ICT and lifelong learning in Europe

European project manager
Jan Gejel
The Xploit and LABlearning projects funded by the European Commission

Allow me a few words about how ICT in learning is discussed in Europe these days.

In the first years of the new millennium most people in education and training were very optimistic as to the revolutionary impact of ICT on education and learning.
The wide opportunities to learn in different ways, to include disadvantaged learners, to make the educations learner-centred, etc., were celebrated by very many educational stakeholders.
Large teacher training programs on the use of ICT were launched.

In 2011 it is widely agreed that the results have been interesting, even promising, but also somewhat disappointing.
What happened was, in most cases, that ICT tools were included in traditional classroom teaching, and at the same time many teachers were trying to catch up with the so-called digital native students; which, of course, they never did.

In conclusion, ICT has had little revolutionary impact on mainstream education, although many interesting experiments have been carried through.

We might put it this way: ICT has been used as new pedagogical tools within traditional classroom didactics.
I here define these complicated concepts in a very pragmatic way: pedagogy being the techniques of teaching, didactics being the organisation of the learning process.

ICT was also expected to have substantial inclusion effects, helping disadvantaged learners, such as young people at risk of early school leaving and less educated adults. But in general mostly higher education students have benefitted from the new learning technologies, not disadvantaged learners.
Many ICT initiatives were and are still aiming to "update" disadvantaged learners.

As it is clearly stated in the European Commission's digital agenda 2020 and in the recent Australian report, *The role of technology in engaging disengaged youth: final report*, we have not yet been able to exploit the potentials of ICT and media for learning.

In too many instances, however, young VET learners experience an environment in which technology is used in limited ways. They are unable to rely upon the provision of appropriate technology by their educational organisations. They also describe a significant gap between their own digital literacy and technological proficiency and that of their teachers and trainers.
There is a clear need for strategies that can address these gaps and barriers. At the same time, technology in itself is not sufficient to ensure the engagement of young learners. Too much emphasis on technology-led approaches can take attention away from the need to provide quality learning that includes quality teaching, quality

content and positive, trusting relationships between young learners and their teachers or trainers.
THE ROLE OF TECHNOLOGY IN ENGAGING DISENGAGED YOUTH: FINAL REPORT
WALSH, LEMON, BLACK, MANGAN AND COLLIN (2011)
COMMONWEALTH OF AUSTRALIA

Why have we not been able to exploit technology for learning?

In general because technology in itself, so well described by Mitch Resnick years ago, does not in any way produce more quality in learning, and because new and better learning processes should emerge from other sources: the development and implementation of learning principles allowing in depths learning, learning to learn competences, self-expression, collaborative learning, etc.
Technology does not offer innovative learning didactics. But technology has great potentials to support and increase the quality of innovative didactics.

ICT implemented in traditional education will not support such changes. It will simply "modernize" traditional education.

We all know that the traditional education didactics, born in the industrial societies, cannot offer such learning opportunities needed in the knowledge society.
Although education might be the key to the knowledge society, the educational systems themselves present a huge roadblock to unfolding the learning potentials of the networked knowledge society.

However, it is also true that ICT and media technologies offer tremendous potentials for creative learning and lifelong learning, including for disadvantaged learners.
The point is, and the lessons learned are, that these potentials cannot be unfolded within the traditional classroom.
We must "re-think" what learning is, as Resnick puts it.

This means that we need to develop innovative didactics to exploit the great learning potentials of ICT and media technologies.

The proper exploitation of the technologies' learning potentials does not emerge from the technologies themselves, but must be rooted in innovative and creative didactic principles.

Such didactic principles might for example include:
- Learning based on exploration, not on transference
- Learning interacting with the world of work
- Learning based on the learners' talents and aspirations
- Learning based on collaboration with resources outside the education
- Learning based on production, not on reproduction
- Learning based on the creative use of all sorts of media, including games, animations, videos, etc., and including advanced media
- Learning processes including the learners' independent and self-organized use of social media and networks
- Learning processes involving other professionals than teachers, such as professionals from enterprises, public institutions, cultural institutions and also media professionals
- Learning processes encouraging entrepreneurship in the widest meaning of this concept
- Learning linked to the personal life of the learner, to the learners' family and community

Most of these principles cannot be unfolded within the frameworks of traditional education.

In our European cooperation initiatives we are trying to make available a variety of inspirations for educations and teachers. A few examples might be:
http://www.sosuaarhus-international.com/LABlearning.htm
http://www.sosuaarhus-international.com/Gaming.htm
A small example from our new initiatives: in a traditional vocational education college we are trying to establish teams of young game developers and young college students, many of them disengaged and at risk of dropping out. The idea is twofold: they will develop learning games for our educations, but they will also learn through the development process itself.

One of the new European initiatives, called LABlearning, will be experimenting with such media based learning didactics across Europe. A hand-out is attached to this message.

Teachers across Europe find it very difficult to work with such new didactics. Many teachers are quite hostile to such changes and to media technologies in general. Very many teachers, in Northern Europe in particular, defend the face-to-face teaching, the close contact to the students, etc.
To some extent they are right, but the attitudes also include some sentimentalism as to face-to-face teaching. Actually, these days it is more like face-to-30 or 40 faces due to short-term efficiency policies in many countries.

Perhaps there are some understandable reasons for these defensive attitudes: first of all, teachers today are under great pressure from the powerful ICT and media rhetoric embracing most of Europe at policy level; and second because they are not in any way able to catch up with all kinds of new educational technologies.
So, to many policy-makers the teachers start to look like the most conservative group of professionals in our societies.

Perhaps they are, but perhaps we are not allowing them to approach innovative didactics in a clever and useful way:

- The ICT and media rhetoric should be replaced by initiatives and discourses linking closely to the everyday realities of education and to encouraging small realistic steps; more bottom up approaches should be encouraged
- The teachers should be included in dialogues about their future roles as educational professionals; teachers are not expected to be ICT and media experts, but to be facilitators of new forms of learning processes, based on some of the above listed principles

The role of ICT and media in changing and increasing creative learning opportunities for citizens is, of course, extremely important to the development and quality assurance of *learning communities*.
The very heart of a learning community is the community's capacity to include all kinds of citizens in lifelong learning processes and to create new learning infrastructures between a variety of learning initiatives and activities.

The development of learning communities is therefore extremely dependent on the creative use of ICT and media to support the development of new formal, non-formal and informal learning opportunities, especially for citizens in need of renewed motivation and self-confidence.

Non-formal learning for adults, migrants, young drop-outs, etc., has always been regarded marginal activities compared to formal education.
Should formal education start to pay more attention to the principles of non-formal settings and learn from them?
Might a strong interaction between formal and non-formal learning be of great value to learning communities?