

The sessions can include visits to game companies and digital gaming educations.

Interested game education students or game companies can decide to use the class as inspiration to new stories, games and game rules, including new ways of online gaming.

[Expansion: create games]

SCENARIO IDEA 2



Wind power

AGE From 10

SUBJECT AREA Energy

Climate change, pollution and increasing energy prices - all this is well-known.

What can be done? Wind power is an increasing alternative, all over the world.

Challenge: how can we take the power of the wind and turn it into electricity for the computer and the television? How much energy do you use at home?

The idea is to find out how the wind can be used as an energy resource. What is a wind turbine and how does it work? Who makes them and transport these “monsters”? Where to put them? Why don’t more people use them?

The class can contact leading wind power producers in Europe, for example Vestas, the world market leader.

People from the company can visit the school and lead sessions, the class can work with them online through chatting and skypeing, or the class could plan and organize a visit to the wind power factory and/or to wind turbines near to them.

[Expansion: explore your use of energy in your house or in the school; promote wind energy in your community/region]

SCENARIO IDEA 3



Eggs

AGE From 8

SUBJECT AREA Ecology

Why are egg prices so different in super markets? Why are the eggs different?

Why are eggs healthy or dangerous?

The challenge is to open up the field of ecology by following the eggs from the production of eggs to the eggs in the super market.

What does the different “types” of eggs mean? Why are some eggs called “ecological”, others not? How can the use of eggs be unhealthy?

What about animal ethics?

The idea is to ask all the questions and then follow through field visits different types of eggs from production to marketing and sale.

Farmers, authorities controlling the quality of eggs, ecologists and researchers might be invited to lead sessions along the field work.

[Expansion: using the case of eggs as a starting point for wider exploration of ecology, including ecology in your community and include various political approaches to ecology in your community]

SCENARIO IDEA 4



Bombs

AGE From 12

SUBJECT AREA History / Society

Again this morning: Israel bombs The West Bank or Gaza.

Why again? Who is right, who is wrong?

What is the long and deep background to these ongoing and unresolved conflicts?

To what extent is religion involved, politics, economy?

The idea is to assume the roles of detectives and trace the conflict wherever it leads.

But the idea is also to leave the classroom, and to engage in very different activities:

- Social networking with young people or school kids in Israel and in Palestine
- Inviting Israeli and Palestine migrants to join sessions in the school
- Create funding to invite young people from the two “countries” to the community
- Raise funding to visit for example Jerusalem and to visit a school in Israel and Palestine

[This initiative is complicated, but important as it is the teacher students, their teacher education and the local school should team up to make it happen. It is likely that only some of the suggestions activities are possible]

[Expansion: permanent collaboration with a school or a class in Israel and in Palestine]

SCENARIO IDEA 5



Lost buildings

AGE From 10

SUBJECT AREA Economy

In many countries, and especially in some parts of Europe, one can watch hundreds of abandoned buildings - either old building not used anymore or new buildings not completed and used.

What happened? Why are these building “abandoned”? Who is responsible and what will happen to all these building?

The idea is to assume journalistic roles and find the secrets of old buildings not used anymore and new buildings left in the middle of the building process.

The challenge includes a lot of visits to lost buildings in the local area and in the region, including visually documenting the state of those buildings and the history behind.

It also includes inviting different professionals and authorities to be interviewed by the class - either in the school or at their work place. Special attention could be given to what political initiatives will be taken to solve the problems.

Part of the exploration will be focused on the economic factors leading to lost buildings.

The initiative might result in a creative documentary delivered to the local media.

[Expansion: how could these builds be used in new creative and artistic ways, and how could young people create projects to make that happen?]

SCENARIO IDEA 6



Chinese 正体字 繁体字

AGE From 10

SUBJECT AREA Language / Culture

China is the new super power, impacting economy, culture, language and most other global things. The Chinese language is totally different from European languages, as they do not use letters but signs, thus representing very way of expression and “meaning” of things.

The idea is the play with the Chinese language, not to learn it, including how signs are created, how you can “draw” them and how you create “meaning”, and to compare this with the letter based European languages.

The activity includes drawing, symbolizing and other artistic skills.

As there are Chinese people in almost all communities now, and as they are often quite isolated, it is a great opportunity to include young Chinese and their families in the exploration of Chinese signs.

At the same time young Chinese living in China are extremely active in social networks and in social gaming networks and it would be extremely interesting to challenge the kids to work in those networks to learn more about the signs and how young Chinese kids use their language and how they experience for example the English language.

[Expansion: learning some Chinese more systematically; engage more deeply in Chinese culture such as food culture; engage with a Chinese school in virtual forums - or even visit China based on solid fundraising]

SCENARIO IDEA 7



Cross-class

AGE From 10/12

SUBJECT AREA Language / Culture

Today it is really possible for any class to work together with a class in another country. This offers new opportunities to language learning, in particular English. All sorts of communication instruments and platforms are freely available and can easily be integrated in class activates and projects.

The idea is to allow a class or a team from your school, or from your teacher education, to work together with a similar group from another country, preferably from another EU country, based on a joint venture and a joint theme.

Such a for example 3-4 months collaboration should be fully integrated in the school work and mixed teams from both schools could be created.

A variety of communication and visual tools should be used and tested.

If well-planned the collaboration might include mobility of teachers and kids, perhaps funded by the European programs.

[Expansion: the activity can be widened to cover entire schools or even communities, thus offering exceptional resources of learning for teachers, kids, family and community; the collaboration could easily be expanded to 3 or 4 schools instead of 2]

SCENARIO IDEA 8



Big Data

AGE From 12

SUBJECT AREA Digital fluency

In all activities in society we rely on information and especially information on the form of statistics. It is a boring theme for most kids (and teachers), but it need not be - because the world is changing.

The idea is to explore what statistics actually means and how it is produced in traditional ways - including all the problems in statistical data.

Furthermore the idea is to engage in what is now called Big Data, a totally different ways of collecting and processing information across all sorts of digital networks and information banks, and basically challenging the old virtues of scientific statistics.

The interesting thing is that Big Data is driven by for example Google and Facebook and collects information from the networks that many kids are deeply engaged in.

Big data can be explored by the class through guidance from companies using Big Data or through local or national Google, Facebook or online gaming resources, and the activities might include creative ideas for how Big Data can be used in new and unexpected ways, such as “bullying in schools” or “you are what you eat”.

[Expansion: groups of school kids from the age of 12 might find it extremely challenging to work with Big Data people to create new forms of knowledge in this way]

SCENARIO IDEA 9



Water

AGE From 8

SUBJECT AREA Energy

Why water is so expensive; we thought it was for free?

Water and especially clean water is becoming a major problem in the globalized world.

Where does the water come from in your community, in your home? How much does your family pay? How do you save money when using water?

The idea is to explore the circulation and problems of water supply in the homes and in the community of the kids and invite them to work on different ways of changing the consumption of water.

It is possible to add social networking to this activity to find out what kids are doing about this in other cities or countries and perhaps get good ideas from them.

Experts on water supply, action groups working to protect the environment and public authorities could be invited to join sessions with the class and with the kids' families.

[Expansion: school kids could take action in the community and for example create the Water Kids Club working with water challenges in the community]

SCENARIO IDEA 10



Dirty city

AGE From 10

SUBJECT AREA Citizenship / Pollution

Many cities across Europe are dirty: full of garbage in the streets, left by people who don't care. In some cities young people are the worst sinners, as they throw all sorts of things in the streets, sometime including bottles and cans.

This is clearly a value problem: why don't they care?

There are other factors making the cities dirty, such as traffic pollution, but in this case the idea is to address what people are doing every day in their own city and what can be changed through different values.

Thus the idea is to find out what kind of things people and especially young people throws in the streets and what "happens" to this garbage: who is cleaning, where does the garbage end and what does it cost to clean the city on a regular basis?

The class can interact with the streets in the city, with groups of young people, with local authorities and end up confronting the community with its own practice and why it accepts to live in a dirty city.

Those activities can be accompanied by social networking to learn about what dirty cities mean in other countries and what people are doing about it.

[Expansion: such an initiative can easily be developed into a larger project, resulting in innovative campaigns or interacting more systematically with groups of young people, or even through forming a local "terror" group constantly addressing those contributing to the dirty city.]

Large-scale scenarios - going epic!

[Large-scale scenarios are characterized by ideas that are turned into “projects”, requesting considerable time and space and processes. They are epic because they allow the players to experience deep immersion in a mission. Large-scale scenarios are defined by an intention to create something in real life that was not there. Such entrepreneurial learning calls for strong cross-subject collaboration and solid support from the involved schools and teachers. In Teacher2020 such scenarios are especially relevant to the 2nd year’s 6 months experimentation]

SCENARIO 1



The Boys Only shop

HOW IT STARTED

In the school 12 year old kids - the teacher trainer worked with money, economy, and things like that.

They talked about shops in the city. One of the boys said: the girls have many shops to go to, the boys only have a few and very bad. I was looking for some nice jeans, but...

USING THE 4 STEPS

Link subjects to real challenges

They decided to work with money and business from that point of view: no real shops for boys.

They asked why it was like that, and they talked to people in the community, such as people in girls and boys shops...

They found out that there were many unemployed people, but they all wished to open a café or something like that.

Establish relevant collaboration in the community or through social networks

So, they started to create a small idea: what would a shop for jeans for boys look like? Where could it be, from where would we get the jeans? How could we get the money for the start-up?

They started to interview people in the community who knew about such start-ups and people in the menswear business - and at some point they worked with the local bank to find out about the money things...

The teacher trainer made sure that they made some photos and small texts and a few videos on the way, explaining what they did.

Mobilize the resources needed to carry out the initiatives

Now, why not create such a shop - based on all the knowledge they got?

But would it be economically sound? Would people visit the shop and spend money?

Therefore they created a small team to find out about all this and to make a small plan for, how such a shop - called Boys Only - could be created.

The received support from the local chamber of commerce to do a survey among families in the community, asking them about their boys shopping preferences...

They got help from a local entrepreneurship center to set up a plan and calculate what was needed to start up the shop - and they caught the interest of some young people in the community looking for something to create economy.

At the same time they worked in social networks to find out about where to get the jeans and the t-shirts, and to ask how other people did it.

Carry out the mission including bringing about change and impacting reality

After some time they had plans, interested young people (one of them just finishing business school) and a support team willing to go along with the idea. Of course, it took some time to make all this happen, but some day Boys only was actually opened in the city - and of course it was quite successful. In short, through this journey they not just learned a lot, they impacted and changed reality.

WHAT DID THEY LEARN?

Both the teacher students, the normal teachers, the kids, the school and many people in the community learned a lot in the “project”.

They learned to learn, not through books or artificial cases, but through taking action in real-life, solving a need in the community and changing the reality in the community. And they managed to create a shop employed 3 young people full time!

They learned that needs can be addressed, but must be addressed in many steps and through working with a lot of different people outside the classroom.

They learned about business, shopping, money, traditions, banking and much more and they practiced English in the social networks when exploring what other people did. On top of that they needed to work seriously with media to tell their story and to document what they were doing - and they needed to make all this available to others by organizing the material on an open social network site.

THE WIDER PERSPECTIVES

Of course some of the kids started to grow a considerable interest in shopping and clothes for kids and adults, and they were lucky to be able to follow what happened to the Boys Only store.

Some of the school teachers cleverly captured this interest, and created new projects linked to this interest and addressing other subjects.

As to the Boys Only, the plan is not to open Boys Only stores in two other cities - and recruit young people to join the venture and to drive the stores.

SCENARIO 2



Live English

HOW IT STARTED

Teacher students criticized the way they were learning to teach English at the teacher training college.

They said that it did not work and that the kids were not learning anything.

Their mentor at the college challenged them and said: ok, but then find another way.

USING THE 4 STEPS

Link subjects to real challenges

Two teacher students decided to use their traineeship in the local school to develop new ways of learning English.

Of course they would like to bring the kids to the UK for 2 years, but they knew that this was impossible.

So, they linked to need for new ways to learn English to a mix of physical and digital reality.

The school allowed them to try out their ideas with a class of 10 year old kids along a 3 months period, giving them on average 1 full day a week.

The teacher students only had 3 months to plan this “project”.

Establish relevant collaboration in the community or through social networks

They talked to the kids about the idea: to spend one week in the UK first, then work together with the UK kids on online project - and, last, invite the UK kids to their own city for a week at the end of the “project”.

Of course, this plan was quite well appreciated by the kids in the school, and also by their normal teachers.

However, many steps need to be taken. They need to find people in the community who knew about raising money for the visits; they needed to find people in the community knowing about how to set up creative online collaboration; they needed to create a clear idea about what the kids could do together, etc.

After some time they decided to form a small team in the community covering this knowledge, and willing to offer guidance and support, as they were able to see the value in such activities.

At the same time they worked on the internet and in social networks to learn about how other schools worked with English learning in similar ways.

Mobilize the resources needed to carry out the initiatives

One of the major challenges was to raise money and resources for the visits.

Well advised, they explored possible funding through the European mobility programs, but they needed a lot of support for that. They also started to look for a school partner in the UK, and they managed to do that through the teacher educations' international coordinator.

They managed, after some struggling, to raise part of the needed money through European funding, but they had to raise the rest of the money through other sources in the community.

At that point they did a clever thing. They stopped working *for* the kids and started to work *with* the kids. The school allowed them to use some hours a week to work on all this with the kids, even if the "project" was not started yet.

So, they confronted the kids with two big problems:

- We need to find an extra 5000 euro to cover the visits
- We need to find out how we can use online tools to work with the UK kids between the two visits

So, a team of teacher students and kids started to fundraise in the community, and not surprisingly it was possible to raise the 5000 euro for such a good cause.

But it took some work and a lot of talking to people they have never talked to before, explaining the idea and the budget for the visits.

At the same time they started searching for people in the community who could give them ideas about creative ways of working together online - at the age of 10!

Once again they talked to many people, especially young people, and they step by step managed to create a package of good ideas. Some of them, however, were not for free, as they required new online tools, so again the mixed team had to find financial resources outside the school.

Carry out the mission including bringing about change and impacting reality

The visits were organized and in between the kids worked together for more than 2 months, in English and using all sorts of digital tool from Skype to gaming networks and social platforms.

The first visit was used to find out about mutual interests and what to work with online between the visits. The second visit was used to celebrate the collaboration and to plan how this kind of learning could go on and create more language learning.

One of the special results was that the UK kids grew an interest in Italian language, and this gave the continued collaboration and extra dimension: both groups of kids were learning language at the same time.

WHAT DID THEY LEARN?

The teacher students learned to create new learning ways, when the old ones do not seem to work. They learned how to team up with people with knowledge and resources, and they learned to create economy from different sources.

The kids learned a lot about how to take an idea and turn it into reality and they learned a lot of English in quite different ways than they were used to.

All of a sudden they became small "drivers of change" in the community, as other people in the community wished to benefit from the collaboration with the UK school and city.

THE WIDER PERSPECTIVES

After one year of continued collaboration, the school management requested a report on the results of the experiments, and based on that they decided that all classes from the age of 10 should be offered such activities in addition to the more classroom based language learning.

The management also decided to explore possible European mobility funding much more systematically and to establish a community team supported the interaction between the two schools with the perspective to widen the collaboration to other people in the community.

So, the idea grown by the teacher students impacted the reality and brought about change - for many people and in several communities.

And perhaps, and first of all, school kids will now be motivated to learn English, as some of their friends live in the UK!

SCENARIO 3



What do you want to eat?

HOW IT STARTED

A campaign in the city: we are what we eat!

The local school decided to exploit this opportunity to work with food processes, cultural traditions and ecology with 10-14 years old kids.

However, they were not pleased with the idea of simply using the material made available by the municipality.

They contacted the regional teacher education to invite future teacher students to create more interesting activities, still based on the local food campaign.

That was the start of the *What are we eating?* project in the school.

The teacher students were not satisfied with learning about food, they wished to create something in the community and allow the kids to learn through taking part in this.

USING THE 4 STEPS

Link subjects to real challenges

Linking biology, ecology, culture, social science and many other subjects to the local food campaign offered the teacher students a nice challenge.

Food is about health, but also about enjoying new things and other ways of eating.

The teacher students set out to replace simple campaigning by creating a new place in the community, in which people could work with different food cultures.

They wanted to include 2 groups of kids between 10 and 14 from different classes in this quite ambitious activity.

Establish relevant collaboration in the community or through social networks

First they need to negotiate all this with the school, as it was not normal to work so much in cross-subject and cross-classes activities.

They were allowed to work with these 2 groups of kids for ½ a day a week in a period of 3 months.

Then they needed to discuss the initiative with a lot of people:

- With the municipality, as they needed a location
- With people knowing about the restaurant business and about offering food training activities
- With people from different food cultures and able to offer guidance
- And with people with some money...

The idea was to include the 2 groups of kids in at least some of the key activities in this “research” process.

Doing that, they found out that some of the kids were themselves a great resource, as they chatted with very different kids from different cultures in their

social networking and through their online gaming, and as some of the kids of course had relatives linked to other cultures.

So, they got the kids to work more systematically with all these resources to be able to use all this knowledge in the process.

After some rounds of “research” involving quite a lot of people, the plan was to establish a new form of “open restaurant” in the community center, offering a menu with very different food cultures and at the same time involving many citizens in learning about and producing this food.

The 2 groups of kids were missioned to co-drive this project!

Mobilize the resources needed to carry out the initiatives

Along with organizing study processes in the 2 groups of kids on different food cultures about the differences between the food cultures and about the “healthy food” profiles of the different food cultures, the teacher students decided to form a community team working in the project.

The school kids participated as active drivers in this process.

At some point it was agreed to use people already living in the community as primary resource for the new open restaurant. Why search for interesting food cultures, when they are already in the community!

So, the community team they created included citizens from China, the Middle East and India.

None of these food traditions were known or respected in the community.

The idea was moreover to expand the menu and learning activities to other food cultures once the open restaurant was well established.

Therefore the 2 groups of kids all of a sudden found themselves in the middle of a multicultural food project! Not only should they learn from the many aspects of multicultural cooking, they were also missioned to document the process through the use of creative media. They had been playing with such media, but never learned to use it seriously.

The teacher students, the 2 groups of kids and the multicultural collaborators created a small business plan and started to raise the resources in the community.

At this point the teacher students need to negotiate once more with the school and with their own teacher education, as the project was becoming more ambitious than expected.

The school agreed to widen the kids’ participation, but on the condition that the food project was introduced to other classes as interesting learning activities.

Carry out the mission including bringing about change and impacting reality

After some struggling with the financial part of the plan, the community team finally managed to create a new association missioned to establish an open multicultural restaurant and learning center in the community, systematically including

- Local schools and kids to learn in practice about healthy food and food cultures
- Migrants in the community interested in joining the open restaurant

The long-term plan was to include 2 or 3 new food cultures in the open restaurant within a 3 year period, and offering these new cultures for active research and practical learning to school classes, school teams and teacher students.

WHAT DID THEY LEARN?

Evidently the teacher students and the school learned to link to something happening in the community, to reflect on further perspectives, to find out how learning activities could be created from such resources and to take direct action and create something in the community that was not there.

The school kids learned a lot about food and from very different perspectives, including tasting and exploring types of food they never came near in their normal life.

But they also learned to link such exploration to health, to economy, to taking initiative and to intercultural collaboration.

At the same time the kids were seriously challenged to use creative media in a much more serious way that they were used to - and to take responsibility for presenting the project to many different people in the community.

THE WIDER PERSPECTIVES

One of the strong results were that there a very creative link was established between the open restaurant and the local schools and teacher training institution, offering both parties considerable and most useful resources.

Apart from that, jobs were created in the open restaurant, knowledge was created about food and cultures in the community and some of the kids grew a long-term interest in food from different cultures and how to create a living from such interests.

And who knows, perhaps the restaurant or the school will someday create a European project, capitalizing from the experience and taking the initiative to other communities across Europe!

SCENARIO 4



What's inside the computer?

HOW IT STARTED

During a school traineeship one of the kids asked the teacher student when they were working with social network things: what's inside the computer? How can the computer do all this?

The teacher student had to admit: I don't know, it's very complicated...

Another kid said: let's try to open the computer! The teacher student replied that the school might not like that, as the new computers were very expensive.

After some further thinking the teacher student decided to capture this interest: let's try to find out what's really inside the computer and how it works - but-let's do it in a creative way... Creating something that was not there - a laboratory...

USING THE 4 STEPS

Link subjects to real challenges

The teacher student linked the kids' interest and curiosity to the need to create digital fluency in the schools and to an important societal challenge: too few young people are interested in science and in computer science, and these subjects or themes should be made far more attractive and from an early stage.

It was therefor quite easy for the teacher student to explain the new idea to the school and get permission to construct interesting activities in this field.

Establish relevant collaboration in the community or through social networks

The problem was that the teacher student knew very little about what is inside computer and how they work; she actually never through about it.

Therefore she decided, along with another teacher student, to learn side by side with the class.

Instead of preparing a ready-made project for the kids, she addressed the kids like this: well, you don't know and I don't know, how can we help each other find out?

So, the kids - 12 years old - were invited to co-design the entire process, instead of receiving a ready-made package, or instead of simply inviting someone from the university to explain about computers.

In the middle of these discussions, one of the kids asked: and what if other kids want to find out as well? Can we make something for them?

Slowly the "project" stated to take form, but it also grew in scope and complexity. At the end it was decided to try to make a sort of computer laboratory where kids could experiment with computers and what they could do.

There was such a computer lab in the city already - but only for university students. And, it soon became clear that the school was not willing to start investing in a computer lab, at least not alone.

Therefore the teacher students and the kids missioned themselves to create a computer lab for kids outside the school allowing curious and talented kids to work with computer technology in their free time such as in the evening or even in during weekends.

All this was somewhat bigger than the teacher student expected, and the first steps were therefore to talk to people in the community: who would be interested, who would support?

The kids were still co-drivers of this process; not present at each and every meeting, but all the time following the process and co-driving.

Mobilize the resources needed to carry out the initiatives

The teacher students and a team of kids from the class, the most curious ones, created dialogues with a lot of people, based on a small project plan they made for the dialogues, and in this phase the kids' team participated directly in all the dialogues:

- They met with the school manager to find out their interest and how they could be involved
- They met with the municipality, as they would need a location for the project and also need some other resources
- They met with the university offering technology science education
- They met with the IBM people in a bigger city nearby, as they might be interested in donating some technology
- And they met with a group of students at the technology university they visited earlier

All this was a lot of work, and it took a lot of discipline in the kids-team to go through all this. However, they were also quite proud of their achievements.

After some further brokering among the interested people in the community, it was decided to create a joint community team to carry through what was now a considerable "project", including financing a first step.

Carry out the mission including bringing about change and impacting reality

The kids in the class was invited to be the pioneers, and they worked voluntarily some evenings per week with the computers, supported and inspired by some of the young students from the technology university.

The computer lab soon became a place where the kids could start exploring all sorts of computer things, not only studying the inside of the computer and understanding how computers work, but also and increasingly what computers can do.

The computer lab therefore needed to offer support and guidance on a wide range of "kids' curiosities", far beyond what was expected. The kids were like other kids: their curiosity was unlimited!

Therefore the lab had to include new resources to meet the "needs" of the kids: people working with programming, with game design, with graphic design and with many other things...

At the end, a considerable number of professionals and students were engaged in offering inspiration and support to the lab - a few hours a week each and on a voluntary basis.

WHAT DID THEY LEARN?

The teacher students learned a lot about computers at a level they never imagined, but first of all they learned that computer curiosity within themselves and among school kids can give rise to endless and highly interesting initiatives and projects that simply spellbind the kids.

They also learned to link kids' curiosity to real activities in the society and to take action to meet the curiosity.

Last, they learned a lot about being a sort of "community broker", bringing together different people and resources to make new things happen - and how groups of kids are in fact able to co-drive such processes when allowed and well guided.

Many of the kids learned how to have an idea and try to turn it into reality, and they learned about all the steps needed to do this. In short, they learned from being engaged in what we call 21st century learning projects.

Moreover a group of kids grew an immense interest in how computers really work and what they can really do - and they now had access to take their interest all the way.

Of course, poor teachers in the school: these kids became very demanding and critical... But isn't that what we want?

THE WIDER PERSPECTIVES

It is easy to imagine the unlimited perspectives of such an open computer lab for kids of all ages - a computer lab you can access whenever you like and only driven by your own interests.

Besides becoming a great success in the community, this lab also turned into a *talent incubator*: many kids started growing a serious and long-term interest in exploring the world of computers, programming and gaming far beyond what could have happened in the school...

It is also easy to imagine how such non-formal activities would heavily influence the future careers of such kids - and how those activities step by step started to influence many activities in the school.

SCENARIO 5



And the old people...?

HOW IT STARTED

Two teacher students were working with a class of 11 year old kids on the theme of how families are changing, and if they are in contact with for example their grandparents.

At some point one of the girls said: yes, I do see my grandparents quite often, but they are not doing so well; they are getting old and they cannot follow the new things; they don't even have a computer...

The teacher students asked: yes, and what are you doing about that? The girl: not a lot, what can I do?

The work then took an unexpected turn, now addressing how old people felt excluded from all the new things happening. This is a major social problem in most European countries, and in fact in more and more countries all citizens are requested to do important things through computers and internet.

And much more: most elderly are not benefiting much from internet, which is very unfortunate as they, often caused by an increasing lack of mobility, spend a lot of time at home or in centers for elderly.

They have a lot of time, but they are not able... And none of the European countries finds it interesting to invest in old people these days.

USING THE 4 STEPS

Link subjects to real challenges

So, the teacher students linked the discussion about family and old people to real needs in the community and decided to capture this brilliant opportunity to learn through... real life.

No problem with the school and the teachers - intergenerational learning is quite popular, as it should be.

The teacher students and the class started to design an activity, or more like a "project", having ensured that the school accepted to allow them to work on this for some hours a week during a semester; also because such a project would be relevant to several other activities.

First, they planned to find out more about what it meant that many elderly felt "excluded". Let's go talk to them and find out. Is it only about internet and computers, or are there other things?

Summarizing this small “research”, they found out that most elderly “complaint” about the following things:

- No help for shopping and moving around in the community
 - Not able to use computers and internet
 - Loneliness and not able to follow their children and grandchildren’s lives
- After some heavy thinking the class decided to try to address all these “complaints” in one project: how could we create useful new activities in support of the elderly in the community?

The class also decided to pay much attention to the migrant elderly, as it seemed that they were more “excluded” than others.

Thus, the mission became to try to create something in the community that was not there before - and to learn from that.

Establish relevant collaboration in the community or through social networks

When creating something new in the community, one needs to collaborate with many different people and institutions.

That was the first part of the learning, and therefore the teacher students and the class decided to meet with the people who could be expected to have an interest in the “project”, such as:

- A number of private elderly in the community
- The elderly center in the community
- The social department in the municipality
- An association for elderly at country level
- The local library

Then they did a very brave thing: one of the teacher students, one of the school teachers and 3 kids from the class formed a small team they called the “Bravehearts”! They had a special mission: to arrange a meeting between the regional Hewlett-Packard computer company and the municipality. The idea was to get these two players to sponsor simple computers and internet to a group of “pioneer elderly”, including the elderly center.

The speech was: the public authorities request elderly to do important things through the internet, and the computer company would like to expand their types of customers. Therefore you should join forces and finance 20 laptops and internet connection to 10 private elderly and 10 elderly at the elderly center, including technical support if and when needed.

The story goes that it took two long meetings to make this happen, but the Bravehearts had a very strong case, and at the end everybody agreed at least to test the new idea.

Mobilize the resources needed to carry out the initiatives

So, the technology had been “mobilized”, but then what?

The idea was to address all 3 elderly “complaints”.

It was clear from the beginning that nobody in the community was willing to “invest” more human resources to help out the elderly. In fact the class tried this way for a while, but gave it up.

The result was: we have to create what is needed ourselves. So they did.

They started to create a youth club in the community called Superpower.

At the end it became a small business case: elderly or the elderly center could “hire” a professional young kid from Superpower for 20 euro a week to receive support services from the club:

- Help to use computer and internet, for public things and for pleasure
- Practical help such as shopping and moving around
- Help to connect to family living in other parts of the countries or in other countries

To be a member of the Superpower club one would need to go through a short “training” about what to do with the elderly and what not to do, and about how to behave towards elderly.

Of course the small “contracts” needed to be signed by the kids’ parents.

The service would be guided and supervised by one of the teacher students and a representative from the municipality’s social department.

The elderly and the kids could plan and organize the support any way they wished, but a minimum of support should be offered every week.

The municipality agreed to pay half of the 20 euro for elderly not able to pay the full fee, at least for a test period of 1 year.

Carry out the mission including bringing about change and impacting reality

Such linking a class discussion to social needs created a lot of change for many people - not only for the kids and the elderly, but also for the elderly's families.

Of course, it was discussed in the class if such services should be offered for free, but here were many good reasons for not doing that. Some of them were:

- It is naive to ask young people to work for free in the long term
- Both kids and elderly should take the service seriously
- Kids need to learn to manage income
- The Superpower club should be recognized in the community as a social resource, thus a certain "quality" should govern the services

In this way the teacher students, the school and the kids in the class engaged in a "social experiment". It would not revolutionize the world, but still bring about important changes to many elderly and young people engaged in the experiment. Cleverly, the experiment tried to combine different needs into a flexible a very human service, very different from the strongly limited services provided in some countries.

After one year of experimentation, what had happened was:

- Some kids earned some money
- The elderly felt much more motivated to start using computers and internet, as they had permanent support
- Some of the elderly started to communicate with family members (they only met at Christmas) through Skype
- Some of the elderly grew an interest in playing online games (such as card games) and using the computer to work with their interests in new ways
- The kids learned about the lives of elderly and their needs, and learned to be a "mentor" for other people, thus building up important intergenerational values
- The school realized that the elderly, with which the Superpower kids were in contact, had a lot to offer the learning of many subjects, and invited some of the elderly to join learning processes at the school

WHAT DID THEY LEARN?

The teacher students learned what "social innovation" means in practice and that social innovation is a perfect field for learning in new ways and through involving real people in the community.

They learned how to negotiate with various players in the community and how to take brave steps that most people would avoid.

And first of all, they learned that school kids can be engaged in much more serious activities than they thought.

The kids in the class combined earning some money, re-connecting to old people and how to create real change in the community.

They learned about the steps to take, the lives of the elderly and how one can create economy through offering useful services to others.

In fact, they learned about what social innovation means, but without knowing it. They didn't need to know, they just did it.

THE WIDER PERSPECTIVES

The wider perspectives of such experimentation are almost unlimited, even if the "project" was quite small and undramatic.

First of all, such experimentation might be mainstreamed into a permanent offer to elderly in the community.

Moreover, such activities tend to generate an atmosphere of intergenerational learning in the community, and might lead to widened services to for example elderly with mental or physical handicaps.

Such initiatives create values among citizens, in schools and among institutions involved. They create "social capital" that could be exploited in very many ways.

Last, but not least, social innovation - be it small or big - appeared to be a most interesting practice field for schools and teacher educations promoting entrepreneurial learning.

Post scriptum

It is interesting to pay attention to the fact that such initiatives might have perspectives far beyond the ones linked to the initiative itself.

Let us just list a few of those “wider perspectives” that might of interest to a project promoting entrepreneurial learning:

- > Any of these large-scale scenarios could be turned into a European project
- > Any of these large-scale scenarios could be turned into valuable and co-creative learning material
- > Any of these large-scale scenarios could generate new initiatives, based on the resources produced in the first initiative
- > Any of these large-scale scenarios could, if well-designed, create economies



Taking action and *learning on the flight*...