Open Education 2030
Call for Vision Papers
School Education

Visionary Learning in 2030: Secondary Education

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This is the time! Bringing opportunities to visionary teachers to deliver an 'open education' to all students based on technology, enhance students' choice and meet or exceed learners' expectations

Introduction: The rise of high tech devices boosted innovative practices in Secondary Education by transforming traditionalist lessons in "open learning windows" using digital resources, new learning cultures that provide real-life experiences of teaching and learning. By opening curricula to mobile devices, teachers changed attitudes and strategies to benefit students on developing open and autonomous digital learning choice and creative and personalised skills.

ICT and Internet are a principal topic in the communities of education and training – the idea of increasing students' ICT-based activities during lessons in Secondary Education and as consequence learners' digital competences.

Rather the final EU report **"Survey of Schools: ICT in Education on use and attitudes to Technology in Europe's Schools** published recently, demonstrates that teachers are not using frequently ICT for learning in the classroom.

Teachers training and sufficient equipment in schools added to bring your own device (BYOD) could change ICT practice in teaching and learning. Both students and teachers in Secondary Education must use ICT in all subjects, both in and out school and for complementary activities. Thus, I would suggest three key visions:

1. Creating a European Open Education community towards collaboration and mutual support.
2. Creating a European team of innovators (experts) providing teachers massive online training (coursera), helping to reboot and made the necessary changes to get every student into school and learning.
3. Rethink European School Curricula to connect learners to new experiences of education in the digital age, adapted to the specific needs of each country, fusing disruptive technology approaches, creative resources and good tools that any educator would be able to use to help learners achieve their full potential.

The emergence of digital learners had major potential implications for Education. Young students don't remember life before mobile phones or tablets. They were the first generation that play, think and learn trought techonology.So they were completely open to use devices and much quicker to integrate them into their lives and school education. Educators "rebooted" and are making the necessary changes on strategic approaches to technology in learning landscape to prepare students for the challenging jobs in the next 20 years.

Education can not be anymore bound by the limits of the teacher, textbooks, or the reference books of the school library. It will not be limited by the doors of the classroom. Lectures will

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definitely migrate outside of brick schools. Digital libraries will be open to schools, teachers and learners from anywhere at any time. Education will become increasingly mobile because students will carry definitely their school "in their pockets". Bring your own device (BYOD) will be the day to day reality in school education. Primary and Secondary education will completely develop into "mass" and "universal" systems.

Producing, classifying and interacting with media will become more important to learners than passive tasks of searching, reading, watching and listening. Digital learning has finally the potential to reverse the backward trends of education.

More important than strict curricula, open education using disruptive tools and digital cultures will reach students interests and openess to work on their own learning, improving skills as autonomy, crtical thinking, expertise, creativity, using new approaches to curricula that will help them achieve their full potential for new jobs.

The educational value and quality of digital resources and social media provided will not be so much in the content, but in teaching and learning. This will release the educator, (tutor and/or e-facilitator) from the tyranny of content.

The educator will be a facilator or e-facilator providing learners support, an e-tutor collaborating with students in virtual learning. Still, students will appreciate the support and collaboration they will receive with this model.

Open learning cultures will provide definitely the strategic opportunity to improve the quality of education as well as will facilitate dialogue, knowledge, sharing and capacity of building.

There will a plurality of possible understandings of 'digital culture'. But despite such conventional observation, debates about digital culture did tend, for now, to have cohered rather firmly around three central and interrelated issues:

- access
- interactivity
- authenticity

Open learning cultures will enable teachers and students to challenge the 'status quo' in the sense that 'credible quality' content will no longer always be in peer reviewed journals, articles and academic sites, but will instead be on experimentation and conclusions in teaching and learning.

Visionary projects-based in Education will require teachers and students to be able to work with disruptive learning and technologies both in and out the school. Fielding trips are often a integral part of the success of such projects, and greatly benefit students' learning by allowing them to engage with real-world environments.

All this aims will create a scientific quality on teaching and learning environment using an appropriate combination of different digital learning, tutorial support, peer group discussion, and practical lessons.

Inclusiveness: Bill Gates said in a 'visionary' insight (2010) that "the best lectures in the world would be found online and for free in five years time". The innovative educators knew he was right. Some educationalists were already sharing for free some good open educational practices online in School Education.

Today's technology will allow students, individually, accelerate or take their time, rather than having to wait for the class-group or struggle to keep up interested on learning. As a result, teachers can take much more one-on-one approach to instruction, and individual students needs get more attention.

Online learning will permit any student anywhere any time to have access to a world-class education. Connected, equitable, social learning will be the great equalizer, the most public of public schools.

Creativity: Open learning cultures facilitated by disruptive technologies will hold the possibility of reimagining the experience of Education leaving the model that has been around in middle and secondary institutions for the last century. The use of technology starts with good teaching.Technology will have evolved by 2030. Gradually, educators will realign to fill the new different roles by trends in lifelong learning or roles they will invent themselves with enthusiasm to share creative learning. Modeling the skills and excitement of being a lifelong learner and reigniting flames as needed. Great educationalists will use the power of technology to do even greater things with their students.

Assessment: The assessment of the digital learning will urge to be done in order to analyse the learners using media in „formal“ learning, or informal learning (after school) and distance learning, to understand students‘ expectations and attitudes, to give students the skills to face the "new ways of learning", using opening learning contents and open educational resources.

The open learning method selected will be the most desirable in terms of educational objectives of real construction of learning, promoting cooperation, communication and reflection and constraints and expectations of the learners‘ success. It will take place in different contexts, situations, and it will not be provided by a single learning provider.

The educational objectives will be achieved when the students use the open learning resources (in and around the curriculum), in the classroom and/or at distance education with autonomy, creativity by developing and encouraging “innovative mindsets”.

Discussion:

Armellini wrote in 2012: “The discussion needs to focus on how people teach and learn their needs and the choices they make.”

Using digital learning has been an efficient way of helping to bridge the gap between formal and informal learning. Open learning cultures were very useful supplementary resources for existing students and new informal learners.

Different media had different educational effects. Teachers might always do different and often better teaching by adapting it to the media. Students are more productive with the introduction of disruptive ICT in the classroom.That way, students will learn more deeply and effectively.

By providing relevant and current contexts, good tools, and interesting digital resources, Education will be moving from being purely academic, to where “gen-wired” might connect ‘new’ curricula (in and around), formal learning (who knows) and informal learning (alone or peer-support) to its own life, interests and academic achievement in a lifelong learning perspective.

Additional to the school subjects, educators will need to focus their proposed projects on things that might help improve students’ educational experience by helping to build autonomy, apply skills and knowledge to new situations, analyzing information, comprehending new ideas and ensuring they learn to self-direct and engage in critical reflection. Skills require opportunities for practice and development. It is important to empower students as valuable contributors to their own learning.

The teacher will be definitely a facilitator face-to-face and/or virtually, providing learners support, humanize the digtal learning, and an e-tutor collaborating with students learning online.

Training new teachers must not be forgotten. Young teachers are the ones who reveal more informatics skills, but the domain of simple technique does not guarantee that teachers use it easily, with clairvoyance and expertise. Massive online training roadmaping would support the big challenge of training teachers in Europe.

Conclusion or some thoughts:

"Open learning cultures can bridge "the walled gardens" of the school education with the worlds outside" Attwell wrote in 2008.

Students deserve every opportunity to learn and succeed. By gaining skills in ICT from a young age and learning to steward it responsibly and in its proper place, digital learning will prepared students to join the 21st century workforce and academic world in 2030.

I 'followed' the first "digital born generation". Fascinated, I could experience students' full participation and excitement by introducing digital resources in the classroom (in and out school). My open pedagogical experience (2001) was with my own project of e-learning based on learners' observation and study. It gave me the joy of being a utopian educator who practiced with passion the inclusive learning success (poor learners and gifted learners) working together in the classroom and online. Technology could underpin learning by making it more relevant, personalized and creative. As Andreas Schleicher said on TED Talks, 2013, "learning is not a place, it is an intimacy". Educationalists talk often about standardize, assessment, but less about passion. Education needs passion.

No doubt! Teachers and schools, but most of all teachers will continue to take brave risks to innovate, to create educational opportunities for a mass audience. Teachers will continue to experiment with their students. It is the only way to find what works in our next context.

As long as teachers will keep the assessment criteria in mind they can be as experimental as they wish.

Educators should be aware with these things and pedagogically well educated to have the ability and passion to motivate pupils and to offer them the best opportunities in versatile learning approaches and good methods. Excellence in teaching will be at the heart of our learners' experiences.

The feedback of experimentation made by teachers and students will have an enormous impact. Teachers need to be sure they have the students' best interest in mind, not just the bottom-line. Quality is a value of the digital resources and how they are linked to learning.The assessment of open education and digital learning will always be crucial to teachers and to learners. Not to do it, can completely change the pedagogical aim. And induce the failure of the educational background of the students.

Training teachers must be on the first line by supporting and expanding their skills and knowledge. It will be always difficult to feel and act as partners and not as teachers. In my own experience, and considering my trainee teachers, the happiest teachers with highest morale and sense of satisfaction in the job, are those who have been helped to develop a highly-attuned sense of technique in the classroom. Teachers must know with precision what they are trying to do and how they are trying to do it.

In 2030, like in 2013, it will be more appropriate not to work with answers but with questions. It will be more appropriate not to work with static content but to facilitate students to create the digital content of their courses. Young people in schools will be treated as natural learners. School systems will hear the voice of their students, finally.

Teachers' attitude and 'open' methodology will raise a lot of interest and hopes for a new approach to school education because learners are bathed from birth in connecting

technology. In a fast moving field like today's technology there are no best practices, only good practices and the need to continually invent better ones.

The "tech-born-generation" will be, among other things, accustomed to instant gratification and use of the web for extending friendships, interest-driven, self-directed learning and will be constantly connected, creating, and multitasking in a multimedia and participatory school.

The school system will continue to be reinvented to be accountable for what matters most. That means to practice captivating work-teaching, learning, and assessing in digital age.

Educationalists will see many new and fascinating educational tools emerging every day, and with them attempt to embed those digital learning resources in their everyday teaching practices. Education will become less dependent on courses, exams and degrees, and more on learners being linked, worldwide, to resources and to each other.

On 2010's, Economic crises in Europe brought a digital divide as a major issue for some developed EU countries' young people. 'New poverty' is clearly a factor in poor access to digital learning ICT and poor performance at school. Schools, and once more teachers and some best students could help to reduce this digital divide by volunteering attitudes at school.

Hoping the problems of equal access to education will be solved in Europe on 2030. It is encouraging to note that one of the key principles of European Commission is attend to find new solutions for Digital Education for all.

I hope that a great time will come in 2030 and will have a positive impact on Education but most of all on young students' lives.

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