THE EU COMMENIUS
LABlearning project

Media Based Laboratory Learning

PLATFORM

Part 2 - Inspiration

Part 2 should be used for further studying, staff and stakeholders' preparation and in-depths dialogues

DRAFT
April 2012 – JG/MM

THE ROLE OF THE PLATFORM

The LABlearning Platform consists in two parts: Part 1 is the *Guidelines* (offering short statements); Part 2 is the *Inspiration* (offering more elaborated texts).

The Platform offers guidelines and inspiration, not instructions and formula. It consists in a number of texts and statements about the quality of the media laboratories. The Platform offers a mutual language, a framework to be implemented or put into practice in different ways – according to local, educational and cultural circumstances.
The Platform is not a theoretical or scientific paper, but offers basic guidance on the most important elements in media laboratories for young people – whether in formal or non-formal settings.

The Platform is based on lessons learned, failures and successes, knowledge and inspiration from similar initiatives. It is also based on interviews with the young people themselves and on the interests and values of the LABlearning project itself.

The Platform and the LABlearning project are primarily concerned with disengaged or disadvantaged young people between the age of 12 and 20.

Platform Part 1 is also a tool for reflection. You can add your own experience to the different topics in the Platform, and the LABlearning project welcomes your contribution – whether you are a partner or not.

The draft version will be discussed by the project partners in spring 2012, and a final version will be available in summer 2012 to guide the project's laboratories.
The Platform will be used to organize the midterm time-out reflections and to support the project's quality assurance activities.
Finally, the Platform's Part 1 will be used to organize and structure the project's final outcomes.

Deep learning must take on epic dimensions...!

Content

Introduction

THE RHETORIC OF TECHNOLOGY

It was hoped, from the early days of information technology, that it would revolutionize education.
It did.
It offered knowledge to millions of people, it offered online communication and E-learning, and it offered measures to make education more efficient.
But it was a "traditional" revolution. Lots of technology optimists still believe that technology has basically changed education.
But it has not.
In most cases technology has been integrated into traditional didactics. Some teachers and learners benefit from this, some not.
All evaluation efforts agree: the more privileged a learner, the more benefit from technology.
Technology itself is not revolutionizing the way most people learn, especially not the way youth learn. And it will not. The learning potentials of technology will only be unfolded when integrated in new didactics, in new ways of learning, shifting the focus from the classroom to actively producing learners.
Technology itself will not produce one milligram of learning. On the other hand, some technologies offer incredible rich tools for learning if integrated in creative learning processes. These learning processes are, though, not derived from technology, but derived from knowledge and experience about real learning.
In fact both the misuse of technology and the unmanageability of available "knowledge" might very well disturb learning rather than facilitate it.

THE EDUCATION CRISIS

Europe has experienced deep crisis in its education systems for more than a decade. High drop-out rates, early school leaving, disengaged youth, etc.
The new generations of learners have exposed the conservatism of the education systems – neither able to meet the young people, nor able to link to the new realities of learning and work.
Many attempts to change the old classrooms have been made over the last 10-15 years, some of them quite successfully, but basically the education system remains unchanged.
Policy-makers and stakeholders are not willing to give up the formal control of the system, its work methods and its outcomes.
The education crisis is about new generations of young people not willing to passively receive "knowledge" from the teachers, sitting in the classroom for hours, days and years. They do not have the discipline, they do not want to and they are not able to; neither the so-called smart students, nor the so-called weak students.
The new generations are active, networking, self-centered, technologists, "un-disciplined", rapidly bored and lacking the old conservative education virtues.
The education system at large is not able to respond to this profound cultural change.
In fact, most students have been bored in the classrooms for ages, but perhaps it was less visible in the old days. Technology and technological youth seem to super-expose the failures of the traditional education system.

DIDACTIC DAWN

Technology and technological youth seem to super-expose the failures of the traditional education system, so we said.
But, in fact, we have known for decades, if not for centuries, what good creative learning is about.
Socrates did not offer answers, but only new questions. Freud did the same in his field of work, and the constructivists followed these pathways in more systematic ways.
But the industrial era called for mass educational solutions, not new questions, later on accompanied by the democratic movement's pseudo-dialogues with the learners: enlightenment, but not empowerment, and mostly for the middle class.
The creative learning environments were always and are still found in the fields of non-formal learning, such as the Nordic folk high schools and the global Computer Clubhouse Network.
No doubt, the didactic dawn is highly influenced by both the communication technology itself, as well as the new generations' technology cultures.
It has become clear throughout the last decades how outdated the traditional educations are when confronted with the potentials of creative technology.
Today, everybody seems to concur: innovation is urgent in the European education sector. The new technologies are seen as key drivers in this innovation.

TECHNOLOGY AND DIDACTICS

But, technology cannot define innovation in learning. Innovation in learning must be based on knowledge about how we facilitate good and creative learning. Good and creative learning was possible long before the emergence of Facebook and computer games.
This means that innovative didactics are to be based on non-technological principles.
On the other hand, technology offers rich access to all sorts of creative tools, and properly used technology can make creative learning processes unfold to the max.
Examples of core and non-technological principles on which creative learning should be based might be:

- The learning environment must be open, explorative and open-ended
- The learning must be linked to the interests and aspirations of the young people
- The young people must be involved in defining problems and missions
- The learners must critically explore the knowledge available
- The learners must interact with external experts and community resources in the learning process
- The learners must learn to organize, elaborate on and present the knowledge, (as a natural next step to fulfill their aspirations? or they must just learn to do it?)
- The learning outcomes could (it would match, what you say later on: " As far as possible, the learning productions should be made useful to other learners, or other people in the community") be benefitting other learners or citizens in the community; often the young people take pride in their products and the fact that other people need them
- The learning process should be product-oriented, as it offers the young people concrete, focused and practical perspectives in the learning
- The learners should use a variety of expression forms along the process and when delivering the final outputs, as using different forms of expressions help the learners develop different forms of intelligences
- The overall learning process is open-ended
- The learning should be linked to real tasks, not to artificial or simulated tasks.

All this can take place without the use of any of the new technologies, but it is very clear to what extend new technologies can dramatically increase productivity, creatively and motivation in such processes.

WHAT DOES MEDIA MEAN

When we talk about media, we mean all sorts of new technologies fit for learning: text editing, digital photography, video, animation, social gaming, social networking, all sorts of useful software and hardware.

But in our context we talk about media for learning. Media for entertainment might be different. Play Station might not be relevant to learning, whereas Facebook and Photoshop might be extremely relevant.

Defining media for learning includes challenging one of the great myths of our time: the idea of "digital natives".

Most young people might be "fluent" as to Play Station and Facebook, but they are not at all "fluent" when it comes about learning with media. Not that they are not technically capable, they are, but they do not know how to learn with the technologies at hand.

Therefore, in learning with media nobody is "fluent": neither the teachers, nor the learners.

We are all in the same boat: we must learn to learn with any state of the art media available, and we must learn to base the learning principles on knowledge about learning, not on technology. Any available creative technology should support creative learning, not the other way round.

Thus, the term "media based learning" is actually "wrong": the learning is based on creative learning principles, but the practical learning is based on extensive use of creative media to enhance productivity, creatively and motivation.

MEDIA BASED LEARNING IN FORMAL SETTINGS

It can be expected that innovation in learning will emerge from bottom-up initiatives: good practices demonstrating the benefits for the young learners as well as for the institutions.

Therefore it is urgent to organize a variety of laboratory and media based learning processes in formal education. As long as the creative learning initiatives remain isolated in non-formal settings, and as the assessment requirements are quite low or even non-existing in these settings, the strong potential of creative media based learning in formal education will not be demonstrated.

Creative laboratories of learning can be established at all levels and in different scales in formal education. It can even be done without disturbing the formal assessment rules and routines.

There is a wide range of opportunities to establish media based settings: from a group work to a class project to a large cross-subject and cross-class thematic community learning initiative.

The wide range of opportunities is described later on in this paper.

The aim of such limited media learning laboratories is to enable young people, teachers and institutions to learn to innovate the traditional classroom didactics. This is done by learning from practical experience and by telling the success stories to a wider audience.

MEDIA BASED LEARNING IN NON-FORMAL SETTINGS

Many young drop-outs, young unemployed, street youth, etc. are in great need of such learning provisions, and different laboratory settings can be established in youth clubs, in community centers or in public or private institutions.

As no or very few formal requirements are forced upon such settings they can develop into high-powered and very creative media learning incubators for young people.

One of the advantages in such non-formal settings is that the laboratory must finance itself, in full or partly. This is a great challenge to the young people working in the facility, as they will learn to contribute to their own laboratory by producing useful projects or products or services to organizations in the community.

The sense of ownership resulting from such activities is quite amazing, and this kind of ownership is only possible to a lesser degree in formal education.
In such non-formal settings it is easier to link the media projects to the community, to interested institutions and to real needs in the city, including the labor market.
The aim of such non-formal settings is to re-motivate and re-engage youth at risk by offering creative and relevant media learning projects, but also to use such facilities as inspiration in the formal education sector. The formal education system can learn a lot from these settings, and the idea of linking formal and non-formal youth settings closer to each other is extremely interesting.

THE PRINCIPLES OF MEDIA BASED LEARNING

Turning to the practical use of media in laboratory settings, we should define the most important media learning principles, not to be confused with the basic didactic principles described above. It is important to notice that neither the young learners not their teachers can be expected to know how to work in media laboratories!
The sense of experimentation is therefore crucial to the labs.

- The use of media should be guided by the learning needs and the missions of the project undertaken
- The media is not for entertainment, but for learning
- The learners must have access to all state of the art media tools for creative learning; they should not be limited by lack of access to quality tools
- The mentors are learning mentors, not technology experts
- The learning settings must have easy and flexible access to media professionals for inspiration and help, as well as to technical support
- The most important media resources are tools with which you can express yourself creatively
- It is important to the young learners that they learn to reflect critically on why they are using the different media tools and for what purpose
- The media labs are based on production, not on consumption: you cannot play computer games, but you can make one
- The choice of media should reflect the target and purpose of the produced outcomes
- The media work should link as much as possible to the local community, including private enterprises, cultural institutions and educations
- The media work should be based on the personal interests and talents of the young people, and could include non-technological creativity
- The mentors should ensure the quality of the learning and offer guidance on the quality, relevance and usability of the outcomes produced
- Networking with peers in social networks should be encouraged

LESSONS LEARNED FROM MEDIA BASED PRACTICE

Let us try to sum up some of the negative lessons from youth media projects over the last two decades.
When we analyze the evaluations of the practical experiments, we will notice a clear pattern: most evaluations focus on a limited set of obstacles or roadblocks, seriously damaging the expected outcomes of media labs for youth at risk.
Here are some of the typical obstacles to successful media LABs:

- Professional staff not ready to let go of the traditional control
- Professional staff not really interested in learning with media, more like simulating an interest
- Young learners not understanding what the media LAB is about and how they can benefit from it
- Lack of patience on the teachers and mentors side, but also on the side of the institution
- Lack of support and inspiration for using hardware and software

- Lack of technical support when needed
- Learning projects not sufficiently based on the interest of the young learners
- Not interesting defined missions, or not sufficiently promoted
- Isolated learning space, not linked to the community or to creative collaborators
- Too much time pressure, not allowing time to learn to work in the media LAB both for learners and mentors
- Tight work schedules, not allowing the learners to unfold or follow ideas and interests
- Too few time to train complicated hardware or software
- External partners not seriously interested in the young people's work
- Too weak project final aims, or too blur
- Professional staff not really dedicated to exploring themselves, just pretending to do so
- More time needed to make the young learners feel the ownership of the media projects
- Overestimation of the young learners' technology fluency
- Learning processes too abstract and academic, dropping of the non-academic learners
- Learning projects too ambitious, too far away from the learners' potential

In conclusion, such list should call for strong and serious preparations of new media LABs. With youth at risk you can only fail once or twice. Too many failures, game over!

HARD FUN

Are we promoting "more fun in education"? Are we giving in to the entertainment culture of the young people?
Not at all.
The great learning innovator Seymour Papert used the expression "hard fun". What did he mean by that?
He clearly promoted fun in learning, or "fun learning". Having fun, feeling good, feeling pleasure seems to be contradicting serious learning, at least when serious learning is based on discipline and abstinence?
The joy of learning seems more "acceptable", but it really means the same. In fact, one might argue that "learning without joy" is simply not possible.
The deep feeling of satisfaction when engaged or immersed in challenging learning activities is the real driver of lifelong learning interest.
Therefore, we do not agree that "fun" should be opposed to serious learning, in fact we will argue that fun, pleasure and joy are preconditions for sustainable learning processes.
When Papert used the expression "hard fun", he did it to show that in successful media based learning the young people are challenged much more in all dimensions than in the classroom. Media based projects, when based on the total engagement of the young learners, are hard work: you need to learn so much and so different things, most of them being quite different from remembering what the teacher said in the class.
This is why young people at risk can grow in media LABs: if they are successfully engaged in the learning projects, they will grow precisely because they are challenged, and precisely because they are following their own interests and using their own talents.
Thus, media LABs are not more entertaining or easy going than the classroom. On the contrary, the LABs are far more demanding than the classrooms. And, it is precisely because of the "fun", the "pleasure" and the "joy" of working that makes the young learners work so hard!
Therefore, once again: you cannot play entertainment games in the media LABs, but perhaps you can create your own learning game?

THE INTEGRATION OF LEARNING AND WORK

It is important to realize that not only is the traditional education system not tuned in with the new generations; it is also not tuned in with the labor markets of the knowledge society.
What is learned and assessed in traditional education?
Traditional "knowledge" and traditional "skills", very different from the competences needed in the labor markets of the knowledge society, and assessed by traditional methods, such as multiple choice tests.
Today it is possible to be successful in the education and totally fail in the labor market.
So, the traditional education system is challenged from both sides: from the new generation of young learners and from the labor markets!
Lately it has become a transversal key priority in the EU Commission's educational programs to develop projects and practices integrating learning and work.
Media LABs offer this integration in several ways:

- The missions of the media projects are linked closely to the community resources in the learning process, and could benefit people from the community, i.e. children, elderly, other young people, or the community at large
- Many media projects link directly to mentors or collaborators in the private sector, such as sponsors, media professionals and project partners
- The LABs invite several resources other than educational professionals to participate in the media projects
- Many of the skills needed in the media learning processes include skills highly needed and acknowledged in the labor markets, i.e. planning, problem solving, production, delivering, etc.
- The media LABs smell much more of entrepreneurship, risk taking and production than the classrooms that in general isolate themselves from the community and the labor markets

INNOVATIVE EVALUATION AND ASSESSMENT FLUENCY

We all know that one of the great obstacles to innovation in learning is the demand for *control* from the formal education system and powerful communities in the society at large.
This control is practiced in the form of formal assessment and validation systems. The learning and the curricula are directed towards those formal assessment and validation systems.
Most assessment systems are controlled by national governments, and the local education can do very little about it.
So, on one side the institutions need to establish innovative learning settings within the traditional education system, on the other side the education system needs to develop innovative and relevant assessment methods that meet the challenges of the new learning processes and of the modern labor markets.
The new assessment methods are likely to be process based, self-evaluative and team based, and to be able to assess the quality of an entire learning process, not just the results of the learning process.
The EU Commission has paved the way for such innovations by launching the learning outcome based assessment: what should be assessed is not how many books the learner has read, or how many hours the learner has spent in the classroom, but *what the learner is able to do as a result of the learning process*.
To assess what the learning can do, we need to monitor and assess the entire learning process within for instance a media based project. This is quite different from a multiple choice test exam.
To make the assessment measures fluent with the new learning processes, we need a top-down approach (national governments changing the assessment methods) as well as a bottom-up approach (LABlearning settings demonstrating the strengths and relevance of alternative work and assessments methods).

LABlearning: why does it work for youth at risk?

THE WHY

Traditional education didactics is outdated for all learners, not just for youth at risk. All learners could significantly improve their learning outcomes, their competences and their creativity if offered exploring and productive media LABs instead of teaching and lecturing.

Nevertheless we argue that media LABs are of special importance to youth at risk.

Why is that?

Strong, self-confident and academic learners can manage their learning pathways even if offered outdated education settings and methods. They might not be able to unfold their talents to the full, which they should in the knowledge economy, but they can manage their learning in a somehow acceptable way.

This is not true for youth at risk.

What does *youth at risk* mean in this context?

- Young learners from non-academic communities and families
- Young learners with low qualifications in the traditional subjects, such as reading and writing and math
- Young learners not able to learn in the classroom
- Young learners with low self-esteem when it comes about school
- Young people who cannot, from their life perspective, value the theoretical learning offered
- Activist and media entertainment addicted young learners
- Young learners with very little support from family and friends as to learning
- Young learners not aware of what they would like to do with their future life
- Young people easy victims of drug and alcohol abuse
- Young learners typically dropping out of secondary school or vocational training, often more than once
- Young people being trapped between unsuccessful basic school and the lack of ability to attend secondary high or vocational training

As can be seen we are a long way from strong learners not able to fully unfold their talents.

These large groups of young people are in need of very powerful initiatives to overcome their so-called educational deficit. If not, they are lost for life, and lifelong learning will turn out to be life non-learning.

Why do media LABs make a difference, then?

Let's point to some of the most important factors.

- The work processes are practical, action oriented and product oriented
- Reflections are in a natural way inserted when needed in the practical work flow
- The young learners are not passively listening and responding to teacher initiatives, but design their own mission and work flow
- The learning is not based on academic skills and qualifications, but on own talents and action learning
- The young people are engaged in defining the projects, their missions and their work methods prior to engaging in the activities; missions are not felt as externally forced and irrelevant

- Even though most young people do not know how to learn with media and technology, they are familiar with technology and feel they are on safe ground
- To a great extend the learning activities are based on the known talents of the young people, or based on the development of new talents
- The learning process is not divided into isolated academic topics, but represents a long coherent work flow
- The learning potential of the work processes is not depending on your academic and theoretical capacity, but on a diversity of very different capacities
- The use of high-end media is well-known to be highly estimated among this young people, and they are well-motivated to work hard to get more media skills
- The work flow are to a large extend based on interacting with external professionals, the community and social networks
- The work process has a clear final goal: to produce a product of high quality to be used by other people in the community; often the young people take pride in their products and the fact that other people need them
- No formal teaching takes place in the LABs; the learning is indirect and emerges through the practical project work
- The media LABs do not smell like education, but more like an open, action-based and productive workplace
- The young people are at the centre of all the phases in the projects: from mission design to delivery of the products; they acquire a deep understanding of their different roles in these phases
- Basically the young people are recognized for *what they can do* and for *what they would like to do*, not for *what they should be able you do according to the formal education system*

MEDIA LAB PROJECTS

It is interesting to describe the typical work flow in such media LAB projects for youth at risk. Such a description tells us about what kind of learning, skills and competences the young people will need to develop along the media projects. Media LAB projects are, of course, very different, but it is possible to outline the most typical phases, as there is a certain "logic" involved in projects and in media projects as well.

Of course, the description below depends on the size and scope of the project and on to what extend it is possible to carry out these phases in the practical learning situation

Media LAB projects should not be "dogmatic", but pragmatic: you do your best in the actual situation and with the resources available.

The young people might, most likely, not be able to carry out the different tasks in the work flow, but they will learn so much from trying and from being challenged by all these activities.

One of the great advantages of this didactic is that everybody around the young people are taking them seriously, which will encourage the young people to start taking themselves seriously.

MISSION

Depending on the formal or non-formal context, the young people will be invited to discuss a given or new mission they will be engaged in as a team or as several teams. The mission must be real and important and challenging. It must make sense and motivate the learners.

Main skills to train

Develop ideas, construct, plan, reflection on other people's needs and what you can offer, establish relevant teams, defining a project, designing work flow and tasks

RESOURCES

The young teams will find out what resources are needed to carry out the mission. This includes own skills and training needs, support from external professionals,

counselling from different people in the community, media needs and resources, available mentors and process supporters, time and costs to take into consideration.

Main skills to train

Reflecting on what we can do and not do, what we need to learn and why it is necessary, identifying support resources and even partners, planning of work flow and work tasks, discussing the team's capacity and deficits and what to do about it

FIRST DIALOGUES

The young learners will contact people they need to collaborate with along the project. They must expose the project and the reason why they need support or collaboration. They also need to explain the benefit for the approached resources and for the community. Moreover, they need to explain what kind of contributions they need from the collaborators and how the team will receive the support. The people to approach might be working in a private enterprise, a health institution, a cultural institution, or they might be media professionals or technology supporters. The initial dialogues might include discussions with the end users of the final products of the project.

Main skills to train

Communication with different people in the community, explaining your cause and your mission to other people, describing what you need from other people and why they should help you, planning how to benefit from these resources during the project, identifying the needs and interests of possible end users

FIRST DESIGN

Then the young teams will, supported by mentors and professionals, engage in the first work tasks and possible training activities are inserted when needed.
The first steps often include finding knowledge, using existing material and resources and trying to outline and visualize what the product should look like.
The first steps will normally reveal additional training needs and additional support needs.

Main skills to train

Internet search, selection of useful resources, elaborating on material, estimating what we have and what we need to create, visualizing plans, flows and outcomes, creating the first concrete visions of the products, including already at this stage: what kind of things would the end users like to have

SECOND DIALOGUES

Now the youth teams will establish dialogues with their mentors and collaborators about the first design steps. They will also communicate with possible end users about their ideas now starting to take on more concrete forms.
The feed-back from these dialogues will go into the further design steps.

Main skills to train

Presenting ideas to partners and users, receiving feed-back, managing the frustration when feed-back is unexpected, learning how to use the feedback from different sources to take further design steps, most importantly learning to adjust own ideas and expectations to partners' and users' needs

SECOND DESIGN

The time has come to start producing some of the elements for the production. It might be a video, an interview, a piece of music, a web framework, some photos, whatever. The young people will engage deeply in this work if properly guided.
The big challenge is for the team to coordinate all this and to remember to work together even if the team members are working on different elements.
This phase might require a lot of media work and training, and strong mentoring and guidance will be needed.
At the end of this work process, the team will bring together the different elements and construct the first version of the product or products, whichever they might be.
The material must be presented in a way that makes it possible for other people to test it.

Main skills to train

Designing and producing with all sorts of media, taking ideas into concrete media elements, coordinating different project and media tasks in teams, seeking advice and guidance when needed, putting together different pieces of content into a meaningful flow, getting new media skills on the flight, ensuring the testability of the produced material, product or service

TESTING

The first, and of course un-finished, material should be "tested" by or to presented to the people or the institution who will use it. The team of young people should try to make the first version testable or at least discussable to allow a fruitful dialogue with end users.

It will be important in this activity to listen well and capture the feedback from the users, and, afterwards, to reflect on what kind of adjustments or further developments might be needed.

Main skills to train

Presenting material in a way to allow testing or discussions, strong listening and capturing skills, constructive dialogues with users, understanding the needs and ideas of the users, making user feedback operative to the final productions

FINAL PRODUCTION

Based on the testing or dialogues with the users, the youth teams will start producing the final outcomes of the material, products or services.

This process is demanding and will require considerable mentoring and professional guidance. The young learners' critical competences will be challenged in this phase. The youth team should be able to feel proud when finalizing the work.

Main skills to train

Media skills, coordinating skills, critical and self-critical approaches, agreeing with the team, open to ask for help and guidance, take pride in your work

DELIVERY

The final material, products or services should be delivered to the users. It can happen in the form of an event, a celebration or in a very informal way. The youth team will need to present their work to the users and perhaps offer guidance on how to use the material.

The learners should make sure to arrange feedback on the upcoming user experience.

Main skills to train

Presentation to users and perhaps other audiences in the community, guiding users towards a proper use of the outcomes, making users interested in evaluating their user experience, and perhaps making them interested in further collaboration

EVALUATION

If possible in the specific learning context, the delivery should be followed up by a double evaluation activity. Normally young people are not interested in evaluations, but when the evaluation is about their own work, the interest will change.

On one hand, the youth teams should evaluate their own work process: what did we learn, how we learnt, what was working and what was not, and what would I like to learn more about (the topics, media tools) and how can I do that.

On the other hand, the learners should plan and carry out an informal evaluation of user experience with the deliveries.

Main skills to train

Reflecting on your own learning process, reflecting on your new talents and needs, reflecting on teamwork and reflecting on user satisfaction, planning further steps in your learning journey based on what happened in this project

A LEARNING EXPERIENCE

Most of the above described activities might not be possible in a specific context. The young learners might not be able to carry out all these different tasks.

This is not so important.
The overall aim is to offer the young learners a new learning experience, very different from their almost always rather negative classroom experience: to show them that learning can be different, joyful and exiting, and that they are not stupid.
What is important are the young learners' feelings about the project: do I feel proud, did I take new steps, did I occasionally forget myself during the work flow?, have I got new talents or ideas, do I feel encouraged to take new or further steps, did I have fun during the project, did I like this kind of work, etc.
Clearly, media LABs are not so much about subject learning, but much more about the famous key words: empowerment, self-confidence, learning re-motivated, discovering skills and talents, renewed energy to take further steps.
If *some* of the young people feel *some* of these things, your media LAB was successful.

Teacher or mentor – Freud, Socrates…

There are many obstacles to innovative didactics: national policy-making, conservative educations, reluctant teachers, the learners' traditional expectations, just to mention a few.
One of the most severe obstacles is, of course, the teachers.
Most of them are not used to work in media LABs, give up control and emerge into exploration side by side with the learners.
For many years public policy has responded to this by offering more teacher training: you must learn this and that to update your teaching skills.
It's an impossible mission, as new technologies and new social practices are emerging all the time. The teachers will, unless they are natural users themselves, will never "catch up".
The good news is that they don't need to.
It goes without saying that teachers of today should take an interest in the world of creative technology, but they do not need to be technology experts at all. It is not their most important roles.
Most teachers ask: what must we do to be able to manage these new media, these new learning settings…
But perhaps it is not about *what you should do*, but about *what you should not do*.
Shifting from teaching to mentoring, and that is what is needed in the media LABs, means NOT doing a lot of things, you used to do in the classroom. Thou should not teach, Thou should not organize, Thou should not take the scene, Thou should not control the learning process, Thou should not direct all activities towards the final tests; Thou should not be a teacher.

It's more like the famous Freudian rule of abstinence. The rule of abstinence is not about drinking or smoking, *but about not giving in to your desire to tell the "patient" how things are.*
The patient can only heal himself by constructing his own story about his mental life.
The same is true for the learner, and even more so for the young learner: she can only learn from constructing her knowledge and experience, and especially from doing this in real life situations.
The teacher cannot replace this process. The teacher cannot transfer the needed knowledge and experience to the learner, as Freud could not transfer his knowledge about the patient to the patient. In fact, he could, but it did not help the patient. Neither will it help the learner.
So, the basic rule of mentoring in media LABs is the rule of abstinence.
Mentoring means waiting, hesitating, watching, reflecting, - and then stepping in when the learners need guidance or mentoring.
The mentor learns with the learners. Therefore the mentor should never engage in the same projects several times. If so, he will lose his learning drive and motivation to explore.
The mentor is a senior learner.
The mentor is experienced in learning, not in media. He can help you when you get stuck, when you need a push to go on… Or give advice in complicated matters or situations. But he will never take over your learning process. Like Socrates: he will answer your question with another question, allowing YOU to learn.

Let us point to some of the important qualities in a media LAB mentor:

〉 Focusing on facilitating the learning of the learners

- Avoiding taking over the learning of the learners
- Willing and able to explore with the learners
- Deeply interested in creative media, but not needing to be an expert
- Sharing the mentoring with non-educationalists from the community
- Intervening when relevant and constructive: just in time
- Offering his experience when useful
- Demonstrating patience and acceptance towards the individual learner
- Watching the learning process, stepping in to let it progress
- Offering time-outs and dialogues when things get stuck
- Making needed resources available during the work process
- Offering critical and useful input
- Not giving in to "populist" behavior to please the learners
- Making sure that the learners' ambitions are challenging and realistic at the same time
- A protagonist of and role-model for "hard fun"

Basically, mentoring cannot be learnt in theory, but only by practicing it, and sharing your experience with peer mentors.

The *epics* of immersive media based learning

To be able to offer the young people immersive learning experiences, the learning space must take on epic dimensions, we say.
What does that mean?
When something takes on epic dimensions it means that the activity or event is played out on a dramatic scene, including different phases, conflicts, missions, interaction with different players and persons, and that it has epic structure: setting out from a shortage, a shortcoming or an important problem, travelling through different stages of elaboration and ending in some kind conclusion, synthesis or new equilibrium, this ending being perfect or imperfect, perhaps leading to a new drama with epic dimensions…

This is also the famous an almost eternal model of true story-telling.
True story-telling and epic learning need to include some basic characteristics, such as:

- A shortage, a problem, a dilemma, or a conflict
- Time and space to work in depths on this opening situation
- Several phases and progression towards solutions
- Interaction with different players and persons and functions
- A drama which is of personal interest to the players involved
- A drama that calls for *need to find out* and *desire to progress*
- A situation that after the working-through can lead to a new situation, a new level or a new challenge

Some will recognize in these criteria the models of not only narrative, but also for instance "life" itself and even computer games!
But what has all this got to do with learning?

Everything.

Traditional classroom teaching in its different versions, including a little group work from time to time, does not include an epic dimension. The many years in school might be presented in epic form, but not the learning itself.
Traditional teaching is basically academic, meaning learning by working with theory and knowledge and texts.
Academic theory and narrative are mutual exclusive!
Academic theory is abstract, based on the logic of language and thinking, whereas narratives link closely to life, persons, drives and desires – and drama.
The Computer Clubhouse learning principles is a powerful example of epic learning.

The creative use of media all along the epic learning process offers a strong story-telling dimension: you use different media and expression forms, not only to work with knowledge and information or content, but to tell the story of the learning drama itself, including the story of yourself.
This strongly supports the dramatic and creative dimension of learning.

This means that there are always two intertwined dimensions at stake in the media based learning process: working with the mission, the topic, the problem, the

content; and the drama taking place inside and around this work process: the scene itself.
The media tools address both dimensions: the content work and the story-telling. What kind of story-telling or drama or epics around the learning process are we talking about?

Let's list some of the most important epic elements in media based learning that makes this kind of learning *totally different* from traditional classroom teaching:

- The learning is embedded in and driven by a mission that the participants are deeply personally involved in
- The mission must include some kind of content, social and real complexity, but need to be within reach
- To work with the mission you need to go through different phases to build up solutions, and you need to design these phases
- The work process must include a need to interact with different players on the scene (in the community), also deeply interested in the mission
- You cannot accomplish the mission alone! You need support from your team, mentors and often from professionals
- You need to tell the story about your work process all along, and you need to do it with the most useful and expressive media tools, and you need to design how to tell the different parts of the story and how to make the story meaningful to other people
- You need to produce an ending to the drama: knowledge, products, services, networks, whatever, end you need to design those endings

The criteria for the young learners' immersive learning experience is that they feel deeply engaged and even lost in a longer work process that demands their full attention, their resources and their skills; and that they, looking back, feel that this learning process was like a journey, a film or a theater play.
Only when looking back, they can see the full contours of the drama, in which they were deeply immersed.
Probably they would say, when looking back: *I didn't know I was learning!!*

In the classroom they never questioned that they were "trying to learn". Now they didn't notice it at all. Why? Because this time, they were really learning…

If we assume a pragmatic standpoint for a moment, what does this mean in everyday media labs?
We need to ensure lab processes of a certain *length*. Epic learning needs a certain amount of time to be played out. So does true learning. Small projects for a few hours or days will not be sufficient.
We also need to ensure strong *missions*. If the missions are not strong, relevant and do not trigger the participants, the missions are not powerful enough.
We need to give *space*: to allow different things and actions in physical and mental space to let the drama play out. This includes available media tools.
We need to *interact* with other people than in the traditional classroom. We need to put new people, resources and players on the scene.
We need good *mentors*. Not media experts, but mentors capable of setting the scene, supporting the different stages and interaction, and silently, discretely, like an invisible hand, pushing the young teams towards solutions or elements of solutions.

The strong mentor knows how to balance frustration and success among the youth teams. Too little frustration makes them lazy, too much frustration make them give up. Too much success, and too early, makes them lazy again, too little success discourage them.

Perhaps this is the true art of being a media lab mentor – and it is not about knowledge, but experience and… art!

If we take a closer look at the things we have been talking about in this section, we notice a very strong and always underestimated link and dependence between *learning and narrative*.
Most learning theories never understood this. They never understood the link between life, people, emotions and… learning.

Therefore narratives and other art forms are more interesting as reflections of learning than science.
Not because the learning content, the mission, is about art or literature, but because deep learning must take on the *forms* of narrative and drama to be deep learning.

We should definitely invite many more learning professionals to study good learning in the light of narrative and drama.

Some people have precisely been doing that: the people who are promoting computer game design as a most interesting and powerful model for… deep learning.
In other sections of this paper we refer extensively to some of these efforts.
In fact, good computer games are organized exactly like the media lab learning processes described above: mission, frustration/success, personal involvement, levels, collaboration and interaction with friends and enemies, challenges within reach, clear goals, etc.

Therefore good computer games are a very powerful inspirational source to immersive learning processes:
1. As model for the organization of the learning itself
2. As content (learning games)
3. As work process: design of games

But how can we be surprised?
Computer games are situated precisely at the intersection point of

NARRATIVE
LEARNING
and
MEDIA

Some LABlearning principles

Media based learning and collaborative learning principles, and… In this text we describe the basic principles of LABlearning in very few words. LABlearning is not about theoretical dogmatic, but about finding a variety of creative learning practices.

SET-UP

LABlearning is not about classrooms and teaching. LABlearning is about establishing a laboratory of learning in which the learners take part in all processes, including defining the learning missions. The laboratory metaphor signals experimentation and exploration and trying out different pathways.

PROBLEM BASED

LABlearning includes learners' participation in defining and understanding the learning missions, as well as participation in the organisation of the learning activities. LABlearning sets out from a problem or a group of problems, from which the mission can be defined.
Learning based on problems and challenges, and not on the consumption of ready-made knowledge, aims to increase the *learning to learn* capacity and motivation of the learners.

LEARNING AS PRODUCTION

LABlearning is about a laboratory in which knowledge and competences can be produced, instead of being reproduced. The production of knowledge and competences encompasses both the mental and collaborative construction of knowledge from a variety of sources, as well as the production of digital and physical products.

PRODUCING FOR OTHERS

As far as possible, the learning productions should be made useful to other learners, or other people in the community.
The *producing for others* should not be reduced to simulations, but should as far as possible aim to circulate real and useful knowledge and competences in the community.

OWN TALENTS AND ASPIRATIONS

No matter the topics and contents of the learning, the learning should link to the learner's own talents and aspirations: to what the learner is good at, and to what the learner would like to be good at.
This includes technological talents, artistic talents or different forms of technical skills.

COMMUNITY APPROACH

LABlearning should open the doors to relevant resources in the community that might be included in the learning mission, or might benefit from the produced knowledge and competences.

MEDIA AND TECHNOLOGY

LABlearning should include all sorts of state of the art technologies to allow the learners to be creative and express themselves to the max, collaborate in virtual environments, to enhance the learner's mastery of media technologies, and to exploit the great learning potentials of interactive technologies, including media production and gaming.

ATMOSPHERE

LABlearning should not smell like "school", but should offer an open environment, based on mutual interests, trust and respect, in which the different players collaboratively pursue their learning goals and help others reach theirs.
The supportive LABlearning environment should be accompanied by clear and strong challenges, demonstrating that learners and learning missions are taken very seriously.

Pathways for media based learning

Media based learning and *LABlearning* are our pragmatic names for learning processes using media work as a motivator, driver and organizer of learning outside the traditional classroom.
Our young and adult "digital natives" are experts in social media and media entertainment, but certainly not in *learning with media.* Most probably, neither are our teachers; nor are we.
Media based learning and *LABlearning* aim to motivate, engage and activate young and adult learners at risk of drop-out or with poor education experience, but can enrich any learning process for any group of learners…
Media based learning and *LABlearning* are also very powerful activities in lifelong learning centers and community centers fostering lifelong learning and inclusion through learning.

[The practical examples are linked to the health care and social care sector]

MEDIA SUPPORTED LEARNING

Description
In different kinds of settings the learners will use digital media on every occasion possible – to search knowledge, to organize knowledge, to discuss knowledge and to present knowledge. Media elements such as internet, social media, Word, Power Point, design tools, video tools, etc., can be used by the learners to produce knowledge.

Use of digital media
The learners use all kinds of available media tools at different levels, depending on their media skills and interests, and on what tools are available.
It is important that the use of media includes being creative with media and the use of a variety of expression forms.

Didactic capacity
Media supported learning does not offer a didactic framework for learning, but it can support and make more interesting different learning approaches, such as problem based learning.

Example
Based on the challenges *Why do some young people suffer from lifestyle diseases*, the teams of learners search basic knowledge on the internet, organize the knowledge in Word, Power Point or design tools, discuss the problems in social platforms, produce a few videos with young people and present the full material on the institution's website.

MEDIA PRODUCTION LEARNING

Description
The learners work in teams to produce learning material on the relevant topic. They plan the production, they search raw material, they organize the content, they design the presentation forms, and they establish dialogues with the people who are

expected to use the material.
The learners learn, not from using media material, but from producing useful material for other people, for example younger learners or families.

Use of digital media
The learners use media tools to produce material and therefore they will also have to use advanced media tools, such as graphic editing and web editing. Relevant media tools should be available to the learners and technical training at hand.

Didactic capacity
Media production learning can offer a strong didactic framework, able to organize the entire learning process in different phases.
The didactic drive is the logic of media production, but the subject-related learning outcomes can be very strong.
Often it is necessary to include professional media designers in the process.
Sufficient time must be allocated to the learners' media training, if needed.

Example
A team of learners is given a mission: in one month you should produce a high quality multimedia material on dementia and how to communicate with people suffering from dementia.
The material will be used by younger learners and by learners in secondary school.
The learner team designs the material, supported by the teachers, and carry out the needed research and dialogues. They use the most relevant expression forms to present the content.
Finally, and supported by a professional media designer, the learner team produces a high quality material on dementia communication, combining different elements and forms of expression.

COMMUNITY BASED LEARNING

Description
The learners address the health needs of groups of people in the community and establish a number of dialogues with groups of citizens and with different stakeholders and players in the field.
The learning mission is to provide the community with alternative or innovative information, material or other forms of input that can help groups of people change their situation.
The learner team collaborates with the community all along the process.

Use of digital media
The use of media is not the key focus in this process. But on many occasions the creative use of media tools will improve the quality of the collaboration and the final outcomes. Media tools should be used to communicate with the community, search knowledge, organize knowledge and present knowledge to the community.
A special attention should be given to the creative use of media to offer the end users alternative ways of understanding the problems in question.

Didactic capacity
Community based learning is indeed capable of offering a strong didactic platform for the learning process. Community collaboration can cover all the phases of the learning process and offers a clear mission and structure to the learners.
The community didactic is characterized by setting up a mission beyond the world of the learners themselves: they are working and learning to benefit the community.
At the same time this framework offers many opportunities to use media in very creative ways.

Example
The learners are given a mission: school children are spending a lot of time using computers, mobile phones and other electronic devices. Some of them get very little physical exercise. Give the community some new input on, how this situation might be changed.

PROBLEM BASED LEARNING

Description
The learners are given a team challenge. A health problem in the community or among themselves is described.
The challenge to the learner teams is to find out how they will learn about the problem, and what they are going to do about it…
Therefore the learners need to discuss and to find out, how they are going to organize their learning of this topic. What will you do, who will you talk to, where will you find, how will you discuss, and how will you present the results of the learning.
The teacher acts as mentor and counselor, but does not interfere with the learning.

Use of digital media
In fact, the learners do not have to use media at all in this process. Nevertheless, the process will be far more creative, efficient and interesting if a wide range of media tools are involved. Relevant media tools can support the research, the planning, the communication, and the presentation of the outcomes.

Didactic capacity
Problem based learning is a strong didactic platform for the organisation of the learning process. The focus is on the *learning to learn* challenges, not primarily on the topics. Yet, strong subject-related outcomes can be expected from such a process.
The teachers and mentors involved need to be confident as to the practical use of this method, as the learning process can sometimes appear quite chaotic and full of roadblocks.

Example
It is a problem to the primary schools that many migrant families do not participate in the school's family events. It makes it difficult to support the migrant children's learning and integration.
The mission is to plan a learning process through which we will come to an understanding of the problem, from different points of views, and that will eventually propose some possible solutions to the problem.

GAME BASED LEARNING

Description
The learners use video games to study a topic, or a mosaic of related topics. The learners can work individually or in teams. The learning process should establish a strong interaction between the video game world and the learning environment surrounding the game world.
The gaming might include the critical analyses of the game and the ways in which the player interacts with the game.

Use of digital media
Interacting with video games, or learning games, offers a highly concentrated and challenging use of digital media. Many skills and competences can emerge from the

gaming activities. However, working with video games is not necessarily that productive, meaning that video gaming should be accompanied by active, productive and designing use of media tools along the learning process.

Didactic capacity

Only in the case where the games employed are of a very high quality and covers many aspects of the learning process can game based learning offer a strong didactic platform. In most cases video gaming will be an element in the practicing of other didactic principles not specifically related to video gaming.
Good learning games do, though, often offer excellent learning experiences, not obtainable elsewhere in the learning process.

Example

The learners use a video game offering missions from within the human body: the body is influenced by different environmental sources and the learner must find out about the impacts on the different elements of the body and try to combat the damages inflicted.
The game is structured in different levels, taking the learner to more and more complex tasks and demanding solutions.
The body game offers experiences that cannot be obtained in the real world.

GAME DESIGN LEARNING

Description

Learners can learn, not only from playing video games, but also, and perhaps even more so, from designing video games on different topics.
The process of designing a learning game is very demanding and complex, and it requires a variety of activities, most of them involving the use of digital media.
The design process is balancing between the learning of game design and the learning of specific topics or knowledge fields.

Use of digital media

Even though the design of learning games will often set out using paper and pen and a lot of discussion, the creative use of digital media might be very creative and demanding.
To illustrate the gameplay the learners will need to use graphics, progression tools, animation tools, perhaps web based tools and most certainly elementary game programming.
The learning process might end at the point of the production of a demo, or it might go all the way and include the production of the full game or parts of the game.
In all cases, professional game designers should be involved and collaborate closely with the learners and the teachers.

Didactic capacity

Game design learning offers a very strong didactic platform, as the learning process can be organized according to the phases of game design.
The teachers involved should collaborate closely with a professional game designer to help the learners organize the process.
Although the learning process seems to be focused on game design, a lot of subject-related challenges will occur along this process, and eventually lots of good learning can result from such processes.
This leads to a piece of serious knowledge: the didactics of the learning process does not in any way need to be linked to the topics at all to offer strong subject-related learning outcomes.
Designing learning games is an excellent example of this.

Example

The learners are challenged with designing a video game on burnout.
Many teachers in primary school suffer from burnout symptoms and in some cases they lose their working capacity for a long time.
The video game should offer a game environment challenging the gamer to find creative ways of avoiding being a burnout victim.
The game should be developed in collaboration with, tested and used by primary school teachers.

SOCIAL GAMING LEARNING

Description

The learners are here engaged in online gaming activities, in which they play a significant role in the progression of the game.
The social gaming might take the form of a serial, progressively feeding the learners with new content elements and challenges.
An important part of the gaming is the discussions between learners and players: how to collaborate, how to solve, how to progress…
Such social gaming processes can be established at high level, including long-term planning and plenty of resources, but it can also be designed as small in-school or between-schools scenarios, using quite simple media tools.
A groups of teachers should work together to design such social gaming processes.

Use of digital media

The social gaming activities are mostly focused on the use of social media and communicative tolls, but might include missions of producing media elements to progress in the game world.
The social gaming environments offer strong media based virtual collaboration competences, being key competences in the knowledge society.
Different forms of text based or video based synchronous communication might also be included.

Didactic capacity

The social gaming learning might simply be an element in learning processes organized by other principles, or it might constitute a regular element in any learning process.
But, in fact social gaming might also, at different levels of ambitions, be used as an organizer of the entire learning.
The teachers and mentors need to be familiar with such learning tools and be highly motivated to participate themselves.

Example

A game series in 12 episodes is produced by a group of schools in collaboration with a social game designer. The process will take 12 weeks and is about why many young people drop out of school and what happens to them afterwards.
The learners take active part in the discussions of the scenarios presented, and work together in teams competing on finding the best solutions and how to make the social game progress.
The winning teams might be offered an opportunity to produce a new social game in collaboration with the professional social game designer.
Alternatively a group of teachers and learners can work together and produce such a series of scenarios at lower level and using the school's own web environment or online forums.
Social gaming learning might be carried out within popular virtual worlds, such as Sims or Second Life.

SOCIAL NETWORKING LEARNING

Description

The learners are here engaged in online platforms, game-like or not, with learners from other schools or even countries. The learners are constantly challenged with problems, situations or scenarios they have to find out about and communicate about.
The discussions and activities in the platform might include media productions to be discussed with other learners.
Social networking learning is different from social game learning as it does not include gaming, but is focused on exploration and collaboration in virtual platforms.

Use of digital media

The learning process will be focused on the use of virtual communication and collaborative tools, but the learner missions should also include the production of small media products, such as Power Points or videos as integrated elements in the virtual collaboration.
Different forms of text based or video based synchronous communication might also be included.

Didactic capacity

Social networking learning might be used as an organizer of the learning process, but in most cases social networking would be an element in a learning process organized by other principles. In such cases social networking might offer a strong collaborative dimension.
Social networking learning also offers strong and interesting opportunities for the learners to collaborate with learners from other schools, from the community and from other countries (for example in the case of language learning).

Example

The learning teams in a Danish college are challenged with collaborating with a Spanish college exploring and discussing the alcohol habits among young people in the two countries.
The learners are expected to collect evidence and produce multimedia material explaining the different alcohol habits, and to discuss the problem and the material in English and in Spanish.
In advanced cases such learning processes might result in the production of a joint website with relevant material.

SCENARIO BASED LEARNING

Description

Scenarios are very different from games. Games are quite demanding as to rules, progression and programming, whereas scenarios are short narratives demonstrating a life situation or a fictive situation.
Scenarios can be produced with simple tools like Power Point or any digital storytelling tool available, it can be set up as a website – or it can be a series of small videos.
The learner teams' mission is to work with the scenarios, respond to the scenarios – and to produce new scenarios taking them further.
If resources are available, scenarios might also be produced at high level with professional media tools. Normally this would include collaboration with media designers.

Use of digital media

The learners engage in learning with simple media tools and communication tools,

but they should also respond to the scenarios presented by developing new scenarios with a variety of simple or advanced media tools.
The focus might be put on expressing oneself with the most relevant media available, and to explore how different media could be used to develop scenarios.

Didactic capacity
Depending on the ambition level of the scenarios such activities might form the backbone of a good learning process. It might as well, though, simply be a learning activity among others in settings based on other principles.
In advanced cases the scenarios might work as an organizer of a full learning process.
Scenario based learning offers the teachers and learners a variety of simple and more complex opportunities to simulate real life challenges.

Example
An elderly citizen suffers from severe diabetes.
A series of dramatic scenarios are developed, using drawing, text or small videos, in which the elderly citizen is not caring well for his diabetes, but bringing him in difficult situations.
The learners will work with the scenarios, and produce new scenarios to present their solutions to the difficulties.
Advancing this example might mean the production of a series of video based scenarios.

VIRTUAL SIMULATION BASED LEARNING

Description
Simulations are not games. They present a part of life in digital format to explore. Many such virtual worlds are simulations. The freedom of action for the learner can be very different, but the basic idea is to allow the learner and the team to explore often complex situations that cannot be explored directly in real life, for different reasons.
The simulated world might include challenges and tasks, and even larger missions. The virtual world might represent a very small part of real life, or it might be historical simulations over time.
A simulated world might be about how to communicate with a citizen suffering from dementia – or it might be about the functioning of an entire hospital or work place.
Quality simulations are quite demanding to design and produce and therefore quite expensive.
It is, in some cases, possible to construct such simulated worlds in existing platforms such as Sims or Second Life.

Use of digital media
The learners will be working a lot with media in virtual worlds. They will learn to construct, problem solve, navigate and collaborate in virtual environments.
Usually they will not produce with digital tools themselves, but it is possible to include digital production in the missions of the virtual worlds, or in connection with the activities in the surrounding real-life learning environment.

Didactic capacity
Simulation learning might be used as an element in different kinds of learning processes organized by other principles, but in the case of a high-level epic virtual world, the entire learning process might be linked to and embedded in such a structure. In this case virtual simulation based learning might constitute a strong didactic platform.

Example

The human body has been animated into a simulation world and the learners can travel along the natural transportation infrastructure of the body to explore different elements in the body, such as the heart, the liver, the blood, etc.
The simulation world can offer open exploration, or it can include different emerging challenges and missions, for instance emerging from outer world incidents impacting the functioning of the body.
In fact, there are no limits to the scope of such simulations and missions, but such simulations should be targeting large-scale audiences, as they are very expensive to produce.

TRAINEESHIP BASED LEARNING

Description

Many educations include periodically traineeships in which the learner practices skills and competences in real life work situations.
During the traineeship the learners might be challenged with producing evidence of their experiences. They might use different media tools to explain what they are learning and what problems they encountered. The media products might be discussed with other trainees from time to time and be presented to new learners to prepare them for the traineeships.
In fact, the media products might also be presented to the work places to invite them to learn to better mentor and support the trainees.
The same is possible in learner mobility activities.

Use of digital media

Besides online communication with people from the education and the work place, the learner will be challenged with finding out how to best organize and present the work place experience: how can I make others understand my learning and my problems by using the most expressive and relevant media?
Should I use texts, pictures, drawings, videos – or should I combine different expression forms? And how to illustrate and express different forms of experience?

Didactic capacity

Structuring and presenting one's experience might very well be a strong organizer of the traineeship. The entire traineeship could be organized into challenges linked to structuring and presenting what you learn and what kind of problems you have during the traineeship.
Presented in this way, the experience would be more interesting to people involved in the traineeship, and to new learners.
Of course, media work in traineeships might also simply be carried out at lower level at milestone points, or as post festum reflections on the traineeship outcomes.

Example

A young migrant is engaged in a traineeship in a centre for elderly.
Some of the elderly have great difficulties with the young migrant's language and accent, as they suffer from reduced hearing and concentration.
The young migrant agrees with the school mentor to illustrate and present these experiences by video interviews with some of the elderly and by producing a media log during the traineeship.

RESEARCH BASED LEARNING

Description

This learning pathway focuses on using digital media to search useful knowledge, to review useful knowledge critically, to organize useful knowledge and to present

useful knowledge in user-friendly ways.
The internet is the basic tool, and the mission is to find the most relevant knowledge on the topic in question, but also to identify different expression forms in which this knowledge has been successfully delivered. This, then, includes critically media reflection: how is this knowledge presented in the best way to people expected to use the knowledge?
This critical reflection leads to the second part of the mission: how can we organize the knowledge in a new way, using different media, to allow a better understanding of the topic among the users?
Actually, the title of this pathway might be: how to work with and form knowledge?

Use of digital media
The learner will use the internet in many different ways, and become an "expert" in the quest for relevant knowledge.
But the learner will also engage in critical reflections on different forms of media expressions: how might the users of the knowledge benefit from certain forms of presentations and not from others?
Finally the critical reflection should lead to a process in which the knowledge elements are combined and presented in a new way, taking into account the profile and needs of the users. In this part of the process, the learner will choose the most relevant media and produce a media product presenting the knowledge in a new way.

Didactic capacity
It is obvious that such activities can be integrated in many different learning processes, governed by different principles.
But in fact, research based learning might offer a strong didactic framework, as the knowledge work might structure the entire learning process.
In this case research based learning provides a very strong didactic platform.

Example
Cancer patients in hospitals are often presented with piles of information. A lot of this information is bureaucratic, unorganized and very difficult to digest for a patient in the middle of a serious crisis.
The team of learners is challenged with this mission: find the relevant knowledge that need to be transmitted to the cancer patients (or a sub-group of cancer patients), analyze critically the quality of the information taking into account the situation of the users, and produce an alternative way of making the patient aware of this content.
Discuss the outcomes with the hospital staff responsible for the production of cancer patient information.

"COMPUTER CLUBHOUSE BASED LEARNING"

Description
A Computer Clubhouse setting is not a "didactics" -or, is it?
In a Computer Clubhouse the media interest is not linked to a specific topic forming part of the curricula, as in formal education. Instead the media interest is linked to… media. And, especially to the personal interests and talents of the people working in the clubhouse.
The clubhouse offers the learner time and space to explore how media can be used to take your talents or interests further – and to engage in in-depth media learning.
The clubhouse is often used to motivate or re-motivate young people, and to allow them to build up a reinforced self-confidence and a number of important basic learning to learn skills.

Use of digital media

The learner engages in all kinds of media learning, such as graphics, animation, video, music, etc., including social networking, and explores what media can do for the learner and her personal talents, aspirations or secret hopes.
The focus is on media work and how to express oneself and ones "cause" in the most creative way. The clubhouse activities are linked to community networking.

Didactic capacity

The Computer Clubhouse "didactics" is based on a series of principles allowing the learner to explore media tools and media expressions.
The clubhouse environments are non-formal learning settings and the learners attend out of their free will.
The clubhouse world can be established as an after-school provision, or it could be integrated in formal educations in the form of "free space for media exploration". Very often such provisions are addressing young people not working well in formal education, early school leavers, or learners at risk of dropping out.

Example

At the Aarhus Social and Healthcare College the drop-out rate is very high. Many young people enroll in the education without really knowing why and what it's about.
Instead of accepting drop-out, the College might establish a "Computer Clubhouse" at the heart of the College or in a neighboring building. The clubhouse should be open every afternoon and can be used by learners at the College at risk of dropping-out, and by learners having recently left the education.
The clubhouse environment is an alternative to dropping-out and to continue to mal-function in the classes.

WEB BASED LEARNING

Description

This media learning pathway is about changing traditional education material and classroom teaching into media based materials and collaborative team work.
The education produces a world of web based multimedia material, in some cases including learning games and social networking platforms, often in collaboration with media designers.
The learners will explore this material, typically organized in sections with facts, narratives, scenarios and links, combine the material in a useful way, and add new elements from online search.
The learners will produce media products as outcomes of the learning and thus contribute to the variety of material in the web world.

Use of digital media

Learners will use all kinds of digital materials in the learning process, including collaborative communication tools.
Learners will train their ability to combine digital material and also combine knowledge embedded in different "languages", such as texts, videos, scenarios, graphics, links, etc.
Last, but not least, they will be encouraged to use media tools to present the outcomes of the learning.
In certain cases, the learners are encouraged to take their media skills further and explore more advanced media tools.

Didactic capacity

The established "world" of web based multimedia material might very well constitute a well-functioning didactic platform, encompassing the entire learning process.

The media didactics of "find-organize-present" can be a strong organizer of the team learning.
The advantage of this pathway is that it can be used at different levels, without compromising the very idea of the principles. And, it can form a part of any learning process governed by other didactic principles.

Example
Working with and supporting people in deep crisis, due to severe illness, can be very demanding and complicated.
To support the learning of the College's care students, sosuMedia – the in house media team – produced a large and very qualified material for the learners to explore. The material was designed in close collaboration with the teachers at the College, and it also included video interviews with people in severe crisis situations. As the College owns the productions, the College can decide to further develop the material, to include productions from the learners or to share the material with other educations.

SOME GENERAL RECOMMENDATIONS TO MEDIA BASED LEARNING AND LABLEARNING

Media based activities work best in long-term processes and in cross-disciplinary settings – allow time for learners to train their media skills

Involve media designers or game designers in the planning and in the learning process itself

Ensure the availability of qualified and state of the art technology

Remember that there are many different ways to learning outcomes, most of ways are very non-linear or indirect

Allow yourself to learn with and from the students

You do not have to become a media expert yourself – you are a professional learning organizer and you should be allowed to involve media resources when needed.

Many ways to create LABlearning facilities

A CLASS AS MEDIA LABORATORY

The school can decide that a class, for example a new class, will be organized partly, or in full, according to LABlearning didactics and principles for a shorter period or for a year.

A CURRICULUM AS MEDIA LABORATORY

A certain subject for one or more classes or groups might be organized according to LABlearning didactics, for instance English, Information Technology, Communication or History.

A CROSS-SUBJECT CURRICULUM AS MEDIA LABORATORY

It can be decided that a class or a group will use LABlearning didactics and principles to learn about a cross-subject theme, such as climate change, in a shorter or longer period.

A CLASS PROJECT AS MEDIA LABORATORY

A class can work in a LABlearning setting on a special project within a curricula subject.

A PROJECT GROUP AS MEDIA LABORATORY

A group of learners can work in a LABlearning setting on a special project within a curricula subject.

A PROJECT GROUP AS MEDIA LABORATORY

Within a subject or within the curricula in general a special group of learners (perhaps at risk learners) are formed, and are challenged to work in LAB settings in parallel to the class.

A SUPPORT EDUCATION MEDIA LABORATORY

Some institutions offer preparatory or support education for students who are not yet ready to enter a secondary or vocational study, and such support educations might be perfect for laboratory based learning.

AN INTERNATIONAL MEDIA LABORATORY

A class or a group of learners are challenged with working with a subject or a cross-subject theme by collaborating virtually with one or more schools in other countries. The project might include language learning and might be set up according to the LABlearning didactics.

A SEMI-FORMAL MEDIA LABORATORY WITHIN SCHOOL HOURS

In support of at risk learners, or to get drop-outs back into learning, the institution can establish in-school media lab facilities and invite groups of learners to work in these facilities in parallel to class education.

A SEMI-FORMAL MEDIA LABORATORY IN CONTINUATION OF SCHOOL HOURS

The institution might decide to open part of the building for after school media laboratories, especially for youth at risk. The activities in the media lab might be linked to the school work, but it does not have to be. Opening hours might be on work days from after school to 8 or 9 in the evening. Some institutions might even consider opening hours during the weekend.

A NON-FORMAL MEDIA LABORATORY IN THE INSTITUTION AFTER SCHOOL

The institution might decide to establish a genuine media lab in its premises – for young people attending the school, and for other young people in the community. This facility might be open in the evening and also in the weekend.
In extreme cases, an educational institution might decide to establish something like a Computer Clubhouse linked to but not controlled by the educational institution.

A NON-FORMAL MEDIA LABORATORY IN A COMMUNITY CENTRE

One of the strongest non-formal solutions is to establish a media lab as an integrated part of a community centre – or the use a media lab for young people as a catalyst for establishing a community centre!
The media lab will profit from being directly linked to the community – and several synergies between the activities in such a centre can be expected.

A NON-FORMAL MEDIA LABORATORY IN A MEDIA EDUCATION

A media education, such as a multimedia university, a media vocational college or a media based high school, might offer its premises to establish a media lab in support of the learning of youth at risk in the community.
In certain cases such an initiative might develop into a computer clubhouse facility.

A NON-FORMAL MEDIA LABORATORY IN A YOUTH CLUB FACILITY

Many communities have some kind of youth facilities or youth clubs. Such facilities might partly or in full be developed into a LABlearning facility, closely linked to the community.

A NON-FORMAL MEDIA LABORATORY IN A PRIVATE ORGANISATION

A strong private enterprise might offer to use its premises for establishing creative media laboratories for youth at risk and for young people in general.
Often this will be private companies with strong corporate social responsibility programs – or companies directly interested in youth and media.

A NON-FORMAL COMPUTER CLUBHOUSE

The high-end non-formal solution is, of course, to establish a genuine computer clubhouse in the community, supported by major stakeholders in the community. Such a solution requires long-term planning and preparation, but in the long run it represents a very strong and sustainable solution.

Learning skills from computer gaming

SPECIAL INSPIRATION SECTION

An increasing number of young people drop out of school, or are getting poor results from the many years in the classroom. At the same time millions of young people are deeply engaged in virtual gaming through which they develop skills much more advanced and efficient than in the classroom. It seems like the world of learning is falling apart: formal learning and real learning. The education system must react to this.

The first wave of virtual games was for fun and entertainment. Then within the last decade advanced and complicated strategic and epic games were developed. These games are very demanding and can go on for weeks or months. Now the third wave of virtual games emerges: *virtual games interacting with real life*.

LABlearning is about very different ways of using creative media to re-engage youth in learning, not particularly about serious games or learning games.
However using games in learning for young people has become a great concern to many educations, especially those dealing with disengaged youth or youth at risk. Game based learning can include very many and very different activities, such as using learning games, studying learning games, developing learning games, producing learning games, engage in social networks to further develop an open game, etc. Experiments will be available to the project in which young learners at risk will form teams with young game designers to produce games for health.

Therefore we offer some first inspiration on this topic – and refer the reader to explore the topic further…
We hope to be able to work with some practical examples of game based learning during the LABlearning project.

WHY ARE VIRTUAL GAMES SO ATTRACTIVE TO YOUNG PEOPLE?

They send the gamer on a clear mission, often an important mission.

The gamer must use all her/his skills and talents to work through the game world.

The challenges cannot be foreseen, nor be predicted.

The gamer can work together with lots of other young people online.

The gamer can take pride of her/his accomplishments and share the pride with other young people.

The gamer is not dependent on external rewards, but on internal satisfaction.

The gamer feels part of a story, of a narrative, and as its driver.

The game allows the gamer to explore complex systems freely and voluntarily.

The game offers meaningfulness to the gamer.

The gaming is independent of all kinds of formal settings, educational rules and regulations.

WHAT KIND OF LEARNING SKILLS IS PRODUCED THROUGH ADVANCED GAMING?

Generic and transversal learning skills that can be linked to all kinds of topics

Methodological skills, independent of the content of the play or the theme

The ability to be deeply focus for a long time, sometimes for weeks and months

The ability to link concrete problem solving to strategic planning

Extremely strong explorative skills, trial and error, testing and piloting

Intense collaboration skills with hundreds or even thousands of young people from all over the world, regardless of status or social background.

Extremely strong team work skills, as these are needed in many social and community game worlds.

The ability to find and put into play clusters of knowledge, when this knowledge is needed to solve the problems and progress in the game.

The ability to face, explore and conquer new fields and new topics.

An extreme capacity to combine all sorts of information and useful elements from a diversity of sources, and an extreme capacity to navigate in these structures

Participation, initiative and taking action skills

HOW CAN THE WORLD OF EDUCATION BENEFIT FROM THE WORLD OF GAMING?

Advanced and systematic virtual gaming includes all the key methodological skills for creative learning. It does not matter in what context these skills are produced: war games, social games, strategic games…

Virtual gaming is not depending on formal academic skills.

Virtual gaming can be used in all kinds of educations, as the learning potential of gaming is not linked to content but to learning methodologies.

The learning gaming must be interacting with the real world to be efficient.

It is possible in all educations to define clear missions, clear goals, clear rules, and to rethink the topic to study in epic forms, as a part of a narrative; the specific epics must be extracted from each individual topic or field.

The learning gaming will benefit heavily from the extremely strong collaborative structures in virtual gaming.

The good game allows the gamer or the learner to produce solutions, not to reproduce solutions, and must be open ended to function in long-term learning communities.

All the genuine and basic features in virtual gaming must be intact in learning gaming; the game elements should be reinforced and taken further, not reduced.

The educational settings must be able to offer free space for such exploring gaming activities in the curricula.

SOME GENERAL RECOMMENDATIONS FOR GAMES IN LEARNING

Many people in the educational world misunderstand what games and gaming in learning means.
Games in learning is not about an individual journey during which the learner disappears into the game world; game based learning is an open process, dynamic and collaborative and constantly interacting with the real world.
Games in learning are not yet another tool in education, but should offer innovative didactics embracing the entire learning process.

Use elements from games; combine them with other learning elements

Focus on special scenes in the games and explore them.

Let games and reality interact.

Let teachers, learners and game developers work together in the learning process.

Expand games, criticize them, and contribute to them.

Go in and out of the game world: game-class-community.

Create own games and scenarios with a variety of tools.

Use elements from games; combine them with other learning elements.

GETTING CURIOUS, ARE YOU?

Then perhaps you should take some time and explore the following resources.

James Paul Gee
What Video Games have to teach us about Learning and Literacy
2007

Marc Prensky
Teaching Digital Natives
2010

Douglas Thomas
A New Culture of Learning
2011

Marc Prensky
Digital Game-based Learning

2001

Marc Prensky
"Don't bother me mom – I'm learning"
2006

Jane McGonigal
Reality is Broken
2011

You are also invited to explore the paper *Learning Games in Education*, a work paper produced by Jan Gejel for the EU InterReg project *Scandinavian Game Developers*. www.sosuaarhus-international.com/EUlablearning.htm [See *Inspiration*]

FURTHER INSPIRATION AVAILABLE ON
www.sosuaarhus-international.com/LABlearning.htm
www.sosuaarhus-international.com/Gaming.htm