The Evolution of Italian E-Learning between the Two Millenniums (1995-2005)

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ABSTRACT
This essay tries to trace the most important steps of Italian e-learning between 1995 and 2005, a crucial time for the success of the Distance Learning in Italy. From the first degree course entirely in e-learning (by the Politecnico di Milano) some excellence e-learning centers of research and experimentation were born until the institutionalization of the telematic universities, and in these years they laid the basis of the actual e-learning panorama.

Despite the technologic, infrastructural and cultural gap with other European countries and in accordance with the evolution of pedagogical models between 1995 and 2005, e-learning became an increasingly high value option for almost all the University community.

FROM SECOND TO THIRD GENERATION OF DISTANCE LEARNING
The decade 1995-2005 has been crucial in e-learning history in Italy and in the rest of Europe, thanks to the transition from distance learning second generation, the multimedia distance learning, to the third generation, i. e. e-learning: the way to benefit at the maximum level the ICT educational potential and that of broadband internet (Bontempelli, s.d.)

The second distance learning generation came after the first one, that of distance learning by mail adopted since the late '800, before the spread of radio and television and afterwards with the invention of the first personal computers in the years '60, '70 and '80. The primitive form of distance learning by mail evolved in multimedia learning: on paper but also television broadcasts, videotapes, videorecords, the first IT programs on floppy disk and CD-roms.

In Italy, just in the decade between the two centuries with the birth of e-learning the didactical and educational processes started to completely change from the technological and methodological as well as the structural point of view. The third generation of distance learning, namely e-learning, is in fact based not on the transmissive model but on the constructivist paradigm and, thanks to the net, allows to put at the centre of the learning process no longer the trainer but the trainee, seen as an interactive subject able to manage and build competences in a collaborative logic (Rivoltella, 2003)

The digital infrastructure of the net and the information and communication technologies (ICT) play a fundamental role in the e-learning development since they allow also the asynchronous communication and the implementation of new tools such as that of chats, forum and the creation of communities, functional to the learning by doing. The arrival in Italy of the distance learning has been delayed and prevented by the academic tradition of the Bel Paese, in addition to a late technological development. At the beginning it was seen as a backup plan for working students or disable people but later e-learning became an educational reality not discriminated but able to project the University towards the challenges of the new millennium.

NEW ECONOMY, NET AND DIGITAL REVOLUTION
The development of new technology, necessary base for the development of the e-learning, permeated and changed almost any field, starting from pedagogy where the IT revolution opened new teaching scenarios, improving new educational paradigms both in frontal teaching and distance learning.

From the early '90, therefore after almost half century since the first didactical experiments at the radio and on TV, the digital revolution begins to enter in the houses in the same years when we are moving from old to new economy. In 1991 the world wide web was created, a technological basis for distance learning on the net (Fad, Formazione A Distanza), and among the most significant stages we can mention the widespread diffusion of the broadband suitable for video streaming.

Moving from the United States of America and from the most developed countries, technological progresses embraced also the Italian social and economic scenario. ICT budget slowly increased also in Italy, although it remained behind the other European Countries average allocated budget (Iammarino et al., 2001, p. 13) and above all with respect to the U.S.A., leader in e-learning development.

The low speed of ICT development compared to that of other industrialized countries has been largely discussed in those years.
"Digital divide" was imported at the end of last millennium from the U.S.A. to refer to an internet and wideband spread in Northern Italy, in the centre e especially in the South and peripherical areas and among the most disadvantaged classes.

Due to the "digital divide" (Pasquali, 2003) first experimental e-learning projects were implemented in the most economic relevant areas and with advanced technological equipment. Cultural opposition also deepened this gap: in the country the classic teaching model was transmissive and considered the sole teaching way worth being applied in a University; it lasted for centuries till the present time.

A big stimulus towards innovation is the EU Commission initiative *e-Learning – Designing tomorrow's education* dated May 2000 that aimed to "enhance the educational and teaching system evolution as well as the European transition towards a knowledge society" (Santagata & Tavoni, 2001).

NORTH
Without pretending to be exhaustive, we will now review the first pioneering experiments in this new field of teaching methodology in the diverse Universities in order to underline how this phenomenon, which began in the North on the quiet, spread in few years in almost each and every University.

MILANO LEADER IN E-LEARNING
With respect to e-learning technologies in Italy, Manlio Tommaso Gaddi (2005b, p. 47), comments:

"Le nuove TIC sono […] entrate nella didattica universitaria, ma in maniera non uniforme, più per l'interesse e la curiosità del singolo docente che sulla base di un progetto, e lentamente si vanno diffondendo, creando aspettative ma anche paure".

e-learning pilot projects, that at that time was called "teledidattica", were already operating at the end of '900 in diverse Academic Institutions, as well as in the enterprise sector for updating programs. Milan, the Italian economic capital, experimented e-learning at the largest stage collecting many records. The Statale University launched a virtual Campus managed by CTU, Centro di servizio per le Tecnologie e la didattica Universitaria multimediale e a distanza (Fiorentini, 2003, p. 17).

Since 1997 in the faculty of Political Sciences Guido Martinotti held the online course of Urban Sociology. The broadband net was not yet developed, and it was not possible to upload the video of the lessons on the platforms, so they were still distributed to the students on hard copies such videotapes or cd rom. The net, on the other hand, allowed to upload hypertexts with links to other subjects.

The turning point for the e-learning was the year 2000, when the Politecnico di Milano launched the fully e-learning degree course (first level) in IT Engineering Online thanks to the collaboration of Metid founded in 1996 (Metodi e Tecnologie Innovative per la Didattica) and directed by Alberto Colorni (2004; Colorni & Negrini, 2004), and with the technical and multimedia support of Somedia, company of the group *L'Espresso*.

This is where the Politecnico project "Laurea online" (LLP) moved its first steps. Colorni - who oversaw the first Italian tele didactic experiment in 1993, Deputy Rector for e-learning and didactic innovation, President of the Degree Course on IT Engineering online, has been one of the most relevant persons in the e-learning diffusion. Benefiting from the prior Colorni's experience, Politecnico improved the e-learning offer also as an orienteering tool for graduated students and as a support for subjects facing learning difficulties.

It is worth mentioning here the establishment, by Università del Sacro Cuore, of Cepad (Centro di Educazione Permanente e A Distanza; Zoffi, 2006) and Asit (Area Sistemi Informatici e Telematici) by Bocconi.

THE UNIVERSITY OF PADUA CAMPUS

Another big experimentation centre in e-learning has been that of University of Padua (Galliani & Costa, 2005). Many projects and experiments led in 2005 to the establishment of the E-learning centre of the Athenaeum, one of the most active among those operating in Italy. In particular, the Faculty of Educational Sciences has always shown great sensitiveness towards the didactic innovation and since the early '90 the course of IT for teaching was included in all its degree courses.

In 2003 Luciano Galliani, one of the founders of Italian e-learning, has been the scientific coordinator of the E-learning project of the Athenaeum along with other representatives, (Luigino Benetazzo, Coordinator of the Commission for distance learning and Antonella Tonoli project managing Coordinator). The project aimed to

"integrare ambienti reali e ambienti virtuali di apprendimento-studio-ricerca, ridefinendo con la sperimentazione e la condivisione di buone pratiche le categorie dello spazio e del tempo in relazione alla comunicazione didattica". (Gaddi, 2005a, p. 48).

Since in 1997-1998 Galliani had established the training course in "Educational Communication and multimedia learning" with an online learning section. The course was then relaunched in 1999 under the denomination "Multimedia and didactic" and was implemented entirely online (Manfredi-De Waal, 2005, p. 109).

In 2001 the degree course Net Manager was added and then updated in "Manager of networks and contents in digital environments". In 2003 the two degree courses were merged in the new course "Multimedia didactic and managing networks", lastly changed in 2004 in the training course E-learning and integrating learning.

Another training course in distance learning launched by Galliani was that in "Evaluation and quality of schooling and educational institutions", to which were then added Philosophy for Children, 2003-2004 (Santi, 2005), Leadership and Management of learning activities (Di Nubila & Giuffrida, 2005) and Per la formazione del bibliotecario (Librarian training) (1999-2000). This latter represents very well the transition from the second to the third generation of distance learning.

In its first edition (1999-2000), although the interaction would take place through many means such a website, e-mail, forum, texts and other educational materials that were delivered on hard copy by mail.

Nevertheless, tarting from the following year we note a turning point leading towards e-learning. Among the master degrees linked to e-learning we can also mention those in Audio-visual and Multimedia Education (Luciani, 2005), Planning and managing cooperation and education activities in Middle Eastern Europe and in the Balkans (Santonocito, 2005) and Tutoring in Distance Learning (Nadin, 2005).

Another interesting example goes back to the year 2003-2004 when the course in Distance learning Technologies in blended mode took place (Costa & Dal Bon, 2005, p. 133) for the degree course in Social Organization Trainer, a test bench for the e-learning implementation also in other degree courses. We would also like to recall here the experience of Online Stage (Felisatti & Tonegato, 2015) experimented in Early Years and Primary Educational Sciences.

The attention paid to e-learning is such, that a platform initially called Chirone was planned (Manfredi & De Wall, 2005), and was then replaced by Moodle.

The University of Padua was also among the first Universities to experiment many technical solutions, platforms and entirely online modalities and blended courses, part in presence part online, and the use of free platform instead of the branded ones.

THE UNIVERSITY OF VERONA

Among the first Universities that experimented the e-learning at the beginning of 2000 we mention here also Verona and, in particular, the project Elvira (E-Learning a Verona In Rete di Ateneo) which would include a spectrum of experimentations (Bianco, 2005) implemented throughout the decade 1995-2005 and that embrace 4 sectors: 1) distance learning on the web and cooperative learning; 2) cooperative learning on the web combined to traditional learning in presence (blended learning); distance learning by conference calls and traditional classes; 4) distance learning by audio-visual records suitable in streaming (Scollo et al., 2005).

Verona chose to focus on heterogeneous technic and the max accessibility, and on service integration and interoperations for graduated and under-graduated students and for lifelong learning. Among such initiatives we also mention some master degrees for foreign students, for example in Argentina.

THE UNIVERSITY OF FERRARA
In Ferrara the idea of distance learning first appeared in 1995 and was inducted by the researches of Università Roma Tre, managed by Benedetto Vertecchi, and by a project of professional distance reconversion of Prijmo Magri, funded by the Ministry of the Public Education.

The University had already founded in 1998 the centre Carid (Centro di Ateneo per la Ricerca, l'Innovazione Didattica e l'Istruzione a Distanza), directed since 2000 by Paolo Frignani, lab technician and Piaget's documentarist highly experienced in the audio-visual sector and its relationship with pedagogy. Carid is an excellence centre "pioneer in planning and implementing degree courses in distance learning, integrated by full-immersion dedicated sessions in presence" (httt://stum.unife.it).

Among the most successful activities of Carid we hereby mention the implementation of the degree course in Technician in audio-visual communication and multimedia and the master degree in distance learning in non-profit Economy and Development Cooperation (https://lists.peacelink.it/volontariato/2005/02/msg00041.html).

In the theoretical sector Carid focused on many issues: didactical and distance learning issues, the new teacher's role, the diversification among system tutor, content tutor and content expert and evaluation expert, learning objects creation in diverse media, the concept of knowledge organization, managing tools of the information flows on the net, docimological analysis applied to the quality evaluation in the theoretical and evaluative aspects.

THE CONSORTIA: NETTUNO, ICON AND FOR.COM
The consortium Nettuno, launched in 1991, embodies the transition of distance learning from second to third generation. Among the founding shareholders there were the Politecnico of Milan and Turin, University of Napoli "Federico II", and then other Universities joined and also RAI, Confindustria, IRI and Telecom Italia; it delivered courses in videotapes and television channels both terrestrial and satellite channel and internet (Fiorentini, 2003) Another consortium worth being mentioned is Icon (Italian Culture On the Net) that includes many Italian Universities with the scope of enhancing Italian language and culture through e-learning.

Born in 1999, Icon is affiliated to the Ministry of Foreign Affairs and is active in 80 countries from all over the world. The Universities in the consortium are Bologna, Catania, Genova, Milano Statale, Napoli l'Orientale, Padova, Parma, Pisa, Roma Tor Vergata, Roma Tre, Salerno, Torino, Venezia and the two Universities for foreigners in Siena and Perugia.

Icon offers since 2001 the degree course online in Italian Language and culture for foreigners, in addition to masters and professional trainings and language courses.

Since 1990 in Roma La Sapienza and Bournemouth Polytechnic (UK) had established the consortium For.com that delivers degree courses, masters, professional trainings, specializations. We also recall here the project "Icaro 2000" and "Dedalo", meant for trainings delivered on internet on didactical application of multimedia.

OTHER UNIVERSITIES IN THE NORTH
In Turin in the project Comunico we recall a semestral course in Theories and technics of new media for the degree course in Communication Sciences with a "website and computer conferencing for communications among students, teachers and tutors" (Fiorentini, 2003, p. 17).

At the University of Ca' Foscari in Venice the course Pedagogy 2000 for the degree course of Literature, Languages and Philosophy was launched. The web platform allowed the publication of learning materials (among which the hypertext *Storia del metodo*), the calendar, synchronic and asynchronous communication among teachers, students and tutors. On the university platform there were also online courses such ad online Chemistry 2000 and Didachem online 2000 (Fiorentini, 2003).

In Udine, starting from 2002/2003 the Faculty of Foreign Languages and Literatures opened the undergraduate course in Online Public Relations (Bombi, 2009), starting point for other experimentations in mixed didactic.

In 2004 Macerata established the Celfi "Centro per l'E-Learning e la Formazione Integrata" (Bittarelli & Rossi, 2010; Rossi et al., 2005), managed by Pier Giuseppe Rossi, that grounded relationships with the University in Zurich and created the open source Olat and won the prize Unique Quality in ICT and e-learning in 2009.

Before Celfi Macerata had Caim (Centro di Ateneo per l'Informatica e la Multimedialità). In 2007 Ciem was established "Centro di servizio per l'Informatica l'E-learning e la Multimedialità" that merged Celfi and Caim. The Macerata platform slowly passed from a web 1.0 to 2.0 gaining a wider democracy.

Other centres are the Centro Universitario per l'Informatica and Telematica Q.it of Siena, Cesmi (Centro Servizi Multimediali e Informatici) of Università politecnica delle Marche, Citam "Centro Interfacoltà per le *Tecnologie* Didattico-Educative Teleaudiovisive" G. Marconi of University of Bologna.

ROME
In 1999 Tor Vergata, moving from the experience of CoFoDi "Comitato Formazione a Distanza" (1996-1999) established the LaD (La scuola Digitale, The Digital School), and delivered a degree course in Educational and teaching Sciences in a multicultural society in addition to many masters and specialization courses and for the certification of ECDL (Fiorentini, 2003).

From the end of '80 the experimental pedagogy workshop of Roma 3 (Domenici, 2017) experimented the distance learning and this experience evolved throughout the years (Agrusti, 2007). An example is the workshop of Introduction of experimental research started from 2003 (Poce, 2003). In the last years the "Fondazione Università degli Studi Roma TrE-Education" has the scope of managing, developing and enhancing for the University of Roma Tre the technical, administrative services and support services for learning, teaching and professional development, especially in e-learning".

THE SOUTH
In the South, despite the digital divide and the severe infrastructural backwardness and the minor mediatic appeal, e-learning experimentations with diverse exits did take place. The University of Napoli Federico II created one of the most important platforms Mooc: Federica. Also before that Cds (Centro di Ateneo per i Servizi informativi) and SOF-Tel (Centro di Ateneo per l'Orientamento, la Formazione e la Teledidattica con corsi multimediali informatici e linguistici) were operating. The second University of Neaples instead would count on Crisceb (Centro di Ricerca in Scienze Computazionali e Biotecnologiche). In Bari in 1996 the Centro interfacoltà Rete Puglia has been launched, with the scope of implementing the distance learning at the Athenaeum and in the other University in Puglia.

Starting from that period three experimental projects were implemented: Rete Puglia, Proteo and Score (Campanella et al., 2008a and 2008b).

The consortiated project Italis (Istruzione a distanza per l'Apprendimento della Lingua Italiana come lingua Straniera) of the University of Calabria (Calabrò et al., 2004), funded for the years 1997-2000 by the European Commission in the context of the program SOCRATES/LINGUA, led to the experimentation of a support system for learning Italian as a foreign language.

In the consortium many institutions were included such as Cirrmi (Centro di Formazione continua degli insegnanti italiani – Université La Sorbonne Nouvelle, Paris III, France), Tesi S.p.A. (Tecnologie e Servizi per l'Innovazione, Italia), Dipartimento di Linguistica dell'Università della Calabria and Centro Opacon della Calabria.

2003: THE LAW STANCA AND THE TELEMATIC UNIVERSITIES
For e-learning has been crucial the decree of 1//04/2003 that legitimates e-learning in the public athenaea and in the private ones. The so called "legge Stanca" (law Stanca) by the surname of the Ministry for innovation and technologies juridically defines distance learning courses (art.2) and "criteria and requirements for distance learning courses accreditation in the state and non-state Universities and in the institutions qualified to issue academical titles" (art.4).

The decree marks the beginning of the history of the private telematic universities (http://unitelematiche.it/storia-universita-telematiche-italiane) that since 2003 would flourish in the entire Italy. The first was in March 2004 the university Guglielmo Marconi based in Rome.

A couple of months afterwards, in May 2004, the telematic University TELMA was born and then, in 2010, it was renamed Unitelma Sapienza: the majority shareholder in the consortium was Roma La Sapienza.

In October 2004 the University of Gabriele D'Annunzio in Chieti and the Ud'A Foundation (Fondazione Università Gabriele D'Annunzio) and the University of Leonardo da Vinci, also called Unidav. In April 2005 the Uninettuno International Telematic University was institutionalised, generated by the Eu project MedNetU (Mediterranean Network of Universities) coordinated by the consortium Nettuno itself, made up of 34 Italian and Foreign Universities and among the founding members Maria Amata Garito (2012 and 2013).

On the 2nd of December 2005 it is the turn of IUL "Italian University Line" based in Florence. In 2006 there is explosion od new telematic universities: on the 13th of April, the Giustino Fortunato of Benevento, rewarded with the quality certificate in 2010; on the 20th Pegaso, based in Napoli, founded by Danilo Iervolino (2015) owner of the homonymous Institutions for school remedial courses; on the 8th of May the Unitel, nowadays Telematic University of San Raffaele Roma; on the 10th of May the Nicolò Cusano that, getting inspiration from the Anglo-Saxon model, created a big campus by the central headquarters in Rome; on the 2nd of June 2006 the Università Mercatorum based in Rome and wanted by the System of the Italian Commercial Chambers and specialized in the economic sector.

TOWARDS THE MOOC ERA

At the middle of the years '0 of the new millennium e-learning became a well consolidated reality in the Universities as testified among the other evidences by the foundation exactly in 2004 of the no-profit association Italian e-learning society.

In a five-year period since the beginning of the millennium almost every athenaeum would benefit from e-learning equipment, even if there are little cases of real success and the distance learning of new generation is less widespread than in the other EU countries. The trust in e-learning is also meagre with respect to the trust given abroad. As Bianco recalls (2005, p. 61), the situation in 2005 is the following:

"Circa il 72% degli Atenei (in tutto, 79 tra Università e Istituti parificati di Alta Formazione) è impegnato in iniziative di on-line ma di questo solo il 7% circa (5 Atenei) è caratterizzato da un'offerta a regime, mentre il rimanente 65% ha sperimentazioni di nicchia. Il 28% degli Atenei (cioè 22 su 79) non ha mai intrapreso sperimentazioni di on-line.".

Those years represent the sunrise of a new revolution that would change e-learning history. About at the end of the '0 in fact, the interest into open didactic resources OER (Open Educational Resources) would rise.

In 2008 in America Mooc (Massive Open Online Courses) phenomenon appeared, i. e. mass free-of-cost online courses that allow for the first time anyone to benefit from distance learning at academic level. The birth date of Mooc (Pozzi & Conole, 2014; Fontanin & Pantò, 2019) relates to the famous course Connectivism and connective knowledge (CCK08) of the University of Manitoba where two Canadian Professors, George Siemens and Stephen Downes, for the first time made available for free their course. The word Mooc was coined by another Canadian researcher, Prince Edward Island, who named the course CCK08 under this acronym. From the USA the Mooc revolution spread also in Europe and in Italy, where the first Mooc Platforms were created among which Federica of the University of Naples and Eduopen, the first Mooc consortium that counted among its leaders the University of Foggia along with other 8 Italian athenaea (2015; Limone, 2016). Despite some doubts and concerns, this new reality projected e-learning towards a new dimension where learning gains a real global perspective.

In the first years of the new millennium the semantic web began to be developed: it is a milestone also in the e-learning field, since it allows a new personalisation of online learning and a more flexible and interoperating use of web resources and learning objects to enhance e-learning and students' objectives (Ouf et al., 2017).

JASON'S MYTH AND E-LEARNING DESTINY

Nicola Paparella (2005) suggests an effective analogy to describe the behaviour concerning e-learning and its destiny at the end of the '90 and the beginning of the new Millennium: e-learning development and the Dante's character of Jason, explained in an article titled *Il mito di Giasone e il destino dell'e-learning in Italia*.

As the author explains, the character of Dantes' Jason is that better represents the conduct of the Bel Paese with respect to e-learning: "A Dante […] il Giasone del mito piaceva e non per motivi diversi da quelli che ci inducono a pensare proprio a Giasone mentre discutiamo del destino dell'e-learning in Italia" (Paparella, 2015, p. 22). (Dante liked Jason's myth and not for reasons that differ from those that make us think exactly to Jason while we are discussing e-learning destiny in Italy).

Dante puts Jason in the VIII circle, that of pimps and seducers thus, he mentioned him in the XVIII of *Inferno* (vv. 86-87), where the poet recalls the conquest of the golden fleece in the Colchide.

> *Quelli è Iasón che per cuore e per senno*
> *li Colchi del monton privati féne*.

Despite the mythical adventure, Jason is put in the circle of pimps and seducers because he seduced Isifile in Lemnos and then also Medea. His character is regal despite the demons' whips and it is his noble figure that attracts Dante's attention.
In particular, Paparella dwells on this scene and quotes some verses from the *Paradiso* II 16-18:

> *Que' gloriosi che passaro al Colco*
> *non s'ammiraron come voi farete,*
> *quando Iasón vider fatto bifolco*.

Here, talking to the readers, Dante explains the wonder of whom, after an in deep study, will read the *Paradiso* recalling the wonder of the Argonauts when they saw Jason subduing the terrible bulls to plough the field.

The pedagogist quotes also vv. 94-96 of *Paradiso* XXXIII, the latter of the poem, where Dante compares the divine vision to Neptune's wonder when he saw the Argo ship and compares his oblivion of this vision to the 25 centuries passed since Jason's venture.

> *Un punto solo m'è maggior letargo*
> *che venticinque secoli a la 'mpresa,*
> *che fé Nettuno ammirar l'ombra d'Argo*.

In Paparella's opinion, e-learning history in Italy can be compared to these mythical hero's wonder ventures, whom the fate puts to the test and with diverse events: initially it was believed that it was a panacea and a miraculous tool but then deep doubts and refusals to cope with soon followed.

Like Jason succeed in conquering the golden fleece but then faced a bad fate, the first distance learning experiments of first generation in America and the experimentations in Italy of distance learning of second and third generation between the years '60 and '90, three crucial questions arose in the public opinion.

These questions were: are we sure of online courses effectiveness? Don't you think that we are taking something away from the youth, like for example the human interaction? What is the best way of e-learning, synchronic or asynchronous?
These questions and a growing distrust about e-learning slowed its diffusion in Italy. That is why, as Paparella explains, that in the '90 it was decided to adopt the typical model of synchronic communication of remote classes instead of exploring the more revolutionary possibilities of e-learning, getting inspiration from Uninettuno (Garito, 2013).

Therefore, it was chosen a TV didactic without bidirectionality and interactivity, focusing on satellite broadcasting more than on the "lesson digital elaboration", delivering videotapes and fossilizing in distance learning of second generation. Like Jason attacked the harpies that would block the old wiseman from eating and reveal where the golden fleece was, in the same way old theories should have been swept away and resistances so that e-learning could find its own way in a new didactic paradigm useful both to distance and in presence learning.

CONCLUSIONS
In the e-learning history, the decade between the two millennia marked the definitive start of third generation distance learning in some excellence campuses and in almost each Italian athenaeum.

University e-learning has changed from an option dedicated to special categories of students like working or disable students to a new frontier largely to be yet discovered, open not only to the entire students' community.

Many centres born in the traditional universities and with the purpose of experimenting the new methodology and ICT in learning contributed to the didactic innovation.

In the decade 1995-2005 academic centres dedicated to distance learning and then e-learning and promoted didactic renovation flourished.

In 2003 the law Stanca institutionalised e-learning legitimating an alternative that in 2020, due to the coronavirus, became the only possible way.

Despite the resistances, the incertitude regarding the pedagogical models to be implemented and the doubts about e-learning fate, this decade has been crucial for the distance learning and grounded its future development which was enormously enhanced in these months of health emergency.

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