DIGITAL LEARNING

through the eyes of a

DIGITAL IMMIGRANT TEACHER…

"We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time."

T. S. Eliot

CHAPTER 1: THE TREE.

The successful digital learning teachers, have proven in their endeavors to be brilliantly smart, because they do not claim that technology can replace traditional methods of teaching.

What they believe is that we can use the Internet to empower teachers at schools, to help them make their teaching methods more effective, to develop new educational programs in a faster way, to have access to the World Wide Web with its huge wealth of information resources, to get in contact with the parents, so that they can resolve more directly the problems of their students, to be able to have fast and analytically updated briefing in regard with each and every kind of students' performance. And if we help them achieve all that, then automatically teachers come to a position from where they can perform their mission in a better and more efficient way.

Several schools have, until today, kept a stance of "isolation" with respect to the hundreds of efforts which are in progress in several countries for the rebirth of their educational surroundings. It is rather improbable that their organization team abruptly start functioning so well, so as to give soon, the green light for the exploitation of the new technologies in their schools. These schools are condemned, with time passing, to fall behind in all the efforts done in the new digital era to formulate a productive and yet inspiring

educational landscape. On the contrary, it remains a deep conviction that a very significant number of private schools in the U.S.A., and anyway the bigger and most qualitative of those, appear to be willing to introduce the modern educational methods into their curricula, provided that the whole effort have the pledges of the technologic soundness and the educational seriousness, that only the successful digital immigrants in teaching can easily promise to provide.

These digital pioneers are certainly masters of the technology, but the deftness that the traditional teachers have to contribute to the whole teaching and learning process, with respect to what can function and develop in the school system and what cannot, is extremely important for the successful completion of every effort in relation to the introduction of the new technologies in schools. It is here that the digital natives of every school have a very meaningful role to play.

I have been a student who got trained from a distance in the applications of distance teaching and learning, I have been a director who tried and tries to find and apply solutions to educational situations with the help of blended learning techniques, and I have been a teacher who fights to teach in as little time as possible as much as he can. Whatever follows and my whole digital immigrant profile is a result of the failures of the past and the successes of the present.

I know that the most important component of the effort that a school, which wants to become a leader in digital education, is NOT money. Rather it is the presence of a human potential with the perspicacity, the courage and the endurance to challenge the status quo of the traditional educational practice. Each member of this team tries with all the power he/she has to contribute to the carving of new ways in the educational Internet, having for years listened closely to the learning needs and difficulties of the community he/she functions in. Each and every one of the digital teachers saw in his/her work a new opportunity and he/she grabbed it. Each of us undertook a risk. Each of us has espoused a challenge.

Those who in education want to make us wait still, fail to grasp what is evident to the several successful digital schools for a decade now. Electronic education is not a "madness" of our times. It is not one more product in an endless line of technological innovations, which promise "a powerful treatment" to education. We aspire that its effect to all sorts of educational practice, remain unprecedented. It gets its

flesh and bones in a truly interactive environment, different from every related endeavor of the past. It elicits the participation, not the passive interest. It offers to the students a place of communication, not isolation. It is not a new kind of television. It is the start of a new way of learning.

The question is not anymore IF the electronic environment we propose can be used to transplant the learning procedure with new and powerful methods. We believe that it can. Neither the question is if we SHOULD invest in time, energy and money, so that we can realize the promise to create a modern educational practice. We believe we should. Digital teachers, digital natives, digital immigrants, traditional teachers, parents we all have a role to play. The real question is HOW to take advantage of the capabilities that the new digital environment offers us. We digital teachers ask for your walking with us. We can collectively transform the learning power of the Internet from a promise to a fact. It is high time that the legacy of the one classroom school building left its place and quitted putting obstacles to the formation of a worldwide classroom.

The chance has arisen. The force is here. It's high time the collective efforts of digital teachers and digital natives alike for the rebirth of education, to be cultivated everywhere. It's high time that the tree of modern, student-centered education rise its stature. It's high time for the vision to become an experience.

CHAPTER 2: THE ROOTS.

"Learning is the procedure of the transformation of experience into knowledge, talent, stance of life, values, sentiments and feelings."

Peter Jarvis.

The fundamental philosophy which governs the rebirth of the school's practices, as we digital teachers propose, is that education should constantly forecast the future needs of the society and be redesigned in the direction of the satisfaction of those needs. The abilities that the society of the future demands from its members are three: craftsmanship in thinking, talent of learning and ability of communication. The reinforcement of the teaching and learning

activities that take place either in the school or outside of it, with the methods of electronic education constitutes the strategic step, so that our digital natives acquire and cultivate these abilities.

The overall solution that we digital teachers have to suggest is designed in such a way so that it absolutely obeys, satisfies and serves the

WEDEMEYER PROSPECTIVES

OF MODERN EDUCATION

1. **Teaching and instruction should be available at whatever place there are students – even one – no matter if at the same place there are teachers or not.**
2. **Teaching should convey the main part of the learning responsibility to the student.**
3. **The modern educational system relieves the educators from every binding bureaucratic procedure, so that even greater and greater part of the time of teachers and students alike is devoted to truly educational matters.**
4. **The educational system should allow the students to have a wide variety of choices and options in their objects, methodologies and plans of study.**
5. **The educational system should use, in the most appropriate each time way all the means of teaching and those certain methods which have their efficiency tested.**
6. **The modern educational system should mix and adapt in a multitude of combinations, all the means and methods, so that each teaching subject and every unit of the subject to be taught in the most appropriate way.**
7. **The teaching means and the technology used should be cleverly structurally interconnected to each other, both at their design and at their usage. The structural elements of the teaching model, should complete one another, and each of them should enforce in its own way the teaching plan of the learning material.**
8. **The educational system should preserve and amplify all those opportunities which enable it to adapt to a variety of rather different learning and teaching practices.**
9. **The educational system should evaluate the learning performances not by raising obstacles in relation to the place**

where the digital natives should study, to the rhythm, to the method or even the sequence of study, but by appreciating, as directly as possible, the accomplishment of the learning targets.

10. **The system should allow the students to start, stop and go on with their studies in as broad and convenient as possible, time intervals and rates, which are in accordance to their short term and their long term learning targets, the circumstances and the special private characteristics of each one of them.**

Computers neither should, nor can they, replace the traditional methods of teaching. On the contrary, they should be used so that they can empower constructive learning and render digital learners capable of doing things which, without the computers, they would be unable to do.

The ideal digital school helps the "traditional" one to surpass all the limitations which set in its perfect from the educative point function, its geographical position, the local sources of information, its tight fiscal budget, and the probable limited experience of a number of its teachers. The primary lever to lift these obstacles is the ability for teachers and students to have access to online courses, sources of knowledge and experts, till now inapproachable. The challenge is one: the creation and optimization of a virtual, but completely real, class. It's an idea whose time has come.

Digital learners and digital teachers function together in the creation of gnostic societies which defy the limitations that time and distance, under the traditional conditions, render insurmountable, allowing the access to knowledge sources distant till now.

The promises that such an environment gives:

- **To centralize learning round each separate learner.**
- **To focus on the learner's abilities and his/her special learning needs.**
- **To render life-long learning an everyday practice.**

Such a society will allow the digital educators to:

- **Render a great variety of authentic learning material, specialized or not, easily accessible to their digital learners, straight from its source.**

- **Encourage critical thinking and interaction between the digital natives and the learning material and between teachers and students.**
- **Respond to the students' expectations, who even more and more, prospect that their lessons will be empowered with digital material and digital spaces for conversation.**

If designed correctly, the space of electronic learning which digital teachers propose, can become very effective in concentrating learning on the learner and not on the teacher. The "if" we earlier used is much more important than it originally seems. It is a common practice for the majority of the software companies who work on e-learning, that their efforts are limited to the simple transformation in digital form of the material and methods which were made to be used in the space of a traditional classroom. Such attempts are inescapably most of the times meant to fail to yield the expected result.

There exist very important differences in the ways of knowledge impartment, management and retrieval between a traditional classroom and an e-learning environment, where many times the computer is many times asked to second or even replace not only the everyday simple practices of a school classroom, but the very own teacher of the classroom. What is demanded is a conversion, a turnabout from the teacher-centered model of learning, where the teacher suggests what must be taught and when, to a model where the digital native learner is in complete control. In the first model, the answer which a mathematician would give to the question: "What do you teach?" is "Mathematics". In the second model the answer changes. It becomes: "Students." The student-centered learning is what true education should have offered since long time ago. The limitations of the traditional classroom impeded such an approach. Now, with digital learning at hand, the focus of the lesson is the student and not the subject. The well designed e-learning environment achieves exactly that.

Teaching is very often treated as the transfusion of knowledge from one vessel to another (Fox, 1983), a definition which must be overruled as very restricting when it refers to the demands of the modern education. According to Fox, the modern concepts about teaching are three:

The moulding theory, which treats teaching as a process of modulation and standardization of students with respect to predetermined norms; the travelling theory, which treats a gnostic object as a field ready to be explored, with the learner obliged to climb mountains if he/she wants to acquire a better view of the object and with the teacher acting as the travel guide to the excursions of his/her students; the developmental theory, which focuses its attention to the mental and sentimental development of the learner. Digital teachers claim that digital natives respond better when offered the third kind of education, which responds to the needs of full-fledged teaching and learning. Of course, there is no doubt that the other two kinds of education are also wildly in use, especially the travelling one, which is sometimes and under certain conditions better fitted for a digital environment.

In my opinion, teaching consists a means of facilitation of learning, which is regarded as one mostly independent, personal activity that has as its purpose the reaching of some goal (self-consciousness, success in some exams, professional adequacy, etc.). This definition is important to make us get rid of one solidly entrenched view, which treats teaching and learning as one and the same packet. My objection to this is that many times teaching and learning have a minimum relationship to one another. It is, for example, known that when somebody learns something in an environment of teaching-learning, this can be the outcome of "out of teaching" procedures. Furthermore, when something has been taught, it is not at all certain that this something will be learned. And if something has been learned, it is not at all certain that this something is the one that has been taught. In the end, teaching is an endeavor, often successful, to ease up learning towards a certain direction.

In the past almost all schools were pivoted on the traditional model, where the student is a passive learner who gets rewarded for independent "accomplishments", with the school being at a distance from the parents and the society. In the model, which is suggested by the majority of digital teachers, students are energized and active, participants in the procedure of learning, well prepared to live and work in the Digital Age of Information.

We employ Information Technology as a tool, to prepare digital natives and teachers, to face the challenges of the 21st century and

transform this tool to be a part of their everyday practice. We hope to supply the school teachers with the qualifications and means so that they can shape their lesson in a more interesting fashion, with the learner as the epicenter. Only via this way, learners are altered from passive receivers to independent and life-long agents of learning.

The environment we propose provides all the necessary features and capabilities for a change in the educational landscape, seeking a change in the way of thinking and attitude both from the staff of the school and from its learners and the society it exists in. For example, digital teachers are called to reexamine their role, now that it is transformed from the one of a carrier of knowledge to the one of its facilitator and of one who accommodates learning. Students should redefine their responsibility in the way the knowledge is acquired. Parents should revalue the priorities they have posed for the education of their kids. It is high time we get rid of the syndrome "Old Wine in a New Bottle". Teachers should recognize that technology has successfully expelled the limitations in space and time of the teaching models of the past and has enforced us to define from the fresh the basic teaching notions about where, when, and how learning should take place. As it happens with every new innovation – be it the fire, be it the wheel, be it the personal computer – teachers should demonstrate the braveness that is requested, so that they revise the old-fashioned preconditions which exist for teaching and learning. Without a doubt, the environment digital teachers love to work in constitutes a vital step towards the redefinition of the educational procedure and the full preparation of the students to be integrated harmoniously in the society of Information.

The How's and Why's of Blended Learning.

The environment most digital teachers work in is founded upon and materializes the modernly accepted model of learning which is known as "BLENDED LEARNING". It is defined as the method which couples distance education via solutions of high technology with traditional education in a school's classroom. Students learn wherever, whenever and independent of the place they stay. They meet opportunities to learn every day and all the time. They learn at school, at home, on the street. The educational material can be designed in such a way, that it will take advantage of the capabilities of all the

teaching means, it will be user-friendly to the Digital Natives, and most important, it will serve their independent and personal learning needs without the danger of becoming punk or condensed. It will provide the means of successful learning, whatever is the learning style of the Digital Native. And this is exactly what makes the difference between an environment that operates correctly and one that it fails.

The new environment should allow students to exploit the analytical method of thinking, to explore and to discover. For them to have such an ability, their digital teachers should have effortless access to modern technology, so that they can take advantage of all the means it has to offer, presenting the lesson ideas with rich multimedia tools, 3D animations and always in an interactive way.

Blended learning modulates one with another:

- **The electronic educational procedure based on the Internet (an environment of a virtual ideal classroom, teaching whose rhythm is defined by the user, collaborative learning, flow of sound and vision, electronic passages, etc.) under the aim of the materialization of certain educational targets.**
- **The various pedagogical educational approaches (behaviorism, Gnosticism, etc.) under the aim of the materialization of the best educational result.**
- **Whichever other educational technology (DVD, CD-Rom, Smartboard, etc.)**
- **The traditional live teaching in the classroom.**

This model is the ideal one for the gradual introduction of a school's educational system to the use and adoption of the e-learning methods. Blended Learning allows the educational boards of schools to guide with small and steady steps, both students and teachers from the experiences stemming from the traditional classroom to the e-learning environment and its potentials, rendering in this way all changes easily acceptable. The educational planners in collaboration with the teachers, develop the electronic material stage after stage, making use of the serious investments that the school has already made for the production of educational material destined for the traditional way of teaching. Blended learning gives to the schools the

chance to supplement and enhance the already existing educational activities without the need to replace them.

The problems that the transition from the old to the new has to face and overcome have to do with the fact that, according to a global study, almost 80% of the teachers do not feel appropriately prepared to incorporate the new educational technology into the everyday teaching practice and that in 77% of the schools studied, the teachers do not use computers in their classroom on a daily basis. They all seem to forget (or want to forget) that the Digital Natives of today grow up with the technology and consequently an interactive, palpable approach to learning constitutes for them the best motive for success.

The modern educational solution should empower students and teachers to run away from the limitations which enforces upon them the use of a limited number of computers and rather during specified hours inside certain, most of the times uncomfortable, labs.

The transition to the new is supposed to be done in an era when globalization creates unthought-of conditions of competition and redetermines how society lives, works and entertains itself. Education comes face-to-face with myriads challenges, as it has to prepare Digital Natives for the world of tomorrow. Maybe the most important of them is to ensure the ability of those Natives to work efficiently in a technologically centralized society, where they must use the supplies technology offers to them in a productive and efficient way, in order to find, exchange and exert their influence in the modern currency of our era, the Information.

We, digital teachers, sure have a vital role to play in this transition. The most important lesson that we have learned after several years of effort, is that in order to create an online environment of learning and determine the proper mixture of components which will constitute it, is not at all easy and should not be regarded as something without a great value. To design and develop all those interactive procedures which, while they function in a traditional environment, now have to function and be redefined electronically, takes a lot of time. But what is truly imperative, is the composition of the right team of contributors, who have the disposition and the courage to fail many times, before finally their efforts are crowned with utter success.

And only then the roots of the tree will have grown deep…

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