

Open Education 2030

Call for Vision Papers

School Education

The Open Community in the School of Today

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Open Education uses established open-content networks such as Wikimedia to engage students, scientists, local communities and senior citizens in joint efforts to build and share knowledge for the solidarity-focused society of the future.

*“Education is that which remains, if one has forgotten everything he learned in school.”
Albert Einstein, “On Education”, 1936*



Introduction

Europe 2030... after two entire decades of deconstruction, inhabitants of the old continent¹ are finally starting to smile again: the prospect of a United Europe is now being shaped in the way it should have been straight from the beginning.

It all started in 2010, when the “Troika”² set foot in Greece and encumbered the country with austerity and cutbacks, only to trigger a domino effect across all of Southern Europe. When the tiles started falling in the North as well, EU leaders finally realised that this Europe was not a happy place.

Luckily for them, a whole generation of young European visionaries – they were teenagers when the financial crisis tore down their dreams for years – are at hand to apply the lessons Europe has learnt from its first steps in the third millennium.

Needless to say, education has re-emerged as a priority: throughout the course of history, the passing on of knowledge has always been the key to building cohesive and competent societies. But how will it be done? Where will they turn to for inspiration, when funding has been so drastically reduced for nearly twenty years?

¹ “the old continent” refers to Europe: an expression not commonly used in English, but quite popular in French ('vieux continent') and Greek («γηραιά ήπειρος»)

² Troika = the “trilateral” group comprised of the IMF, ECB and EC responsible for “financial aid measures” to EU member-states in “bankruptcy.”



Learning from Solidarity

The crisis led people to re-think their lives and re-address their priorities. Where all sentences would begin with an “I”, towards the middle of the ‘10s more and more people, driven by need, started adopting a “we” attitude. “My neighbour was fired and can’t afford to feed his kids. It’s him today, but who knows: tomorrow it could be me. I have to find ways to help him”.

But were all citizens driven by need alone? Back in the last years of the 2nd millennium, a certain small group of people started breaking boundaries. They were fed up with the commercialisation of nearly everything. “Is it possible that in the Computer Age, so many people are missing out on all the action not because they can’t afford hardware – prices are dropping by the day – but because every step they take in software is licensed with a price tag?” “Unacceptable” they thought, so they pooled resources and Open Source³ was born. Anyone was free to legally use and further develop the software products that were freely released to the public, on condition that the work THEY invested into development was, in turn, made freely available to the public. The open-source philosophy attracted a great number of followers, communities and user groups were formed. Soon after, Creative Commons (CC) licences⁴ further propagated the ideals of sharing skills, knowledge and creativity. Copyright is a thing of the past – after all, how profitable is your intellectual property when it’s available for anyone to see, listen to or eventually, steal – on the Internet? Why should a creator take on the role of ghost-hunter for violators to his copyright, when he can apply a CC licence to his work, i.e. become a sharer and earn profit from secondary sources? Soon enough, free and open content was gaining ground in all fields.

Revolutionising “the sum of all knowledge”: Wikipedia

Knowledge was soon to follow suit. The free online encyclopaedia was launched in 2001 by Jimmy Wales with a mission; in the words of Wales himself, “*Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge. That’s what we’re doing*”⁵. Over less than a decade the concept had spread to nearly all countries of the world, and the Wikimedia Foundation⁶ boasted an “umbrella” of 12 free-knowledge projects.⁷ With Google search rankings that the most profitable private enterprise would envy, Wikimedia’s success was based on volunteerism: one could say that one of the first manifestations of the term “crowdsourcing” – coined back then, now a household word – was the Wikipedia movement⁸. Volunteers from all over the world contribute their knowledge, under CC licences, to the building of the most up-to-date and comprehensive knowledge pool ever. Teachers soon became aware of the immense potential offered not merely in *using* Wikipedia, but more importantly, in *editing*. Wikipedia Education

³ official website of the Open Source Initiative (including definition) at <http://opensource.org/>

⁴ Creative Commons mission and licencing info at the CC official website: <http://creativecommons.org/>

⁵ Quote by Jimmy Wales (aka “Jimbo” to the Wikipedia community):
http://en.wikiquote.org/wiki/Jimmy_Wales

⁶ Concise info about the Wikimedia Foundation on its FAQ page:
<http://wikimediafoundation.org/wiki/FAQ/en>

⁷ List and description of projects at http://wikimediafoundation.org/wiki/Our_projects

⁸ According to movements.org, “Wikipedia, the open-source encyclopedia, is one of the best examples of crowdsourcing. Any user can write and edit entries on the site”. <http://www.movements.org/how-to/c/crowdsource/>

Programmes started sprouting in all continents⁹. K-12¹⁰ teachers and University professors alike integrated contributing to Wikipedia into their in-class and homework assignments, with multiple benefits for all: school assignments are no longer “static” projects, soon doomed to oblivion in the information overload of our age; instead, they are dynamic content, online and open to correction and further development from day one. Moreover, students and pupils acquire a sense of belonging to a multilingual, multicultural, knowledge-based community; they effortlessly learn “netiquette” and collaborate constructively with peers from all over the world.

Local content, global impact

But there were far graver issues at stake from 2010-2030. People were being laid off by the dozens. Unemployment rates sky-rocketed to double-digit figures, reaching in April 2013 an all-time high of 26.4% and 26.3% in Greece and Spain respectively.¹¹ Families could barely feed their children, let alone encourage them to study and pursue a career.



Panagiotis interviewed Mr. Aggelos Bozas, 82, about surviving off the wild flora during WWII.

In 2012 a school from the island of Kefalonia, Greece was insightful enough to discern that the future would be grim for its residents. The island had a rich flora, which had generously sustained the locals during WWII. The working pupils and their teachers were already experiencing serious changes in their lives due to the crisis: with 30-40% cutbacks for those who had jobs, and a skimpy unemployment benefit for those who didn't, they realised that soon they themselves would have to turn to the “fat of the land” for their sustenance. So they started a school project in which they studied the edible species of flora around them, while turning to their parents and grandparents for guidance. “We said: we have to document their wisdom now that they're still around. In a few years it will be too late. Sometime in the future we'll be grateful that we did,” recalls Panagiotis, then an 18-year-old pupil of Evening Upper Secondary, now a father of three.

And so they set about their project: they photographed all the edible plants around them. They chopped, peeled, cooked, dried, boiled, preserved... and photographed again. They learned things about the products of nature around them that they had never imagined. Their newly-acquired knowledge was uploaded to a gallery in Wikimedia Commons.¹² For the first few years they would only turn to this knowledge when in need of a gourmet idea: natural, fresh ingredients are sought-after treats in their own right. Soon enough however, supplies got scarce and more and more people had to turn to ...“weeds” for dinner.

Other schools – but informal groups as well – soon caught on to the idea. In 2013 you could find only one gallery in Commons by typing “Wild flora of” in the drop-down search box.

⁹ Wikipedia Education Program homepage at Wikimedia Outreach:

http://outreach.wikimedia.org/wiki/Wikipedia_Education_Program The Foundation currently runs four programs in three continents, however there are Wikipedia education programs run by local Wikipedias as well, such as the [Greek](#) and [Italian](#) programs.

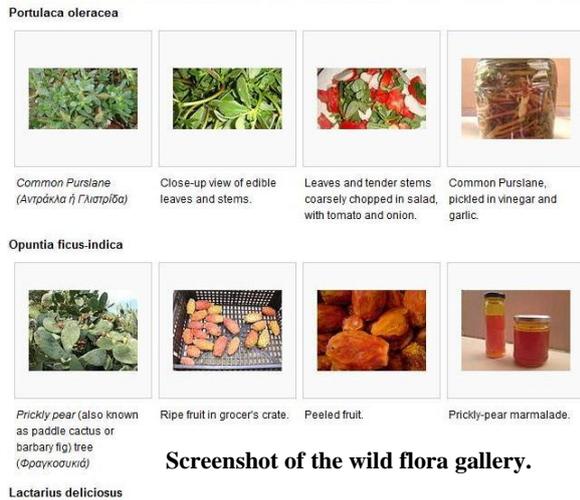
¹⁰ A term designated for the sum of primary and secondary education (i.e. Kindergarten to 12th Grade according to the U.S. and other education systems).

¹¹ April 2013 statistics from Eurostat on Feb. 2013 figures:

http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-02042013-AP/EN/3-02042013-AP-EN.PDF

¹² “Wild Flora of Kefalonia, Greece” gallery at

http://commons.wikimedia.org/wiki/Wild_flora_of_Kefalonia,_Greece (captions in English)



Screenshot of the wild flora gallery.

Now, in 2030, nearly every province of Europe has its own Wild Flora gallery, with inter-wiki¹³ links to other language versions: the students and locals collaborated in gathering the material and building the content, but the information is available to the world at large. The knowledge they gained and shared helped them survive in the dark years of recession.

But that's not all: it was shortly identified that "citizen science"¹⁴ projects could be linked up with scientific fields such as biodiversity, and forces were joined with the open-science movement¹⁵. **Soon enough, an endless**

stream of crowd-sourced scientific data "formed a delta" with mainstream scientific research, with the support of experts, visionaries and open-access advocates. The outcome? Trillions of bits of freely accessible data at the disposal of today's aspiring young scientists shaping Europe as a continent of open research at the service of its citizens. In the words of 33-year-old Vicky, a post-doctorate researcher in Organic Architecture who has been studying flora and fauna for the past five years: "My research involves identifying organic forms that could inspire innovative architectural structures in terms of both form and function. I can't possibly imagine how I would ever have managed to gather the information I need if I had to work in my parents' time: first of all, I could never have afforded to have regular access to around twenty different journals! In a way, it can be said that the crisis led scientists of my parents' generation to "let go" of their proprietary attitude. It didn't make sense anyway: who am I to claim intellectual property rights on my research on the scarab beetle, when the insect has been roaming the Earth for millions of years?"

Learning with Solidarity

On a different note, a year earlier – 2011 – wiki technology was employed by the same school in a different school project offering "a plate of food" to those in need. The students and their teacher built a platform for distributing meals to their fellow citizens who could not provide for their daily sustenance. The philosophy behind the project was that most households then could either afford to cook an extra serving of food each day, or couldn't afford



Screenshot of the "A PLATE OF FOOD" wiki. The "logo" (designed by student G. Chalkias) reads: "If you can, donate... if not, receive"

¹³ Interwiki linking is a facility for creating links to the many wikis under the Wikimedia "umbrella". Instead of pasting in entire URLs, they use a shorthand similar to links within the same wiki (intrawiki links).

¹⁴ Scientific research conducted, in whole or in part, by amateur or nonprofessional scientists, often by crowdsourcing http://en.wikipedia.org/wiki/Citizen_science

¹⁵ See Wikimedia Blog post at <http://blog.wikimedia.org/2011/07/20/joining-forces-with-open-science/>

to cook at all. Was there a way to offer the surplus meals to those who needed them, in a way that was convenient and discreet for all? The students found a solution to the puzzle: all the meal donors would log on to a site by e.g. 11 a.m. each morning and register the meal they were offering. The project co-ordinator would log on an hour later, and “match” meals to recipients on the basis of a special dietary questionnaire.

The meals would then be delivered either door-to-door, or by the person(s) in charge of deliveries. They created all the necessary material and built a dedicated site at wikispaces.com¹⁶. The reason they chose a wiki over other options they investigated (a blog, or social media such as Facebook or Twitter) was dual: first of all, wikis for educational purposes were available “ad-free”¹⁷, which was a major consideration for the non-commercial nature of the project. Secondly, it had a Creative Commons licence “built in” to the platform, as all material at Wikispaces is subject to CC licencing: all they had to do is add “NC” to the default licence.¹⁸ Moreover, the WYSIWYG¹⁹ editor made editing the page “a breeze” even for those who were not acquainted with wiki code. The system was translated into other languages and adopted by a number of communities throughout Europe, as it was equally effective in a block of flats as well as in a small neighbourhood. It helped a lot of people secure their daily sustenance, while strengthening the ties of solidarity, compassion and caring in the societies involved.

Conclusion

Schooling – especially in times of difficulty – cannot be isolated from the social setting in which it is established. Custom-built Open Education tools are fantastic, but the investments in terms of research, development and funding do not always reach all end-users. It is here that widespread open-content technologies such as Wikimedia can play the role of open-education platforms, with a “fringe benefit”: *the educational output has a much wider outreach*. The work carried out by an innovative Greek school in times of recession – and there are certainly numerous similar schools all over Europe – can serve as an example of how readily-available open technologies, the wisdom of our senior citizens²⁰ and a mentality of solidarity can help build competent and essentially happy societies that transcend boundaries of language, culture and schooling qualifications. Europe, get ready for the open community of building and sharing knowledge for a better world...

Notes

¹⁶ The “Plate of Food” wiki is at <http://enapiatofaghto.wikispaces.com> (Greek only, English translation can be provided on demand)

¹⁷ see “Wikispaces Classroom” at <http://www.wikispaces.com/content/classroom/about> (available free of charges and ads for schools and universities)

¹⁸ The default licence for “Wikispaces” sites is CC BY-SA 2.0, we added NC (Non-Commercial). See licensing policy at <http://www.wikispaces.com/Creative+Commons>

¹⁹ “What You See Is What You Get” (WYSIWYG) is the latest trend in wiki editing: the simple interface is quite similar to a word-processing GUI and free from “wiki” code, which could discourage a “newbie” from editing wiki projects. Such editors are being trialled experimentally in various Wikimedia projects. In the near future it is expected that the user will be able to choose between either a typical wiki editor or WYSIWYG.

²⁰ Engaging senior citizens in inter-generational projects is a concept closely linked with EU policies: 2012 was designated as the “European Year of Active Ageing and Solidarity Between Generations”, and the EU has taken the concept a step further by linking it with the “European Year of Citizens 2013” via the “generations@school” initiative: <http://www.generationsatschool.eu/en/home?mini=2013-04>

The article may be imaginary, but the title is real: we presented a mini-seminar titled “The Open Community in the School of Today” at the National Hellenic Research Foundation on 17 December 2011. Read more [here](#).

I used a [free online tool](#) to create the “newspaper clipping”: Such tools can easily enhance the learning experience ☺

Many thanks to Daniel Mietchen, [Wikimedian in Residence on Open Science](#), for his interest in our wild flora project and desire to explore how we can collaborate in the fascinating world of open science: the links he provided were the inspiration for the last paragraph of “local content, global impact”.