Photos by WWEU from the iYouth and iCAP projects

For Marc Prensky

INTRODUCING
EUROPEAN PROJECTS EXPERIMENTING WITH SECONDARY
STUDENTS' ENGAGEMENT IN REAL-LIFE AND REAL-TIME
COMMUNITY PROJECTS

Mission Based Learning

BACKGROUND: WORKING WITH EUROPE

Working with Europe is a small private organisation creating pioneer European projects for schools across Europe to collaborate and to experiment with what we in short might call "Mission Based Learning", or perhaps better: Mission Based Education.

The professionals in WWEU have been working for many years in public educations, but left those educations to gain the freedom to create what is needed: radically new approaches to young people's education, not updated academic education.

WWEU has been responsible for creating and supporting the implementation of such projects for many years now.

The organisation is partly based in Catalonia Spain, partly in Denmark.

BACKGROUND: THE EUROPEAN PROJECTS

The European projects created by WWEU are funded by the European Commission's educational programs, The Lifelong Learning Program from 2007-14 and the Erasmus+ program from 2014-20.

The project grants are based on very demanding application work and the programs are extremely competitive. Only about 15% of the applications are granted.

The granted projects are 2-3 year projects, usually including 5-8 school partners from different European countries.

The projects work on modest budgets, such as typically 250.000 euro.

The EU program aims to create frontline education in Europe, including community based education, entrepreneurial education, innovation-fostering education, etc.

WWEU usually creates and participates in 5-6 such projects ongoingly.

BACKGROUND: THE HISTORY

The Mission Based Learning projects (just a working title in this context) set out around 15 years ago, based on inspiration from Seymour Papert, Mitch Resnick and the global Computer Clubhouse project created at the MIT Media Lab.

The idea was that the extremely innovative and successful Computer Clubhouse concept should be transferred from non-formal education to formal education.

In some projects we managed to persuade the Computer Clubhouse people from Boston to participate directly in the projects.

Since then we have developed our own concepts, methodologies and vocabulary.

We have within a 10 year period completed between 15 and 20 projects based on the Mission Based Learning principles.

Between 80 and 100 schools, teacher educations and knowledge organisations have been involved in these projects. This also means that we have a very large

European network of schools, teacher educations and other organisations from almost all European countries.

THE BASIC PINCIPLES IN OUR EDUCATIONAL EXPERIMENTATION

These European school projects are, of course, different.
Some of them address re-engaging secondary school students in science in new ways, some of them addresses empowerment of second-chance students, and other aims to build innovation capacity and agency among secondary school students.
Participating students are always between the age of 12 and 16, often from different classes, backgrounds and gender.
Some of the projects address teacher educations and the need to train the new generations of teachers to work in non-academic and real-life project directions.
Obviously, the schools in the projects need to implement the Mission Based Learning in different ways: some did after school missions, some reserved one day a week for the missions, while others integrated the missions in the normal school curricula.
What they all have in common is that they need to struggle to create sufficient time and resources for the engagement of the students.
However, despite their differences, all the projects are based on the same fundamental principles, very much similar to the basic principles in Prensky's writings and visions – we simply from time to time use another vocabulary…

Let us, then, list and briefly describe these fundamental principles:

THE 10 FUNDAMENTAL PRINCIPLES

Missions
The core concept is student teams working in missions.
"Missions" is similar to "projects", indicating intention, creating something useful for the community and accomplishing something important through community collaboration and alliances.
The word "mission" also refers to the logic of good video games, in which you need to stepwise build up resources and powers to succeed.
Missions are based on student teams' analysis of what the community needs, what does not work well – or what new resources the community might benefit from.
The missions might last from some weeks to an entire school year or more, depending on the nature of the missions.
In the European projects it is also possible for a student teams to engage in virtual missions as long as the mission is in line with the fundamental mission principles.

No teaching, no teachers

There is no teaching in the missions, and no teachers.

The needed learning takes place on the flight, when needed and when relevant and meaningful to the students and to the missions.

The teachers work in the missions as coaches and guides, and facilitators of the student teams' collaboration with the teams from the other participating countries.

Mostly, the teachers are involved in the missions at the same level as the students: the relation between students and teachers change dramatically. In most missions teachers need to learn alongside the students: and that makes them the best coaches!

Missions selected by the students

The missions are defined by the student teams.

The first step is to research the community, talk to people, investigate and conclude: what will be our mission to accomplish something important benefitting the community, or part of the community.

A student team might work through several missions along a 2 year European project – or immersively in one very important and powerful project.

Working with the community

All missions or projects are devoted to create something useful in the community: new technology or support to old people, whatever.

The missions always need to be carried through in collaboration with community resources: parents, politicians, experts, end-users – or other young people.

The student teams need to create alliances with powerful community resources and negotiate their way to accomplishing the mission.

We sometimes use the expression "mission brokers" about the young people's community negotiations.

Accomplishments are celebrated in the community, in the project and in the social networks.

Real-life and real-time

The missions can never be artificial or made-up, but must be real-life and real-time missions.

This means that the student teams engage in problems, challenges and needs in today's community – including anticipating near-future opportunities for the community.

Working in real-life and real-time missions requires much attention, patience and focus from the students.

Team based accomplishing

The students work in teams, never individually.

Students always state that this kind of teamwork is very complicated and demanding, but they also state, after some time, that they would prefer to work that way in the normal school activities.

From time to time a student team of 5-6 students might wish to split up and go in different directions.

Story-telling

The student teams are requested to tell the stories from the mission: to the other students in the school, to the other teams in the European project, to the parents – and to the community.

The form of documentation used in these projects is creative story-telling using creative media.

The story-telling helps the students reflect on and evaluate their accomplishment – what went well and what did not.

The stories are published in the European projects for all to comment on and enjoy.

Evaluation and assessment is always based on this story-telling – and in some projects the story-telling is integrated in a portfolio of accomplishments.

Transnational collaboration

A great challenge for the student teams is the collaboration between students from different countries. Language is an initial barrier, but they often overcome this barrier in creative ways, mixing languages – or even inventing their own language!

An interesting discovery is:

While most students are fluent communicators in their global social and gaming networks, they are not, in the beginning, able to communicate in the educational setting. They freeze, so to speak...

They strongly feel the burden of the educational setting and find it difficult to act in virtual environments structured by... the school.

Therefore our projects increasingly invite the student teams to decide in whatever ways they would like to communicate with their peers from the other countries.

In all the projects, in which young student teams are involved, the project organizes one or two 5 days mobilities in one of the partner countries to allow the young teams to work together face-to-face for 5 days.

In most projects these events are so intense that the young people never forget them.

Sustainability

The projects strongly invite the student teams (and the teachers and community collaborators) to continue the missions, the projects or the development of the new resources in the community beyond the lifetime of the European project.

Such long-term and beyond school engagement can take on many forms and in the last project year the project invites the students to figure out how the projects can be sustained – and to what extent community resources will support this.

It is obviously of great value to the students' capacity to agency to continue the engagement – in or out of school.

The participating schools are, of course, expected to continue working with and expanding Mission Based Learning after the termination of the European project.

Creative technology

Technology does not play a special role in the missions, unless the mission is about technology in the community.

The students are invited to use whatever technology they find appropriate and use available technology as creatively as possible.

Video plays a very big role in the students' story-telling.

In future projects we hope to be able to challenge the students with another way of using technology: *based on the nature of your community project, why not develop precisely the technology you need yourself?*

A FEW EXAMPLES

Across the last 10 years we have implemented such projects as <u>for example</u>:

LABlearning
The project worked with disadvantaged young people carrying out community missions through working in creative media laboratories.
The young people created amazing media story-telling from their missions, and the project once again demonstrated that so-called "disadvantaged" young people can accomplish amazing things when given the proper settings.

Open the Doors
This project addressed second-chance students (mostly dropped-out migrants) and offered them community projects to create capacity to act in the community, to be able to do better for themselves – and to open the doors to entrepreneurial taking action, helping them to create a future not depending on their school "failures".

iYouth
The title stands for "innovation youth".
The student teams from secondary schools analysed their community and identified needs that should be addressed to benefit the community and people in the community.
Based on certain innovation criteria, the young teams collaborated with a variety of resources in the community to create something new and useful in the community.
This project was a very clear example of what we name Mission Based Learning.

ScienceGirls
This project aimed to create a new image of what science could be for girls.
The girls teams from the participating countries engaged in several real-life and real-time science activities in their community or region.
The project mission was to create practically useful guidance to science teachers on how to organise open science schooling through real-life and real-time science engagement.
The project was climaxed through a 5 days mobility in Catalonia in which 100 secondary school girls from all over Europe took part.
(PS Imagine the friendships created…)

iCAP
The title stands for "innovation capacity" and was created as a parallel to the iYouth project – but with other partners and students and using a slightly different approach.
The project ends in 2019 and will be followed by new initiatives.

Teacher2020
This project addressed teacher students in basic teacher education.
The idea was to engage teacher student teams in innovative missions in secondary schools and thereby to prepare them to be ambassadors for and frontrunners of Open Schooling and Mission Based Learning in their future jobs.
The project is followed up in 2018 by The Unteachables, described below.

Open Science Schooling
This project started in 2017 and represents a major attempt to create new ways into science engagement for all secondary school students –coordinated by a university in Finland.
The project includes developing critical approaches to science – to science in the community as well as globally.
The student teams work in science missions of their own choice and in close collaboration with science resources in the community/region and with other community players involved in the science processes.

The project wishes to engage the student teams deeply in those science challenges, precisely through meeting and working with science in real-life and real-time settings, and with a strong focus on "science in society".

This quite big project is being followed up through a long-term strategic plan, promoting Mission Based Learning in open science schooling, as briefly indicated below.

The Unteachables

This is one of our newest projects – granted summer 2018.

The project includes a number of teacher educations from different European countries and aims to empower teacher students to change academic education into project or mission based education.

This will happen through analysis of existing alternatives to traditional academic education and through working in practice with student teams from collaborating secondary schools, experimenting with the project or mission based approaches.

The outcome of the project will be practically useful guidance to teacher educations on how to prepare the new generations of teachers to provide the education 21st century secondary school students need – including through practical experimentation along the teacher education in collaboration with student teams and community players.

The project is, by the way, coordinated by a leading teacher education in Denmark.

[We can deliver more material and information about these projects, as needed – or detail some of the elements in the projects]

THE NEW STRATEGIC APPROACH

At the same time we are now creating two major future strands for following up these project initiatives at higher European level and heading toward European leadership.

The two strategic strands, each of them with a 5 year perspective, are:

Open Science Schooling

Unteachables but Learnables

A series of Erasmus+ projects like the ones from above will be created for 2019 and 2020 implementation, leading to a higher level European Knowledge Alliance, supported by the European Commission.

We will start creating these new projects (applications) shortly.

Importantly, the *Unteachables but Learnables* strand will be based on our Mission Based Learning concept, and the different new European projects will explore various dimensions of this concept *in practice*.

Obviously, Prensky's education visions will play a considerable guiding role within this 5 year strand and its projects.

…AND THEN SOME

It is quite obvious, at least to us, that most of our experimentation is fully in line with Prensky's visions, as they have developed across the years. However, we from time to time use other "names", based on the European traditions.

It is of great interest that this "convergence" emerges from two very different backgrounds and traditions.

The projects and missions are, of course, still at the level of pioneering and experimentation, not yet reaching what you call "end-to-end empowerment education".

In Europe there is little hope that such end-to-end empowerment education will be established by the public authorities.

Dark and darkening clouds over Europe these days…

Most likely, in Europe, such end-to-end empowerment education needs to be financed and initiated by major companies, possibly and hopefully in some cases in collaboration with visionary educational authorities.

It is most likely that "end-to-end empowerment education" in Europe – at least in its first phases - will need to totally *by-pass public authorities and public funding*.

We will, most definitely, need to look in that direction in the very near future.

And, perhaps, pay attention to various forms of crowd funding at the same time…

Mission accomplished ☺