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Dipart. di Scienze Amb., Informatica e Statistica  
Polo Scientifico via Torino

**COSTRUENDO UN'ESPERIENZA IMMERSIVA DI  
APPRENDIMENTO A DISTANZA ATTRAVERSO CORSI  
ONLINE APERTI E DI MASSA CON WEB CONFERENCING,  
METODO SOCRATICO, L'APPRENDIMENTO BASATO SUI  
PROBLEMI E LE RETI SOCIALI**

Building an Immersive Distance Learning Experience beyond  
Massive Open Online Courses with Web Conferencing,  
Socratic Method, Problem-Based Learning and Social Networks

Rogério L. Roth, Ph.D.  
posdoctor at gmail.com  
rogerio.roth at unive.it

**FINAL REPORT OF ACTIVITIES  
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Polo Scientifico via Torino

Via Torino 155, 30172, Mestre

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## Preface

“Where are you right now? Somewhere warm? Safe?  
Next to someone you love?  
Now what if all that was gone, and the only thing you could do was survive?  
You would, right? You’d try. You’d do things...  
Until you have that last thing you have left: yourself.  
But what if you could take it back? All of it. A reset switch.  
You’d hit it, right? You’d have to. Even if you didn’t want to.  
Because sometimes the choice isn’t even yours, it’s fate.”  
(12 Monkeys, S01E13)

The integration of technologies went through various stages, from exacerbated optimism with over-promises to disappointment with the realities, possibilities and daily practices. Thus, the intrinsically interdisciplinary process of effective integration to the university teaching practice is becoming less frequent and dystopian, represented by a throwback or absence of these practices. The alternative to the current model can be a back to the past, not ignoring the technologies, but performing a rereading of good teaching practices, establishing connections and adapting them to needs and local realities. The same technology that massified in virtual form the university can provide the answers and indicate a way back to the quality, but the adoption and effective use of fads without a previous context of experimentation, testing, protection and logic of use can bring different results of the expected negatively impacting the use of technologies to support the education.

Massify, decentralize and popularize should be the goals of higher education, but institutionalize the education practices mediated by the different technologies in a particular university is much more than installing a version of a learning management system, that don’t attract so much attention and became part of the scenery.

The inclusion of these technologies in the educational processes is not always an easy task, requiring from professors to study its reality and, if necessary, to adopt some model of integration. Some professors seem to know how and why to use technology, but the effective integration still eludes many of them. The key is that to work certain content we need to know it well, the technologies and the didactic way and how to use them. We don't need to follow a certain model of technology integration to use the technologies, since not all professors adapt to them and all models give the impression of a prescription that tries to define what must have more or less importance in the scenario. Whereas random practice came before the proposed models, they try to standardize what should not be standardized, that is, produce a cake recipe to be replicated.

## Acknowledgements

“I lost someone.  
And I was so mad I didn't want to go to some church and watch the show.  
You know, all those people maybe they cared maybe they didn't.  
But there is not a day that I don't wish that I had taken the chance to say good-bye.”  
(Under the Dome, S02E02)

Despite the differentiated characteristics of this type of work, many people helped me in some way, at some point, from the beginning to the end.

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In memory of Ernesto, Yedda, Beto & Babalú (nothing will ever be the same).

In memory of Umberto Eco (I lost a high-brow idol).

## **Astratto**

Questa ricerca ha avuto come obiettivo quello di studiare e descrivere i diversi modelli di integrazione delle tecnologie (piattaforme, ambienti, metodologie) nel sostenere le pratiche educative a distanza e/o mediata dalle tecnologie; e la prospezione e l'identificazione di nuove possibilità che aggiungere allo stesso tempo, soluzioni video basate (conferenze sul web), apprendimento basato sui problemi, reti sociali e il metodo socratico. Se da un lato l'ubiquità di internet ha permesso l'invasione della nostra intimità, anche creato una moltitudine di opportunità di apprendimento e lavoro. È stato in questo modo che la Khan Academy ha iniziato, per fornire un'istruzione gratuita e di alta qualità per tutti, in qualsiasi luogo. Tuttavia, il coinvolgimento dei clienti potrebbe essere stimolato attraverso un metodo provocatorio, noto come socratico, che riflette come la cognizione umana come ha sviluppato. Sicuramente è necessaria una rilettura, un rinnovamento per adattarlo alle esigenze e alle possibilità tecnologiche di oggi che, in modo inesorabile, si riferisce alla onnipresenza di video e videoconferenza e senza la quale tutti i sistemi legati alla tecnologia didattica digitale rimangono indifferenti alle parti interessate.

**Parole chiavi:** integrazione di tecnologie, metodo socratico, metodologie, modelli di riferimento, paradosso, rilettura, risorse elettroniche, strategie.

## **Abstract**

This research aimed to study and describe the different models of technology integration (platforms, environments, methodologies) in supporting distance educational practices and/or mediated by technologies; and the prospecting and identifying new opportunities that add simultaneously, video-based solutions (web conferencing), problem-based learning, social networking and Socratic method. If on one hand the ubiquity of the internet allowed the invasion of our privacy, also created a plethora of learning and work opportunities. This is how the Khan Academy got started, to provide a free, world-class education for anyone, anywhere. However, the involvement of customers could be stimulated through a provocative method, known as Socratic, which reflects how human cognition has been developed. Certainly is necessary a rereading, a recycling to adapt it to the needs and current technological possibilities that, so inexorable, refers to the omnipresence of videos and videoconferencing and without which all systems related to digital educational technology remain indifferent to stakeholders.

**Keywords:** e-resources, methodologies, paradox, rereading, role models, socratic method, strategies, technology integration.

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## Technology Integration at a Crossroads

“You gave me the greatest gift that anybody's ever given me. Desperation.”  
(Iron Man 3)

### 1. Back to the past: master classes, blackboard and chalk

In an increasingly technology-driven world in permanent turmoil and change – scenario where the boundaries between physical and digital realities become increasingly tenuous and ambiguous – the intrinsically interdisciplinary process of effective integration of the technologies to the university teaching practice is becoming less frequent and dystopian, represented by a regression or absence of these practices, becoming an immense challenge for educational administrators.

Many universities remain resistant, averse to taking risks or even do not confer any importance, resources (financial, human, technological), training or structures that support and/or make possible the effective use of technology in their educational processes, although one can frequently observe some experimentation derived from efforts often isolated of certain groups or individual of some professors.

The publication of theoretical work and the events industry focus on the topic to exhaustion, on most occasions without proposing anything new, or suggest alternatives and/or practical and feasible solutions. The more complex is that formal education, by its very nature, cannot follow the breakneck speed of different media and technologies. To Roth (2011) this is an empty speech which is not echoed among professors and only demonstrates the gap between the ones who conduct research and the ones who teach.

Producing texts and teaching materials – which includes OpenCourseWare (OCW) and Massive Open Online Courses (MOOCs) – doesn't seem to have any value to the institutions. There's no stimulus, much less recognition (institutional, through similar institutions or even from pseudo-evaluators that imagine themselves owners of the truth with respect to the form and content of what should or should not be made). However, many materials produced in this way (Creative Commons) are immensely more accessed, used and referenced than scientific (or pseudo-scientific) publications that usually only serve personal purposes.

In recent years, universities have awarded more prize and merit to the curriculum of the researchers than to the professors. The important thing seems to be just the publication

of scientific articles in magazines or newspapers of subjective quality and which have been submitted to peer review in an attempt to ensure that these articles and publications meet certain quality standards and scientific validity that vary by publication. This orientation was probably correct while scientific research was limited in quantity and quality and should therefore be stimulated with active policies. “However, not attending with sufficient energy the student's training may foreshadow a new spiral of low-skilled (individuals).” (Frías-Navarro et al., 2010, p. 29).

Hazelkorn (2011) emphasizes the growing obsession around the world since the rankings have become omnipresent in the 1990s. What started as an academic exercise became a race with geopolitical implications. In this sense, Salmi (2009, p. 11), comments the challenges of creating world-class universities, citing a “...growing desire to compete for a place at the top of a global hierarchy of tertiary education.”

What is the relation that can be established between getting a Nobel Prize and the publication of articles only in English, with the level of education developed in given higher education institution? Many rankings (ARWU, THE) are absurd (Roth, 2013, p. 34). Not be ranked doesn't mean develop a low level of education and nor can it be interpreted this way, the same way that being ahead of it cannot be interpreted as having an excellent educational level. These are systems that consider only certain aspects in most cases without any direct relation with education and, as is normal in the area, averse to modernism, hindering the entry of new entrants...

This motivated European Union (EU) to launch its own ranking (U-Multirank) on 13 May 2014, using new indicators and measures a wide range of university activities in research, teaching and learning, regional engagement, knowledge transfer and internationalization (Vassiliou, 2014).

<http://www.umultirank.org/>

In a context of crisis and shortage of resources we must have common sense, perform a reading of reality beyond the immediacy, betting on innovation, creativity and heterodox solutions (Roth, 2013). It is only possible to innovate with people who think differently and are open to different proposals and implementations, not necessarily ignoring what is established. Demo (2012) goes further and claims that the institution does not know how to learn, are full of avant-garde theories for others, but they are the first not to use their theories of change. His position is that “Faced with the challenges of the future, this

resistance is futile and ignorant because only removes the university of the historical fulcrum, making it less and less relevant.”

The integration of technologies went through various stages: from exacerbated optimism with excessive promises to disappointment with the realities, possibilities and everyday practices. In a certain way, may even be called the Holy Grail of contemporary education – pedagogically and technologically correct – an ideal that we seek, but that in reality we have not reached yet or even will achieve.

Besides the lack of motivation and incentives, professors are forced to devote less time to the core activities (teaching) and disperse in support activities often working in areas diverse of their training and on which they do not hold any experience. This includes bureaucratic management positions, publication (forced by the system, regardless of having something relevant to say or communicate), participation in scientific events (which in most cases has a lot of event and little of scientific), as well as participation of various types of evaluation panels of students or peers (Roth, 2013).

One of the difficulties to properly explore the various technologies in pedagogical practices is the lack of an adequate infrastructure in institutions, able to adapt to different conditions present and future or even catch up on the constant evolutions technological and methodological, as well as meeting the current needs of the new generation: instant messaging and social networks. These contemporary needs usually are linked to the use of tablets and smartphones, online and offline content consumption oriented devices and not its production, contrasting with the advances introduced by Web 2.0 that allowed friendlier spaces of knowledge building, encouraging authorship and autonomy.

Roth (2011) recalls that many universities, in the absence of proper space for experimentation, travel on the journey of the other institutions trying to replicate ready recipes (as if it were possible) and adopt fads that are always prowling the educational area. There are also those institutions which launch themselves, effectively, in the use of new proposals with the intent, veiled or not, of being pioneers in its use. But, agreeing with the phrase coined for Nokia by Yim (2010), “It's not technology, it's what you do with it.”

Sá (2004, p. 4) reminded everyone that “In the midst of the information society, at the beginning of the 21th century, the inclusion of ICT in education is, in fact, something less implemented than desirable and a subject relatively little reflected. There has been a major



concern on the part of the European Union, claiming for a long time the effective integration of ICT in teaching.”

These same technologies, platforms, environments and methodologies that were once considered new by the specialized literature and quickly will be getting old without having been duly appropriated by the institutions or even by professors – with the aggravation that the constant emergence of other technologies can cause unpredictable impacts. As warned Demo (2002, p. 28), “If the technology is not properly educated, can relate to premature aging, rather than renovation, because anything older than scrap, even recent.”

Roth (2007, p. 55) detected that some problems are in the own development of courses that should train and motivate other professors, for those who belong to these teams seem to be convinced that are modern due to the fact that universities provide some resources, systems, technologies, and computers for use of the university community. But, in fact, they are what Pedro Demo calls pretentiously modern. “The doubtfully modern posture would be the one that tries to turn modern what basically remains archaic.” (Demo, 2002, p. 28).

On the other hand, what is done in Italy, about the beautiful revolutionary, democratic and constitutional rule of “universal, compulsory and free education” at all levels? The situation of Italian public universities is similar to what happens in Portugal and Spain. According to Italian law, the fees paid by students cannot exceed 20% of the Ordinary Finance Fund (FFO) that every university receives from the state. This limit has systematically been breached in the majority of universities, and clearly an increase in fees cannot but further exacerbate this situation. At this point only bad faith can justify the lack of understanding of the fate of the university and students. The most logical consequence will be an unlimited increase of university fees and the virtual disappearance of the public university in favor of private foundations and universities of excellence (Benino, 2009).

Pressured by the lack of government resources many public universities have launched to the market (offering services as companies and private universities) in search not only of its maintenance, but survival. This only denotes the neglect of certain states, considered rich and developed, regarding the education of their people.

Certainly public universities need to overcome inertia and obtain other sources of funds to ensure its sustainability. But that does not mean, necessarily, start charging the customers (students).

However, the universities are wasting time, turned inward to their autonomy and a seemingly comfortable situation. But are threatened by unavoidable risks: the chronic underfunding of some states; the growing strategic ungovernability and consequent loss of competitiveness; the decrease in the number of students, high drop-out rates and their consequences in funding; the unsuitability of trainings and consequent loss of social relevance and prestige; the establishment of the European Higher Education Area (EHEA; and the competition of the transnational education (Costa, 2004).

Surely it is possible to offer a product, service, and even courses, including at tertiary level, at no cost to the end user (student) by obtaining other funding sources that don't rely on governments and school fees. Google taught us this, just follow their business model. In this sense innovation becomes imperative, as it can be constitute in the way of implementing new strategies that enable the university a greater contribution to society, a return to those who through their taxes have generated the resources to keep these institutions (albeit underfunded).

In many relevant areas Europe have the latest technology.

Why not in technology-mediated learning?

What we see is an incredible resistance to this model of education technologically integrated and supported as well as a focus on optimizing the use of the internet to try to replace outdated and ineffective educational systems that remain resilient even in the face of European reform that in 2010 established the EHEA through the Bologna process, among other things, required another way of teaching, with fewer master classes, more tutorials and directed work (Auni3n, 2011).

Venice is known for being a crossroads of people, knowledge and cultures. However, the current life circumstances suggest, or even require, attention to well-known warning of Vygotsky (1998, p. 130): "Instruction must be oriented toward the future, not the past."

We may have available the most modern technological means, unlimited financial resources and still not produce anything – or something with quality.

Much of the students' demotivation is due to this gap between the university (always, in some measure, conservative) and the stimuli to which they are continuously exposed

outside the classroom. This is not a competition with the different media in technology of sensation (would be a losing battle), but to seek and follow the dynamics of today's world and, at the same time, provide resources for thinking a critical analysis.

Many professors still gives lessons, although nowadays nothing is so didactically incorrect as the action of giving lessons, having a pretense of holding the knowledge, not committing to a program previously approved, including content to be developed (day by day), methods and forms of assessment (Roth, 2013). They confuse quality with presentiality; lack of organization with autonomy.

The vast majority of selection processes of European university professors gives documentary form (curriculum vitae) and not by impartial and transparent public tender. In these processes normally is not provided any assessment of knowledge and skills of any kind not even didactic. And the paper accepts all...

In the absence of didactic training (obsolete or updated), professors from other areas, apart from education, replicate the old and outdated practices they received from their trainers (and often use the same materials they received). Even those who bother to study or develop didactic skills do, usually, with who develops the same retrograde practices.

Innovate in education is an immense challenge since whoever evaluates sees us with different eyes (*status quo*). People who do not want things to change are those who for some reason feel they have a disadvantage in changing. The question is more educational than technological, because the pedagogy remains focused on traditional instructive proposals, not to mention that resists becoming technologically sound (Evans, 2001; Stoll, 2000).

The effective integration of technologies in supporting education is a challenge that so far has not been faced with depth (Moran, 2003). We have done only adaptations, experiences, small changes. Many of the failures can be attributed to this strategy because most often we limit ourselves simply to pave the cow path (Roth, 2011). This *modus operandi* is nothing more than to remain doing something the wrong way, only more quickly.

Integrate and institutionalize the education practices mediated by the different technologies in a particular university is much more than installing a version of Moodle (or any other LMS), performing some training workshops (sometimes not even that) and afterwards, letting the usage depend on the goodwill of each professor.

The lack of quality training for professors, the lack of adequate support to formatting and content production or even unexplained lack of investment and priorities has produced opposite results to those expected (imagined), being represented by total or partial lack of use and even of the outdated existing technologies or even a return to conventional teaching practices.

## 2. Learning Environments & Platforms

When related to virtual presence or at distance, environments and platforms refer to the same systems that allow some interaction synchronous or asynchronous. In constant update, evolution or revolution; the effective use of these systems – or not – and its suitability to educational practice is something that always stumbles on lack of experimentation free from prejudices. This can be translated as lack of will, lack of interest, lack of motivation, lack of resources, lack of equipment or even lack of recognition.

The blind adoption of determined environment or technology (open source or paid) or even their lack of update (latest versions) is explained by the fear that some innovation or paradigm shift can arise at any time and take by land all the efforts (however slight) in a particular diverse direction or other platform.

The market of Learning Management Systems (LMS) has several, subjective and often unreliable information. The website Capterra compared LMS 263 (v.2 – January 2014) in several respects (Customers, Users, Twitter, Facebook and LinkedIn).

<http://www.capterra.com/learning-management-system-software/#infographic>

The analysis of the twenty most popular systems puts Moodle in the first place. Following we find: Edmodo, ConnectEDU, Blackboard, SumTotal Systems, Schoology, Cornerstone, SuccessFactors (SAP), SkillSoft, Collaborize Classroom, Desire2Learn, NetDimensions, Docebo, Instructure, Interactyx, DigitalChalk, Latitude Learning, eFront, Litmos and Inquisiq r3.

With respect to the number of clients, the five most installed systems are: ConnectEDU (135 k), Edmodo (120 k), Moodle (87,1 k), Collaborize Classroom (48 k) and Schoology (35 k).

And, regarding the number of users, the five most commonly used systems are: Moodle (73,8 m), SumTotal Systems (38,5 m), ConnectEDU (20 m), Blackboard (20 m) and Edmodo (20 m).

When the aspect is presence on social networks, the five systems most followed are:

- Twitter: Edmodo (55 k), Blackboard (23,9 k), SuccessFactors (SAP) (18,4 k), Moodle (14,3 k) and Instructure (12,4 k).

- Facebook: Edmodo (38,1 k), Cornerstone (28 k), Docebo (21,2 k), Moodle (15 k) and eFront (8,11 k).

- LinkedIn: SuccessFactors (27,8 k), Blackboard (16,6 k), Cornerstone (12,9 k), SkillSoft (11,5 k) and Desire2Learn (11,3 k).

But when we checked all 263 LMS referenced in research, we started to notice the limitations and tendencies. Besides the little emphasis given to the Sakai system, no reference has been found about the TelEduc (UNICAMP).

<http://sakaiproject.org/>, <http://www.teleduc.org.br/>,  
<http://www.capterra.com/learning-management-system-software/#all>

The issue is not attempting to define which one is the best system or even the most used. Roth (2004) has been investigating, compared and used different systems. In this sense it would be more appropriate to check how much the majority of these environments literally stopped in time (focusing on messages, discussion forums, chats, mailing lists, newsgroups, websites), the few that really evolved into a new concept – or even those that have already been created under a new approach – and the main, how little of the resources are actually used. Hardly anyone who designs the systems uses them or even is who an actually use.

All the technologies needed to access the same set of content through different media are available openly, in other words, without direct costs of acquisition associated. And it facilitates the exchange of contents (SCORM – Sharable Content Object Reference Model) (Roth, 2013, p. 8, p. 53). The various types of possible connections, made by cell phones, tablets and desktops directly or through immersive virtual environments (or not), provide a variety of options. But, despite the many plug-ins, many environments were not made to the current needs of new generations, not to mention that the mobile world dictates the desktop trends.

The trend to bring your own technology (BYOT) – bring your own device (BYOD), bring your own phone (BYOP) and bring your own PC (BYOPC) – refers to the policy of permitting employees to bring personally owned mobile devices (smartphones, tablets and notebooks) to their workplace, and to use those devices to access privileged company information and applications (Bradley, 2011).

[http://en.wikipedia.org/wiki/Bring\\_your\\_own\\_device](http://en.wikipedia.org/wiki/Bring_your_own_device)

The term is also used to describe the same practice applied to students using personally owned devices in education settings (Lee, 2012). In this sense, BYOT is an educational development and a supplementary university technology resourcing model where the home and the university collaborate in arranging for the young's 24/7/365 use their own digital technologies to be extended into the classroom to assist their teaching and learning and the organization of their schooling and where relevant the complementary education outside the classroom. Gartner (2012) said that BYOD is the most radical shift in enterprise client computing since the introduction of the PC. This wave, disruptive technologies and advancement in technical infrastructure and in learning technology, opens for new ways of teaching in the classroom. Probably, the main benefits from BYOD at universities can be at removing costs and efforts to acquire, administrate and maintain own laboratories, as well providing interactive classroom tools that provide better user experiences.

In 2014 consumption of media from smartphones will overtake consumption via PC's (eMarketer). Another study (Pew Research Center) reports that 74% of teens use the Web from smartphones. More than half of young people only use this type of cell phone to consume content. And 89% of those contents are consumed via Apps (Smart Insights). That is, in only 11% of the cases the browser is the chosen channel to access content (Oliveira, 2014, p. 6).

<http://www.emarketer.com/>, <http://www.pewresearch.org/>, <http://www.smartinsights.com/>

Universities are adapted to this type of demand?

At least a Responsive Web Design (RWD) on their websites?

In August 2009, a different design of environments like Schoology emerged, based on the philosophy of social networks and instant messaging support. No exceptional disruption was perceived and five years have passed since then (until 2014) that in information technology represents a universe of possibilities.

<https://www.schoology.com/>, <http://en.wikipedia.org/wiki/Schoology>

However, it is a proprietary system (paid software) which inhibits many universities that do not realize or even visualize some justification for its acquisition. The reverse logic probably refers to the observation that, if there is no motivation or incentives (by institutions) to (professors) use the resources of open systems available, why pay for a system that probably will not be used too often?

The same can be said of immersive 3D environments like Second Life.

<http://secondlife.com/>, [http://en.wikipedia.org/wiki/Second\\_Life](http://en.wikipedia.org/wiki/Second_Life)

This virtual environment was a fad in the biennium 2006-2007. Remains active, without the spotlight of the specialized media, but most users (residents) left Second Life, migrating to social networks like Facebook (not necessarily back to “real life”, but usually returning to “real identity”). The system of Linden Lab never found the right concept to be used for education. Many companies and universities from the real world have invested in virtual islands just to have a presence in this new world. Are these pretentiously modern trying to score land even without knowing what to do with it. Something like trying to be present not to be forgotten, extinct or even swallowed by the revolution – that never happened.

When users have different identities and often seek this environment as an escape from their normal lives – as if it was possible another life – what is the relationship with real life (where are the physical companies and universities)? None. However, the testing and experimentation are always valid. We cannot criticize what we don't know. An open source option is the OpenSimulator (OpenSim), a less restricted version and financially free of Second Life's architecture.

<http://opensimulator.org/>, <http://en.wikipedia.org/wiki/OpenSimulator>, [http://opensimulator.org/wiki/Main\\_Page](http://opensimulator.org/wiki/Main_Page),  
<http://elearning.unica.it/opensim/>

Environments such as Moodle (considered the most popular by Capterra) are installed to exhaustion mainly because they are free (without direct costs of acquisition – because there are always maintenance costs), has a considerable user base (many congeners) and are more than enough for the few uses that most faculty confers, practice or even demonstrates need. Moodle is a project with more than ten years of life. Technologically speaking this is relevant and cannot be ignored. The concept, created in 2001 by Martin Dougiamas, turned into Moodle 20/08/2002 in its first version (Moodle 1.0) which featured 10 releases (1.0 to 1.9) and several intermediate versions (up to 1.9.19). The second version (Moodle 2.0) already had 8 releases (2.0 to 2.7), and the current version is 2.7 (12/05/2014). All versions prior to 2.3.11 were discontinued, but that does not mean they are out of use, but only that the support is no longer provided. The version of Moodle more used worldwide is the 1.9.x (without current support). That is, more than 50% of all installations have not evolved to version 2 (and we are already on the eve of version 3). A quick analysis reveals that Moodle did not evolve much. Even the said support has become unnecessary for most users. Although both the official website as the references found

emphasize that the system evolves constantly adapting to the needs of its users, in fact it appears that the design of Moodle remains the same, centered in disciplines and forums. Besides the system does not properly meet the current needs of the students it turns out that the vast majority of the facilities are not even updated, since most professors even explore the basic features available since the first version do not produce content.

Probably the wrong question is something like: Why update if it is working properly? Actually nothing is working well nor from the side of the Moodle developers much less in the universities side. The project of the LMS, in a way, stopped in time and the use of it is minimalist. The vast majority of institutions (which not even update installed versions) keep it in use because besides not import in direct costs of acquisition is a way they demonstrate that are technologically active and engaged – although it is just another misuse technologies.

This program is freely available as open source (GNU Public License) and can be installed in any operating system (Windows, Linux, Mac) that can run the PHP language. As the database can be used MySQL, PostgreSQL, Oracle, Access, Interbase or any other accessible via ODBC.

<https://moodle.org/>, <http://en.wikipedia.org/wiki/Moodle>

The Moodle website has some statistics that cannot be interpreted without context (like everything in life). On 17/05/2014 would be 64,630 registered websites. This does not mean that they are active websites, much less that they are updated.

<https://moodle.org/stats/>

This environment is being used in 235 countries and the ten largest users are United States (11015), Spain (5478), Brazil (4329), United Kingdom (3667), Mexico (2664), Germany (2368), Colombia (1754), Italy (1704), Portugal (1593) and Australia (1513).

The critique here is not about Moodle (or any other conventional environment). It fulfils reasonably well the function for which it was designed (in 2002). The problem are the users (professors) that don't use all their resources or even use the environment incorrectly, in most occasions only as a file repository – the same materials that were intended for xerographic copies. But, despite several updates and several plug-ins developed and available, the system often seems a patchwork. An analysis of the Moodle source code shows different types of modelling without a default, redundant codes, low performance and errors that persist even with new versions. The migration process from a previous version to



a newer can be a challenge and generate many problems – which ends up discouraging many universities to update what is working.

In addition to not adapt to current needs correctly the system is still student-centered. The paradigm of the distance education ended up influencing classroom learning and teaching-learning process before professor-centered evolved initially for the student and then to communities, coexistence networks established by the relationship between professor-student(s) and between students (Roth, 2011, p. 7). Of course there are many variables to be worked that prevent or hinder the development of these initiatives. The arguments most often cited are lack of time and skills of professors; along with the absence of a system of recognition or curricular reward. In addition, the lack of interest in pedagogical innovation is also a significant barrier. But it is likely that, when universities are filled with animators of collective intelligence aware of the relevance of guiding, observe and record the development of their students, they will be called simply “professors”. After all, the professor's role always been helping students to learn (Roth, 2011, p. 43).

Any proposal, technology or new methodology on the horizon? If were alive Carl Sagan would probably say yes. “Somewhere, something incredible is waiting to be known.” (Gelman et al., 1977, p. 53). A hasty reflection trying to analyze where we came from and where we are going – related to education – does not provide the answers since the problem has never been technological. We do not need to develop something new to make the educational practices more interesting. There are many environments and platforms available and innovation does not necessarily involve the invention or development of something completely new, but through the use of what already exists, often free of charge. It can be a rereading of old ideas, a recombination or new approach about something that already exists, or simply an imitation of something that exists elsewhere. A creative idea does not need to revolutionize the world, be totally unique, radical, extravagant or even fun, but it has to be something socially useful and that solves a real problem (Carvalho, 2012).

In 1995 Steve Jobs quoted a phrase attributed by him to Pablo Picasso: “Good artists copy. Great artists steal” and added: “We have always been shameless about stealing great ideas” (Denning, 2011).

<http://www.youtube.com/watch?v=TRZAJY23xio>

Ethics aside, what can be seen as lesson is that not necessarily developing an original solution can lead to success. More important than this would be to use effectively

than there is already available, often without costs of acquisition, although developed by others (such as Moodle, for example).

The Ca' Foscari University of Venice (UNIVE) following the minimalist trend of use, practiced by their European counterparts, offers Moodle in several instances. The main is hosted in <http://moodle.unive.it/>. The Department of Environmental Sciences, Informatics and Statistics (DAIS) ever experienced local facilities of restricted use, including a specific version for external courses and certifications.

<http://moodle.dsi.unive.it/>, <https://moodlecertif.dsi.unive.it/>

The study of languages seems to be the area of Ca' Foscari that gives more attention to the environments, with the production of small content and many tests (Quiz). This activity module allows the professor to design and build tests with a variety of question types, including multiple choice, true or false and short answers. Moodle keeps these questions in a question bank allowing the recycling (reuse later). It is an exception perceived also at DAIS and not the rule in established practices. However, this type of test that Moodle provides and that the University Language Centre (CLA) and DAIS use are more related to the memorization and simple answers than the problem-solving.

<http://claonline.unive.it/>, <http://cladidattica.unive.it/>

Someone could argue that problem solving does not apply to certain areas such as teaching languages or computer science. On the contrary, a parrot can also memorize not only words, but whole sentences and repetitive logic without knowing what to do with it later or even when the conditions of temperature and pressure are not exactly the same previously verified.

My latest experiences (as a student) related to learning foreign languages (Ukrainian and Italian) were disappointing. In both cases the teachers had a good command of the language. But seemed to be more prepared to improve students' language dominance than teach from scratch. And no one can improve what has not as a basis. These were conventional courses, based on books and with a lot of homework.

Nowadays (pedagogically sound approach) nobody else uses the homework as teaching resource. In Germany, for example, children leave their books at school. Fontein (2012) stated that "No child would be having their free time dominated by doing school work". No child, and certainly, no adolescent or adult. This trend fortunately starts being followed in other countries, such as France and Australia (Matthews, 2012), (Walker & Horsley, 2012). But the teaching languages persists in this old approach (to transfer home what should have

been done in the classroom) what will consume classroom time to correct the lessons later. The lack of conversation practice, lack of classroom support and (at last experience), and the replacement of hours of presence classes by exercises over the internet is a misuse of that technology, a fake presence and modernism in reverse.

Other facilities related to the teaching of languages in Ca' Foscari are found at the Linguistic Laboratory (that serves two departments) and the Center for Language Teaching, Department of Linguistics and Comparative Cultural.

<http://lingue.cmm.unive.it/>, <http://venus.unive.it/italslab/>

It gives the impression that Ca' Foscari has several redundant areas, which overlap and even find themselves in internal competition. None of them establishes a market differential, new methodologies or even the correct use of technologies.

### 3. Video and Video Conferences

A picture is worth a thousand words? Fernandes (2009) mocks the phrase attributed to Confucius: "A picture is worth a thousand words. Try saying it with a picture". Some situations are impossible to be properly represented or identified only with an image. On the other hand, a text allows various interpretations according to the reader's imagination. But this bipolarity doesn't apply to a video or even to videoconferencing. After all, when we join several images in sequence (make a video) with words we will always be the best of both worlds.

Even in the CLA where we found some content production and exercises to assist the teaching of languages, the most that we found were audio files. Activities performed mainly at a distance or even in person -synchronously or asynchronously – found in videos and in videoconferences an indispensable support to its effective understanding. It is a way to meet people (not through a static photo or even some text that can be authored by others) and is connected directly to the safety of traditional evaluations made at distance.

The case of teaching and study of languages is important, since without this support if they lose the facial expressions and, in the specific case of the Italian language, the use of hand gestures – so characteristic and so significant. Remove or tie the hands of an Italian and a large part of its power of communication is lost. It is not the essence of communication, but certainly a necessary environment to emphasize the statements. The practice is cultural

and so entrenched which can be observed during the use of cell phones (including hands-free kits) without the video is being used or even another person be present.

The widespread increase of available bandwidth in the various types of internet connection and the ubiquity of video cameras on all smartphones and tablets only collaborate to increase the gap between the reality (market and users) and the practice of universities. Social networks have moved towards this new model, introducing video plug-ins. What was previously limited to specific applications (Live Messenger, Skype, etc.), became common place to meet the demand. The same happened with the creation of plug-ins for the various LMS, unfortunately without the same attention and/or use.

Even with the quality of the new specialized systems of videoconferencing like telepresence what we have seen is an occasional use (normally limited to scientific events) and not in educational practices.

#### 4. In-person environments

Some authors such as Tapscott (2009) believe that universities will collapse if they don't follow the techno-social and cultural changes that are inevitable. Others like Wyatt (2001) had imagined that the use of technologies (Web-based learning) would be the beginning of the end. But they were wrong. Over the centuries since the founding of the first institution in the Western world, the university has faced many challenges and demonstrated a remarkable adaptability and resilience (Santos, 2002). However, with the evolution of socio-economic contexts increasingly knowledge-based, these institutions have been subject to unprecedented pressures and challenges.

Faced with a reality where computing tends to become increasingly pervasive, many people believe it is the end of the use of paper and consequently the end of printed books – now that digital books are increasingly ubiquitous and available. The tablets and smartphones are around. How long it will survive?

Offering distance courses in integral scheme of e-learning or even blended is no longer enough to become a reference or even excel in an EHEA, which pasteurized offers, standardized content (making equal different courses), stimulated the mobility and where a same paid course coexists with an identical free of charge. In times where all universities may appear to be (on the internet) what they see fit (crap marketing scheme), where the

offerings of courses through e-learning multiply exponentially how to stand out in chaos? What is the perfect connection to do not get into the banality of similar offerings? The answer, to Roth (2013), comes from own question and applies to any endeavor, including educational, that want to highlight and/or start a new cycle of life: innovate, find a right concept, and establish a market differential.

This search is not limited to virtual environments but must be extended to the in-person environments, local. If we do not have good physical environments for production, support, teaching and study, everything that we offer at distance will be just false advertising.

Ca' Foscari developed the CFZ Zattere (Cultural Flow Zone).

[http://www.unive.it/nqcontent.cfm?a\\_id=161749](http://www.unive.it/nqcontent.cfm?a_id=161749)

Conceptually the model is innovative. It is a cultural center, an open, comfortable, polyvalent space, dedicated to encounter and exchange between students. In CFZ is possible to find services and training courses, extracurricular activities that complement the studies, projects designed and realized by students and spaces for relaxing, reading, studying and consulting books.

New spaces of coexistence are a trend also found in Portugal. Diogo Moreira, SAS manager of the Polytechnic Institute of Viana do Castelo (IPVC) explains that: “We have come to the conclusion that the model of canteens and bars was inadequate to the needs of students today and decided to radically change the concept of food services, going to be centered on the importance of providing an experience to student that goes beyond own meal”. This Portuguese institution is ending with the traditional spaces of the refectories, converting them into social areas where also you can eat and which will be accessible to students at any time of day (Silva, 2014).

## 5. Role models

Sartoretto (2014) said: “Did you thought about improvements to my Course in Moodle?”

“Calcolo Mod 1 e Mod 2 [CT0309] – Prof. Sartoretto”.

<http://moodle.unive.it/>

Probably the question was a little more complex than this. Without any motivation or benefit, how to make disciplines such as the calculation become more attractive and

interesting for students of informatics who often do not realize or even don't care about connections between the means and the ends? I think it begins by changing professor's posture which includes stop giving conventional classes (traditional). Look the syllabus with other eyes (through the clients' eyes) and establish a contract with students. Identify real connections between contents, subjects, course and student needs (put yourself in their place), building bridges. Not be limited to the theories and exercises that are unrelated to any problem or real situation. This means find and/or develop examples and practical situations where the content to be developed are really important, essential. Which can be visualized with the use of images, photos and videos and not just numbers and words (like this text). Without this connection is only distant theory, tedious even boring. And the feedback will be the lack of interest and participation because personal goals will only win the discipline and move on giving attention to what really matters (as if the calculus and logic did not matter).

But how to be innovative and overcome what is outdated? How to get rid of old formulas and make room for the unexpected? Starting to make room for the unlikely (but not impossible). In addition to the logical levels 0 and 1, a digital circuit can still present a third state (tristate). It's called the state of high impedance, where the output does not contribute to the high level, or to the low level. The classical bit (digital) can have the value of zero or one. Already the quantum bit can simultaneously load two values.

[http://en.wikipedia.org/wiki/Three-state\\_logic](http://en.wikipedia.org/wiki/Three-state_logic), <http://en.wikipedia.org/wiki/Qubit>

The Lifehacker reminds us. Are you asking the right questions? (Drager, 2011).

The Fast Company brings several suggestions on how to do this (Berger, 2011). "Where do I start?" could be a good option. When we deconstruct stories of innovations we found the source of the success of companies that offer products and services before unthought always converging in a simple question that is often considered a bit provocative, naive or even a little insane: "What if?". Williams (2011) of Frog Design talks about how this strange and unusual question was the impetus for the launch of Little Miss Matched, a company which proposes the use of socks that don't match on purpose. One among many examples cited as new and innovative business that began with what he calls "a disruptive hypothesis" (a hypothesis which tends to disorder).

<http://www.frogdesign.com/>, <http://www.littlemissmatched.com/>

Suggests five steps to identify disruptive opportunities: 1: craft a disruptive hypothesis: be wrong at the start to be right at the end; 2: define a disruptive market opportunity: look where no one else is looking; 3: generate several disruptive ideas: make the ordinary unexpected; 4: shape them into a single, disruptive solution: avoid novelty for

novelty's sake; 5: make a disruptive pitch that will persuade internal or external stakeholders to invest or adopt what you've created: under prepare the obvious, over prepare the unusual.

Another pioneer is Netflix, whose business model answered the question: "What if a video rental company didn't charge late fees?"

<https://www.netflix.com/>

The large number of technological innovations most sought on the internet was born from an attempt to answer ambitious questions like "What if we could somehow crowdsource everything a city has to offer?" (principle of social network Foursquare) or "What if we could get any question immediately answered by the world's smartest people in the world?" (like Quora).

<https://foursquare.com/>, <http://www.quora.com/>, <http://en.wikipedia.org/wiki/Crowdsourcing>

It's not bad discover that we don't have all the answers. Just start asking the right questions. Progress often comes from those who dare to question: "What if?" Complete this question the right way is a great shortcut to ask the right question. After all, it's not just a matter of being willing to question; It is necessary to know how to question.

What still prevents the Italian university to surrender to technology is the resilient veiled practice of *magister dixit* (argument referring to an authority regarded as unquestionable), for whom the opinion of a master (professor) did not allow replica. The term was used by professors in Florence and throughout Italy around the year 1600, to impose silence students who questioned the theories of Aristotle, considered the master of astronomy. When a student at the university questioned some theory of Aristotle, professors soon interrupted saying "*magister dixit*", which means "the master said – it is not discussed" and could end the matter.

De Morgan's law was pointed to by Sartoretto (2014) as a problematic topic to be transformed into attractive to undergraduate students.

[http://en.wikipedia.org/wiki/De\\_Morgan's\\_laws](http://en.wikipedia.org/wiki/De_Morgan's_laws)

These theorems are proposed to simplify expressions in Boolean algebra. Define rules used to convert logical operations OR in AND; and vice versa.

Several videos have been produced on the subject. For example, those of William Spaniel:

Logic 101 (#19): DeMorgan's Law, Part 1

<http://www.youtube.com/watch?v=xu6kE6Meyb0>

## Logic 101 (#20): DeMorgan's Law, Part 2

<http://www.youtube.com/watch?v=6NEAEeDoqNQ>

Teaching materials also exist ready, to exhaustion. For example, some distributed as OCW by Massachusetts Institute of Technology (MIT): Probability and Random Variables – by Scott Sheffield, MIT (Course Number 18.440).

<http://ocw.mit.edu/courses/mathematics/18-440-probability-and-random-variables-spring-2011/>

More recently and already shaped as course, some MOOCs as provided by different providers like Coursera. Making Better Group Decisions: Voting, Judgement Aggregation and Fair Division by Eric Pacuit, University of Maryland/

<https://www.coursera.org/#course/votingfairdiv>

The use of formal logic in law courses is suggested by Lawsky (2010) which presents a practical problem using De Morgan's law. And Volokh (2008) discusses how a Supreme Court case (USA) seems to conflict with De Morgan's law.

There is no subject that cannot be turned into a practical problem, making connections between theory and everyday situations that allow a better understanding. And the same technology that allows mass the sharing of these contents allows generating individual versions of the same question. Facing a certain problem (proposed by professor) students may have different interpretations and choose different paths to find their solutions.

Even the highest mountain has many faces to be climbing. The important thing is to get to the top, no matter which way. But while the internet offers a plethora of information (many do not correct or even trusted) rests with the professor guiding this crossing avoiding certain roads or even driving students to the desired direction.

When the internet became graphical began exploring a system of hypermedia documents interlinked and executed, known as the World Wide Web, Web or WWW. These terms translates as a worldwide web while the internet nowadays is much closer to the concept of a huge unorganized forest (which has everything and anything can happen, including getting lost) than an organized and limited spider web.

It is not practical these days to waste time copying theory on a blackboard, dictate lessons to students, make photocopies, make pdf files for download or even read in a textbook. All these information are available through various formats (text, image, video), courseware (OCW) courses (MOOCs), blogs and websites.



Since 2004 students in the Woods College of Advancing Studies at Boston College have the opportunity to participate in the development of a new form of distance learning that combines interactive virtual reality with collaborative online course environments and classrooms.

<http://www.bc.edu/schools/advstudies/>, [http://mediagrid.org/publications/presentations/Immersive\\_Education.pdf](http://mediagrid.org/publications/presentations/Immersive_Education.pdf)

These experiments led to a series of events, starting by Enabling the Age of Immersive Education (Boston, 2005), the creation of the Immersive Education Initiative in the same year and the sequence of events iED since 2007.

<http://www.immersiveeducation.org/>

These events, like the current edition (IMMERSION 2014) address the personal and cultural impact of digital technologies such as wearable computing, virtual reality (VR), augmented reality (AR), mixed reality (MXR), neural interfaces, affective computing, neuro-gaming, telepresence, virtual worlds, simulations, learning and training systems based on games, immersive MOOCs and totally immersive environments, like caves and domes.

<http://summit.immersiveeducation.org/>

They are new and not so new concepts that could generate new products to move the industry and thus moving the world. Although several universities are present realizes that the real players are sized companies focused on games (is what moves this technology) and greater computing power necessary. Back up that way to the recurrent insistence of carry the world of gaming for education (learn by playing) – coherent strategy while held as a further means, even not to thwart the new clients, created in this reality.

Most often these are distant technologies of university reality – I speak here of public universities in countries where the donation of resources is not common practice and available resources always seem insufficient to the needs. These universities that, in front of a set of uncertainties as to its own maintenance avoid to invest or even support certain fads and are limited the free options, how to install an LMS, a digital repository (as ARCA) and maintain a website often without dedicate versions in other languages that meet the needs of its external clients.

<http://arca.unive.it/>, <http://www.unive.it/>

Total immersion environments as the caves and domes are fantastic and with almost unlimited possibilities of use: Avango, CATIA, Cave5D, CAVELib, CaveUT, CoVE, EON Icube, Equalizer, inVRs, libGlass, Mechdyne's Conduit, P3D VirtualSight, Pro/E, Quazar3D

Immersive, Quest3D, Syzygy, TechViz XL, Unigraphics, Vis5D, Vizard, VR Juggler, VR4MAX and Vrui.

[http://en.wikipedia.org/wiki/Cave\\_automatic\\_virtual\\_environment](http://en.wikipedia.org/wiki/Cave_automatic_virtual_environment)

But specifically with respect to education, what do we do when we finally have access to the Holodeck (the most perfect of immersive systems, able to reproduce perfectly the real life with people and environments)? (Bilton, 2014), (Moursund, 2014).

<http://en.wikipedia.org/wiki/Holodeck>

We will start a third life – because the second (Second Life) did not materialize? Or simply continue to reproduce the old techniques and approaches that, unfortunately, are still in use?

Some of the most important technologies are those that become part of the environment. Weiser (1991) considered the father of ubiquitous computing (omnipresent) wrote that “The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it.”

Nowadays we can transform the house of Flintstones on home of the Jetsons. But unfortunately the children of both continue to attend the university of the first. Many professors are still trying to teach as they did in the 20th century, or worse, 19th. It is a cultural atavism. Many of them are digital immigrants compared to students who have already been created in this virtual world (Roth, 2013). We will continue to teach through immersive systems or we will recover what has been lost, do a rereading of good practices and really provide students an innovative experience (not just technologically speaking)? If we are not able to make an interesting classroom experience, what makes us think that a virtual environment can do (by itself) more quality into the process? Or even we'll desist to manage processes and lead our students to their own discoveries, keeping the focus (no dispersions), controlling the excess personal exposure and avoiding procrastination?

With the growing popularity of social networks and personal blogs, the potentially dangerous practice of oversharing became commonplace. Oversharing is the act of sharing too much personal information with people who are not necessarily prepared and qualified for it.

Different people may have different ideas about what constitutes oversharing, so they may not realize they're making others feel uncomfortable. The oversharing could be considered an addiction of the new generations? When we have more means in our hands,

we need to expose more information and feelings? What is the best way to prevent or remedy the problem? The fundamental lesson is invariably the same rule for all social networks: never forget that the whole world is watching.

There's too much information and knowledge of less in the use of the Internet in education. There are lots of data, lots of information available, not always reliable. In the information, data are organized into a logical, code or structure determined. To know is to integrate the information in our benchmark, appropriating it, making it significant for us. Knowledge does not transfer, knowledge is created, is built every day. Many students scatter in the tangle of possibilities and do not seek what they should, leaving drag to areas of personal interest. It's easy to waste time with information little meaningful, staying on the outskirts of subjects, without deepen them, without integrating them consistently. The process of knowledge happens when filtering, select, compare, evaluate, synthesize, contextualize what is most relevant and meaningful.

Our students become more ignorant, find ready answers, pasteurized texts and perform many copies authored by others. The ethical side of search, adapt and then create and adopt is being replaced by the simple act of adopting ready answers that don't fit exactly to all new challenges. Conversely, the Internet mirrors the real wishes of every one of us, desire to be out of control of states or even of other institutions, which through other media are always "guiding us", offering the "best" economic and cultural products.

For those who are procrastinating (deferring an action), this results in stress, feelings of guilt, loss of productivity and shame in relation to the other, for not fulfilling their responsibilities and commitments. Procrastination can be considered normal, but it becomes a problem when it prevents the normal functioning of the actions. People are losing focus and the internet is becoming just a place for fun and to pass (occupy) the time, mostly with things that don't add absolutely nothing and still exposes too much. That is, has nothing to do with education and with everything good that you could obtain from technologies when used correctly.

If we don't even utilize the potential of what we have at our disposal (I speak about what has come to stay and not temporary fads) how to think only in evolve technologically (such as hardware and software) without remembering and meet the requirements to make this practice effective and correct? Current needs are no longer focused on the accumulation of knowledge. The focus should be the ability to solve problems. Given this context of variables and uncertainties, professors need to do their part (lifelong learning is a concept

that should be applied to everyone and not just for others) seeking the update (didactic and technological) and a way to explore their creativity and willingness to innovate (if these exist even in latent form). In this sense, must act autonomously, seeking new viewpoints, new solutions and try to do something different from the usual. You do not get different results doing the same things and the same way.

The Web 2.0 may have facilitated many things as the creation of search engines (Google, Bing, Yahoo, etc.), the collaborative websites (Wikipedia, YouTube, Twitter, etc.) and social networks (Facebook, Google+, LinkedIn, etc.). But nothing prevented the authorship in the Web 1.0 or even earlier when the internet was not graphic or when it did not exist.

Not everything is available on the internet and never will be. Books and publications of quality usually are printed and sold or have access to controlled content – and not offered for free or even possible to be localized by any search engine like Google. Just a quick comparison between centuries of resistance that has printed books and how fragile are the eBooks that are in the cloud. A single data communication failure, power supply failure, server failure – or, why not remember an atomic blast – so that everything gets lost or becomes inaccessible.

Will be the Web 3.0 (semantic) which will give the solutions? Or the Web 4.0, Web 5.0? What is the limit to induce in the people concepts that don't exist and that can become reality (or not) and are geared more to the infrastructure (systems, websites and databases) than end-user usability?

The difference between being the author, copier or just reader not settles by technology, but by an educational issue, moral, personal. The art of writing involves practice and also reading. We can provide a technological environment (add a framework) to these matters but will always be a means and not an end.

## The Impacts on the Educational Landscape

“Ruin is a gift. Ruin is the road to transformation.”  
(Eat, Pray, Love)

### 1. Looking to the future: breaking the links with the recent past

This is not a cliché, or even the Back to the Future trilogy of science fiction adventure films written by Bob Gale and Robert Zemeckis, but to rethink education in terms of current and future technological possibilities involves experimentation, practice and feeling. Where to go?

Given the diversity of scenarios and options – free or paid, open or proprietary, local or cloud, domestic or foreign – the decision-making process should take into account something more than just the omnipresent costs. Items such as security and privacy of information should be considered essential.

Many prominent people are recognized more for their eventual errors and failures than by their great achievements. It is not easy to predict the future with 100 Percent certainty. What to say when the bets are related to the future of the education area, so resilient, tough, conservative and averse to changes...

The recent past has brought us a virtual massification of academy, often without any quality or even interaction that should be mandatory in times of Web 2.0.

Regarding to the behavior on the Internet, of individuals and institutions – including educational, we witnessed the rebirth of pretentiously moderns, dazzle, boring and invasive.

“But I have everything on my plex. My diaries, my homework, my music, my books – my whole life!” (Marshall & Gaviola, 2011).

Security, privacy, and responsibility are themes that consistently and recurrently are brought to the forefront – reported here to the different Internet uses.

Several universities and students do not see limits, to expose themselves (oversharing) on social networks. Likewise, it seems to lack common sense in adopting different service models offered in the cloud computing, as well as Infrastructure as a service (IaaS), Platform as a service (PaaS) and Software as a service (SaaS) solutions such as Google Apps. Some services apparently are free of charge, but there is always a price to pay for everything.

For many decades now, Microsoft has been criticized for its predatory monopolistic practices. Google is currently under the spotlight as well.

On the 1st April 2014 the Gmail email service (Google Mail) completed 10 years ("Gmail," 2004), ("Gmail," 2014). The date always refers to the celebration of April Fools' Day, sometimes called All Fools' Day – especially in Australia, Brazil, Canada, United States and Europe ("April Fools' Day," 2013).

For Brazilians, the 1st of April has several interpretations, it also reminds the military revolution that occurred on this day in 1964 – and the harsh years that followed.

Interventions such as this are typical of the technique of a coup d'état, that the CIA has developed and applied in Brazil, artificially radicalizing the social struggles to the point of causing the imbalance in the political and destabilize governments (spooling actions), who did not submit to the strategic guidelines of the United States – who deny responsibility and complicity with the coup (plausible denial), standard by which American governments was characterized many times their intervention policies in other countries (Bandeira, 2004).

"Friday, April 3, 1964 – 12:06 p.m. Thomas Mann: I hope you're as happy about Brazil as I am. Lyndon B. Johnson: I am. I think that's the most important thing that's happened in the hemisphere in three years. Lyndon B. Johnson: I hope they give us some credit, instead of hell." (Beschloss, 1997).

Interpretations and historical events aside, we all (Gmail users) can be victims of this stigma.

Are we fools to use the Gmail and its associated tools from Google?

What is the price we pay for the use of these "free of charge" offers?

Ribble (2014) states that, "...Gmail was not the first of its kind. In fact, it was a relative latecomer to the webmail party. Gmail's objective was not to create a totally new way of communicating, but to make radical improvements to the existing webmail model. And the last ten years leave little doubt that they've succeeded".

They really managed to do "radical improvements", ranging from the absurd to the unbelievable, verifiable in a judicial documentation of 30 pages, when Google acknowledged that Gmail users have no "reasonable expectation" that their communications are confidential. Its users do not have complete privacy (Rushe, 2013).

That suit, filed in May (2013), claims: "Unbeknown to millions of people, on a daily basis and for years, Google has systematically and intentionally crossed the 'creepy line' to

read private email messages containing information you don't want anyone to know, and to acquire, collect, or mine valuable information from that mail”.

To John Simpson (Rushe, 2013), Consumer Watchdog's privacy project director, “Google has finally admitted they don't respect privacy”, emphasizing that, those who want some security or privacy, should not use Gmail.

The document came to light at a time when Google and other technology companies (AOL, Apple, Facebook, Microsoft, Paltalk, Skype, Yahoo and YouTube) try to explain the role they play in mass surveillance practiced by the National Security Agency (NSA) over citizens of the United States and foreigners (governments, authorities and citizens) of several friendly countries, including France, Germany, Spain and Brazil.

The denunciations of Snowden (2013), former technical expert of the Central Intelligence (CIA), occurred through the newspapers The Guardian (Greenwald, 2013) and The Washington Post (Gellman & Poitra, 2013), giving details of the information traffic carried through various surveillance programs, among them PRISM (2013) and XKeyscore (2013).

According to the information published, it is possible (XKeyscore) to read the email content of any person in the world, just knowing the email address. Any website can be verified (inbound and outbound traffic). Any computer that a person uses on the Internet can be monitored. Any notebook can be traced – when accessing the Internet – while the user travels, to any part of the world.

Snowden (2014) said (00:03:46,445 – 00:03:59,131): “Every time you pick up the phone, dial a number, write an email, make a purchase, travel on the bus carrying a cell phone, swipe a card somewhere, you leave a trace and the government has decided that it's a good idea to collect it all, everything, even if you've never been suspected of any crime” (“Snowden Interview,” 2014).

No new information. Snowden just proved what we all, in some way, already knew – that the control and manipulation of information have been used (by all parties) not only in times of declared war to change public opinion, to support certain actions of the rulers or even to contain the resilient and politically incorrect through the eyes of the dominant power.

If someone travels to a different country (of their usual displacements – which are monitored) and try to access Gmail through a different way than webmail immediately has the access blocked, forcing the use of a mobile phone to receive an unlock code via SMS or

voice message. Google keeps a record history of the used IP addresses and suspect whenever someone gets out of their “controlled” comfort zone. Some user requested this kind of “protection” or is it possible to disable? Not... (“Basics,” 2015), (“SMS from Google,” 2015).

This kind of control – that not just Google does – seems to be meaningless for those who already transformed their life (personal/institutional) in an open book, updated and exposed 24 hours a day (Twitter/Facebook) in a sort of Big Brother (reality show).

Probably, in search of their “fifteen minutes of fame” (Warhol, 1967)...

Google or any other service provider paid or “free of charge” cannot be our PlexPad, not now; much less in the future (2149), (Terra Nova – Marshall & Gaviola, 2011).

The year 2014 was prodigal in examples of lack of privacy and security for both users and institutions, including the lack of digital literacy. The incident of August – the biggest scandal of celebrity photo leaks already occurred – exposed a security hole of the Apple's iCloud service (“2014 celebrity,” 2014).

Our lives cannot be fully exposed and/or dependent on a single supplier.

That way we will be allowing connections between the various services and providing more information than necessary – both for those hosts as well as for our personal and professional contacts. Also, we are going to be hostages of a particular company – under a certain government or country – and its policies, economic interests and technological failures.

Eventually everything that goes to the cloud may be lost or even accessed by other people. If certain information is sensitive, secret or even intimate, the Internet and the vast majority of their gratis or paid services is certainly not the best place to store them. After all, nothing is forever. Google also taught us this. On Tuesday, September 30, 2014, the chronicle of a death foretold finally came true: Orkut is over (Orkut, 2014), (“Orkut Archive,” 2014).

To Assange (2014), “Unlike intelligence agencies, which eavesdrop on international telecommunications lines, the commercial surveillance complex lures billions of human beings with the promise of 'free services'. Their business model is the industrial destruction of privacy. And yet even the more strident critics of NSA surveillance do not appear to be calling for an end to Google and Facebook.”



This “business model” searches not only the destruction of privacy but also the end of anonymity and the end of freedom of opinion without reprisals.

Who should not, does not fear? Who should not, should fear yes, and with good reason...

WikiLeaks founder, Julian Assange, himself is the victim of the system, in the same way as all those who try to challenge the constructed and manipulated truths, that subsequently have become definitive and unquestionable evidences (WikiLeaks, 2011).

But what options are available? Fance (2013) recognizes that Gmail can be one of the most popular services, but there are many people who feel that it is far from being the best. She cites some problems and points out how the most important justification is the fact of the Google scans each email message that is sent and received. This is done so that advertisers can better target users and display ads that are more relevant to them – although from a Gmail user’s standpoint, this is considered an invasion of privacy.

If, for these reasons – or any other – someone wishes to stay away from Gmail/Google or simply wants to try something new, she lists ten major alternatives: Hushmail, Zoho, Mail.com, Outlook.com (replaced Hotmail), GMX, Facebook, Inbox.com, Yandex, Shortmail and Yahoo Mail.

There are many other options in almost every country – the Internet is a sea of possibilities – and the major players seem to have servers located in the United States, China and Russia. On Wikipedia, for example, there is an extensive compilation and comparison of providers (“webmail providers,” 2014).

Some people or institutions may want to not rely on Russian or Chinese services for several reasons. But what is the difference among staying under the surveillance of a Big Brother (Orwellian) American, Chinese, Russian, or any other controller?

This text does not intend or even has the pretense of showing anti-Russian, anti-American or anti any other country. Nothing is intended against or in favor of any party. It only reflects the absurdities to which all were thrown, implicitly or explicitly, after Second World War, during the Cold War and the ideological-political bipolarization.

What we thought we had stayed in the past seems more alive than ever.

Impossible not to relate the current ubiquitous and pervasive practices to the dystopian novel 1984 (“Nineteen Eighty-Four,” 2010) written in 1949 by Eric Arthur Blair, or rather by his pseudonym “George Orwell”. The pseudonym has always been one of the forms of anonymity.

Wilde (1891) through an essay and using a Socratic dialogue, stated that: “Life imitates art far more than art imitates life”. The Orwellian nightmare comes true.

“Sooner or later, though, you always have to wake up” (Cameron, 2009).

The anonymity nowadays is something pursued by all means and ways. On the Internet, due to the illusion that many have to be anonymous, the practice is verified even in discussion forums and/or opinion that, in a ubiquitous manner, require the use of an email of identification or affiliation to a social network – as if the two possibilities were not possible to be false and, thus, be possible to post a comment “anonymous”.

How can we distinguish current practices to those verified in the middle ages?

In a way, we live in a new “holy” inquisition, and witch hunts... Any difference even among the contemporary practices of the Gestapo, Kempeitai, NKVD, Stasi, SAVAK, KGB, MSE, FSB, OSS, DOPS, CIA, Mossad and similars?

On behalf of an anti-terror paranoia systematically fed, the “Patriot Act” (“Patriot Act,” 2008), a fascist law that invades the privacy of any American citizen (with impacts throughout the world – at airports, for example), we cannot create a state of exception, trample fundamental freedoms and constitutional rights in the alleged combat against an imagined – or created intentionally – “terrorism”...

The new heretics – accused of heresy, piracy or terrorism – remain being all who are contrary to the established dogmas, those who question certain truths, considered as indisputable – created without evidence, logic or moral use – or even those who oppose to the opinions determined by certain dominant groups. No one is discordant in itself, and any founder or participant in any practice or behavior that may be considered divergent – in a given historical period and social reality – nothing more is than someone who, from his own point of view, believed that he was moving in the correct path. The heterodox is classified this way just because someone invested with some sort of institutional power, rated its practice or its ideas as dissonant and contrary to an official orthodoxy that if self considers as the correct path (Barros, 2008, p. 125).

There are no eternal facts, as there are no absolute truths (Nietzsche, 1908, p. 22).

Both science, law and history are made of transitional truths. There are no thorough truths in every area of human knowledge, in constantly evolving, much less in our “official story”, the manipulated version of the facts that goes to the books.

After all, the paper accepts everything and who writes, defines, govern or even judges do it according to his own bias of life, including his own prejudices as well as the maintenance and commitment to the current situation.

Everyone has the right to freedom of opinion and expression?

Scientists, jurists, rulers and serious historians, exempt, uncompromised and without fear of facing the *status quo* and the truths imposed?

Galileo Galilei (2007) would have certainly divergent opinion about inquisitorial courts. The reality that prevails corrupts and marginalizes those who oppose the established truth, through the fear of rejection or ridicule, which makes many thinkers to remain hidden.

Many actions of certain groups which, without options, try to survive the extermination what is imposed on them and the occupation of their territories – real or virtual – are erroneously classified as “terrorists”. This never can be compared with the widespread raids against civilian populations that began in Second World War and culminated with the attack with nuclear bombs on Hiroshima and Nagasaki (August 6 and 9, 1945). We have lost the moral.

The true terror remains the actions of powerful states, primitive, warlike and pre-historic imperialisms; that have not learned lessons from the mistakes of the past and insist – through a path unilaterally imagined – in denying the right to self-determination of peoples, as well as impose their vision of the world to other cultures, most of the time ignoring the cultural diversity and ethnic minorities.

On the Internet we can see that the attacks are not limited to “strategic” targets. In the case of Google actions, they are generalized. Beyond the control of the email contents we can realize an insistent and resilient way to induce and/or require the identification that matches completely to the policies adopted by this company which, often, is not shy to request additional information – another e-mail, cell phone – to connect the dots. Consequently, it became a common practice, including banks, sending codes via SMS to confirm operations, as if cell phones could not be stolen. On the contrary, mobile phones can identify the exact location of the user – or anyone who uses his phone.

Remoaldo (1998) points out that anonymity has always been an important feature of society. The need for its existence has been demonstrated over the years. It has been of great value to dissidents in countries with little or no freedom of expression, for the victims of violation and for people who might want to share their experiences without revealing their true identity. Without anonymity, these actions could result in the silencing of these people through censorship, physical aggression, loss of job, legal processes or even through murder.

Many countries allow citizens to hide their identity as part of the right to privacy, since the acts are not considered illegal. Yet even this concept of legality varies according to a particular era or social situation ("Anonymity," 2011).

Wikipedia, for example, is written collaboratively mainly by authors who use unidentifiable pseudonyms or use only their IP address, some might even use identifiable pseudonyms or their real name ("Wikipedia: Anonymity," 2014).

The actions of Big Brother (Orwellian) can reach everyone and the current distrust of solutions providers on the Internet entails further the desire to remain anonymous. The full anonymity on the Internet is possible but not always guaranteed, since IP addresses can be tracked and associated with a particular computer through which a message was sent or through which the contents of a website has been changed – without identifying a user directly.

Identity masking services such as Deep Web (Tor, Freenet, I2P and others like Morphemix/Tarzan, Mixminion/Mixmaster, JAP, MUTE/AntsP2P and Haystack) hinder tracing, by using technologies of distributed computing and encryption ("Deep Web," 2008), ("Tor Project," 2002), ("Freenet Project," 2000), ("I2P," 2003).

Another possibility is the use of a Virtual Private Network ("VPN," 2013).

Hoffman (2012) says that: "All the major search engines track your search history and build profiles on you, serving different results based on your search history". He suggests five alternative search engines for those who are tired of being tracked: DuckDuckGo, Ixquick's Startpage, Ixquick, Blekko and Ask.com/AskEraser. He also reminds us that, to surf anonymously everywhere – with slower browsing speed – the best option is the Tor browser.

The SlashGeek ("Anonymous," 2012) recommends that not be used only the Tor (previously an acronym for The Onion Router). It indicates as the best choice to associate

Tor with VPN: You-Tor-VPN or even You-VPN-Tor. Gives tips about VPNs, points out that the Google search engine should not be used and indicates the Firefox as the best browser (with the extensions Ghostery, NoScript and Adblock Plus).

A device that promises total anonymity online in a simple, non-technical and inexpensive way (\$51) is the Anonabox (2012), (“Anonabox,” 2015), and there is also a free turnkey solution for application-wide online privacy. It's called Tails (“Tails,” 2009) and it is a “live” operating system, developed from the Debian (Linux) and optimized for privacy, where all network data is routed through Tor network.

Proxy servers can also be used (“Proxy,” 2010). There are different levels of proxy (web, caching, reverse, transparent, etc.) with different levels of protection and anonymity – enough to bypass the restrictions of websites even in countries where the Internet is censored or wars occur, to report the latest developments.

These technologies allow the traffic to pass through another computer before communicating with the recipient, a different user's IP address.

The Lizard Squad, group that presented itself as responsible for Christmas attacks (2014) to PlayStation Network and Xbox Live above all did so to demonstrate the incompetence of Sony and Microsoft to avoid these attacks (Pilkington, 2014).

With the attack on the Tor, anonymous Internet service, the Lizard Squad (@LizardMafia) attracted even the wrath of Anonymous (@YourAnonNews) whose only concern is the privacy made possible by the Tor, which is used by people around the world to navigate and communicate without having anyone else lurking their private activities (Smith, 2014), (Arce, 2014).

The Tor project is one of the most effective sites for encrypted communication, becoming one of the most important Internet services in the world.

Whistleblowers like Edward Snowden has used the service as well as many dissident movements and users – who are under the control of information – from countries such as China, North Korea, Cuba, Egypt, Iran, Russia and Venezuela. Without wishing to create an axis of evil, where we are free?

The Americans – and not only them – should seriously consider its use.

## 2. Trojan Horse

In October 2006, Google allowed educational institutions to use the Google Apps service, which is now called Google Apps for Education (“Google for Education,” 2015), formerly Google Apps Education Edition. Google Apps for Education (“Apps for Education,” 2015) is free of charge and offers the same storage space that Google Apps for Work (“Apps for Work,” 2006), formerly Google Apps for Business. Seems to be an offer they could not refuse. But, even the success stories multiply; there has not been unanimity among the universities, even among the Americans (Whittaker, 2010).

In the European Union (currently, 2015) checks are in progress to legally allow access to users' privacy and the right to be forgotten – a process that began in 2010 in Spain – as well as Google's business separation. All try curb the company's dominance in the Internet search market (Fioretti, 2014), (European Commission, 2014). Recurring issues of (lack of) privacy comes at a time when the company Google is also fighting for four years against an antitrust investigation (European Commission, 2010).

Starting in the academic year 2008/09, Ca' Foscari (UNIVE) began using Google services, starting with Gmail by shifting the MX record of domain unive.it:

IP address: 157.138.7.88 – Host name: unive.it

MX aspmx.l.google.com

MX alt1.aspmx.l.google.com

MX alt2.aspmx.l.google.com

MX aspmx2.googlemail.com

MX aspmx3.googlemail.com

source: <http://network-tools.com/default.asp?prog=express&host=unive.it>

This initiative is initially observed in Ca' Foscari (2008, 26) (translated): “email @stud.unive.it – Starting from the academic year 2008/09 for all students has been prepared a mail box identified by registration@stud.unive.it. The mailbox, hosted by Google, has more than 7 GB of disk space. The initiative aims to improve the quality of communications to students, and from these to the University”. Later in Ca' Foscari (2012, 55) there is a reference (translated): “It is also expected that the migration to Google Apps for Education can encounter some problems (not severe) relating to technical and/or organizational aspects” and one realizes that, even being a “free” offer from Google (without direct acquisition costs), the UNIVE paid (indirectly) for consultancy fees (translated): “Investment

relating to consultancy for transition to the systems Google Apps for Education, Moodle and iTunes U”.

Both Google, Moodle and Apple do not charge (directly) the use of their platforms by universities. But one day the invoice may arrive.

Currently (academic year 2014/15), all Google Apps for Education services are available to faculty, staff, researchers (username@unive.it) and to students (registration@stud.unive.it). The authentication system of the University (translated): “To professors, employees, and researchers the email username@unive.it associated with the services Google Apps for Education; to students the email registration@stud.unive.it associated with the services Google Apps for Education;” (“autenticazione di Ateneo,” 2015): “Warning: although the new mail box is hosted by the Google operator is accessible exclusively by web address <http://mail.stud.unive.it> and not via [www.gmail.com](http://www.gmail.com)” (translated), (“account di posta studenti,” 2015).

However, the emails are explicitly exposed on the UNIVE website, ignoring the risks involved and abstaining from using, for example, JavaScript or images.

Piotto (2014) said: “Use image instead since text email is forbidden by Italian law (legge Stanca 17/01/2004 about public administration sites accessibility). Use text like [dot] [it] or \_AT\_ help spammers (see <http://techie-buzz.com/featured/tips-to-tackle-email-harvesting-spam.html>). Use complex system like captcha, JavaScript, etc... help us to prevent spam but block Google indexing and reduce site's usability. We are a public service, @unive.it isn't a personal email (if you want a personal email use @gmail.com), our first goal is help students and users to find us (Google indexing is necessity, not a problem), no matter if we receive spam”.

This position is simply absurd, and the same can be said with respect to all the arguments offered as a reason to not protect the emails. Currently all @unive.it accounts receive a reasonable amount of spams, higher than the verified in “normal” Gmail accounts already included in lists of spammers. This is due mainly for sewing the email lists to people from academic institutions (internal and external “clients”) that are made through offers sent to all account holders. I'm not referring to the absurd mailing lists (CIdE) that are created internally and, as always, shoot first, ask questions later (“Mailing List CIdE,” 2015).

Why do we need an institutional email? To “prove” some affiliation?

This type of account is one which we do not have full control, which is subject to the receipt of unsolicited messages – institutional or non – originating within the institution and that, most often, we lose access to all content and contacts when we move away, or are taken away.

The UNIVE, on the flip side, provides a proxy server (“Proxy Settings,” 2015), proxy.unive.it (157.138.1.34: 3128) that allows access to internal services – as if we are within the internal network, which includes email – and thus omit the location.

The security issue also calls for proper attention and information from professors to students – at all levels – in exposing and demonstrating the risks as well as suggest alternatives – not only with regard to the overexposure. Diversifying the options, we will be collaborating to create a society digitally a little safer and just.

The Russia's foreign minister, Sergei Lavrov, said at the UN that “...no one has a monopoly on truth and no one is now capable of tailoring global and regional processes to their own needs” (Lavrov, 2014). This is a correct and consistent statement – albeit absurd, coming from Russia, who practices the opposite of speech, and recurrently, in the cases of Ukraine, Georgia and Moldova.

Such a statement should even be applied to the Stalinist version of history – mostly related to the Second World War, whose events insistently have been changed and used in the wrong way (by all parties) and “Hollywood” that, in the absence of new military “victories” and in the face of repetitive failure verified later (Korea, Vietnam, Afghanistan, Iraq and Syria) does not shy to distort the facts and explore the event, apparently, to the last drop: Fury, a Sony movie (Block & Ayer, 2014).

This is not about watertight issues or problems unrelated to the entrenched reality in which many universities live. We live in a state of war, even when not declared, which includes all forms of surveillance, electronic attacks, cyber-attacks and cyber terrorism; often sponsored by governments and sovereign states – democratic or not – or by independent groups.

Angela Merkel (Germany) and Dilma Rousseff (Brazil) would have been only two, of the 35 world leaders monitored by the NSA (Rawlinson, 2013), (“Global surveillance,” 2013). According to Aymone (2014), provided that the complaints have been proven many Brazilian



federal public universities have adopted various new safety standards, among them the use of own email servers, something that the majority of them had already made.

Generally, there is a recommendation (DOU of 2014, October 17) so to adopt the “Guide to Good Practices on Hiring Information Technology Solutions”, of the Secretary of Supervisory Information Technology of TCU (SEFTI), to decrease the risks to which IT area is subject, especially with regard to the creation of service level agreements with the applicants areas and the holding of documentation of products developed by third party companies, for that they do not become hostages of the companies contracted, who hold the knowledge of the products developed, (“Guia,” 2012).

The information leaks are not something inherent to the Internet or use of computers. It has always existed. And were not just spies of the “enemy” photographing secret documents. Most of the time it's friendly fire and the problem is at home – the leaks mostly originate from within the institutions. We slept with the “enemy” or heroes, depending on the observer's point of view...

Scanning only made things easier and faster. And the Internet allowed for greater disclosure, that is, more people have access to information.

WikiLeaks (2006) is an organization which publishes, on its website, posts from anonymous sources, documents, photos and confidential information leaked from governments or corporations, on sensitive issues.

In Russia, the Kremlin is returning to typewriters – in an attempt to avoid leaks. It has already spent nearly \$15,000 on the purchase of this “modern” equipment (“Kremlin,” 2013).

The joke seems to be about to become literal also in Germany (Farivar, 2014).

Secret information must, as its name implies, be kept secret. In the case of emails, the biggest problem is what we write and for whom. Unlike spoken words (that can be recorded) emails are written and identify (digitally) the origin and destination. They can and are used as evidence, even after our own death (e.g. Steve Jobs), (Ames, 2014).

Certain words or expressions can classify any message as interesting or potentially dangerous to the eyes of the software spies who monitor the computers (locally or remotely). This is also true for all kinds of websites, including blogs and social networks. McAfee has related the search keywords more dangerous to scammers (Keats & Koshy, 2008).

A given message will be stored at least in two places: on the sender and on the receiver. Where both sides keep copies of sent and received messages on their personal equipment as well as on their servers (cloud) the same message will be, at least, in four places. That is, it is sufficient to invade or have access to only one of the options to take ownership of all content, something that not just the NSA makes with perfection.

There are several technologies to improve the security level of messages sent as the encryption and the use of certificates. But nothing is perfect. Just a password that is easy to break in order for this data to be accessed by anyone. The main thing is to use common sense in the contents and, even with respect to private messages, keep in mind that eventually the text will be accessed by others, even unauthorized, which may make different use of the information, including against us.

The issue of security, for universities, should not be restricted to emails and own servers. To Roth (2014a), should be assessed what options are available free of charge at this time – and it would be both technically and pedagogically usable. The focus would not be to fall into the discussion paid vs. free, but to speak out on issues such as security and privacy. Given the current quality of free options (such as Google's package), it is an irresistible appeal to institutions, public and/or private, in lean times.

But we should not make the same mistake of the Trojans.

The end of anonymity, for example, does not mean any guarantee of the end of inappropriate content publication (Blum, 2014).

The Brazilian Civil Rights Framework for the Internet – officially Law No 12.965, of April 23, 2014 – also guarantees the freedom of expression, but registers the possibility of compensation when there is a violation of the intimacy and private life (“Civil Rights Framework,” 2014). Moody (2011) described the regulatory Framework as a law “anti-ACTA”, in reference to the Anti-Counterfeiting Trade Agreement, widely criticized for restricting the freedom on the Internet and that was rejected by the European Union. Tim Berners-Lee, inventor of the World Wide Web, called it a “fantastic example of how governments can play a positive role in advancing web rights and keeping the web open” and called for other countries to follow suit of Brazil (McCarthy, 2014).

The Internet is a reflection of the imperfect world in which we live and it has its good and bad points depending on how we use it. We can observe practices that may be, at the

same time, considered right or wrong, depending on who the judges (*status quo*). Countries such as China, North Korea and Cuba, among others, are criticized by the second largest “democracy” in the world (USA) with regard to the control what they do about Internet access.

Which country does not do the same (and not just on the Internet)?

### 3. Paddling against the tide

With respect to content sharing, there are conceptual differences – and distorted – as well as various interpretations about the French expression *droit d'auteur* (authors' rights), (“Authors' rights,” 2014) and the Anglo-Saxon term copyright (right of copy), (“Copyright,” 2009).

Wong (2013) compares the Chinese appropriation of western culture and the construction in the western imaginary of a China that represents the quintessential mimicry. She reveals that, the copy as learning method, common in arts academies worldwide, is part of Chinese culture and its pedagogy, linked to the thought of Confucius, to whom the copy is an exercise in humility. In 2004, responding to allegations of copyright violations, China's government argued that, thanks to the imitation skills of artists from Dafen (Shenzhen), consumers around the planet could have access to the world of great art.

This point of view can be extrapolated to music and books. But why not apply this also to education, so that more people have access?

The replication process as an instrument facilitating access to information and social change always comes up against the same issues.

Some governments insist on the way of criminalization. Projects such as the PROTECT IP Act (Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act), (“PIPA,” 2011) and the Stop Online Piracy Act (“SOPA,” 2011) did not follow ahead. And the persecutions, the closure of some hosting services as well as the control of the search engines (“Chilling effect,” 2011) have not reached the expected results, as was expected.

After all there are several other ways to share content, with greater or lesser exposure as well as the commitment of those who intend to do.

The cases of Napster, Megaupload and The Pirate Bay are exemplary. After these services have been withdrawn from the air, the options – clones or similar ones – have

multiplied exponentially. In times of shared economy, the solution to the “problem” does not pass by this way: prohibit, prosecute and punish...

The history has shown us that certain actions and/or positionings have different interpretations over time. We should learn more from our mistakes than from our accidental successes. There are notorious examples proving the opposite, full of discrimination of the most varied types: social class, belief, skin color, creed, disability, ethnicity, age, education, nationality, sexual orientation, political opinion, national origin, race, religion, sex or any other type. In the past, and occasionally nowadays, the discrimination was something explicit. In these politically correct times discrimination follows other models. Many people have already been barred or even lost jobs for them being exposed in social networks: their opinions, their preferences, their “friends”, their followers.

The new generation are born under the illusion that there's freedom – at least on the Internet – and there is no dominant feeling in them, of doing something wrong, with respect to the information and data sharing, whether simple personal photos as well as music, movies and books of third parties. Considering that they are the future and who controls the world is always a dated issue – we all have a life limit – this difficulty will soon be outdated.

The copy path as learning method cannot be restricted to art schools (worldwide) nor be seen in a discriminatory manner as happens currently against the Chinese, in the same way as happened with the Japanese after the Second World War. Both gave us lessons that the copy process always has a cost and there always occurs some appropriation of content by who performs...

Does not fit here discuss the rights of the author or copy, but if a particular work is displayed to the public, that is, was exposed, published, rented or even sold there is no way to prevent, in practice, that people to do records (photos, audio, video, paper copies, etc.) and then display them and/or share. It is impossible and there is no Big Brother (Orwellian) that can contain this tsunami due to the omnipresence of photo and video cameras in mobile phones.

One can only try, but this is and will always be a losing battle.

#### 4. Streisand effect

On November 21, 2014 a self-titled group “Guardians of Peace” or “GOP” would have hacked the servers of Sony Pictures, blocking all computers, blacking out the company's website, besides stealing files and leaking unpublished movies (“Sony hack,” 2014).

How a company as powerful as Sony – technologically speaking – shows itself as vulnerable to different attacks (Guardians of Peace, Lizard Squad) in so little time?

The origin of the “Guardians of Peace” is still uncertain. According to the American television channel NBC, FBI sources “investigate” if North Korea “would be” behind the attack (Williams, 2014), (“North Korea,” 2014). The Asian country has its own division of hackers within the armed forces, known as Unit 121, which is “suspected” of attacks on the United States and South Korea.

Could have been the North Koreans? Yes, in the same way that, could be the Chinese, Russians, Iranians, Japanese, Europeans, Americans (northern, central or southern), or Sony's own staff. The pseudo-defenders of freedom of expression and privacy exist everywhere.

The stronger “evidence” of the authorship of the attack would be the fact for North Korea to have a “reason” to attack the Sony Pictures: the movie “The Interview”, a bad taste comedy from Sony about the fictional assassination of the North Korean Supreme Leader, Kim Jong-un (Roger & Goldberg, 2014).

If Sony was again the victim of the enemy hidden (or declared) maybe we never have all the answers. Could have been a marketing action (internal) or the work of friendly fire (Lena), after all the repeated attacks to the Sony's structure has gotten a seemingly easy success.

All that the “Guardians of Peace” obtained in relation to threats to suspend the release of the movie was to make the even much more commented than would normally be, that is, the Streisand effect. It is an Internet phenomenon where an attempt to censor or remove any kind of information turns against the censor, resulting in the vast replication (“Streisand effect,” 2007).

It is very likely that the movie The Interview would have been unnoticed, were it not for all the controversy that surrounded it. According Chedin (2014) and Spargo (2014), there are reasons to suspect this story – which points the involvement of North Korea, or even exemption from Sony.

Through what happened Sony received disproportionate attention and the movie won an absurd free marketing. In the name of “freedom of expression” and as an act of protest and support, many people resorted to websites about cinema, notably the IMDb, and rated a perfect 10 to the movie, even before watching it (IMDb, 2014), (Savov, 2014).

They even went as far (Barack Obama) as to suggest the movie be nominated for an Oscar! (Maddocks, 2014).

The same movie that is featured in the race for the Golden Raspberry Awards (Kreps, 2015), which “honors” the worst productions of the year (2014) of American cinema.

If the movie is good or not, depends on the personal taste of each one of us.

With much good will, protest and everything else, Chedin (2014) asserts that the movie does not deserve even half of it. It is possible, but better not to rely on critics in the same way that we should not trust politicians, researchers and exempt historians.

The Sony's profits are probably being larger than “normally” would have been under standard conditions for “temperature and pressure”. Only at the premiere weekend were about \$18 million, of which \$15 million would be from online sales (Baker & Milliken, 2014) – the film was released simultaneously in several streaming services such as YouTube, Google Play, Xbox Videos and Kernel.

According to Sony, just in this period the movie had been purchased or rented online more than 2 million times (Baker, 2014), becomes the largest Sony Picture’s online movie of all time.

Between December 24 and January 4, this number rose to more than 4.3 million times, having raised more than \$31 million from online, cable and telecoms sales. In addition, the film has earned \$5 million at the theatrical box office, with 580 independent theaters showing the movie in North America (Sinha-Roy, 2015).

To what extent has Sony learned from the mistakes of the past and can be held harmless in the process? That is, put sensitive information on a server – which can be accessed via the Internet – does not refer to the rereading of an antecedent trap, in Pearl Harbor-style (“Japan Questions,” 2008) – when all the Americans aircraft carriers of the Pacific fleet had already abandoned the port, leaving only the battleships, almost all old and outdated – to achieve our true purposes?

The results, after the release of the film, has been so significant that, probably, the ports of Sony's servers will be open to the future "invasions".

It costs much less to promote the new releases and profits online are immediate.

Any "definitive evidence" about the attack's authorship presented so far?

The government of China said that there is no evidence that North Korea is responsible for attacking the Sony Pictures, as stated by the United States (Rajagopalan & Holland, 2014).

In the past the U.S. also accused China of cyber spying, without evidence, and a U.S. official said the attack on Sony "could have used" Chinese servers to mask its origin (Wroughton & Rajagopalan, 2014).

"Could have used" is an inaccurate, partial and biased statement. Suspicion and investigate evidence is something normal. Disclose this information before to prove something is irresponsible. Call a spade a spade, with impartiality and without compromise, is another story.

The persistent and opportunistic attitude of trying to incriminate – without evidence – all those opposed to the dominant ideas of a given country does not give us the right to expose them and ridicule them (Basques, Communists, Cuban, Nationalists, National Socialists, North Koreans, Palestinians, Iranians, Ukrainians, Venezuelans, etc.).

This recurrent modus-operandi always refers to the argument used, for example, with respect to the alleged large hidden reserves of mass destruction weapons in Iraq...

The American agencies of "intelligence" CIA (Iraq) and the FBI (Sony) are so discredited that their information should always be interpreted to the contrary.

Something like the weather forecast: we would make fewer mistakes...

This is a strategy adopted by various nations, throughout history, to distort the facts, to create false truths, to obtain the support of the majority of other countries – and, sometimes, not even that.

Since the early years of the twentieth century we witness tampering, denial, creation or even the imposition of versions considered "historical" episodes as Holodomor, Katyn massacre, attack on Pearl Harbor, Holocaust, murder of John F. Kennedy, September 11

attacks, weapons of mass destruction of Saddam Hussein, Guantánamo Bay Detention Camp, etc. The list is not intended to be exhaustive nor exclusive of any country.

Conspiracy theories? Perhaps they could be considered that, but this does not mean that the huge list of evidence and proof of unofficial versions are lies (“American False Flag Operations,” 2015), (Sutton, 2001), (Sutton, 2000).

Today we think that we know what really happened in Ukraine (1932-1933), in Poland (1940), in Brazil (1964-1985) and in Iraq (2003). The history was partially rewritten – in these cases. But, many other revisions (rereadings) are required (“Holodomor,” 2010), (“Katyn,” 2004), (“Iraq,” 2003).

The official story hardly reflects the real history – what really happened – it is always distorted by the bias of one who tells – or is obliged to narrate.

We cannot change the past, but we should at least try to correct our mistakes – including the “official” versions of the history – and, as far as possible, not repeat them.

Several episodes remain being victims of the manipulation of the facts nowadays. We should have evolved – as a human race – but we remain using concentration camps, performing the forced deportation of people and the extermination, practicing the most diverse types of discrimination, forcing various forms of slavery – of all colors – and exploiting the child labor.

If the year 2014 brought hope to Cuba, it also proved that this country – and not only – remains limiting and chasing the freedom of opinion.

Faced with an inert United Nations due to the limits of power and facing a “security council” that does not allow the positioning of the majority, we see the resurgence of conflicts in all continents and we are witnessing the rebirth of a new cold war in Europe.

This “security” council whose five permanent members (who have veto power) are the same as, currently, they practice the worst atrocities and crimes against humanity – without any punishment, because they consider themselves above the law that they have created for others: China (Tibet), France (Libya), Russia (Ukraine), United Kingdom (Argentina) and United States (Iraq).



In addition, we watched transfixed, the eternal victim of the Second World War (Israel) does not shirk from applying these days (with evidence) against Palestine the same crimes and persecutions which alleged that they had been victims in the past (without proof).

The battle of information – or rather, misinformation – nowadays happens mainly through the Internet. Many people who hold key positions – including presidents and prime ministers – choose to disclose relevant information via Twitter than through official statements. Nothing like creating a noise...

The truths created (lies) against Ukraine and its heroes (1942-1956) are repeated nowadays (2013-2015), (Stopfake, 2014), distorting the historical role of nationalists as Stepan Andriyovych Bandera (“Stepan Bandera,” 2010) and his current followers, as well as the Ukrainian Insurgent Army (“UPA,” 2007) and all tragic events that followed the Euromaidan (“Euromaidan,” 2013), which began on the night of 21 November 2013 with public protests in Maidan Nezalezhnosti (Independence Square) in Kiev, demanding closer European integration. All in the hope of creating an independent Ukrainian state, and now fully integrated into the European Union.

And as in any military conflict, gives rise to the propaganda war. Given the manipulation of the news by Russian or pro-Russian agencies – many reversing totally the sense of what happens – we highlight the blog “Ukraine in Africa” (“Ucrânia em África,” 2015), one of the best exempt sources of information about the absurdities that happen in this European country.

The episodes cited bring lessons in all senses of interpretation.

The year 2015 will be just another in that world powers will show their inability to resolve many major crises. The next president of the United States will have to work out if there is a middle way between the imprudences of George W. Bush and the retraction of Barack Obama. The European Union will have to decide if it wants to stick at its current borders or whether it will allow the entry of Ukraine and Turkey. The upsurge of tensions will be considered by the West as Russia's fault. Vladimir Putin, in turn, will blame the West, while encouraging Russians to turn inwards, away from the malign influence of foreigners. China should use its new leverage to push harder for a stake in global internet governance. The Big Brother (Orwellian) may become the whole world (Ahmed, Doucet, Gracie, Kendall & Mardell, 2015).

The attack occurred in France (Charlie Hebdo) on January 7, 2015 – in the event of confirming evidence that the murderers are Muslim terrorists – indirectly may introduce more difficulties Turkey, besides favoring the current racist offensive in Europe (Schofield, 2015). Probably on the day that all the much-vaunted freedoms (expression, opinion, religion and manifestation) keep distances and ethical boundaries between themselves – politically correct, and contemporary – be possible to obtain a suitable solution to all issues involving not only the complex religious world, without running the risk of messing with existing passions when it comes to faith, whatever it may be.

The history of Europe was a long blood-filled drama full of wars, conflicts, revolutions, plagues, discriminations, enforced migrations, coups and catastrophes – the majority of these events related to religion or to different visions and religious options. In name of “god” we remain watching the most resilient and regrettable episodes.

“It's not time to repeat history. It's time to make history” (#McLaren Honda).

In the same way that movie studios can get better financial results through secure online operations – lowest-cost and value to the end consumer – than in movie theaters, should universities ask themselves about the dominant model of knowledge's sale and bet on innovative online solutions (different from this e-learning low-quality model that turned massive) and with a new model of sustainability, without charging customers directly.

## **Institutional Strategies and Practices for Integrating Technologies**

“Failure is only the opportunity to begin again, this time more intelligently.”  
(Henry Ford)

### 1. No way out

Observe the strategies of counterpart institutions, related to the integration of learning technologies, can corroborate in several ways: we can follow the same path, apparently safe (cake recipe); don't repeat the same mistakes (learn from the mistakes of others) or even follow a completely different option not to fall into the commonplace, innovate, or even establish a market spread.

In this text, we perceive inner space as the own infrastructures of each university; outer space as being shared and/or third parties' infrastructures; and virtual space as all kinds of infrastructures: own, shared and/or third parties, based on the internet.

With the supposed adoption of informatics and subsequently the internet and social networks, the technologies were used and manipulated from the marketing point of view by the universities themselves as a panacea for the education problems and, thereby, representative of an alleged contemporary education, pedagogically and technologically sound.

According to Hannon, Riddle and Ryberg (2013) the widespread adoption of social media by students and professors in learning settings has confronted universities with digital practices that don't readily fit traditional education, and challenges institutional strategies for integrating learning technologies.

When we talk about innovations in the educational institutions we can check experiences or even the adoption of new procedures only in the early grades. There are well-known practices observed in several incredible schools around the world. Some of them can be considered *hors concours*: Escola da Ponte (2015) in Portugal, Green School (2015) in Indonesia, Ørestad Gymnasium (2015) in Denmark, Rauma Freinetkoulu (2015) in Finland and Vittra Telefonplan (2015) in Sweden – a country that is proud of its experimental education – although the venture is sometimes perceived as being far-fetched even by Swedish standards (Labarre, 2012): it's a school without walls.

But all originality and change seem to disappear as soon as we arrived at the university level. Or anyone ever read something about amazing universities?

The evolutionary or revolutionary educational practices follow excluded from universities. The most recent change in high education areas, far from achieving unanimous approval and with few supporters, is centered on problem-solving ability, since the current needs should not be focused more on accumulation of knowledge. Memorizing contents should not be considered important, although the Organization for Economic Cooperation and Development (OECD), still believes so...

The global school rankings published by the OECD in 2015 recalls – in gender, number and degree – the absurd college rankings system and their misguided forms of assessment and evaluation. At this year's edition are on the podium Singapore, Hong Kong and South Korea (Coughlan, 2015).

Please forgive me the parties involved – and especially the top of the pyramid – but this is just plain absurd. These rankings are based on an amalgamation of international assessments, including the OECD's PISA tests, the TIMSS tests (run by US-based academics) and TERCE tests in Latin America, putting developed and developing countries on a single scale (as if it were possible). And they do so based on the results of conventional tests (archaic) carried out by 15 year olds, only in areas such as math and science...

It is this kind of ranking that can set the level of education practiced by any country?

This vision (and limitation) is the equivalent to the outdated IQ tests that gave good rates to who had the ability to perform calculations automatically – but without the possibility to solve complex real problems. That is, people who had a skill (mechanical) that were not giving them a status of superior intelligence than to perform activities such as a supermarket cashier (in the absence of electricity).

The European country better ranked was Finland (6th), followed by Estonia, Switzerland and Netherlands. Poland appears in 11th and Germany in 13th. United Kingdom at 20th position. Denmark only in 22nd (which has one of the most technologically advanced educational systems), followed by France. Italy appears in 28th place, after Spain.

Portugal 30th was ahead of Sweden 35th (country that is proud of its experimental education and received a nonsense warning from the OECD to solve some “serious” problems in education). Brazil appears bitterly at 60th place and Indonesia appears in the 69th position...

At first I thought this was a bad joke... Will it be that this table was published reversed? Or did some “trainees” (always taking the blame) manipulated wrongly this data?

I think that the OECD should be the one alerted to solve their serious methodological problems.

After all what's the benefit of these misguided rankings? Sounds more like a form of pressure on anyone who challenges the educational *status quo*.

Anyway we intend to form our children for the past or for the future?

To prohibit innovation is not the answer, much less to cling to outdated forms of education and assessment.

## 2. Problem solving vs. memorize answers

The problem solving (unlike traditional “memorize answers” and “knowing theories”) is a way of learning that, although not a panacea, does not find – so far – methodology that is equivalent, interesting or even practical. “Knowing theories is one thing, but everything takes on new light when you try to implement theories in real life”, said Beau Tippetts (Madsen, 2015).

According to the definition of Barrows (1996), “Problem-Based Learning (PBL) as the constructivist answer to traditional learning theories is based on three main preconditions for successful and comprehensive learning process: it is student-centered; follows an active process of knowledge construction; and it is collaborative”.

However, the origin of PBL seems to follow the *modus operandi* of official history: many inaccurate versions, nebulae, mysterious, full of gaps, not always showing what really happened, since that end up being filled with the most amazing odds – many of them called conspiracy theories – based on different points of view, serving interests of certain groups, without letting people know the truth. What would have actually happened?

The most commonly accepted version is the same available at Wikipedia (Problem-based learning, 2012): “PBL is a student-centered pedagogy in which students learn about a subject through the experience of creating a problem. Students learn both thinking strategies and domain knowledge. It was developed at the McMaster University Medical School in Canada in the 1960s and has since spread around the world”.

Even so, the inaccuracies remain. According to Neville (2009), PBL was pioneered in the medical school program at McMaster University in Hamilton, Ontario, Canada in the late

1960s by Howard Barrows and his colleagues. To Neufeld and Barrows (1974), the modern history of PBL starts in 1960, where several schools used similar methods for educational questions. However, the credits for introducing the first PBL curriculum belong to the McMaster Medical School in Hamilton, which started in 1969. The first European PBL curriculum was introduced 1974 in the Maastricht University Medical School. According to Clandfield and Sivell (1990), “the origin of PBL, goes back to 1920. Celestin Freinet, a primary school teacher, came back injured from World War I. He saw himself incapable of speaking and teaching in front of a class for extended periods of time. His injuries forced him to seek a new methodology that would allow him to continue his professional activities in a satisfactory way. He established a system, in which the pupils played an active role in learning. Mainstays of this approach were communications skills, cooperative learning, self-responsibility and self-evaluation of their learning process: all elements and features of PBL”.

Maurer and Neuhold (2012) commented that “nearly 50 years after its introduction in university education PBL is still considered an alternative way of teaching and learning”.

Probably referring to the year 1962...

McMaster states that “Howard Barrows, a McMaster architect of PBL who pioneered the concept of using simulated patients to train medical students” (Accidental educator, 2011). And about him “A professor of medicine at McMaster from 1971 to 1980, Barrows created educational tools and learning methods that have defined modern medical training. His innovations included standardized patients and performance-based testing. His research encompassed the problem solving skills of physicians and PBL as a structured teaching/learning method”.

Soon the information (it was developed at the McMaster University Medical School in Canada in the 1960s and has since spread around the world) may not be correct (Problem-based learning, 2012). Or can? PBL was first started by Barrows and Tamblyn (1980) at McMaster University, Canada in September 1969 for educating medical students to become physicians. The roots of PBL can be traced to the progressive movement, especially to Dewey’s (1944) belief that teaching should appeal to students’ natural instincts to investigate and create. Inspired by Dewey’s maxim, Howard Barrows, a physician and medical educator at McMaster University developed PBL for educating physicians to foster their own capabilities for reflection outside of school in ordinary life.

We can't take away the merit of Barrows (in develop, standardize and use the method in the university environment), but either he reinvented the wheel or "forgot" to reference the creator. In September 1969 Barrows was not a professor at McMaster (only two years later).

What would be the correct reference? The year 1980, 1974, 1971, 1969, 1962, 1960 or 1920?

A little hazy. May have spent more or less than 50 years, but the vast majority of universities (including European) is not yet there (does not practice, ignore)...

Anyway, the PBL was published only in 1980 (Barrows & Tamblyn, 1980).

Subsequently in 1985 (Barrows, 1985) and 1988 (Barrows, 1988).

Patangi K. Rangachari, a professor emeritus of medicine who was working on a book with Howard Barrows, stated that he presented himself as an accidental educator: "He called himself an accidental educator. He drifted into education, but his contributions were tremendous. He invented the simulated patient program and consolidated the body of knowledge around problem-based learning." (Accidental educator, 2011).

The paradigm shift usually happens with those who are from outside (in this case, the area of education)...

Educators are like soldiers in the hierarchical structure of an army, far away from mass thinking, dominant and power structures. They just fulfill orders and strive to maintain the current situation represented by the resilience of things "as they should be" and "as ever have been". In this way, hardly innovate in their teaching practices or even are friendly with possibilities outside of the commonplace.

If schools and universities were kitchens, educators would not be the chefs, but replicators of cake recipes (created by others). Not that this has to be seen necessarily as a problem. Better replicate a good recipe than produce something original unpalatable.

But the innovation and breaking paradigms usually comes from those who have different backgrounds of education and outside vision, away from the eye of the storm: Jean Piaget (biologist, Swiss), John Dewey (philosopher, American), Lev Vygotsky (lawyer, Belarusian) and Paulo Freire (lawyer, Brazilian). Regardless of the career of each and the different complementary formations during their lives was the simple fact that they did not start their careers as educators (or trained in education) which enabled an innovative and uncompromised vision with the dominant format (including today).

McMaster University (2015) was established in 1887. The Maastricht University (2015) is much more recent, 1976.

Although the first may be considered traditional, neither of the two is medieval...

It's certain that absolutely nothing is forever, and that the paths that brought us to today are not the same that will lead us to the future. But we have to change because society today is changing every day. Often, new approaches are seen as a source of danger to the current system, but the real danger is to refuse to understand the languages and the strategies that are related with these new methodologies, keeping the university further away from the real world. (Roth, 2013).

Steve Jobs said that: "We have always been shameless about stealing great ideas.", (Roth, 2011), (Denning, 2011). Ethics aside, what can be seen as lesson is that not necessarily developing an original solution – such as PBL – can lead to success. More important than this would be to use effectively than there is already available, often free of charge, although developed by others (such as the PBL, for example).

And the case of the universities of McMaster and Maastricht is exemplary.

Regardless of who the father of the child is, the important thing is that PBL is an innovative methodology that has come to stay. It should receive greater care on the part of universities that could invest in its development coupled with ubiquitous technologies and the irreverent Socratic method of inquiry (maieutic).

The Maastricht University (2015) is, arguably, the main user of PBL, but at the same time the vast majority of European university professors have no idea how to use the technique. For lack of curiosity or even interest not even try to use it; and not even seek examples and practical uses. To Lee and Kwan (1997) there are also some perceived weaknesses to PBL, which include a lack of traditional structure and progression, and a lack of depth in the knowledge acquired. Professors with these concerns do not recognize the integrative nature, and the aspect "you learn what you need" of PBL.

Guerreiro (2009), on behalf of the GUE/NGL Group (PT) and referring to the various demands said that the European Parliament should stop having the pretension that they can give lessons to the world. In some aspects, such as democracy, discrimination and respect for human rights, for sure. However, the Maastricht University (2015) can and has many lessons to give. And not only to traditional European universities that remain entrenched.



This spirit of trying to do things in a way we think is correct or even appropriate to the present day coming up in resistance by maintaining the current situation that remains acting in the universities where prevail concepts such as tradition and resilience in always doing things the same way, albeit with some possible contours of modernity. Just a gloss, an eternal paving the cow paths...

The step forward, contemporary and verified only in some schools, it would be fully release the use of the internet, including tests and exams. A total of 14 colleges in Denmark participated in the pilot project of a new system of exams since 2009 (Hobson, 2009) and all schools in the country have been invited to join the scheme by 2011 (Cisco Systems, 2011). Students can use all sources of information available to solve a particular problem that simulates real needs unlike theoretical questions, without practical application, that only requires the memorization of content. This is another resource in the same way as occurs in real life when we use all possible means to get answers and solutions (Roth, 2014a).

Currently it is possible to apply, with security, evaluations either offline or online through different technologies (blogs, case study analysis, chat room responses, end of semester paper, group projects, interactive video, journals, podcasts, reading responses, threaded discussions participation, videoconferencing – individuals, small groups or large groups – voice-based discussion boards, weekly tests and wikis). (Brady, 1998), (Poe & Stassen, 2002), (Rogerson-Revella, 2015). The differential should be mainly in the type of issues raised (that do not have simple and ready answers available on the internet) as well as in the individualized edition of the problem for each student or groups of students: the proposed problems should not be exactly the same for all.

The questions that students have to answer in this kind of exams forces them to relate the facts and not just debit them: “Our exams have to reflect daily life in the classroom and daily life in the classroom has to reflect life in society. The internet is indispensable, including in the exam situation”, argued Bertel Haarder, Minister for education in Denmark (18/02/2005 – 23/02/2010). For him, the actions may be followed by other countries: “I’m sure that is would be a matter of very few years when most European countries will be on the same line” (Hobson, 2009).

This evolution does not necessarily pass by information technology or internet, but by the producing an assessment of better quality, customized, which is not reproduced and applied to the same group of students, or worse, maintained year after year without

substantial changes – as if the knowledge did not evolve over time or even if the evaluators do not update their skills.

Demonstrate interest in developing an updated assessment meets the need to develop an updated education (not only technologically) and is part of the job of a professor in the same way that update the course syllabus and the relevant bibliography.

The creation of problems and different situations for each student inhibits the behavior, sometimes verified, of reproduce the answers produced by others. And the release of the use of all possibilities – including the internet – such as occurs in real life, comes not only to meet the new needs (problem solving) as reproduce our “normal” behavior of using every possible means to find a solution.

Correctly used (as a means and not an end) the technologies don't become a problem for the evaluations (hypothesis of copy ready answers found on the internet or obtaining the results through the internet contacts), but an ally both in the generation (sequential or random) as well as in the supervision process (face-to-face or at a distance).

The school at all levels – including university – must be aligned to the world around them and not indifferent, castellated, resilient and averse to changes; using content, means and archaic methods that are reused every generation of teachers, as if the world did not evolve.

But it is not enough provide “computers and internet” and refrain from the process. Even the best orchestras can play without a conductor, but it is he who gives the interpretation to the piece of music being performed – and “life” to their musicians. There are cases where we can even say that the orchestra would play better without them, but without a “real” conductor there is no music, they simply reproduces what's in the score.

And, certainly, the question is not architectonic...

We can create and deliver modern spaces, of excellence, with all available and imaginable computing resources and still not get anything beyond the dispersion, use of electronic messages, social networks and access to inappropriate content.

Without a problematic to be solved, without a proposed objective, without a guide to accompany the journey, connect the dots and to establish goals to be achieved we will not going anywhere... With or without internet we will just pass the time.

The rite (without the pretense of becoming a cake recipe) passes through a contract between the parties (and I don't mean the bureaucratic and/or legal issues), but an agreement involving areas of individual interest with objectives to be met, possibilities available (materials and technological) and limits (they always exist) to obtain and/or achieve the minimal results proposed. In addition to a timely manner, that can be set (with clearances) based on prior experimental achievements that validate and support the methods.

For decades Brazil was appointed as the country of the future (Zweig, 1941). The time passed and this “future” apparently never came. What about in terms of education when we are not yet able to offer universal access – and free of charge – for all without exception and/or discrimination (positive or negative) as opposed to the dominant model that favors those considered as “best” (in some abstract sense), that is, those who find themselves in a privileged situation economically, socially, geographically – or even with the support from who indicates them.

We might have thought that Europe (broadly speaking) due to the tradition in the area (cradle of the universities) was ready to provide answers, not necessarily to the world, but to the resolution of their own problems in overcome the difficulties to provide education, at all levels, for everyone and free of charge and sustainable. But it's not what happens. The good exceptions, and the best examples are verified only in northern European countries, not only in the countries considered as Nordics (Scandinavia) that, in general, have better quality indicators of life and educational levels of their populations.

To Reginaldo Carmello Correa de Moraes, the university must desist from “cathedrals” to get to the student (Lucena, 2015), opting for more affordable models, making small buildings and taking advantage of the existing infrastructure. Massify, decentralize and popularize should be the goals of higher education in Brazil (not only in Brazil). His analysis on the models of education in several countries shows how Americans turned an elitist and private model in other, flexible and mostly public. He points the capillarization as the most important factor due to multiple access points for higher education that were made available.

This capillarity can be facilitated through the proper use of the technologies (which hardly happens), through inner, outer and virtual spaces.

### 3. Inner Space

A conceptually innovative model of inner space is the CFZ Zattere (2015), Cultural Flow Zone, developed by the Ca' Foscari University of Venice (UNIVE). To Roth (2014a), it is a cultural center, an open space, comfortable and multi-purpose, dedicated to the meeting and exchange among students. In the CFZ is possible to find services and training courses, extracurricular activities that complement the studies, projects designed and carried out by students and spaces for relaxing, reading, studying and consulting books.

From the University of Western Sydney (2015) we have the Innovative Learning Spaces: Collaborative Learning Space, Collaborative Computer Lab, Collaborative Theatre Space, Learning Commons, Social Learning Space and The Academy Learning Space.

The Penn State College of Education (2015) presents the Krause Innovation Studio and defines its work in terms of interactions and activities, rather than tools and technologies.

Their vision is of a physical and intellectual space focused on developing 21st century educational leaders who engage in innovation and research with emerging technological tools, and achieve excellence in teaching and learning. The reversal of the traditional educational technology paradigm (teaching first, technology second) addresses the needs of an increasingly diverse and geographically dispersed student population.

From Aalto University Helsinki (2013), one particular learning space that is innovative, practical and upholds their student centered pedagogy. Called "The Stage" this is a flat learning space for up to 100 students, it was not purpose built but is a visionary re-design, on a low budget, of an existing space previously used by the Engineering School.

The "Lectorial" Innovative Learning Space from University of Melbourne (2013), project of 2010, represents a range of new learning spaces developed across the campuses.

City University London (2015) current vision for new and refurbished buildings now has the paramount opportunity to be truly visionary, by projecting forward to Future Learning Space.

And Karp (2014), co-founder of the Design Engineering Collaborative at UC Berkeley, gives many architectural suggestions, discussing how to really transform a design and innovation space from an idea into a reality. A summary of a few lessons learned: don't take no for an answer; be humble but be strong; create a vision; believe in yourself and your vision; pay attention to how you brand yourself on campus; be clever and creative; keep the

momentum and foot on the accelerator; don't be afraid to do something drastic; care about what your doing and your involvement; have fun!

#### 4. Outer Space

With regard to shared infrastructures the UNIVE had until 2014 with the International Center for Educational Research and Advanced Training (CIRDFA, 2014) that was used by the four universities in the Veneto (Italian region where it originated about 30% of the Italian immigrants in Brazil), Università Ca' Foscari Venezia, IUAV University of Venice, University of Padua and University of Verona.

However, despite the amount of projects advertised in UniVirtual (completed: Bridging, CHISS, LNV, Lethe, PACE, emett, MforCal, Permit, SFP, CLIMA, uTeacher, Share.Tec, SEMLANG, 3EMI, Mabe, SUV, Pinokio, SSIS, Rapvite; ongoing: OMD, ISDERA, Progetto PRIN 2009, RAPVITE, IRIC, ESSTIC, SUSTCULT, ALICE) it is not clear a real transformative innovation of university practices of the UNIVE, but a mere glaze under the traditional format of e-learning/blended learning that abducted the universities with false promises of low cost and massive reproduction.

The only active reference that remains related to the acronym CIRDFA is the IRIC-CIRDFA (2009), an academic cooperation project with the Institute of International Relations of Yaoundé II (Cameroon). Probably the same resilient European rhetoric seen in Roth (2013) and Roth (2014b) where through agreements and projects financed by the European Commission (EC), some universities imagine that they have a vocation to teach others, to give “lessons”, to perform some “training” workshops, demonstrating the uses of the basic and most elementary of an education system pseudo-technological, outdated and that has never been didactically correct.

Currently the Centro Internazionale di Studi sulla Ricerca Educativa e la Formazione Avanzata (CISRE/UniVirtual) has the Laboratorio RED (laboratory of educational research), Laboratorio Univirtual and the European Centre for Women and Technology (ECWT).

Paths and models for “innovative” teaching...

Companies such as JISC (2015), a United Kingdom non-departmental public body, present themselves as being a “charity” institution, but provide digital solutions for UK

education and research, being funded (over 80%) through the body financing UK HE and FE, with additional support coming from higher education institutions.

Harrow (2014) points out the benefits of this shared infrastructure: “The last few years have not been easy for UK universities. They have had to deal simultaneously with policy uncertainty, technological innovation, greater competition as a result of internationalization and globalization, rising expectations from students and of course, new pressures to tighten budgets and get the greatest return from their scarce resources”. But in the past JISC has just been, part of the furniture of the higher education sector, so there is no frame of reference for assessing the value of than they did.

It is similar to the situation of FCCN (2015), which was a Portuguese non-profit private institution and public utility in the period 1987 to 2013, when it became a unit of the Foundation of Science and Technology (FCT) thus integrating this public institution.

Another example is the four universities of Virginia (George Mason University, University of Virginia, Virginia Tech and James Madison University) who joined forces in a public-private partnership called 4-VA with Cisco Systems to pilot a shared infrastructure and implementation of the company’s TelePresence technology (Rich, 2011). The technology for the project will improve access to academics, reduce time to graduation and reduce costs.

Institutionalizing the education practices mediated by the different technologies in a particular university is much more than installing a version of a Learning Management Systems (LMS). But once these client institutions learn the cake recipe they “become free” and create their own structures (using the same methods and materials under which they were “trained”). Most often paying to similar institutions (there are no disinterested partnerships in a market under competition), with own resources from their budgets or from the EC – to “learn” how to practice wrongly the use of technologies.

The EC, which maintains one of the funding schemes (FP7, Horizon 2020) more perverse with regard to new entrants, always giving priority to – and dishonestly – those that have already been covered previously (teaching or research projects), that is, always maintaining the same beneficiaries. They should move in the opposite direction. Do not award grants for those who have previously obtained previously (forcing them to grow up and go to the market) and allow a general renovation of structures and beneficiaries, at least without discrimination and favoritism – and this includes renewing the judges and administrators so that the system does not create addictions and relationships. Allied to this

corrupt structure also has a total lack of justice – when it comes to appeals (redress procedure) filed against the denials verified. Come to be absurd verify that the Europe – that prides itself on having one of the most advanced justice systems in the world – does not allow an application denied to one of your lines of financing be object of appeal, namely, the redress procedure introduced for FP7 (and valid for Horizon 2020) does not give a new right of appeal (Fumero, 2012). The argument that “it ensures a consistent and coherent approach to complaints, upholding the principles of transparency and equal treatment” is absurd. If European judges don’t make mistakes so why we need higher national courts, the European Court of Human Rights and four international courts in The Hague?

There are also foundations of public and private universities; and private companies that also try to explore this aspect (provide services to universities), but they will always be mercenaries in this area. Most often it is the same team originating from the same universities or even, from other similar institutions. People who did not develop this type of activity in the institutions as employees, but that subsequently imagine themselves able to give lessons (sell information) to the same institutions or to others.

Sharing infrastructures seems to be an interesting possibility economically if we can keep the control and the privacy over our relevant information. But we should not make the same mistake of the Trojans, as in the case of Google (Roth, 2015a).

Shared projects by universities are usually dated, or have a limited lifespan. After the “technology transfer” each goes its own way...

## 5. Virtual Space

The UNIVE following the minimalist trend of use, practiced by their European counterparts, offers an outdated LMS in several instances (Roth, 2014a). But with the latest technology and web application advancement, a new generation of LMS is expected and should have some new features. These include: the need to be open, personal, social, flexible, support learning analytics, and properly support the move to mobile computing. This new generation of LMS must be able to meet the need of the changing environments of business and education to allow these institutions to reach their potential (Stone & Zheng, 2014).

Find a virtual space updated as the Schoology (I am not referring to the updates, but the current needs of the “new” customers) it is rare, and the experimentation with 3D

immersive environments such as Second Life does not have led the institutions anywhere – the worst, many have returned to the “past” (through the archaic ways to educate and assess)...

After an initial phase of excitement with the technologies we find four distinct situations: some institutions have returned to traditional practices; others accommodated themselves with the initial situation of basic and limited use; some, correctly, started to pay more attention to teaching than to technology; and many are floundering, remaining in the same place while trying to innovate. The fundamental question seems to be: where to go?

The results of the 8th Annual Learning Tools Survey (Hart, 2014) show old acquaintances and some new features. The top 100: Twitter, Google Docs/Drive, YouTube, PowerPoint, Google Search, WordPress, Dropbox, Evernote, Facebook, LinkedIn, Google+ & Hangouts, Moodle, Prezi, Pinterest, Slideshare, Blogger, Word, Wikipedia, Feedly, Diigo, Articulate, Audacity, Camtasia, Yammer, Skype, TED/TED Ed, Google Chrome, Google Scholar, Scoopit, Snagit, Gmail, Adobe Connect, Adobe Captivate, Flipboard, Kindle (& App), Outlook, iSpring, Coursera, Hootsuite, Khan Academy, Edmodo, Adobe Photoshop, Excel, Google Maps, Zite, Powtoon, iPad & Apps, Padlet, Pocket, Udutu, Tweetdeck, Voicethread, Explain Everything, Jing, Flickr, Nearpod, Keynote, Quizlet, Storify, WebEx, Mahara, SurveyMonkey, iTunes, Google Translate, SharePoint, Haiku Deck, IFTTT, OneNote, Google Apps, Poll Everywhere, Blackboard Collaborate, Socrative, Wordle, Notability, Google Sites, Delicious, Glogster EDU, Canvas, Tumblr, Vimeo, Kahoot, OpenOffice, WhatsApp, Wikispaces, Instagram, Pearltrees, Easygenerator, Voki, Lectora, EDpuzzle, Blackboard Learn, Firefox, Paperli, TodaysMeet, LINE, ProProfs Quizmaker, Moovly, Schoology, Blendspace and SoftChalk.

The novelties of this edition were: Powtoon (6), Explain Everything (53), Nearpod (56), Haiku Deck (66), IFTTT (67), Notability (74), Canvas (78), Kahoot (81), Instagram (85), Easygenerator (87), EDpuzzle (90), LINE (95), Moovly (97), Schoology (98), Blendspace (99) and SoftChalk (100). It is perceived by rating that the most used options are free of charge (even if that compromise the privacy of users), and that the most interesting tools only at this time begin to find more users. This is due also the accommodation of all of us to remain doing the same things in the same places. In the LMS area the Moodle stays ahead and this is due only for the simple reason it does not have direct costs of acquisition.



## **Frameworks for Integration of Digital Technologies at the Roadside**

“The greatest difficulty in the world is not for people to accept new ideas,  
but to make them forget their old ideas.”  
(John Maynard Keynes)

### **1. First steps**

Technology integration is not a new subject in educational domains, much less at the universities where several theses, dissertations, and papers are published – often without direct impacts on the daily routine of the institutions. The missing link seems to be in the absence of a transformational practice, institutionalized, accepted and adopted by all stakeholders to restore the role of educational space and social transformation.

The education area is surrounded by related expressions such as “education economics” and “economics education” that represent distinct concepts, and often cause some confusion.

Education economics, also known as economics of education is the study of economic issues relating to education – focuses on the economics of educational institutions – including the demand, funding and provision of education (Economics education, 2006).

On the other hand, economics education, also referred to as economic education is a field within economics that focuses on two main topics: the current state of the economics curriculum, materials and pedagogical techniques used to teach economics at all levels; and research into alternative approaches or instructional techniques, level of economic literacy and the factors that influence the level of economic literacy (Education economics, 2008).

Educational technology meets these two expressions simultaneously, to the extent that it interferes with the economic aspects and at the same time in pedagogical techniques.

### **2. Educational technology vs. technology education**

An analogous situation (involving similar expressions) can be seen with the “educational technology” and “technology education”. Educational technology is the effective utilization of technological resources in the teaching-learning process. It refers to a wide array of tools, media, computers and networking hardware, as well as taking into account underlying theoretical perspectives for their effective application. This kind of technology is not limited to high technology. However, current digital educational technology, sometimes referred to as e-learning, has become an important part of today's society, comprising an

extensive array of approaches, key elements and delivery methods (Educational technology, 2005).

On the contrary, technology education is the study of technology, where students “learn about the processes and knowledge related to technology”. This field of study covers the human capacity to change and shape the physical world to meet its own requirements through the techniques, with the handling of materials and tools (Technology education, 2005).

These concepts also get very close when the educational technologies (tools and resources – with or without ICT) are effectively used to meet the needs and expectations (of someone or some institution), through handling, adaptation and suitability of materials with these didactic and technological techniques. But the integration of these digital technologies – popularized as being of information and communication – in the educational processes is not always an easy task, requiring from professors to study its reality and, if necessary, to adopt some model of integration.

In the United States, the International Society for Technology in Education (ISTE) has established standards in technology for administrators, teachers and students of primary and secondary levels (K-12 classrooms): “Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions, as accessible as all other classroom tools” (NCES, 2002).

But all the innovation, originality, change focused on the current or future needs and even patterns and models that attempt to be established – to support the paradigm shift – seem to vanish from sight as soon as we arrived at the college level. Have you (or anyone) ever read something about amazing and contemporary universities? Something about institutions that may be considered pedagogically and technologically sound? Some examples of institutions that are not just pretentiously modern? The evolutionary or revolutionary educational practices continue excluded from universities (Roth, 2015b).

Edward Osborne Wilson (Neyfakh, 2011) paraphrased a quotation that he attributed to Arthur Schopenhauer, which may have been the first person to suggest “stages of truth”, in 1818: “All new ideas go through three phases. They’re first ridiculed or ignored. Then they meet outrage. Then they are said to have been obvious all along”.

Probably, the effective integration of digital technologies by universities is somewhere between the first two phases...

### 3. Technology integration models

Jeyaraj, Rottman and Lacity (2006); Santos (2007); Espindola, Struchiner and Giannella (2010); Struchiner (2011); Foster, McGrier and Sheets (2011); and Rielley (2015) cite different models and theories of adoption and diffusion of innovations such as theoretical framework of integration of ICTs in educational contexts (Hall & Hord, 2006; Moersch, 1995). These works are intended to describe the main stages of adoption of ICTs and analyze the individual factors (Tabata & Johnsrud, 2008; West, Waddoups & Graham, 2007) and institutional (Shuldman, 2004) that influence the process of change (Watson, 2006), from monitoring different experiences of educational innovation.

#### - Theory of Reasoned Action (TRA)

The TRA refers to a model of behavioral intention prediction, covering attitude and behavior predictions (Ajzen & Fishbein, 1980), that is, it is centered on the person's intention to behave in a certain way. It was developed at the end of the 1960s by Martin Fishbein - later expanded and revised by Fishbein and Ajzen (1975) - derived from previous research as the theory of attitude, which led to the study of attitude and behavior (Theory of reasoned action, 2005). According to Bobsin (2007), the model presents limitations: risk of possible confusion between the meaning of attitudes and norms and having an intention does not mean acting in accordance with, because there are situations – such as limited ability, time, unconscious habits, environmental or organizational variables – that may limit the freedom to act.

#### - Theory of Planned Behavior (TPB)

The TPB is a theory that links behavior and beliefs. This concept was introduced by Ajzen Icek to refine the predictive power of the TRA (limitations) by the inclusion of the perceived behavioral control (Ajzen, 1991; Theory of planned behavior, 2005).

#### - Reasoned-Action Approach (RAA)

The RAA is an integration methodology for the prediction and change of human social behavior. This theory states that attitudes regards the behavior, perceived behavioral control and perceived norms determine people's goals, while their behaviors are predicted by these intentions (Reasoned action approach, 2013). This is the latest release of theoretical ideas of

Martin Fishbein and Icek Ajzen, in the wake of the earlier TRA and the TPB (Fishbein & Ajzen, 2010).

- Diffusion of Innovations (DOI)

The DOI model seeks to characterize how innovation is diffused through certain channels of communication, among members of a given social system, and by what process these individuals pass since become aware of the innovation in question until its adoption or rejection (Rogers, 2003; Diffusion of innovations, 2004; Diffusion of Innovations, 2005). The categories of adopters are the following: innovators, early adopters, early majority, late majority, laggards and leapfroggers. This theory, developed by Mitchell Everett Rogers in 1962, is one of the most ancient social science theories.

- Technological Pedagogical Content Knowledge (TPACK)

The TPACK is a framework to describe and understand the types of knowledge needed by a professor for effective pedagogical practice in a learning environments equipped with technology. The concept of pedagogical content knowledge (PCK) was initially described by Shulman and TPACK methodology was developed from these central ideas, through the inclusion of technology. Punya Mishra and Matthew J. Koehler, professors at Michigan State University (United States), developed extensive work in building the theoretical framework TPACK (Koehler & Mishra, 2008; Mishra & Koehler, 2006).

- Substitution, Augmentation, Modification, Redefinition (SAMR)

Developed by Ruben Puentedura (Puentedura, 2014) the SAMR model is similar to TPACK model, but made up of different components. Both are used for technology integration in the classroom, but SAMR helps take direct activities from the classroom and enhance them by using technology. This model focuses on the process that a professor goes through in remixing existing pedagogy content otherwise impossible without technology.

- Technology Integration Matrix (TIM)

TIM demonstrates how professors can use technology to improve students' learning. For that purpose, it incorporates five interdependent characteristics of significant learning environments: active, constructive, goal directed (that is, reflective), authentic and collaborative (Jonassen, Howland, Moore & Marra, 2003). Thus, associates five technology integration levels (entry, adoption, adaptation, infusion, and transformation) with each of the five characteristics of significant learning environments. The five levels of integration technology and the five characteristics of significant learning environments create a matrix of

25 cells. It was developed by the Florida Center for Instructional Technology, University of South Florida (TIM, 2011).

- Levels of Teaching Innovation (LoTi)

LOTI, proposed by Chris Moersch, provides an observable framework to assess technology use in the classroom and connects to higher-order thinking, engaged learning, and authentic assessment while using technology (Moersch, 1995; Rielley, 2015) – performing classroom walkthroughs according to the H.E.A.T. (2015) observation model: Higher-order thinking, Engaged learning, Authenticity, and Technology use.

- Concerns-based Adoption Model (CBAM)

The CBAM is an analytical tool used to understand the cognitive concerns of professors and students by providing a framework to anticipate future needs associated with the adoption of change (Hall & Hord, 2006).

- Learning Adoption Trajectory (LAT)

The LAT is a refinement of CBAM developed by Sherry and Gibson (2002) based on their research work on change in education.

- Apple Classrooms of Tomorrow (ACOT)

Project developed in the 80s in five public schools in the United States through a partnership between universities, public schools and Apple Computer, Inc. (Ringstaff, Yocam & Marsh, 1997; Sandholtz, Ringstaff & Dwyer, 1997).

- Social Cognitive Theory (SCT)

The SCT started in the 1960s by Albert Bandura as the Social Learning Theory (SLT). The theory turned into SCT in 1986 and postulates that learning occurs in a social context with a dynamic and reciprocal interaction of person, environment and behavior (Bandura, 1986). It starts from the idea that people do not learn only through what they do by affective way but also by observing the action of others (SCT, 2006).

- Technology Acceptance Model (TAM)

The TAM is one of the most influential extensions of the TRA of Martin Fishbein and Icek Ajzen (Ajzen & Fishbein, 1980). Developed by Fred Davis and Richard Bagozzi (Davis, 1989; Davis, Bagozzi & Warshaw, 1989), this model suggests that when users are presented with a new technology, many factors influence their decisions about how and when they will use it. According to Davis (1989), people tend to use or not to use certain technologies in

order to improve their performance at work - perceived usefulness. However, even if this person understands that a particular technology is useful, its use could be compromised if the user finds it difficult to use such technology, so that the effort does not compensate the use - perceived ease-of-use (Technology acceptance model, 2003). TAM has expanded into two major updates, TAM 2 (Venkatesh, 2000; Venkatesh & Davis, 2000) and the Unified Theory of Acceptance and Use of Technology (UTAUT), (Venkatesh et al. 2003). In addition, a TAM 3 was proposed in the context of e-commerce, with the inclusion of the effects of trust and perceived risk on system use (Venkatesh & Bala, 2008; Venkatesh, V., n.d.).

#### - Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT, formulated by Venkatesh et al. (2003) is a technology acceptance model. It has as purpose to explain the user intentions to use an information system and the subsequent use behavior. This theory is supported by four key constructs: performance expectancy, effort expectancy, social influence and facilitating conditions. The first three are direct determinants of usage intention and behavior, and the fourth a direct determinant of usage behavior (Unified theory of acceptance and use of technology, 2008).

#### - Perceived Characteristics of Innovating (PCI)

Aichholzer (2004) states that the five perceived characteristics of innovating (PCI) of Moore and Benbasat (1991) are based on the theory of diffusion of innovation (DOI) of Rogers (1995) – which is often used in information systems research to explain the adoption of technological innovations by users - and of literature on the diffusion of innovation. Larsen and McGuire (1998) refer to these attributes or characteristics such as universal attributes to innovation adoption studies. These five perceived attributes (relative advantage, compatibility, complexity, observability and trialability) formed the basis of the work by Moore and Benbasat (1991). They developed a general instrument to be used when you want to assess the various perceptions that an individual can have about the usage characteristics of an innovation and have introduced three new attributes: image, voluntary use and income statement. Furthermore, they adapted the original attributes of complexity and observability that were denominated, respectively, ease of use and visibility (Perez & Zwicker, 2010).

#### - Diffusion and Infusion Model

Initially proposed by Kwon and Zmud (1987) the diffusion model was further modified by Cooper and Zmud (1990) that proposed a six phase model of information technology (IT) implementation, necessary to achieve the objectives of diffusion and infusion. These six-stages include: initiation, adoption, adaptation, acceptance, use and infusion. To really innovate with the use of the technologies an organization must achieve the level of infusion,

which is the degree of integration of an IT innovation to existing processes and normal practices of an organization, providing users with the innovative use of technology.

- Tri-Core Model of Innovation

Swanson (1994) proposed a model of three cores to identify the cores of expertise that contribute to the development of organizational information systems (IS) innovations. The tri-core model is composed by an administrative core, a technical core and an information systems core. This model suggests that a deficiency in one or more cores can cause failures in different types of IS innovations.

- Actor-Network Theory (ANT)

The ANT is a stream of research in social theory that originated in the field of studies of science, technology and society in the 1980s from the studies of Michel Callon, Bruno Latour, John Law, Madelaine Akrich, and others (Freire, 2006). Technically it can be described as a material-semiotic method, meaning that it maps relations that are, at the same time, materials (among things) and semiotic (between concepts). Thus it assumes that many relations are both material and semiotic. This theory is also called sociology of translation, which is one of the important concepts used by the authors. This sociological study aimed to explain the birth of scientific facts. The ANT is also used to explain the new communication paradigms that began into existence with contemporary culture.

- Institutional Perspective

With different impacts, the adoption of IT is also influenced by coercive pressures from both trading partners as their parent companies. The coercive pressures are considered by Teo Wei and Bensbasat (2003) as a construct made up of three sub-constructs: perceived dominance of supplier adopters, perceived dominance of customer adopters and conformity with parent corporation's practices. The last sub-construct was found to have a stronger impact on the intention to adopt than the pressures from suppliers and customers, "probably because their performance and tenure are subject to evaluation by the parent corporation's executives" (Teo, Wei & Bensbasat, 2003, p. 40). The adoption of technologies is also influenced by competitors. Mimetic pressures are a construct formed by the extent of adoption by the competitors and their perceived success of adoption and were found to be significant only when innovation was perceived as being highly complex.

- Integration Model of ICT into the School Curriculum (MITICA)

The MITICA consists of five main axes that in a concept of Fundación Gabriel Piedrahita Uribe (FGPU) must meet any educational institution that wants to achieve

significant changes in the integration of technologies into their educational processes: institutional direction: refers to the administrative, pedagogical and technical leadership required from administrators of educational institutions and the necessary changes in its structure and organizational culture; ICT infrastructure: meets the proper technological resources: hardware, software (operating system and other basic applications), connectivity and technical support; ICT coordination and teaching: deals with the roles they should play within the institution both the computer science coordinator and the professors of this subject; professors from other areas: refers to the skills that they should have to be able to integrate ICTs in teaching their subjects; digital resources: meets the availability and proper use of software and Web resources (MITICA, 2011).

#### - Pedagogical Projects of the Classroom (PPA)

The pedagogical projects of the classroom for the integration of ICTs – possibilities and scenarios for the use of ICTs in education – was proposed by the Universidad del Cauca, taking them as a strategy to build experiences that leverage the mediation of ICTs both to stimulate the reflection on teaching practice and to enrich the educational and didactic proposals that surround them (Chaustre et al. 2010; Pino et al. 2011).

#### - MICEA Model

The interdisciplinary methodology based on learning teams (MICEA) was proposed by Velandia (1990), “an interdisciplinary construction methodology of knowledge as a team, and through practice, and can complement each other with new information and communication technologies” and the dynamic classroom, based on social cybernetics and triadic proportionalism, proposed by Gregory and Volpato (2002). Velandia C. (1990) proposes that MICEA addresses the need to streamline the student presentiality in a participatory manner, critical, committed and operative. It responds to the requirement of teamwork; the efficient use of technology in constant growth and innovation; to the progressive transit from face-to-face classroom towards to that develops in cyberspace, where the student may also find himself with the knowledge (Mora, 2005).

Santos (2007) reports that it is also possible that in environments with strong institutional symbolism, new technologies will supplant the older ones even though the latter have not yet been exploited to its full potential. This possibility is sustained by the theory of fashions and fads (Abrahamson, 1991).

Did I forget something? For sure. The goal was not to compile, sort, or even compare everything that exists, often only theorized by those who do not practice or live the day-to-



day realities. Regardless of what is proposed and theorized, the key is that to work with a particular content of educational manner and through technologies, we need to know the content, the technologies and the pedagogical way to using them. The rest is just idle talk, nonsense, individual attempts of standardization that does not get consensus, much less are adopted as standard by some supralegal body or evolved jointly by the community – nonprofits. In all areas, including the proposition of models and theories, there is always a competition in search of credits, dividends, a place in the sun and, perhaps, recognition...

#### 4. The other side of the coin

Neither the educational technologies (related or not to ICTs), nor the technological integration models can be considered as a solution to all the problems of education. The integration of technology is not a panacea and for it to be successful in the learning process, professors need to demonstrate how and why it can be used in a meaningful way. It is not a unique approach to all cases in which professors do the same thing for their students or possess the same specific skills to be competent technology users (Wepner, Tao & Ziomek, 2006). Professors need to know how and why to use technology in meaningful ways in the learning process for technology integration to work. Some professors seem to know how and why to use technology in the processes, but the effective technology integration to support and enhance teaching and learning in the classroom still eludes many of them (Plair, 2008).

We don't need to follow a certain model of technology integration to use the recent or even archaic technologies, since not all professors adapt to them and all models give the impression of a prescription that tries to define what must have more or less importance in the scenario. And this does not work. Whereas random practice came before the models, they try to standardize what should not be standardized, that is, produce a cake recipe to be replicated.

The reversal of the traditional paradigm of educational technology (making teaching first, technology second) the need for an increasingly diverse student population and geographically dispersed (Penn State College of Education, 2015), but this would be virtually impossible, these days – without frustrating the new generations – if the use of technologies (new and not so new) was to be left to chance in an apparent return to the past...

In the post “Push My Thinking: TPACK or SAMR or?” from “EdTech Coaching” blog by Krista Moroder, she starts the discussion arguing “why I don’t use TPACK”. What

appeared to be a post related to the use (or not) of the methodologies, “evolves” (or, should I say, “regresses”?) to the rhetoric discussion of education with or without technology (Moroder, 2013):

D! says: “I tend to disagree. In my view, the only variable that changes anything in educational methodology, is advances in technology. For example, the printing press and the humble pencil changed pedagogy. The internet and accompanying hardware are simply next in line. Great teaching is always influenced by available tools. Tech therefore deserves an equal circle if not a bigger one”.

However, some resilients agree with the author...

maa says: “Great teaching should not be the case be influenced by available technological tools. It’s with a great teacher’s common sense of knowing how they become the right tools for teaching to enhance learning”.

And Anne Leftwich @anneleftwich, suggests: “Focus on learning. Don’t use technology as a Trojan Horse to change pedagogy”.

As William Shakespeare said “Life is a stage, and we are the actors” (Felter, 2012). According to Galvão (2007), “We staged moments, we rehearse our dreams, and we debut on stage, sometimes successfully, but sometimes with total shame...” In this sense, and adapting to the context, each actor (or author) seeks to interpret in his own way the effectiveness or the non-viability of a certain model, theory or even technology – successfully or with total shame...

This “resistance” shows a salutary, a mistaken and a dated side. The salutary side is not bowing down, not even to established truths, without questioning, without discussing, not to be seduced. The mistaken side is to try, at this stage of the game, ignoring the role of new technologies with the argument that good or great professors do not need them. “Good” or “great” professors, it is an adjectival expression, used in the wrong way, probably referring to those who still give lectures, although nothing is so didactically incorrect nowadays as the action of giving a presentation and have the pretense of holding the knowledge, not committing to a program previously approved, which included content to be developed, methods and forms of assessment (Roth, 2013). The sages on the stage ignore the technological possibilities and the current needs for fear of exposing their own weaknesses. They are overcome with fear of the new and unknown. For them it is much easier to stay in their comfort zone rather than learning new lessons.

Moroder (2013) claims that didactics should have more importance. That may be true. But which didactics is she talking about? An updated didactics or the traditional that has stopped in time?

A current didactics is not shy of exploring new ways to evolve the standard focused on the professor, to later ones, focusing respectively centered on the student and on the relationship between professor-student(s) and among students.

Many professors considered “good” or even “great” do not have any didactics. They learned from their masters how to give lectures and remained at this evolutionary stage. They tend to reproduce the kind of teaching that they have received and never innovate in their didactic practices. They refuse to learn new lessons or even dream with the hypothesis that they are not knowledge holders. In fact, they deceive themselves into thinking that they only teach and others just learn. This *modus operandi* (method of operation) is not pedagogical, or even something that can be considered “good” or “great”. Everything that exists is the feeling or even a false tradition of refuse to change the way things should be done, an evident desire to stay in their comfort zone, the *status quo* represented by the current situation that has prevailed in the institutions and that keeps them tied to the past, entrenched, oblivious to the world that evolves around them...

Barton and Nettheim (2015) have defined this situation in just one sentence: “I’m an analogue man in a digital world... I’m redundant”.

Finally, the dated side, related to the age or even the lifetime of the resilient (or should I say resistant, or even redundant). The new professors were born in a technological world, in which the use of the internet is not a differential, but a common place. Considering that they are the future and who controls the world is always a dated issue – we all have a life limit – this difficulty will soon be outdated (Roth, 2015a).

“When you look through the years and see what you could have been, oh what might have been if you'd had more time. So when the day comes to settle down, who's to blame if you're not around?” (Davies & Hodgson, 1979/1978, track 6).

Certainly it is possible to do education these days without the latest technologies. It would also be possible to write this article by hand or using outdated technologies like a typewriter or even computers of the first generations. The fact that we use the latest means and methods does not imply better quality, but responds to the expectations of stakeholders. And this reduces frustrations (Roth, 2014).

But to truly utilize in an unarmed way the many possibilities offered by the “force” of the internet – as a support for the contemporary education (pedagogically and technologically sound) – perhaps we should follow the lessons from Jedi Master Yoda to the young Luke Skywalker: “No! Try not. Do... or do not. There is no try” (Kurtz & Kershner, 1980; Quotes for Yoda, n.d.).

There is also the need to venture, get out of the common place and look for something unexpected, unusual, carrying the practices beyond the small horizons.

## 5. Integration of digital technology in business

The methodologies perceived and described previously are normally related to the question of professor-school-technologies, that is, focused on the school setting. They imply that a certain theory or model are needed to assist the integration of technologies into teaching practices – which is not always true, although there is always a process, even if unconsciously or unplanned. But this approach is not limited to educational institutions. The companies also use the technology integration not only in their training courses (internal or external), but also in their processes of administration, production, sale and post-sale, which includes institutional or functional websites and presence in social networking sites (SNSs) that could be used as innovative tools for teaching (Harris, 2012; Duncan & Baryzck, 2013; O’Brien & Glowatz, 2013).

In the European Union (EU) this aspect is perceived through the Digital Economy and Society Index (DESI), prepared by the European Commission (EC) – through five main dimensions: connectivity, human capital, use of internet, integration of digital technology and digital public services (DESI, 2015). Denmark, Sweden, the Netherlands and Finland are the countries with the highest performance. They are not only ahead in the EU, but they are the leaders of the digital world. Outside EU, Norway and Iceland also show performances that would place them in this high performance group.

## The Socratic Method Reloaded: a Rereading

“Vision without action is merely a dream.  
Action without vision just passes the time.  
Vision with action can change the world.”  
(Joel Arthur Barker)

### 1. Lessons from the past, eventually a bonus for the future

Even the didactic and technological solutions that we can consider correct and brought us to the present day will not necessarily be the same that will lead our education to the future.

More important than trying to develop a new approach, method or solution would be to use effectively of everything that already available, mostly free of charge, even developed by others...

Regardless of the various developments and setbacks, we must always learn lessons from the past, at least to avoid repeating the same mistakes – even though committed by others.

This project was developed and submitted to the funding agency in 2013 and began in March 2014. However, Riffel (2014) published an article with a partially similar name, exploring the “Reloaded”. This is not about reference, just coincidence.

The different inspiration may even have been commonplace, but it is explicit: The Matrix Reloaded, a Silver and Wachowski production (2003a), sequence of The Matrix (Silver & Wachowski, 1999), where the virtual reality system had been reloaded (rebooted) in a less perfect way. At the same time, the film served as a passage for a continuation, a revolution: The Matrix Revolutions (Silver & Wachowski, 2003b), that completed the trilogy of films.

Far from this pretension – that this text becomes a rite of passage, watershed or even lead to any revolution in education – we seek only an update, a simple evolution or even rereading – depending on the approach – not necessarily of less perfect form, but that allows for a better use of all that now we have access, often free of charge – and that, nor for this, we use...

Previously, Gregory (Rebane, 2013) in a criticism, defends the “sage on the stage” claiming that giving up the traditional teacher's role as the “purveyors of knowledge” would be the same as the Socratic method reinvented, something “with no Socrates needed or

expected in the classroom”... This is one absurd statement, from any viewpoint used to analyze the issue. Hypothetically, Socrates never played the role of the “sage on the stage” – on the contrary – and the school, in all its levels, should be a space in constant transformation and not defined lines, which remain unchanged.

Socrates left no written record of his own philosophy. Deliberately, not bequeathed his own texts for posterity, similarly to what would have happened with Jesus Christ and his apostles; or even Buddha. What we think we know about Socrates are just reflections provided by different mirrors: those who consider themselves disciples and those who provide testimonies, with and without temporal relationship; the detractors, equally close or far apart in the timeline, as well as very few signs and relics. Nothing more than footprints of others...

Our gods never wrote anything, which does not prevent that pseudo-representatives continually evoke the “word of god” (Ancient Aliens, 2008) or, as in this case, the words of Socrates. “Perhaps we will discover the answer when we open our eyes to the possibility that what we think we know is an illusion, and what we think is illusion may very well be real” (Burns, 2013).

According to Moraes (2010), Socrates preferred the thinking in-group than the solitary reflection, the dialogue than the writing. In this way, he can always be considered as an actor whose historic facet appears shrouded in cloudiness, characteristic of everything we think we perceive from a remote past. The main sources from ancient Greece would come through three different views: the satirical and iconoclastic portrait of the comedy the Clouds (The Clouds, 2001; The Clouds, 2002), directed against the sophists, that the author, Aristophanes, confuses with Socrates – because this is the most prominent philosopher at the time; the idealized and elegiac vision in the works: Memorabilia (Memorabilia, 2005; The Memorable Thoughts of Socrates, 2006), Apology (The Apology, 1998; Apology, 2005), Symposium (The Symposium by Xenophon, 1998; Symposium, 2005) and Oeconomicus (The Economist by Xenophon, 1998; Oeconomicus, 2005), all of Xenophon – historian, soldier, mercenary and disciple of Socrates; and the numerous dialogues of Plato (Hare, 2010), other disciple, which feature Socrates as the protagonist – although it is questionable whether these texts represent the true thoughts of Socrates, just reflections of Plato's thoughts or even a fantastic piece of his imagination (Burande, 2015). Some authors (Glenn, 1995; Jarratt & Ong, 1995) believe that Aspasia would have invented the method, because she would have been mentioned by Socrates as being one of the most important people to

guide him in his philosophical and intellectual development, especially in the art of rhetoric (Pownall, 2003).

Both in the past as well as present times, absolutely nothing can be considered as absolute truth, definitive or even accepted by everyone without questions, controversies and discussions. Do not agree or disagree is part of human nature and it is exactly this method that we find developed in the Plato's Socratic dialogues (Hare, 2010) – where the truth is born of discussion and not from a former truth stated, created, manipulated or even forged.

Nowadays, when we delude ourselves that we are no longer in times of inquisition, we should all have the right to freedom of thought, association and ideas among others. But try to expose yourself beyond what is permissible, go against the dominant doctrine, reveal criminal actions committed by the so-called democratic countries or even challenge some created truths – without any credible proof to back them up – in some countries, even some considered modern and developed, such as Germany, whose prisons are full of teachers, researchers, scholars, historians and even elderly – languishing for not accepting the absurd official version of rewriting history that was imposed on them “without evidence” through a gag law (Hall, 2015). “The past is erased, the erasure forgotten. A lie becomes truth and then becomes a lie again”... ..”The past is forbidden” (Perry & Radford, 1984).

A country that has no freedom of expression (or we could say of thought – as if that could be controlled), enjoy no freedom at all...

In the opinion of Malcolm X (1963), “Nobody can give you freedom. Nobody can give you equality or justice or anything. If you're a man, you take it”.

We live in a world of rules and regulations, controlled by certain groups, institutions, organisms and governments; where any alternative means that arise, aiming the protection and the anonymity of the common users – like Tor, Bitcoin and Deep Web – will always be questioned and discriminated against negatively, with the explicit intent to discredit and criminalize them mainly to connect them with aspects that are considered drawbacks, depending on the point of view (Bowyer, 2013). The internet, whether it is open or protected, will always be a reflection of the world we live in: multifaceted, complex and imperfect, with good and bad aspects.

When some governments use the same means to perform some operations considered illegal, nothing happens – especially if the country is part of the United Nations (UN) Security Council. But when groups or individuals make denunciations of infractions from

these same countries – in a public or anonymous way – or use similar procedures and technologies, they are persecuted and often crucified. Even when these arbitrary acts are condemned by an expert panel from OHCHR (2016). The UN and all its appendixes were structures created in the post-Second World War, only for others...

The cases of Julian Assange (WikiLeaks), Edward Snowden (CIA/NSA), Ross Ulbricht (Silk Road), Kim Dotcom (Megaupload/MEGA) and Shawn Fanning (Napster) are totally distinct, but exemplary – when the system feels threatened and tries to crush anyone who acts outside of the dominant order. Moreover, the biggest surprise for the unbelievers seems to be the technological simplicity of surveillance techniques of the governments.

For Alex Winter – Deep Web: The Untold Story of Bitcoin and the Silk Road – “In the digital age, our privacy can no longer be ignored. ...You can no longer throw out the ridiculous axiom that ‘if I have nothing to hide, I have nothing to fear’” (Wong, 2015). We live not only in a post-Snowden era, but also mainly in an era post-Sony attack. There are several parallels between the shutdowns of Napster, Megaupload and the Silk Road – when arise several similar services: “Once it’s decentralized, it’s game over”.

Revolutions in the real or virtual world are always seen as a risk to the dominant system. They could be seen – not just in a very optimistic rhetoric – as an opportunity, but usually this is not the case. This is no exception neither in the education sector.

Currently, what we imagine they can revolutions in the area of education (Klein, 2011; Konnikova, 2014; Dasgupta, 2015), with rare exceptions, are only individual proposals or from small groups that do not evolve towards a consensus – are not discussed, are not adopted, are not practiced, are not successful – and, when they do, they earn this status through other merits or reasons, apart from the fact that some pedagogical procedure have really been revolutionized or even evolved. These possible success cases, which apparently defy the current structure, normally do not develop in universities and, in this way, are not linked to the *status quo*, nor the traditional sale of knowledge held by public and private institutions – although that eventually also practice the sales knowledge. Currently are initiatives created under the internet infrastructure, strongly supported in the use of videos and videoconferencing, using as a marketing argument and methodological approaches the possible gratuity, the timesavings and the reducing of study period.

If a picture may be worth a thousand words, when we join several images in a sequence with words, making a video, we will always be the best of both worlds (Roth, 2014). The intensive use of videos and videoconferencing can be considered a trend to be



followed by educational institutions; valuable resource to be replicated and an important differential of the outdated support systems education based only on Learning Management System (LMS) – characteristic of an education that is not involved with students, whether it is practiced face-to-face, blended or totally by distance. However, seen in isolation, without a context of use, production logic, interesting content production (carried out in a professional manner); and specific combined methodologies – as the Socratic method and the Problem-Based Learning (PBL) – is still far from being considered as disruptive innovation.

Being initiatives competitors to the established structures and still dominant are not linked or even related to the practiced and illusory monopoly of higher education (Carey, 2012; Ellsberg, 2012), idea created, maintained and erroneously perpetuated by universities and similar institutions, that insist or even still delude themselves that they are in control...

In the past, universities were seen as a possibility to obtain and guarantee a job for many years, or for life (Ellsberg, 2012). These days, a large portion of people that can complete a higher education course surely never going to use the same, not even work in the target area. (Crotty, 2013; Ellis, 2013). The continuous training and the lifelong learning are becoming an increasingly common feature – concepts that should be applied indiscriminately to all of us, even to those who deceive themselves that only teach.

If on the one hand the ubiquity of the internet allowed the invasion of our privacy (Rich & Smith, 2007), also created a plethora of learning and work opportunities.

This is how Salman Khan created the Khan Academy (2006), with the mission of providing a free, world-class education for anyone, anywhere. This non-profit venture – as they should be all initiatives related to education – is described by some (Okabe, 2014) as a teaching model, while sharing their free classes through videos. For free. For everyone. Forever.

The *Veja* magazine (Weinberg, 2012) – always trying to kid ourselves that there is a better world than we can imagine – in addition to promoting it as a phenomenon, mistakenly crowned him as the “best teacher in the world”, for allegedly making the learning more attractive, satisfactory, interesting, productive and he has taught four million students over the Internet. On the other hand, the Khan Academy has been criticized because Salman Khan would not have training in pedagogy (Danielson & Goldenberg, 2012; Strauss, 2012). This argument was absurd, from any viewpoint used to analyze the issue, but perhaps may help to explain the success – he would not have “learned” how not to do things or even how to do things the wrong way. Steve Jobs (Apple, 1976) has suffered similar criticism. While

other technology companies were led by geeks, he was the only in running a business about which he actually knew very little. What he lacked in experience, he made up for in his ability to think outside of established standards. Jobs showed us that, “what I know is less important than how I think” (Crépin, 2012).

Salman Khan probably is not the best teacher in the world, but this fact does not make any difference and neither should be given any importance or significance.

Bill Gates (Microsoft, 1975), for example, never was the best programmer in the world – not even close. He did not invent the BASIC language, did not invent the DOS operating system and not the graphical operating systems. He never completed a university course – in the same way that Steve Jobs and Mark Zuckerberg (Facebook, 2004). This did not prevent him from building one of the largest technology companies or even be ahead among the world's richest people (Forbes, 2016) – a fact that cannot be interpreted as being a discouragement to higher education. However, completing a university course does not mean absolutely nothing in terms of success or even guaranty a secure future. Or someone can still imagine that, even in the 21st century, the road to success is linked to the completion of some graduation course or even the universities?

Regarding the United States, this thread is just academic, given that “some of the nation's greatest minds never finished college” (Grassi, Parrish, & Winter, 2016).

Being the best in any discipline means first of all fit into a given paradigm, that is, be suitable to certain rules under which we can try to compare the contestants (Ahmed, 2013; HEC, 2008). This never happens in an honest, ethical, reliable, unbiased and transparent manner in the area of education where many resumes are forged, manipulated and constructed without any personal merit. We shared, at the same time, with professors pedagogically and technologically sound; pretentiously modern; and pseudo-educators that replicate methods or ways of trying to teach of the past – without any update, including the materials and books used (Roth, 2015b)...

Freitas (2014), for instance, prefers the path of problematization and deconstruction than the finding or even the construction. Rehearses a criticism of differentials, innovative and revolutionary values of Khan methods followed by an unnecessary comparison with Comenius (2006), in whose work *Didactica Magna* (Great Didactic) would be present the inaugural speeches of modern didactics – the universality, a more effective education (starting from the simplest concepts to get the most comprehensive), the continuous learning (lifelong), the development of logical thinking (rather than simple memorization) as well as the access of poor children and women to school – to, at the end of fourteen pages, to

surrender: "...the teaching methods of Khan are a kind of realization of the universalist ideal of Comenius: 'teach everything to everyone'. ... In 2012 this formula is completely feasible and could be expanded: instead of a master to teach hundreds of students, the megalomaniac project of education via the web made possible to teach not hundreds, but hundreds of thousands of students".

Unlike alleged by the author, most teachers do not have any didactic. Especially the university level ones, have very little - sometimes none - didactic-pedagogical apprenticeship. Rules and principles alone are not sufficient to produce an educator. They do not receive this kind of instruction in the universities, much less in education area courses that should train teachers. They go straight from graduate courses to teaching, without prerequisites, often without prior experience, training or even vocation, as if the teaching skill was implicit in the certificates that accumulate during life (Roth, 2015c).

In what kind of serious enterprise – outside the limbo of universities, in “real” life – this is accepted without reservations?

What many of them imagine that it could be didactic or even something like this is just replicated behavior from their “masters”: inefficient, ineffective, criticized (mostly by students – that when they become teachers tend to reuse it, in the absence of good references), outdated or even inappropriate (Ribeiro, 2014), not only to the current times. Comenius (2006) criticized this approach since 1649 and at the same time regrets that the good ideas were not always put into practice. Our pseudo intellectual supremacy only inhabits these positions, or better, orbit around (Leite, 2015). Many imagine that they are like the wine and that, with time, become increasingly better (Ramos, 2015). They only delude themselves, because the legend that all wine improves with age is not true. Only 10% of red wines from around the world mature well, against only 5% of whites (Porto, n.d.). Eventually, all wines will turn into vinegar.

Naturally, these days, Sal does not produce or present any other video for Khan Academy. In the same way as other technology area entrepreneurs, he found people far more qualified than he to do so (costing much less).

Could still be questioned the certification – that our politically incorrect world tends to give infinitely more importance than the knowledge effectively acquired. However, this recurring issue since the establishment of the universities seems to be with a set expiry date. Since many years that areas such as computer science do not have the excellence centered in the universities. IT Certifications, such as AWS, Cisco, Citrix, CompTIA, EC-Council, GIAC, ISACA, ISFCE, Microsoft and MongoDB have a much higher value on the market than

university courses in the target area (Roth, 2011). Moreover, the certification of this knowledge is not held by universities, but by private institutions such as the Prometric Testing (1990).

After the OCW (OpenCourseWare) and MOOC (Massive Open Online Course) waves, the natural evolution would be the availability of higher-level courses, with certification, totally free of charge and no limit of users. Free and Open Source College Course (FOSCC) or Free/Libre/Open Source College Course (FLOSCC) is an online university course with certification that is at the same time an open course, free of charge, open source and freely accessible by the general public through the web – from anywhere, anytime, using any suitable device. Derived from the acronym FLOSC (Free and Open Source Course or Free/Libre/Open Source Course) that was coined in 2013 for the project COFUNDRAISING “Sustainability and Latest Revenue Models for Academic Resources: Facing the New Challenges of Education Economics” (FP7-PEOPLE-2013-IEF). This area is a hotbed of development right now. OCW, MOOC and FOSSCC/FLOSCC always have production and maintenance costs and this variable remains a research issue because both the Khan Academy as Coursera and edX universities have not yet found a suitable model of sustainability.

Another case that has also carved out an individual space and seeks differentiating factors is Myngle (2005) of Marina Tognetti, that presents itself as the leading multi-language global platform for live online language learning, although focused for business professionals. This virtual classroom has resulted in students and teachers participating from over 150 countries, but unlike the Khan Academy, the mYngle is not free of charge – presumably because it has not yet found an alternative way to ensure its sustainability. Certainly it is possible to offer a product, service or even courses – including at tertiary level – at no cost to the end user, by obtaining other funding sources that do not depend on the payment of study fees or public funds. Google and Khan Academy have taught us this lesson...

Wauters (2009) points out some similar proposals. The one offered by Babbel (2000) is similar and also paid. Others present themselves as social networks for learning languages. Like the case of WizIQ (2005), italki (2006), LiveMocha (2007) and Busuu (2007), all with free basic services and premium paid options. The eduFire (2007) was acquired by Camelbak Education Group in 2010 and is offline. And the VoxSwap (2007), only option totally free of charge, is with the domain expired since 30 August 2015.

The Holland Herald (Latten, 2015) in-flight magazine, in a quick interview with Marina Tognetti, claimed: “mYngle is just what you’ve been waiting for, language lessons that come to you”, after all, Myngle (2009) states that you can learn any language online with the “best private teachers”. Marina, unlike Sal, apparently always selected people who worked for her and by using this argument to be able to count with the “best teachers” also seems to adopt a trend to get a market advantage in contrast to the bad impression that we have all of us – as students – of those deemed as “traditional teachers”...

Conversely, it would be a good idea – while professors and researchers – hear the calls of the market, not just marketing, but of our customers – our students – who were born in a different reality, with expectations that normally we do not meet the demands...

Serving the business as usual or bending over the absolute and unquestionable truths – including in didactic terms – does not lend support to any personal and professional growth. Does not add any new experience, even for those who delude themselves that they teach much less for those who we intend to educate.

Aldous Huxley (2004) wrote in 1932 that, the “experience is not what happens to a man; it is what a man does with what happens to him”. So, if we were not welcomed with a contemporary vision of education (as learners), it does not seem fair to penalize our students by replicating the old ways of teaching. All educators should position themselves critically in relation to the model through which they were “trained” and not repeat the same mistakes – without experiencing fear for having transgressed a trend.

We do not need to reinvent the Socratic method, not even give up who embodies the role of Socrates, intentionally or not. This is not an act of apostasy, but certainly is necessary a rereading, a recycling to adapt it to the needs and current technological possibilities that, so inexorable, refers to the omnipresence of videos and videoconferencing – and without which all systems related to digital educational technology remain indifferent to stakeholders, always representing an education not involved with students...

2. The Socratic method, elenchus or dialectical: of the debate, of irony and of maieutics

This model, popularized as the Socratic method, reflects how human cognition has been developed. The method of examining a certain argument from an ignorance position

and through rational discussion would have revolutionized the western philosophical thought being considered the first use known of the inductive argument – in which a set of experience-based assumptions would be initially confirmed as true and as a result, would lead to a universal truth. This argumentation form became the basis of all the empirical sciences (Costa, 2013) and has been used many times to question the knowledge of those who considered themselves wise. It starts from the perspective of one who knows nothing and, following on from, exposes inconsistencies observed in the arguments – or even the gaps perceived in the answers – to gradually extract insights or perceptions.

The philosophical activity of Socrates supposedly takes place in stages (Yankee, 2013). He asked, insistently, questions that interested him and, in this way, has developed a new way to investigate what we think we know. Initially, in the part of the process known as irony, the philosopher purposely expressed in the opposite way to what he believed, imagined or even knew about a given subject, forcing the interlocutor to reveal its assumptions, ideas and opinions. With this tactic, Socrates led him to demonstrate his own ignorance on the subject, namely, that in fact this knew very little or almost nothing about the object of discussion.

The next step in the method was known as maieutic, a word that comes from the Greek *maieutiké* and can be translated as the art of childbirth. Socrates would have said that his mother – who was a midwife – gave birth to children, while he gave birth to the ideas. He could be considered as an accoucheur, not accoucheur of babies but an accoucheur of suppositions, assisting the birth of the true ideas through brainstorming sessions.

Starting from the concepts presented by the interlocutor in the initial stage, Socrates exposed the contradictions and took him to agree with a new set of conclusions, seeking to discover the veracity of the knowledge in question. This method of seeking the truth through dialogue – including the processes of irony and maieutics – receives the name of dialectics, because it develops as a dialogue between opposing views.

To Costa (2013), Socrates did not seek definitive answers or explanations. He possibly believed that to understand who we are would be the primary interest of philosophy and, in this sense, investigating only the basis of the concepts that we apply to ourselves. It would mean the “love of wisdom”, feeling experienced only by those aware of their own ignorance. Its central concern would have been the investigation about life: “The unexamined life is not worth living”. The mission of the philosopher would not be to instruct people or even learn what they thought they knew, but to explore the ideas that they had. All the truly wise man should say that they know nothing. And to get some knowledge about oneself and the

world that surrounds it would be necessary to remove the preconceived ideas and understand the limits of your own ignorance. Only in this way, there would be some hope of determining the truth.

### 3. How to argue using the Socratic method

This method can be used to show someone that he is wrong, imprecise or even get him to agree with statements that contradict their original assertion. Considering that Socrates possibly believed that the first step to knowledge would be the recognition of ignorance, it appears that this methodology is focused not only to prove certain concept, but to deconstruct the opposite with a series of questions (elenchus), leading to the uncertainty. This approach is used to develop critical thinking skills, used in classrooms, training in management and psychotherapy. (Burande, 2015; Come Discutere Utilizzando il Metodo Socrático, n.d.).

Step 1: Locate a statement that summarizes the argument being debated. Apparently, Socrates discovered this statement by asking the person to answer certain question. For example: "What is the color of this table?". The Socratic method can be employed with respect to any answer or statement in which the person appears to be sure, like, "This table is green".

Step 2: Analyze the consequences of this statement. Assume that the declaration is false and find an example where it can challenge it. You can provide a scenario, real or imaginary, where this argument is inconsistent. Use this scenario in a new question: "To a blind or colorblind person, is this table still green?". If the person answers no, proceed to step 3. If the person says yes, ask: "What makes it green and not red to a colorblind? Or any other color to a blind person?". In other words, "If someone is colorblind or can't see, what makes the table green?". This question may well confuse some people who consider the vision as the perception of the human being. If so, go to the next step...

Step 3: Change the initial statement to take into account the exception: "So the table is green only to those that can see normally". Challenge this new statement with another question. For example, "If the table is in the center of an empty room, where no one can see it, is it still green?". Eventually, it will be possible to reach an argument with which the person agrees, but contradicts their initial declaration. In this example, you can end up indicating the subjectivity of the perception of color and argue (through questions rather than statements)

that color only exists in people's minds as a result of their individual perception; it is not actually a property of the table. In other words, the table is not green. It is your opponent's perception of it that makes it green.

Through this method it is possible to create challenging assumptions. If the aim is to argue effectively, this procedure can offer a number of suggestions, including to challenge their own beliefs. The key to using the methodology is to be humble and not assume that you or anyone else knows anything for sure. Each premise should be questioned, since the objective is to examine possibilities, which is done through questions and not answers.

#### 4. A rereading of the Socratic method

In a debate about the role of social networks in education (Atica & Scipione, 2011), Eduardo Chaves said that “the method of Socrates can be considered not school-related”, that is, cannot be studied or submitted to the learning process in school context. But that could change with the use of social networks. Furthermore, in the same way as happens in Socratic practice, the activities connected to these networks are not likely to be pegged to the curriculum frameworks. There would be, an education in vertical in which “all educate each other” – paraphrasing Freire (1987), “mediatised by the world”. And what the world offers us at this time? The social networks, virtual worlds, instant messaging and gaming systems.

If the school will be able to adapt – appropriating of this possibility and making non-formal educational practices – we will be finally educating us more outside of school than at school. This is a challenge that depends on the capacity of the institutions – not necessarily the formal – to reinvent themselves towards a new situation that, without the technology, it would be absolutely impossible: to have something that is, at the same time, personal, customizable, and even global-scale.

From the dream of Comenius (2006) to the finding of Freitas (2014), through the vision of Freire (1987) by challenge of Eduardo Chaves (Atica & Scipione, 2011)...

The Socratic method can be considered an educational tool, since Socrates himself turned the marketplace of Athens into a classroom enticing his interlocutors through a dialog whereby they could have their assumptions questioned and at the same time learn, traveling towards new conceptions of knowledge and understanding (Davey, 2008). Probably, this is the first reference we have of a kind of student-focused education, stimulating their own



thoughts and impressions of the facts – not accepting ready-made truths, forged, rewritten or imposed, as being absolute and unquestionable truths. Something similar to the scholastic, which is centered on dialectic with the aim of extend knowledge through inference in the quest to solve the controversies. This concept is reflected in the UNESCO suggestions – directed to educators and philosophers – to find ways to include philosophy and philosophical inquiry in current education practices, in order to enhance the democratic ways of life (Tchoshanov, 2013).

This recommendation is completely consistent with the current proposal that suggests the rescue of the Socratic method, and through a rereading, adapting it to current educational practices – didactic and technologically correct – these days in which the use of the internet has abolished the frontiers. Davey (2008) considers this time as the “arriving at a new beginning” through the “redefining socratic pedagogy”.

However, what often prevents the connection between philosophy and educational technologies is a theory distant from practice and technologies; and a technological practice without any theory. That is, two completely different speeches that does not turn into a transformational practice. Lopes (2005) discusses these antagonisms and proposes to classify the charlatanism of higher education pedagogy in four areas defined as alpha, beta, gamma and delta. Although in an empirical way, the reflections show a sad portrait of the reality.

Over recent years, a wide range of researches have been carried out on using web conferencing to facilitate student collaboration (Winter & McGhie-Richmond, 2005; Diziol, Walker, Rummel & Koedinger, 2010). Something that Downes (2012) calls cognitivism, that is, “that knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and traverse those networks”. The study of Tucker & Neely (2010) explore the use of the Socratic method through web conferencing. Badgea, Saundersb & Canna (2012) brings new tools to visualize student engagement via social networks, where the Socratic method was used. Shahsavari & Hoon (2013) discuss the role of Socratic questions in promoting students’ critical thinking through Web 2.0 tools. In addition, the portal SMRP (2004) – dedicated to advancing the use of the Socratic method – makes available free of charge all teaching perspectives, methods and resources developed for this purpose.

## 5. Videoconferencing and telepresence systems

Mobility is always something interesting for students and teachers. But it has a cost and usually only includes some, discriminating the others. Not everyone can afford these costs and the scholarships and grants are not enough to meet demand. So it makes much more sense to move Mohammed to the mountain than the mountain to Mohammed. And Mohammed presently can use videoconferencing to be virtually in the “mountain”.

“Every artist has to go where the people are” (Nascimento & Brant, 1981).

According to Wauters (2009), the mYngle advocates the use of Skype for videoconferencing tutoring. This is an option of reasonable quality these days (broadband accesses), simple and free. Klein (2012) argues that the mYngle and WizIQ use a proprietary technology for virtual classrooms – solution also used by eduFire, as well as Adobe Connect. Suggests two options: Vyew (2005) and BlueTeach, although these remain problems with the use of Flash (Adobe) and discusses some possibilities for the virtual classroom of the future, as the Conceptboard, without the use of Flash.

The ClickMeeting (2006) offers several solutions, all paid, with differentials for nonprofit institutions. On their website there is a specific session suggesting ways to incorporate videoconferencing in a traditional classroom, fostering a more dynamic and engaging learning environment: lectures and classroom presentations; virtual presentation from a guest speaker; recorded lessons for online review; online meetings and webinars; staff meetings and professional development.

The Fuze (1996) is another option, and is presented to the market as the “best” HD videoconferencing including online meeting services, webinar and screen sharing.

PC Magazine (McLaughlin, 2015) compared what they regarded as the “best” videoconferencing services of 2015: ClickMeeting, Join.Me, Adobe Connect, Cisco WebEx Meeting Center, Citrix GoToMeeting, eVoice, Microsoft Skype for Business, Onstream Meetings, StartMeeting and InterCall. In addition to these services, there were comments about CometCall, Drum's ShareAnywhere, Google Hangouts and Zoom.

In recent years, Roth (2007) has discussed, examined and specified video conference systems, as well as accompanied its evolution to telepresence systems (Roth, 2011) and what is perceived is that the ubiquitous availability of broadband in the various types of internet connection and video cameras in all mobile devices only contributed to increase the gap between the reality and the practice of schools and universities.

All active social networks and the dominant Facebook have adapted, by providing additional support (add-ons, plugins and extensions) to the videoconferencing and making the usual and transparent practice, without the need of additional softwares. The same situation was verified in the various LMS (Roth, 2014).

New videoconferencing solutions are always emerging (LVTSPB, 2009): Avaya – (Radvision) Scopia systems; AVer Information – HVC330, H300; Cisco Systems – Cisco TelePresence; Huawei – TP Telepresence series; Ericsson-LG – LVP series PSTN, ISDN and IP videophones; Librestream – Onsite; LifeSize – LifeSize Team, LifeSize Room & LifeSize Conference; Panasonic – VC500; Polycom – RealPresence Immersive Studio, OTX, HDX, Group series; Polycom – VVX; Sony – PCS systems; TrueConf – TrueConf Terminal; Vidyo – VidyoRoom & VidyoDesktop; and Zoom Video Communications – ZoomPresence.

Apparently, these solutions with dedicated hardware-based codecs still offer better quality than software-based codecs, but that is not always important or even necessary – not to mention that the situation can change rapidly with the availability of a higher bandwidth and cloud computing resources.

The costs involved indicate that the best structure must be on the side of whoever produces the contents (videos) or even the person who manages the processes (does the current teacher's role in videoconferences). Usually only one person speaks at a time - with the exception of the Italians (*parlare tutti insieme*). In this sense, even the solutions considered more modest and without acquisition costs may be suitable.

The differential should not be focused on technology (best system and with better quality), much less in technological dependence, but in the effective use of solutions that are already available in more than one vendor – absolutely nothing lasts forever– if possible free of charge, as an affordable means of natural and transparent use.

Try to give emphasis to technology or even consider it not as a means, but as an end sends us to the fears of society entering a new era. To Gale Anne Hurd, the vision in the Terminator was that human arrogance has led to the complete destruction of civilization, because we placed all our trust in technology (Southwell, 2014).

What could change, of course, should be the involvement of customers (students) through a provocative method - so that they get out of inertia.

One of the main goals of education has been to strengthen the relationship between long-term memory and intelligence, helping people to store information to subsequently use them in problem-solving (Hielkema et al., 2012). Soon, regardless of where they are these

clients, videoconferencing will always be a means to distribute tasks, since the Socratic method can and should be associated with PBL methodology.

## 6. Stop & Go

The year 2015 can, in a sense, be regarded as the year in which the internet lost definitely their innocence. We passed the boosterism of the Free (Anderson, 2010), to the unfulfilled promises of cloud computing (Seshachala, 2015; Henthorn-Iwane, 2015) – with all of the coupled traps, until we reach the total lack of privacy and security, as demonstrated in all Google episodes and by latest Microsoft OS version (Windows 10) with several definitions that not only simplify, but try to impose the “socialization” of the user. Not to mention the trend of intelligent virtual assistants who want to know all of your life and always inform the owners (Apple Siri, Microsoft Cortana, Google Now, Amazon Eco Alexa, etc.).

The dream of having a J.A.R.V.I.S. (Just A Rather Very Intelligent System) at home can always become a nightmare.

George Orwell would have commented about his book, 1984, that “In times of universal deceit, telling the truth is a revolutionary act” (Müller, 1989, p. 106).

The documentaries Facebook Follies (Peill & D'Eon, 2011) and Deep Web (Winter, 2015) exploit these facets of “modernity”. The exacerbated exposure on one side and the quest for anonymity and privacy of another, considered politically correct or not, depending on the time in which we are living. But in both cases we witnessed astonished to governments considered democratic – as of the United States, and in the Obama era – acting contrary to rights and basic and fundamental guarantees on behalf of copyright protection, the drug enforcement, or of the so-called terrorism – and they do it through something much worse, something created by themselves: the state terrorism (Roberts, 2004; IPE, 2011).

From “yes we can” to “yes we scan”. Common place in history when a society makes the transition from freedom to dictatorship and just one more of the contradictions of a country with a discourse of respect for human rights, but that does not submit nor even the decisions of the Inter-American Commission on Human Rights (IACHR).

According to Siddiqui (2008), “The same jihad which was acclaimed as a holy war of liberation and was supported in terms of money, weapons, training, manpower and moral support is now seen as terrorism in a world where ‘war on terror’ is the slogan of the day”.

Scapegoats are created (Osama Bin Laden, Saddam Hussein, Shawn Fanning, Ross Ulbricht) to manipulate the masses and create exemplary executions, which can serve as an “example” and spread the fear: “When the mob governs, man is ruled by ignorance; when the church governs, he is ruled by superstition; and when the state governs, he is ruled by fear” (Hall, 1928).

Schröder (2002) points out the risks of a greater intervention by the modern civil state and a weakened right of defense for the accused – whoever they may be. In this way, by the completely arbitrary definition of terrorism it is very easy to realize that “the war on terror has little to do with combating terrorism and instead has as its primary objective the erosion of fundamental rights in the EU”. What often we tend to classify as terrorism may well be a last gasp of freedom. The real terrorism is always implicit in immoral actions and unfortunately in both situations we will always have innocent victims. This limit position is just another consequence or even proof of our inability to solve our conflicts.

The modern definition of terrorism could be something like: everything that others do to try to survive or even to not submit to the actions and desires of the powerful – against which has no chance to fight under the same conditions. Powerful states that create laws and international courts to others, because they are the first to ignore these limitations or even international treaties which have acceded and signed...

But what could be the way to ensure security, privacy and at the same time universal access to information, training and opportunities that the internet can offer without any kind of persecution, overexposure or discrimination?

The businessman Jorge Paulo Lemann, currently the richest man in Brazil (2016), pondered that idealistic speeches don't help to build practical solutions: “There's a lot of people in Brazil who thinks that equality is a beauty. I think equality is a beauty too, only it doesn't work. Equality of opportunity, that is true. Now, equality for equality... People are not equal” (Frias & Bilenky, 2015).

Surely people are not equal, but many of them can count with a family background or even with an initial financial support and privileged information, not always obtained honestly and transparently. Most do not have access to the same level of education; to the personal, professional and government contacts in certain places that allow leverage their individual possibilities exponentially, in a short time and put them in prominent positions with minimum effort – and many times none. In this way, of course, they can't count on the same opportunities...

But where there is equal opportunities and inclusion for all persons, without any kind of favoritism or discrimination? At Lemann Foundation, or even in companies captained by Jorge Lemann? Of course not. In these places a given profile is exploited or even searched – at the detriment of others – of workaholic entrepreneurs, who according to his own words should save Brazil (Instituto Millenium, 2016). The opportunities are created just for some few privileged people, and despite the capitalist logic of the creature, does not match with the public discourse of the creator. It is just another fallacy of meritocracy...

Jorge Lemann (Lemann Foundation) and Bill Gates (Bill and Melinda Gates Foundation) are supporters of the Khan Academy, but it is not a matter of collective funding (crowdfunding). The full list (2014-2015), which includes many foundations, can be verified in Our Supporters (2016). Probably the support for this kind of venture – really free of charge and within everyone's reach – is derived from a sense of guilt. “There's a correlation between generosity and guilt. But, you got the money. Break as many eggs as you like” (Feige & Russo, 2016). At the same time, there is always an untold story, different from the official, which hides the tracks of those who fell by the wayside, in climbing to success. “The things that we've done to survive they don't define us” (Miller & Showalter, 2014).

Although it is laudable the work of some foundations and institutes, it is not any favor. Basically, they don't do anything with their own resources, but from donations, deductions, and taxes not paid directly to governments, applied in their own social programs (Guerreiro, 2012). Something similar to what the Lions Clubs International (2001) always did: success with the money of others – in this case, with the tax money, which theoretically should be to the benefit of all citizens.

Why not create opportunities for everyone, not only of study, but also of access to knowledge and subsequent application?

“A hierarchical society is only possible on the basis of poverty and ignorance” (Perry & Radford, 1984). When we tried to fetch only a certain profile at the expense of others, when we begin to choose “the best” – often in a subjective and biased manner, to the detriment of all or even any one – this possibility of giving specific destination to resources that should be public fails blatantly...

Only a state committed to social equality and free of the corruption in essential sectors would be able to give exactly the same opportunities, without discrimination of any kind, for everyone. Considering that a market - where really are created the professional

opportunities and where companies and states hire labor – able to select personnel in a transparent way. The problem is that this issue is theoretical and even in socialist or communist utopias was never able to materialize – since the discriminatory employment practices are always present.

Even in the European Union who built his unit under the difference and as a product of a long historical construction – receiving the Nobel Peace Prize (EU, 2012) – the policy of protection against discrimination cannot fulfill its role (EC, 2015; Equinet, 2015).

The instinctive reaction of all creatures with fear is to retreat to a safe place. However, for a large portion of legal immigrants (or even “real” refugees) the European dream of today – or the American dream of the past – remains an urban legend. Suddenly, the dream so desired becomes a nightmare...

Even citizens of member states coexist with intolerance and discriminatory acts that constrain, mistreat and ignore human and community rights. In the background seems to persist the fear by changes in lifestyle, the dispute by the labor market or even the access to health and education. After all, following the implementation of the European Higher Education Area (EHEA), the European university courses all look the same (independent from the university), though some are fully or partially paid and other totally free of charge (Roth, 2015b).

What is the subjective importance (always discriminatory) that can be attributed to its origin, to the country, you are in; to university in which you have studied, the publisher in which you print your books or the journal you publish your papers?

Many researchers provide their papers to publishers like Elsevier, JSTOR, Sage and Springer because they consider that have a study published in these magazines brings prestige and recognition by the scientific community. Directly, they do not earn anything with this and do not receive no portion of the money collected through exorbitantly high charges. These publishers simply take ownership of the content, for which they do not pay (Oswald, 2016). They create their own systems of indexing and impact factor – something that only reflects your edits ignoring the open access journals. Such global indices – as the Science Citation Index, Scopus or Web of Science – include a small number of journals and tend to favor publications in English –considered the global scientific language (Altbach, 2014) – something that can be characterized as neo-colonialism. Thus they handle only what interests them and feeds the wicked system. In this sense they discriminate what may or may not be published, who can or cannot publish, the pseudo-subjective quality or even the validity of publications – in accordance or not with certain editorial line. They live from this

system where they imagine that only they have the right to do so and then charge what they imagine – without the payment of any copyrights.

Notice the sequence: take ownership, adapt and not pay for the use. This practice is so absurd as the rankings that imagine evaluate the quality of universities and, in some countries, could be characterized as larceny and formation of gangs. But count on the connivance of the universities, which seem to be engaged in a global arms race of publication, of researchers “hostages” of this system or even of a corrupt and compromised system of “justice”.

For many students and researchers, the website Sci-Hub (2011, 2015), (Tor: scihub22266oqcxt.onion) – the equivalent to The Pirate Bay for academic research – is the only way to gain access to certain content that should be in the public domain, but which are subject to exploitation, privatization of knowledge, trading and a false elitism in the scientific sphere. “The world, although round, has many corners” (Abreu, 2013). In this sense, merit should always be something individual and own of personal production and not derivative, discriminated or even pegged to an imaginary differential of quality or tradition...

The Khan Academy and the mYngle can and presumably will always be criticized by people and institutions who are part of the dominant system and see their lifestyle threatened. It is always easier and comfortable criticizing who does that at least trying to do.

However, they can be considered as contemporary models, efficient, effective and successful – of the market differential and the effective use of videos and videoconferencing – to leverage ventures and educational initiatives through the internet.

Marina and Sal basically did not create anything new. They just reused everything that was already available, even if developed by others and for free.

Probably this is one of the keys to success: take ownership of an idea, adapt and not pay for the use. This simple *modus operandi* is part of absolutely every business success stories – that we so admire. Just check the cases of Microsoft, Apple, Facebook or even some publishers that are parasites of science.

Many people who have created or developed something original – like Kane Kramer, the real inventor of the iPod – will not have gained any money from this (Boffey, 2008).

In Brazil, it has become fashionable to discuss the legacy of Jorge Paulo Lemann and his business partners – Carlos Alberto Sicupira and Marcel Herrmann Telles – however there is also that the ideas were never of them. To Claudio Haddad, president of Ibmecc São Paulo, “Jorge Paulo is not a genius in an ivory tower”. This was one of the striking features of



“developed culture” at Bank Garantia: its ease in copying the good examples. According to Carlos Alberto Sicupira, “The great advantage of Brazil is that you can copy what is being developed elsewhere and do here. You can copy everything, no need to be reinventing the wheel”. “What we have done for the entire life? Only copied. We did not invent anything. Still well. Inventing things is a danger darn”. Copy and implement – and do not innovate or even create – have always been the favorite words in this group. Jorge Lemann confirms, “Worth much more a good logic, a good execution, than any brilliant innovation”. “You have to worry about innovation. But if someone is doing well, best not to spend too much time looking for how to do it. Go there, look and adapts to their way, and ready”. (Teixeira, Hessel & Oliveira, 2008).

What lessons can we take of the mega ventures of William Henry Gates III, Steven Paul Jobs, Mark Elliot Zuckerberg or even of Jorge Paulo Lemann? Practically no teaching.

No one replicates success stories, because the temperature and pressure conditions are never the same. However, we learn more from our mistakes and from the mistakes of others – than with our possible achievements or even with the achievements of others...

Probably Salman Amin Khan and Marina Tognetti have much more to show us than our representative icons of certain exceptional situations – not always clearly demonstrable and exempt from criticism...

Our false heroes are always better at everything: are richer, more intelligent, are better-looking, more resourceful or simply are considered better than us, without any superficial adjective. In this context, modern heroes are amenities missing, at least, through a paradoxical perspective (Sapelli, 2011).

José Abelardo Barbosa de Medeiros, known as Chacrinha (2009), was a great radio communicator and one of the biggest names in Brazilian television. Was the author of the famous phrase: “Na televisão, nada se cria, tudo se copia” (In television, nothing is created, everything is copied) – probably parodying the statement of Antoine Lavoisier (2001): “*Rien ne se perd, rien ne se crée, tout se transforme*” (Nothing is lost, nothing is created, everything is transformed) or Giordano Bruno (Kessler, 1900): “*Il tempo tutto toglie e tutto dà; ogni cosa si muta, nulla s’annichila*” (Time gives all and takes all away; everything changes but nothing perishes).

This concept of lack of originality can be taken without risk to everything that relates to the Internet, especially education – even that considered technologically correct – where the copy and paste many times means the practice rather than the exception.

Be ahead of its time is a capacity that almost never gives any advantage to its possessor. Lavoisier was convicted of treason and lost his head on the guillotine. Giordano Bruno was called a heretic and burned at the stake by the “holy” inquisition. Malcolm X was murdered before he had time to develop their new ideas. Socrates was forced to drink hemlock for pissing off many people. The premise credited to Johann Wolfgang von Goethe, that “When a human being awakens to a great dream about and it throws all the strength of his soul, the whole universe conspires in your favor” is false, because the human element is always perversely present. We always destroy our heroes.

The reality that prevails, corrupts and marginalizes all those who oppose the established truths makes many thinkers remain hidden with fear of rejection or ridicule (Roth, 2015a).

Faced with several notorious practices, observed in several amazing schools around the world, Roth (2015b) pointed out good examples that could be followed, copied or even reused with proper adaptation: the secret ingredient. Any cake recipe when replicated requires the use of this supplement that is neither explicit nor described. In the case of the deployment of a new idea will always be the previous sensitization, persuasion, participation, and agreement of the parties involved. Without pressure or obligation to those who will actually use every day a new process or way of working. Without this small detail, there will always be some kind of boycott and any action in this regard will be subject to the low level of adoption, as verified in all pretentiously modern universities.

Among these special cases, the Escola da Ponte, from Portugal, became known among those that should be considered hors-concours. And it is exactly this model of non-formal practices that will be tested (Souza, 2016) in a pilot project, in a pilot project, by two public schools in the Brazilian state of Mato Grosso do Sul: without assessment tests and without formal classes...

When we want to carry out some movement forward in educational terms we always have the opportunity to skip steps and go straight to the current state of the art. Learn from the experiences of others. Although this can be verified in some schools of Brazil, cannot be generalized. In March 2016 took place the Open Education Week (Open Education Week, 2011), with the support of the Parana Program for Open Education Practices and Resources (Rea Paraná, 2014), an interinstitutional action created in 2014 by the Federal University of Parana and the Federal Technological University of Parana.

Open Educational Resources (OER) and the inception of repositories never formatted or delivered any product (full course, with or without certification – only lessons of courses). It

can, in a way, be considered as an evolutionary stage, but it is an outdated view, at least fourteen years. Although there are verified experiments since 1999, the OCW movement really took off with the launch of MIT OpenCourseWare in 2002 (OpenCourseWare, 2007). The MOOCs were a step forward – they were formatted as courses (they could use OCW materials), but never reached the level of FLOSCs. Not to mention that all this requires some level of authorship, something unthinkable for anyone who does not create, only copies – or appropriates. In the videos and in video conferencing this changes, but imagine that the model of the Khan Academy will be the next step remains an open question. The really public universities (without tuition fees) is that should evolve to take this step forward.

The Khan Academy and mYngle, how they were developed, would not have existed without the current internet. Without the use of videos and videoconferencing not left the commonplace, would not have gained such visibility, recognition, and attracted so many users. For sure is a refreshing change, recycling the same old material that has always been rehashed. The main attraction of the Khan Academy is the fact of being free of charge and the promise of so remain for future – Besides, of course, the quality of the currently produced material. The mYngle, by contrast, faces many competitors with similar strategies.

Which business model will be able to survive is a matter of time, for the future.

There is no an apparent didactic innovation – in reference only to those considered correct today – in none of the initiatives. What exists is a good use of available technology and a good selection of teachers, not only based on inflated resumes, who you know (recommendation letters) or even dishonest competitions.

While the mYngle applies the traditional concept of maintenance (who pays the bill are the users) does not represent a serious risk to the *status quo*. On the other side the Khan Academy appears defending opposing ideas to those of the establishment, and applies the maximum of the Free (Anderson, 2010), that is, that someone will surely pay the bill, but need not be the end user. In the case, currently who pays the costs are several foundations, individual donors (who earn the right to expose its name as benefactors) and anonymous donors (who do it out of conviction and do not seek this form of promotion).

In these two ventures the effects are much more noticeable, because the actions are not limited to a particular country or language, since the internet – usually – does not impose borders. This concept – of not only globalization or internationalization, but of universality – should be replicated by all universities in the world, to keep up to date and adapt to changing times in order to finally meet the beautiful revolutionary, democratic and constitutional rule of “education universal, compulsory and free” for all. This is not a reality, not even in Europe.

Ferrer (2001) said fifteen years ago that “And the European Union has the moral and political obligation to provide the financial resources necessary to achieve free education for all between now and 2015”. And since last year this deadline is not met – without which the objectives have been achieved.

In this context, Downes (2011) tells stories about open source, open content and open learning – through the lens of the person who wants access to these resources, rather than the provider's vision. We have to somehow, go through this learning curve.

Sherman (1982) wrote that “You can't go back and make a new start, but you can start right now and make a brand new ending”.

We still cannot go back in time, but we can all take a step back and then take two steps forward and make a new choice.

An important question that should be reviewed and continues to move away the academic environment from the business community is an alleged false pretense or even a pseudo-referential of originality that permeates the publications and practices of the educational milieu (Silva, 2011; Dey, 2006). Fake, because in daily practices, subtly, manipulated or even explicit manner, prevails in the copy, the plagiarism, the unethical practices (as to include co-authors without participation and after have this favor reciprocated) and the reuse of materials without update, by professors.

The writers have always known that “books always speak of other books, and every story tells a story that has already been told” (Eco, 1984).

We should not be forced or pressured to create useless academic papers, theses, dissertations or even supposedly scientific papers, that have as justification only fulfill some imposed precondition, not practical or even constitute some number abstract to be able to reference some level of production under the false aegis of the quality or even giving some merit to its supposed author (DORA, 2012).

More important than this would be the adaptation, the applicability and the massive use – and this has been, demonstrably, the recipe to get good results...

Parodying Umberto Eco (1989), this is an open work, and as such should be seized and enriched by each one of us. More complex paths could be traveled by with creativity, knowledge and competence – qualities not always present in who clings to certain jobs and positions without the intention or even pretension to enable change, regardless of fads. There is therefore a special need to promote the formation of the new generation of teachers who, in the near future will be in educational key positions.

The background should always be the belief in the need to democratize education, provide access for all; and in the capacity that we have many of us, educators, trained or not, to do an education with high standards of quality, regardless of distances (Roth, 2013). Then we can move forward, without turning the issue into another sensationalist story or continue putting forever the blame on our colonizers (Filho, 2015).

## Conclusions, Comments and Suggestions

“When the storm breaks, each man acts in accordance with his own nature.  
Some are dumb with terror. Some flee. Some hide.  
And some spread their wings like eagles and soar on the wind.”  
(Elizabeth: The Golden Age, 2007)

There is not even one example in history. Facing a paradigm shift, people who believed in the new model have always been labeled as naive.

But, even so, the world has not stopped turning.

Is it possible to make education in the 21st century without the use of the latest technologies? Of course it is possible. It would also be possible to write this text by hand or using outdated technologies as a typewriter (manual, electric or electronic) or even some PC of the first generations. The fact that we use the latest media does not imply necessarily in best quality. But responds to the expectations of other stakeholders, that is, of who is on the other side. And this reduces frustration.

My best texts do not appear on the screen of a computer (or any other contemporary device) but of a sheet of paper and a pen when I wake up at night or even dispersed during the day, not concentrate on what I have to do. The technology allows me to work these texts, fix them, appropriate form and content. But the original ideas never come this time.

The musician Nei Lisboa expressed this technological disenchantment. “The email is phone without embarrassment, fax no busy signal, answering machine without babbling to the void. But I wonder if I'm not missing received a long letter, with those pages of custom calligraphy, well-sealed, chubby and warm waiting for me in a real mailbox. We are getting wonderfully unhappy” (Castro, 2006).

Similarly, will not be the technologies (outdated, current or even future) that will by itself – and magically – give a better quality to the educational activities and rectify contemporary practices. Everything goes through experimentation, adaptation, training, testing and finally production. After identifying which technologies fit best on the reality of the university and students, take ownership of the same (master their use) and surprise people with innovative proposals. There is also the need to venture out of the commonplace and get something uncommon, unusual, carrying the practices beyond the small horizons.

Buzell (1989) quotes the statement of Otto von Bismarck: “You are all idiots to believe that you can learn something from your experience, I prefer to learn from the mistakes of

others to avoid my own mistakes”. We learn more from our mistakes than from our successes and no success story can be replicated like a cake recipe. There is no magic formula, turnkey solutions or models to be followed and repeated. Homework of the type do as I say and not as I do, I have to do, or even am forced to do; are empty when we presume to teach, demonstrate, or even suggest something that we never practiced in our personal journey.

We do not live in a world of absolute truths, but always transient. A few years ago the smallest perceived particle as existing in the universe was the atom. And where are we today? (Higgs boson). Where we'll be tomorrow? And in the coming years?

In Denmark, since 2011 students can do their exams connected to the internet using all sources of information available to develop an original work, namely, to give answers to a demand, to solve a particular situation that simulates their needs in current real world. (Cisco Systems, 2011). It's more a resource, just like in real life (creative chaos). Many people associate the word chaos to disorder or something negative, but is inappropriate, because even scientifically the creation came from chaos (all possibilities).

The same technology that massified in virtual form the university (previously massified presentially) can provide the answers and indicate a way back to the quality. But for that to happen, the universities need to turn their eyes to the essential (the training of students, technologically updated and correct, including pedagogically) and abdicate a bit of pseudo-marketing represented by university rankings. The new generations are less manipulated and don't usually consult rankings (always biased in some way), after all, the information provided has been previously interpreted. Who judges, opines or evaluates never does impartially, but according to his life bias, which includes their prejudices as well as the commitment to the current situation.

Nowadays social networks echo like no other medium the “longings seasoned with fears, paranoia and other questions” (Nada Além, Los Porongas).

<http://www.losporongas.com.br/>

To the extent that many European universities engaged in search of modernity and the students have a wide range of mobility, this can change the options of where perform the training – with greater or lesser technological integration, even as these customers well or poorly serviced share their reviews on the internet producing, depending on the case, or a free positive marketing or a destructor negative marketing.

Many potential students (domestic and international) of Ca' Foscari end up opting to study Informatics at Padova – than in Venice. It would not be the time to create a highly competitive market advantage? A real appeal and irresistible which reversed this demand in a sustainable way?

The alternative to the current model can be in a step back to the past (one step back in order to take two steps forward), not ignoring the technologies (that came to stay), but performing a rereading of good teaching practices (including medieval as the Socratic method), establishing connections and adapting them to needs and local realities.

The OpenCourseWare have evolved into the Massive Open Online Course and the irreversible trend is to move towards full university courses, via Internet, in a safe environment and with guaranteed privacy, with certification and totally free of charge. It would not be ultimately a way unlike everyone else – a redesign – to achieve the beautiful revolutionary, democratic and constitutional standard of “universal, compulsory and free education” at all levels, to all people and without any distinction or discrimination? (Neves, 2003).

The use of free resources available on the Internet is a great asset to all universities, whether public or private, because theoretically and probably its use demand less financial resources than would be needed to develop and/or maintain services and its own structure. However, it is necessary to moderate the enthusiasm of early adopters and dampen the skepticism with regard to novelties as well as pass on these benefits – in some way – to the users and ensure that they will have security and privacy preserved. The destruction of privacy widens the existing power imbalance between the ruling factions and everyone else, leaving the outlook for subject peoples and oppressed classes, as Orwell wrote, still more hopeless (Assange, 2014).

In the movie Iron Man 3 (Feige & Black, 2013), Tony Stark (Robert Downey Jr.) quotes a phrase at the beginning and end of the film: “We create our own demons”...

The context is different from this paper and much closer to the Europe's strategic relationship with Russia after the end of the Cold War, but can be applied and generalized to the extent that, when we bet all our chips on a given market solution – product and/or service, proprietary technology and/or provided by a single vendor; and hosted in a single country – we became hostages of our own options, or even worse, of the third-party options to whom we entrust our information on the Internet.



There are several papers, highly speculative, trying to explore and question everything that we think that we know not only how it should be the modern education (through a new didactic or of a correct technological mode), but about all areas of knowledge. It seems to be much easier to criticize than to act and it is obvious that someone who acts always deserves greater consideration than the one that only opines.

In the report's recommendations "Designing tomorrow's education. Promoting innovation with new technologies" suggested an awareness of what is at stake at the European level and to pencil in the outlines of a common policy (RCCEP, 2000). The text brings several references to these experts, namely "analysis" and "evaluation" – which is always a risk because the "experts" of the EC constitute a mafia who settled in the structures – in addition to cite and criticize the initiatives of several member countries, such as "In many respects Finland is a genuine information society laboratory in Europe". Seeks to build and promote a virtual European education area.

All areas that imagine living under absolute and unquestionable truths constantly are faced with information and possibilities considered impossible in the eyes of the dominant paradigm, judging by everything we thought we knew about the issue. But, many times, even a small discovery to put in check all the fragile models developed, inspired many times in an orthodox view, not necessarily who created them, but of those who have power or position to propose them.

The most honest answer we can give, not only in education, but absolutely in all areas of human knowledge is, we don't know. We think we know, we feel we know, but we don't know. Something that refers to a self-referential Socratic paradox: "I know that I know nothing" or "I know one thing: that I know nothing" (*ipse se nihil scire id unum sciat*)...

All pseudo-experts, pseudo-researchers, pseudo-educators or even those who imagine themselves experts, researchers and educators should start from this premise: that the first step to wisdom is to recognize that we are basically ignorant and we must always remember that we don't know anything. That we are nothing, we are just exercising certain position, often temporarily and conquered in a dishonest way, patronized or even undeserved. And that no one gets different results doing the same things and the same way (Roth, 2014b).

To Seixas (2013), “in Brazil, everything becomes fashion. Even street demonstration”...

Although she considers being a cliché this story to go to Europe and back talking about a “civilization shower”, the writer defines the Brazilians in general as being frivolous and superficial; and Brazil as a country that “seems to have passed, in mass, from functional illiteracy to the Facebook – nonstop”.

Generalize concepts or opinions about any country (even though our) or continent, that we do not know properly, it's always a big risk. Much more based on a trip of less than 30 days only in Germany – and after referencing to “Europe”, ignoring the immense cultural diversity of the continent.

The Brazilian universities, for example, with all its difficulties – including budgetary – has “generically” a much less conservative stance regarding the correct use of technologies in support of teaching than the vast majority of European universities.

Universities generally are cake recipes and after implementation of the EHEA the European cakes all look the same (independent of the factory), though some are fully or partially paid and other totally free of charge.

We need to stop thinking that keeping a false presence on the internet and providing some outdated LMS – for the deposit of files – means some innovation. It is not, on the contrary, it is a disservice to education and customers will be the first to notice that this is a misuse of technology these days.

Absolutely nothing replaces the video and video conferencing, whether in high quality facilities (and high cost) as well as through software-based clients.

Video conferencing (synchronous) can be recorded and made available asynchronously, as the videos. Properly used, with the support of an actual LMS and a contemporary rereading of the Socratic method; weighted use of social networks and the PBL may permit the construction of a truly immersive experience, face-to-face or at distance, where the education (end) is ahead of the technology (means).

With the universities' routine, the pretentiously modern professors and the various LMS – traditional, little or barely use, not updated, limited, without adjustments or even evolution, such as Moodle – no longer attract so much attention and became part of the scenery – like some writers...

Dockstader (1999) stated that, “Technology integration is having the curriculum drive technology usage, not having technology drive the curriculum”. Generally speaking, the curriculum drives the use of technology and not vice versa (Edutopia, 2005; Edutopia, 2007; Technology integration, 2005).

At the Ca' Foscari University of Venice (UNIVE) the only reference found related to a technology integration model, refers to the TPACK in an introductory essay by Banzato and Baschiera (2012, p. 24) – through a quote from Holton (2012): “But faculty can be aided by some training or assistance in course design, technology, and teaching and learning to develop technological, pedagogical content knowledge (TPACK). Teaching should be treated as a design science, more like engineering than just an art or craft that we all think we can intuitively do well”. That is, no text of own authorship of some professor or researcher was located on the context. The references found are limited to the behavioral models and are treated theoretically. This does not mean that this institution does not perform any “technology integration”, although nothing has been perceived in this sense. But for sure, this university does not practice and does not even theorize any of the best know models (TPACK, SAMR, TIM and LoTi).

This process is urgent and can no longer be ignored. By the end of the 20th century such arguments were still admitted that the use or even integration of technologies “that came to stay”, should be something slow and gradual, taking into account the wishes of the *status quo*. However, even the “big” dinosaurs had their heyday and subsequent extermination, naturally (catastrophic) or even induced by pseudo-gods (Ancient Aliens, 2008) that here decided to conduct experiments “that came to stay”, created in his image and likeness...

The few references related to the Socratic method are found in the book “Capire e dissentire, Cicerone e la filosofia di Epicuro” (Maso, 2008), in the course “Problemi Particolari di Didattica delle Scienze Sociali” (Gozzo, 2009), in the degree theses “Marco Aurelio: filosofia e potere” (Dei Rossi, 2012) and “Sviluppo, valutazione ed analisi delle competenze trasversali nell'high education” (Pisanello, 2013) and in the doctoral thesis “Platone e la scrittura di dialoghi socratici: strategie, interlocutori e finalità” (Candiotta, 2011). Just another one of the gaps of a traditional university with a misleading discourse of modernity and technological security (current policy requires changing passwords every 180 days), but that hosts its institutional emails on Google (Roth, 2015a).

Far from being unanimous, the Socratic method has always been a fit topic for polemics and various speculations, being worshiped by some and hated by others. Throughout history this approach went through several steps, since a questionable usage (for its supposed creator), followed by a misinterpretation (of his detractors) to what we can consider as their redemption and consequent adoption, in the days of today.

This is not a new discovery, only a rediscovery.

Many times the secret is in the simplicity. In the movie *The Martian* (Kinberg & Scott, 2015), “there are moments in which the protagonist seems to be Brazilian, as he is always taken by that spirit of never give up and lives finding a way for everything” (Zarour, 2015). Should not be this the common place? The spirit which guides us and keeps us active in the market?

“The reversal of discourse on the one hand challenges some created truths, facts, common sense and ideologies, and on the other offers alternative truths and facts” (Siddiqui, 2008).

We do not need to expose to ridicule any person, much less our students. But the practice would not all bad if applied to many who consider themselves teachers, subcelebrities who insist on ascending to the throne or even refuse to come down from the pedestal, without any right or even personal merit – “conquered” and not acquired through financial resources or third-party indications. Help them put on the sandals of humility and to accept that, with very few exceptions, we are not special and we do not know anything with certainty.

Merit should not be something that you can buy through articles for paid publications, small print runs of books (the unethical side of the “Portuguese knack”) – through a growing number of vanity publishers that will publish books for a fee (Altbach, 2014) – or even by participation in events industry very little or no “scientific”.

As that living a waking dream, in a Matrix outside of reality, we delude ourselves and we imagine that we know. We think, we feel and even believe we know, but we do not know – It is a dangerous trap thinking that way. In this sense, Socrates was the truly wise, because he had the full notion of their “learned ignorance” (*docta ignorantia*). Back to the Socratic paradox: “*ipse se nihil scire id unum sciat*”, that is, “I know that I know nothing” or “I know one thing: that I know nothing”...

## Future Studies

“I’m not your brother – you’re not my sister.  
And do not tell me. Who, and for what, is guilty on our land.”  
(People are like ships, Skryabin)

A lot has been written and discussed about funding models for the area of higher education in last years. Freitas (2005) compares the situation in Denmark, Finland, Sweden, Germany, Austria, Belgium, Spain, France, Greece, Ireland, Scotland, Luxembourg and Portugal. Strehl (2007) focuses on the funding systems in Austria, Czech Republic, Denmark, Germany, Ireland, Latvia, Norway, Portugal and Slovak Republic. Gladkikh (2009) compares OECD countries with a special emphasis on investment models developed and exercised in the USA, UK and Australia. And Cerdeira (2009) seeks to set a cost limit, from which the accessibility to higher education would be waged.

There is a neoliberal movement to the implementation of policies based on cost-sharing, through the introduction of tuition fees or even an increase of this amount when it is already levied by the institutions; loan programs and/or change of social support scholarships for loans; and encouraging development of private education. This trend is verified through triangulation: tuition fees, loans and social support; and from combination of these three instruments, derive funding policies in higher education, with greater or lesser participation of governments and taxpayers; students and families; patrons and philanthropists; and by adopting policies more or less liberal, socialist or social democrats. These studies are generally focused on describing and comparing the existing situation. But it is time to move on, get any information from other areas, innovate and experiment with new ways that flee from traditional propositions, which often are based only on public resources and/or in the tuition fees.

What is done in Europe, related to the revolutionary, democratic and constitutional standard of the universal, compulsory and free of charge education at all levels?

Europe has still not found a commonplace between discourse and practices – do not agree or disagree is part of human nature, and each country still has its own standards. In some countries, public education is free at all levels and there are no fees to pay. And that is reality since the early grades until a doctorate.

It is not because a given system is in use by some country that it can be considered as the best, ideal or even that meets the needs of its citizens.

The issue is fundamentally related to the use of public resources or the needs considered most urgent, a priority issue that varies from state to state as well as the economic situation of a country or region in a given economic cycle or historical period.

No matter where we are, the question seems to be the same. Who will pay the bill? In times of content socialization, use of open educational resources and massive open online courses, how the institutions are found new sources to funding and fundraising? If the answer is always difficult for traditional institutions that have become accustomed to sell knowledge, as would be answered by those who already works next to the new paradigm?

Probably Google and Khan Academy have several suggestions.

Budgetary difficulties currently can be regarded as current topic in almost all universities, whether public or private, and any project to be presented that does not provide or suggest alternatives of economic viability will be subject to the impossibility of its execution regardless of its content. Offer distance courses in e-learning scheme or even share content through the OpenCourseWare (OCW) and Massive Open Online Course (MOOC) is no longer enough to become a reference or even excel in a European Higher Education Area (EHEA), which pasteurized offers, stimulated the mobility and where a same course paid coexists with an identical free, without tuition and fees cost. The natural evolution would be the availability of higher-level courses, with certification, totally free of charge and no limit of users. Free and Open Source College Course (FOSCC) or Free/Libre/Open Source College Course (FLOSCC) is an online university course with certification that is at the same time an open course, free of charge, open source and freely accessible by the general public through the web – from anywhere, anytime, using any suitable device.

The day will come when all member states will question the needs to invest (or not) in free education for all levels (as is already happening in some European countries). If it is possible offer new sustainability options, talk about the lost generations will be mere rhetoric because the framework of evasions found in the universities can be reversed and we will not enter into a new spiral of low qualification. The coming years will bring answers.

Create equal opportunities also means ensuring that all have the same possibilities for access, regardless of the economic resources of their families and reality practiced in a particular country, because the European diversity includes the higher education completely free for some and fully paid for others.

## Captain's Log

“If you can't fly then run, if you can't run then walk,  
if you can't walk then crawl, but whatever you do you have to keep moving forward.”  
(Martin Luther King, Jr.)

Logbook is a tool used to record the most important events, a kind of summary. This is the intended use of this space, without the pretense of wanting to report everything that happened over the period.

24/07/2013 - Call CSF 2/Science Without Borders (CAPES/CNPq)  
04/09/2013 - CURTIN (acceptance letter)  
05/09/2013 - CAPES (application CSF 2: CURTIN, Perth, AU)  
10/09/2013 - UNIVE (acceptance letter)  
10/09/2013 - CAPES (application CSF 2: UNIVE, Venice, IT)  
12/09/2013 - CBS (acceptance letter)  
12/09/2013 - CAPES (application CSF 2: CBS, Copenhagen, DK)  
19/09/2013 - SFU (acceptance letter)  
19/09/2013 - CAPES (application CSF 2: SFU, Krasnoyarsk, RU)  
26/09/2013 - CAPES (process BEX 11542/13-6)  
30/09/2013 - CAPES (appeal - contemplated areas CSF 2: Information Technology)  
30/09/2013 - MEC (protocol 13809593)  
21/11/2013 - MEC (protocol 14398536)  
21/11/2013 - CAPES (protocol 14399137)  
21/11/2013 - MEC (protocol 14398536)  
12/12/2013 - MEC (protocol 14608996)  
13/12/2013 - CAPES (ad hoc consultancy)  
29/12/2013 - @KeepFightingMichael  
07/01/2014 - CNPq (application PDE 248860/2013-5)  
07/01/2014 - CAPES (grant awarded notice: CURTIN de 02/2014 a 03/2015)  
09/01/2014 - CAPES (request for consideration: UNIVE)  
13/01/2014 - CAPES (ad hoc consultancy)  
19/02/2014 - CAPES (grant awarded notice: UNIVE de 02/2014 a 03/2015)  
20/02/2014 - CAPES (grant awarded: UNIVE)  
20/02/2014 - CAPES (confirm interest: BEX 11542/13-6)  
22/02/2014 - CAPES (change request of the grant period from 03/2014 to 04/2015)  
24/02/2014 - CAPES (sending of the grant letter: JG997937772BR)  
24/02/2014 - CAPES (location additional request)  
05/03/2014 - CAPES (sending of the commitment term: via e-mail)  
14/03/2014 - DLH (GRU/FRA/VCE)  
15/03/2014 - VCE (Venice arrival)  
15/03/2014 - WIND (cell phone & internet)  
15/03/2014 - HBA (hotel)  
15/03/2014 - UNIVE/URI (Ufficio Relazioni Internazionali)  
16/03/2014 - AE (codice fiscale)  
16/03/2014 - PRIMACASA  
17/03/2014 - CAPES/SICREDI (Pymt #1: 03-04-05/2014)  
18/03/2014 - UNIVE/URI  
19/03/2014 - CAPES (sending of the commitment term: JG407086846BR)  
19/03/2014 - BSM/ESU (03/2014)  
19/03/2014 - ACTV/VENEZIA UNICA (city pass)  
19/03/2014 - ESU/JUNGHANS  
20/03/2014 - UNIVE/DAIS (Via Torino)

21/03/2014 - UNIVE/ARU (Decreto Del Rettore 248 - Visiting Researcher)  
 21/03/2014 - UNIVE/DAIS (Via Torino)  
 22/03/2014 - UNIVE/ASIT (eduroam, VeniceConnected)  
 24/03/2014 - UNIVE/ASIT (e-mail @unive.it on)  
 26/03/2014 - UNIVE/CLA/DAIS (Moodle)  
 26/03/2014 - CAPES (term of commitment: JG407086846BR)  
 28/03/2014 - #54  
 28/03/2014 - ESU (tessera 20/00740117)  
 28/03/2014 - UNIVE (tessera biblioteca)  
 01/04/2014 - BSM/ESU (04/2014)  
 01/04/2014 - UNIVE/CFZ (Cultural Flow Zone)  
 01/04/2014 - UNIVE/BAUM (Biblioteca Area Umanistica)  
 01/04/2014 - UNIVE/CISRE  
 02/04/2014 - UNIVE/CFZ  
 03/04/2014 - ESU (dichiarazione di ospitalità)  
 03/04/2014 - DAIS Workshop 2014 (Secondo Workshop di Dipartimento)  
 04/04/2014 - BSM/CLA  
 07/04/2014 - UNIVE/CLA (Italiano A1 - Matricola: 28619)  
 11/04/2014 - GENERALI ITALIA/Ina Assitalia (11/04/2014 - 11/04/2015)  
 16/04/2014 - UNIVE/CISRE  
 16/04/2014 - ODZ (Renzo Bergamo - EstEtica del Caos. Ordine e Immaginazione)  
 21/04/2014 - UNIVE/CSAR (Viktor Popkov - Sogno e Realtà)  
 09/05/2014 - CAPES/BBA (Pymt #2: 06-07-08/2014)  
 12/05/2014 - iED (Immersive Education Initiative)  
 17/05/2014 - LIDO  
 23/05/2014 - BBA (FedEx 605075017561)  
 24/05/2014 - UNIVE/CFZ  
 25/05/2014 - UNIVE/ARCA (Archivio Ricerca Ca' Foscari)  
 03/06/2014 - UNIVE (Rettore 2014/20 - Prof. Michele Bugliesi)  
 03/06/2014 - Technology Integration at a Crossroads (BR v.10)  
 06/06/2014 - IMMERSION 2014  
 12/06/2014 - FIFA World Cup 2014 (Brazil)  
 16/06/2014 - @KeepFightingMichael (out of coma)  
 17/06/2014 - Technology Integration at a Crossroads (EN v.14)  
 17/06/2014 - UNIVE/Sartoretto, Margiotta, Bugliesi  
 21/06/2014 - UNIVE/CLA A1  
 27/06/2014 - Ukraine - European Union Association Agreement (AA)  
 27/06/2014 - UNIVE/Sartoretto, Margiotta, Laura Cappellesso  
 30/06/2014 - Tchou Orkut  
 01/07/2014 - @ForçaNeymar, @ForcaNeymar, @FuerzaNeymar (Brazil x Colombia)  
 08/07/2014 - UNIVE/Laura Cappellesso, Sartoretto, Margiotta  
 11/07/2014 - CAPES/BBA (Pymt #3: 09-10/2014)  
 04/08/2014 - Technology Integration at a Crossroads (IT v.19)  
 09/08/2014 - UNIVE/Via Torino (off till 17/08/2014)  
 18/08/2014 - UNIVE/Via Torino (13:30 till 22/08/2014 - saturday off till 30/08/2014)  
 20/08/2014 - The Impacts on the Educational Landscape (BR v.1)  
 25/08/2014 - UNIVE/Sartoretto  
 26/08/2014 - Biennale di Venezia (till 05/09/2014)  
 27/08/2014 - Mostra Internazionale d'Arte Cinematografica (71<sup>a</sup> edizione/06/09/2014)  
 01/09/2014 - UNIVE/2014-2015  
 07/09/2014 - Independence Day BR  
 21/09/2014 - F&I (Formazione & Insegnamento)  
 22/09/2014 - UNIVE/CLA  
 23/09/2014 - UNIVE/ARU  
 30/09/2014 - Orkut off, <https://www.orkut.com/> → <http://orkut.google.com/>



01/10/2014 - Windows 10 Technical Preview  
 01/10/2014 - TOJDEL (Volume 2 - Issue 4 - October 2014)  
 05/10/2014 - Elections BR 2014 (1st round)  
 05/10/2014 - @KeepFightingJules  
 13/10/2014 - UNIVE/F&I (Rita Minello)  
 17/10/2014 - CAPES/BBA (Pymt #4: 11-12/2014 & 01/2015)  
 22/10/2014 - CAPES/UNIVE (Sartoretto, Margiotta)  
 26/10/2014 - Elections BR 2014 (2nd round)  
 30/10/2014 - U-GOV/Catalogo di Ateneo  
 12/11/2014 - U-GOV/CINECA  
 12/11/2014 - MIUR (3501469)  
 19/11/2014 - UNIVE/Via Torino  
 28/11/2014 - UNIVE/Via Torino  
 04/12/2014 - Acqua alta a Venezia  
 04/12/2014 - UNIVE/Career Day a Ca' Foscari  
 16/12/2014 - WEBB (Whole Europe Beyond Borders)  
 24/12/2014 - UNIVE (off 24/12/2014 - 06/01/2015)  
 24/12/2014 - Lizard Squad/@LizardMafia (Xbox Live)  
 25/12/2014 - Lizard Squad/@LizardMafia (PlayStation Network)  
 25/12/2014 - The Interview (Sony)  
 27/12/2014 - Anonymous/@YourAnonNews (Tor)  
 07/01/2015 - @JeSuisCharlie  
 16/01/2015 - CAPES/BBA (Pymt #5: 02-03-04/2015)  
 23/01/2015 - CAPES (grant renewal notice: UNIVE de 05/2015 a 02/2016)  
 25/01/2015 - UNIVE/Marcomini, Bugliesi  
 26/01/2015 - UNIVE/Assemblea di Ateneo  
 02/02/2015 - IDL (Internet Defense League)  
 06/02/2015 - CAPES/BBA (health insurance 2)  
 20/02/2015 - UNIVE/ASIT (renewal email @unive.it) (21/03/2015)  
 20/02/2015 - GENERALI ITALIA/Ina Assitalia (11/04/2015 - 11/04/2016)  
 21/02/2015 - CAPES/BBA (docs: health insurance 2, renewal email @unive.it)  
 23/02/2015 - CAPES (location additional request)  
 27/02/2015 - @TheRealNimoy – Spock off (Live long and prosper)  
 27/02/2015 - @BorisNemtsov – off  
 01/03/2015 - CAPES (12 months: BEX 11542/13-6)  
 02/03/2015 - CAPES (renewal deadline: BEX 11542/13-6)  
 26/03/2015 - UNIVE/Open Day 2015 (26, 27, 28)  
 28/03/2015 - #55  
 31/03/2015 - IJLTER (Volume 10 - Issue 3 - March 2015)  
 31/03/2015 - U-GOV/Catalogo di Ateneo  
 01/04/2015 - U-GOV/CINECA  
 01/04/2015 - MIUR (3650941)  
 09/04/2015 - Microsoft Office 365/OneDrive for Business 1TB (UNIVE, 26/03/2015)  
 10/04/2015 - CAPES/BBA (Pymt #6: 05-06-07/2015)  
 01/05/2015 - CAPES (14 months: BEX 11542/13-6)  
 11/06/2015 - CAPES (renewal) - UNIVE/DAIS (Via Torino)  
 15/06/2015 - MyCsf (<http://mycsf.com.br/>)  
 09/07/2015 - CAPES/BBA (Pymt #7: 08-09-10/2015)  
 16/07/2015 - TPACK.ORG (Technological Pedagogical Content Knowledge)  
 17/07/2014 - #JB17 off  
 29/07/2015 - Windows 10 (consumer release)  
 18/08/2015 - IJLTER (Volume 12 - Issue 3 - July 2015)  
 24/08/2015 - Facebook (hits one billion daily active users)  
 02/09/2015 - Mostra Internazionale d'Arte Cinematografica (72<sup>a</sup> edizione/12/09/2015)  
 07/09/2015 - Independence Day BR

11/09/2015 - International Welcome Day @Ca' Foscari  
13/09/2015 - ARCA (Archivio Ricerca Ca' Foscari)  
01/04/2015 - MIUR (3650941)  
06/10/2015 - IJLTER (Volume 13 - Issue 2 - September 2015)  
09/10/2015 - UNIVE/CFZ (Writers in Conversation: Concita De Gregorio)  
20/10/2015 - CAPES/BBA (Pymt #8: 11-12-01/2016)  
16/11/2015 - UNIVE/HRS4R (Human Resources Strategy for Researchers 2015)  
04/12/2015 - #DontCrackUnderPressure  
09/02/2016 - Safer Internet Day 2016  
16/02/2016 - The Socratic Method Reloaded (BR v.14)  
17/02/2016 - Inaugurato l'anno accademico 2015/16  
19/02/2016 - Umberto Eco off  
22/02/2016 - Mobile World Congress 2016  
26/02/2016 - CAPES/BBA (Pymt #9: 02/2016)  
28/02/2016 - The Socratic Method Reloaded (BR v.17)  
01/03/2016 - The End of the Road – Last Month  
04/03/2016 - Windows 10 build 14279 – Cortana PT-BR  
07/03/2016 - Open Education Week 2016  
07/03/2016 - UNIVE/ASIT (renewal email @unive.it)  
09/03/2016 - #FreeSavchenko  
17/02/2016 - UNIVE/Sartoretto  
20/03/2016 - UNIVE/ASIT (e-mail @unive.it off)  
28/03/2016 - #56  
01/04/2016 - Arrivederci!  
01/04/2016 - DLH (VCE/FRA/GRU)  
02/04/2016 - GRU (São Paulo arrival)  
05/04/2016 - The Socratic Method Reloaded (EN v.20)  
10/04/2016 - CAPES (The Socratic Method Reloaded, BR/EN)  
01/05/2016 - Final Report (before publication of the last paper)  
02/06/2016 - IJLTER (Volume 15 - Issue 6 - May 2016)  
02/06/2016 - CAPES (The Socratic Method Reloaded, BR/EN v.26)  
02/06/2016 - Final Report (after publication of the last paper)  
02/06/2016 - Game over...

## Afterword

“Where are you right now? Somewhere you don’t belong?  
Wondering who have I become? Living a life you never thought you’d have to?  
Doing things... ..you never thought you would be capable of?  
No matter how hard you fought, you’d have to live with it.  
You’d adapt, transform, evolve. Metamorphosis.  
And sometimes you have to accept not every caterpillar becomes a butterfly.”  
(12 Monkeys, S02E02)

Are you going to do university mobility? Travel unarmed, without bias or prejudice. Generalize concepts or opinions about a particular country– due to a bad personal experience or third-party – is, of course, a bad practice.

However, among the urban legends and the daily practices observed in Italy...

Unfortunately, CAPES will do everything possible to reduce their benefits, denying access to additional terms and conditions, absurd early deadlines, discounts on payments, initial payment in Brazil, the use of BB Americas prepaid card (made for the US market), charges for withdrawals in Europe or even to electronic transfers made from USA to these countries. You will never receive the net value of expected benefits. For those going to Europe, deposits are made in Euros, via BB Americas, for all payments.

In Italy, the best option of cash withdrawals are the terminals (ATM) that operate under the flag Bancomat. This includes, among others, the banks belonging to Gruppo Popolare (Banco San Marco, Banco Popolare, etc.), Gruppo Unicredit and Gruppo Intesa Sanpaolo. On these terminals it is possible to withdraw 500 Euros per day, with a fee of 1.60 Euro per withdrawal. Other terminals limit withdrawals to 300 Euros per day and/or charge additional fees.

In Spain only Bankia terminals allow withdraw 500 Euros per day, for a fee of 1,60 Euro per withdrawal. Other terminals (Banco Santander) limit withdrawals to 300 Euros per day and/or charge additional fees.

In the United Kingdom, Moneycorp terminals allow withdraw in Euros or Pounds Sterling (if there are US Dollars in the specific wallet, by deposit held in that currency or transfers between internal wallets, all with fees). Can be exploited the two limits (Euros and Dollars). On these terminals it is possible to withdraw 500 Euros per day, with a fee of 1.60 Euro per withdrawal. Withdrawals in Pounds Sterling pay 2,00 US Dollars per withdrawal.

Portugal has one of the best ATM terminal systems in the world (if not the best). The entire network is integrated into the Multibanco flag. Regardless of your bank (national or international) all have the same treatment (in all terminals) and will be subject to the same fees. There is a limit of 300 EUR per withdrawal. But are allowed two withdrawals per day. In

the case (BB Americas card) is allowed a withdrawal of 300 euros and another of 200 euros with a fee of 1,60 Euro per withdrawal. Banks such as Santander Totta, allow only two withdrawals of 200 euros every day.

Outside the euro zone (with dollars in the specified wallet) it would be theoretically possible to withdraw money in any country in the world. That's not true. In many countries outside the EU is impossible to use this card. Probably the solution is creating specific wallets for these currencies – option not available for this card.

The best option (from 20/04/2015) is the electronic transfer of BB Americas for a European bank. Until to date, this service is only available for Portugal, Spain, France, Germany, Greece, Ireland, Italy, Netherlands and the United Kingdom. Best would be if the CAPES used the BB Europe for those who are on this continent...

The relationship of Italians with money (between fame and reality) is not very good. The ghost of the Mafia remains present and no one (not even public or private banks) will exchange small bills (released by ATMs) by bigger bills (like 500 Euros, for example). The only way is the Central Bank of Italy (Banca d'Italia). And even exchanging Euros per Euro, many documents and explanations will be necessary – it does not happen in other European countries.

In Italy, the budgets are charged, there are many fake exchange houses (acting as if they were conducting a sale of goods), the refund of a security deposit (or caution money) is almost a police matter and the purchase of any products is usually without the possibility of return. All this gives a bit of nostalgia from Brazil and our consumer protection code.

Venice holds many traps for the unwary. Where to eat, where to stay and how to use a very expensive water transport – every day. Theoretically it should be possible to request to CAPES the additional of locale (Europe 400 Euros): “For the high-cost cities, listed in specific Normative Resolution of CAPES and CNPq, will be granted additional value to the monthly fee according to the table below”.

<http://www.cienciasemfronteiras.gov.br/web/csf/valores-de-auxilios-e-bolsas>

Don't count on it. CAPES ignores the costs of life or even requests, using bureaucratic arguments for denial. For Italy, the CAPES and CNPq sites list only the cities of Milan, Rome and Florence.

[http://portal.mec.gov.br/index.php?option=com\\_docman&task=doc\\_download&gid=12127&Itemid=](http://portal.mec.gov.br/index.php?option=com_docman&task=doc_download&gid=12127&Itemid=)  
[http://www.cnpq.br/web/guest/view/-/journal\\_content/56\\_INSTANCE\\_0oED/10157/1297921](http://www.cnpq.br/web/guest/view/-/journal_content/56_INSTANCE_0oED/10157/1297921)

This information is not updated, is not correct, nor justified. Milan, Rome and Florence has living costs demonstrably lower than those seen in Venice which is one of the most expensive cities of Italy (and Europe) to live, due to the complicated logistics and be a popular tourist destination.

I can't imagine that those who choose Venice as a target is thinking of getting this additional benefit, but anyone who encounter the costs of life practiced faces a negative discrimination both by CAPES and CNPq, without any logical and/or scientific argument (something that goes against the very nature of the institutions).

The way it was established there is the explicit privilege of few (emphasis on the United States – that has a cost of living lower than Europe, Canada and in cities in France), and the prejudice of others (Venice, for example).

The outdated document RN-036/2013 of CNPq brings the following note at the end: “The listed cities were selected, according to the established agreements with the different partners, reports from the embassies and survey in the major international rankings”.

[http://www.cnpq.br/web/guest/view/-/journal\\_content/56\\_INSTANCE\\_0oED/10157/1297921](http://www.cnpq.br/web/guest/view/-/journal_content/56_INSTANCE_0oED/10157/1297921)

Agreements (setting the cost of living)? Reports (without quote and/or specify sources)? Survey (on which the rankings and on what date)?

This procedure is extremely subjective and without any scientific slant, that is not in keeping with the role assigned to both the CNPq and CAPES.

1) NUMBEO compares the cost of living in the most expensive cities in the world.

(Europe: Cost of Living Index 2015),

[http://www.numbeo.com/cost-of-living/region\\_rankings.jsp?title=2015&region=150](http://www.numbeo.com/cost-of-living/region_rankings.jsp?title=2015&region=150)

Veneza/Venice has an index of 93.24. Index above Florença/Florence (84.41), Milão/Milan (83.73) and Roma/Rome (83.75). This is absurd, because it penalizes anyone who is subject to higher maintenance costs and benefit those in the reverse situation.

2) Expatistan (2015) compares the cost of living in two cities.

(Cost of living comparisons all over the world),

<http://www.expatistan.com/cost-of-living>

On this site, Venice is 3% more expensive than Florence (10% more expensive food and housing 11% more expensive). With respect to Milan, Venice is 3% more expensive (23% more expensive food and housing 1% cheaper). With regard to Rome, Venice is 1% cheaper (17% more expensive power and 15% cheaper housing).

The Normative Resolution N° 3 of August 13, 2013 suspended the registration of cities for granting this aid. It is understood that before this date (when the call was open) it was possible to carry out the request, and that for some reason (which does not match the cost of the reality of life in cities not included), was suspended. Remains an argument not

logical, nor scientific, but political. The purpose of this aid was able to withstand a higher cost of living in certain cities in which Venice certainly is included. If the argument for the suspension was the lack of resources of the program (budget constraints), the aid “additional of locality” should “democratically” to be extinct for all. But, while supporting certain cases (cities) and ignore others is proceeding on a negative discrimination for some and positive for others – not consistent with a democratic rule of law, because those who chose cities where there were “agreements” is being directly benefited although these cities may have a cost of living lower than other not listed. Moreover, it is to process a change of rules (norms) for edicts that were previously released. The correct would be to apply changes only to later edicts. There is a need for equality between the situations. If Venice (or any other destination city), arguably has a cost of living higher than several listed cities, it deserves to be contemplated. At the same time if any of the listed cities are experiencing a cost of living lower, the benefit should be revised.

Details such as economic crises and exchange fluctuations can completely change the meaning of what can be considered expensive and what is cheap in all countries. The exchange rate, for example, floating daily, but certain references of CAPES and CNPq - regarding the cost of living - are outdated since 2013...

At Ca' Foscari prevailing the culture of fear. A simple question about the absurdities checked (lack of security of Google e-mails, imposition of receiving direct mail, mandatory password changes, lack of support from the institution with regard to housing, lack of physical space to perform the work or even the aid request for translations and revisions of texts in Italian) triggers the most unexpected reactions, including threats of punishment. Absolutely everything generates noise, reflexes, consequences, exalted and exacerbated placements.

At this point of the championship I would say that it is something very Italian...

Face the status-quo and propose changes is something always difficult. The current situation - comfort zone in which there are many people who do not want things to change because they feel that they would lose something with this - is present in all the structures of power in Italy, including at the university. But now I see Italy in the same way as I see Brazil. We are a talkative society and not makers; we're living and accepting things beyond the limits...

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“You are all the same.  
And the more I know you, the more I like animals.”  
(Boss AC, Laia)

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“I imagine God as the source of all the energy  
 that created and maintains the balance of the universe.  
 I see God in the flower and on the bee that sucks the nectar to produce the honey;  
 and in the bird that devours the bee; and in the man who devours the bird;  
 and in the worm that devours man...  
 I see God in every star in the sky, in my nights in inns,  
 and in the sad eyes of each ox, ruminating in the winter.  
 I just can't see God in the man who devours the man,  
 and so I think that I still have much to learn in those paths of life...”  
 (Benedito Rui Barbosa, Paraíso).