



## A PICTURE OF E-LEARNING IN ITALY

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**Abstract:**

*E-learning draws the attention of several disciplines and brings them together. These disciplines define its educational, social, cultural and technological dimension, in accordance with the transformations it brings to learning as an individual and collective experience. E-learning is not yet widely established in social practices. As a result, while, on the one hand, it is necessary to analyse the different obstacles hindering its spreading, on the other hand, there is an urge to develop some adequate strategies for action that could lead to its effective implementation.*

*With regards to the Italian framework, this study illustrates the main courses of development involving associations, universities, legal trends, and recent scientific and cultural initiatives focusing on e-learning. It also provides some bibliography and webgraphy describing the main fields of interest, reflection and intervention in the present Italian scenario.*

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## 1. E-LEARNING RESEARCH IN ITALY

### 1.1 THE MULTIPLE DIMENSIONS OF E-LEARNING KNOWLEDGE

Established knowledge is always subordinate to technological progress: it is bound to follow – and rarely to anticipate – the social and cultural developments brought about by the introduction of new technologies. In the case of information and communication, the introduction of telecommunication has produced a change at several levels of human experience: it has modified notions of space and time, perceptions, cognitions, lifestyles, social practices, and – consequently – training frameworks. The definition *e-learning* is used for a wide variety of disciplines which, while preserving their own scientific boundaries, unavoidably intertwine and often become one when researching, analysing, and monitoring the different forms, functions, and multidimensional outcomes of Internet-based training processes. Over the last ten years, different fields of knowledge – from cybernetics to neurosciences, and again sociology, anthropology, economics, didactics, semiotics and, naturally, pedagogy – have been involved in the development, the testing, the evaluation, and the conceptualisation of “learning environments” intentionally oriented to the production of forms of learning that could suit the training needs of contemporary individuals.

### 1.2 E-LEARNING STAKEHOLDERS

The critical points that are being tackled are mainly linked to the conditions produced by the changes in the spheres of space and time of the actors involved in the training process.

Firstly, there has been a shift from a *linear* and stage-based notion of development – as theorised by Jean Piaget – to a development theory distributed all along an individual’s life in a *sinusoidal* form (Demetrio, 2001). This has led to the creation of multiple training programmes for all the age groups who should potentially be able learn through the Internet. Hence the need to promote training *in* Internet skills – that is, to encourage the acquisition of basic computer literacy, especially for weaker age groups like children and the elderly – and then launch various training programmes *via* the Internet through the creation of distance learning (e-learning) environments. Consequently, virtual training places too become distributed, diversified, and specialised. Therefore, in order to encourage the organisation, the development, and the management of learning groups through the Internet, it appears vital to guarantee training at least three macro levels:

- trainees’ training: individuals are required to gain the basic skills in order to choose distributed forms of learning with logical – not sequential – connections; where learning does not only entail individual study, but also requires exchange and cooperation;
- trainers’ training: it is about focusing on constructivist-based teaching methods, which involve cooperative and collaborative forms of learning. Consequently, instructors – who are invested with the role of facilitators and guides in the learning process – are required to undertake, in an online environment, roles and tasks that depart from traditional tutoring;
- researchers’ training: different learning frameworks and conditions also entail different methods of analysis, surveying, and final reporting. One of the most established methods of online research on the analysis of Internet-based learning and knowledge processes is Action Research (Calvani, 1995, 1999, 2001), which requires researchers to adopt different approaches to data analysis, comparison, and processing.

### 1.3 LEARNING IN ITALY

According to the maps showing the geographical spreading of e-learning in the world, the top-ranking country in the use of e-learning systems is the United States, followed by the United Kingdom and by northern European countries (Sweden, Norway, and Finland). One of the main reasons for this American lead rests on an epistemological explanation. It is based on the effects of a pedagogical culture that, since the beginning of the Twentieth century, has been influenced by a pragmatic educational thinking (J. Dewey) and by its learner-centred notion of practical education, where technological tools serve as a social mediation of the stand pointing culture. Conversely, Italy is still lagging behind the US and Northern Europe due to a cumbersome pedagogical tradition founded upon idealist and humanist theories (the educational reform promoted by the Italian Education Minister Giovanni Gentile in 1923 is its most prominent example). This approach produced a notion of training that rests on conceptual and abstract contents and on classroom-based teaching, where the teacher has an authoritative role. In the last five years, however, the use of e-learning in companies, universities, and schools has been gaining increased momentum.

### 1.4 E-LEARNING ASSOCIATIONS AND REFERENCE JOURNALS

In the last few years, the e-learning environment in Italy has developed and, most importantly, it has stabilised. Although the bubble of interest that has made it difficult to make objective assessments of e-learning has not deflated yet, some shared qualitative standards in the field of distance learning are now being developed.

Furthermore, some pioneering distance learning experiences such as research centres, associations, and discussion meetings have become institutionalised. Somewhat belatedly compared to other main European countries, these experimentation sites have become reference points for e-learning research and practice nationwide. Therefore, it is now possible to draw a pretty clear picture of the main issues around e-learning in Italy.

Since 2004, the **Italian e-learning Society** has been a reference for Italian research on e-learning. This institution is a not-for-profit association aiming at promoting research and scientific experimentation in the field of e-learning in Italy, especially at a university, post university and school level. It is currently chaired by Prof. Alberto Colorni from the Milan Polytechnic. The members of the Board of Directors are: Giorgio Federici, Paolo Frignani, Jose Mangione, Guido Martinotti, Giorgio Olimpo, Piercesare Rivoltella, Antonio Calvani, and Enrico Pillotti.

The Italian e-learning Society (Sie-l) launched the publication of the **Journal of e-learning and Knowledge Society** (Je-LKS.). This journal is aimed at researchers, professionals, and educators with an interest in the relationship between technology, training, and social innovation. It is currently edited by Prof. Antonio Calvani, from the University of Florence, it is issued every four months and it is published by Edizioni Centro Studi Erickson. The journal is composed of two sections: *Methodologies and Scenarios* and *Applications*. Papers are selected following an anonymous evaluation by two referees, both in Italian and English. There is a printed and an online version. The **online** version (<http://www.Je-LKS.it>) shows a summary of the contributions that will be appear in the printed version, other works or projects in progress, and a limited number of full texts.

Another important specialised journal is **E-learning & Knowledge Management**. This e-learning journal, edited by Alberto Colorni, is composed of three sections: the first section (Legislation) is devoted to national and international regulatory initiatives; the second section (General) contains technical and professional contributions aimed at big industries, the service sector, and the needs of the Public Administration; finally, the third section (Market) is a

showcase of different leading actors (in training, consulting, technological platforms, etc.) divided into two macro sectors: industry and services.

The Italian National Research Council (*CNR*) edits the journal called *Tecnologie didattiche*, which also provides some important contributions in the field of e-learning. This four-monthly publication is aimed at researchers, educators, managers, and courseware producers: basically, at all those with an interest in research and in the application of educational technologies at all levels. This journal also aims at creating a multidisciplinary forum, disseminating the results of related research at a national and international level, and disseminating sector-specific issues, models, and methods. It was first issued in 1993.

Another publication worth mentioning is a newsletter called **Form@re**, produced by the University of Florence. It is a free newsletter launched in May 2001. In 2004, a series called “**Quaderni di Form@re**”, edited by Prof. Calvani and published by Erickson publishers was launched. This series has an educational and popular slant; it reproduces in print the most interesting and important issues dealt with by the Form@re Newsletter.

### 1.5 E-LEARNING RESEARCH ISSUES IN ITALY

This section contains a selection of the most hotly debated issues on e-learning in Italy. The selection was made from the papers presented at the third *SIE-L* conference<sup>1</sup> and from the contributions that have recently appeared in the journal “Form@re” ([www.formare.erickson.it](http://www.formare.erickson.it)). Eight themes have attracted research and academic consideration most recently: the evolution of e-learning models; evaluation, accreditation, quality certification; experiences, simulations, games, teaching laboratories; accessibility; professional roles and profiles; e-learning and Knowledge Management; open source planning and development; economic, legal and organisational aspects.

#### a) The evolution of e-learning models

This theme is concerned with the way curricula are developed starting from the joint assessment of educational needs and technological solutions, in the attempt to adopt appropriate programmes for each specific situation.

In this regard, rapid e-learning has now become a major topic in the e-learning world, where its methods, its impact, its business-related aspects, and its future developments are analysed. For further information on rapid e-learning, see the following works:

[http://www.formare.erickson.it/archivio/ottobre\\_06/9\\_COSTI.html](http://www.formare.erickson.it/archivio/ottobre_06/9_COSTI.html)

[http://www.formare.erickson.it/archivio/ottobre\\_06/10\\_BALLOR.html](http://www.formare.erickson.it/archivio/ottobre_06/10_BALLOR.html).

The Internet is moving towards a *Web 2.0* direction: this is a crucial development, which invites reflection on its possible consequences for the learning process. For more on Web 2.0, see this work: [http://www.formare.erickson.it/archivio/ottobre\\_06/7\\_MANDUCHI.html](http://www.formare.erickson.it/archivio/ottobre_06/7_MANDUCHI.html)

Other research strands focus on learning and on the management of cognitive load, leading to questions about what implications these factors have on the design of e-learning courses<sup>2</sup>.

Another important research interest focuses on the analysis of e-learning models and their developments inside Public Administration, Regional authorities, universities, and government agencies. One of the main questions is: to what degree is there an established relationship between civil servants and new technologies? What synergies and economies are there between public agencies which use e-learning to train their staff?<sup>3</sup>

Finally, there are some attempts to redesign and redefine notions of e-learning, aimed at drawing clearer boundaries and removing any possible terminological ambiguity<sup>4</sup>.

#### b) Evaluation, accreditation, quality, and certification

The demand for quality training courses leads to a careful study in the field of certification. An interesting paper focuses on research into the qualitative and quantitative evaluation of the

messaging of a virtual community of practice as well as on the creation of on-line tools and criteria facilitating forum evaluation<sup>5</sup>.

In this respect, the project evaluation tools based on the Project-Based Learning approach are particularly noteworthy. For an analysis of this approach, please see the following work: [http://www.formare.erickson.it/archivio/ottobre\\_06/11\\_MELARDI.html](http://www.formare.erickson.it/archivio/ottobre_06/11_MELARDI.html)

It is also important to mention the growing interest surrounding skills self-evaluation tools, and the “ePortfolio” in particular. This subject has been attracting increasing attention in the last two years, both in publications and during meetings. In June 2006, a whole day of the annual conference on e-learning organised by the *Centro per l'e-learning e la formazione integrata (CELEFI, E-learning and Integrated Training Centre)* of Macerata was entirely devoted to ePortfolios<sup>6</sup>.

Finally, some research is starting to look into the effectiveness of some innovative teaching practices that appear to be suitable for the development of teaching quality. In this regard, a consideration on visual learning<sup>7</sup> is also made.

#### c) Experiences, simulations, games, teaching laboratories

Other considerations involve some new methodological and practical approaches used to develop activities for e-learning and augmented learning; the learning space becomes a “design place” where training gradually becomes an actual “experience”<sup>8</sup>.

Some other considerations and experimentations on the use of computer simulations and 3D environments have led to a comparison between different modes of learning: a verbal mode and, on the other hand, an experience-based mode, where the learner plays an active role<sup>9</sup>.

Another interesting experiment concerns video notes, which go through personal experiences connected or related to a specific aspect of the video. At this address [http://www.formare.erickson.it/archivio/ottobre\\_06/2\\_ANDREOCCI.html](http://www.formare.erickson.it/archivio/ottobre_06/2_ANDREOCCI.html), on the “Form@re” online journal, there is an article by Bernardino Andreocci, who illustrates the teaching potentials of interactive digital videos in Internet-based learning environments.

#### d) Accessibility

The spreading of distance learning practices relies on the solving of some preliminary problems such as the availability of essential infrastructure and the acquisition of basic computer literacy skills. Moreover, there are also problems regarding accessibility, which bring into play social and cultural aspects that are identified by the term “digital divide”. The main currently emerging issues around access and the use of ITC systems concern differences in culture, gender, age, and sensory and motor abilities (disability). In this regard, please see: 1) a paper about a project dealing with the accessibility and design of a learning object for the hearing impaired: [http://www.formare.erickson.it/archivio/ottobre\\_06/6\\_BIANCHI.html](http://www.formare.erickson.it/archivio/ottobre_06/6_BIANCHI.html); the analysis of the access and use of technologies for educational purposes in a developing country:

[http://www.formare.erickson.it/archivio/ottobre\\_06/14\\_POZZI.html](http://www.formare.erickson.it/archivio/ottobre_06/14_POZZI.html)

#### e) Professional roles and profiles

Research ranges from the study of the relationship and the synergy between some professional figures (“instructional designer”, “content manager”, and “subject matter expert”), working together in order to create quality e-content, to the analysis of tutors’ contribution to the socialisation of knowledge.

Another strand of research is concerned with the professional quality certification of some professional figures in the field of e-learning and it provides a comparative overview of the international picture (see, for example, [www.cepas.it](http://www.cepas.it) for e-tutors)

f) e-learning and Knowledge Management

Trust and social capital can be considered as elements supporting collaborative knowledge construction in a Virtual Learning Community (VLC)<sup>10</sup>.

Research also focuses on the side effects produced by knowledge sharing processes through the use of “social software”, which enables users to tag web documents and resources with meaningful keywords<sup>11</sup>.

Research and actions are aimed at establishing a network of university instructors and trainers with an interest in e-learning. They also define guidelines, create portals, and produce newsletters. In this regard, an interesting experience is the project called “e-learning network for Teacher Training” ([www.eLene-tt.net/tt-center.htm](http://www.eLene-tt.net/tt-center.htm)), funded by the European Commission.

Theories and studies on communities of practice and lifelong learning are also gaining momentum<sup>12</sup>. Within this framework, a specific line of research looks into the ECM programme (Continuous Education in Medicine), which operates in the health sector. Some of the most burning issues that have come up are the comparative analysis of the cost effectiveness of ECM courses versus classroom training and the analysis of managerial skills in handling training in public health agencies<sup>13</sup>.

In addition, some interesting studies focus on the integration between e-learning and knowledge sharing, and in particular on collaborative processes supporting the creation of new knowledge. This field of research analyses communities of practice and social learning systems<sup>14</sup>.

A final mention goes to a project called *Thinking Library*, promoted by the Provincial Authority of Turin and by the Turin International Book Fair. This project intends to serve a social function in terms of disseminating knowledge and creating a dialogue between different cultures, as well as fighting the digital divide and supporting public administration<sup>15</sup>.

g) Open source planning and development

In Italy, as in the rest of Europe, the debate around open source tools, shared software, and free and open content in general attracts considerable attention in the academia and in public administration. The open-source development model is used when several diverse stakeholders bring their contribution within a framework of collaborative working and learning. This method seems to have considerable success in the world of e-learning, which is still, in many respects, at an experimental stage.

In this regard, it is interesting to see, on the one hand, the discussions on the guidelines for the choice of the standards to be put forward and used in the field of Open Source and, on the other, the analysis of the integration of open source systems, which now support SCORM (Shareable Content Object Reference Model), the e-learning de-facto standard<sup>16</sup>.

The work done on content-sharing environments and platforms – which are projects that are still in their infancy – has yielded the concept of “open learning objects”<sup>17</sup>. This research work has also focused on the development of additional modules, the testing of prototypes, and the integration of open source platforms with some internal or external tools in order to achieve integration between formal and informal learning. The following links illustrate some experiences concerning the development of additional modules and integration modules of open source tools: [http://www.formare.erickson.it/archivio/ottobre\\_06/12\\_GENSINI.html](http://www.formare.erickson.it/archivio/ottobre_06/12_GENSINI.html) - [http://www.formare.erickson.it/archivio/ottobre\\_06/5\\_FACCIOLO.html](http://www.formare.erickson.it/archivio/ottobre_06/5_FACCIOLO.html).

Greater attention is being placed on wireless mobile devices, such as tools for the collaborative production, use, and updating of information<sup>18</sup>. For considerations on mobile learning, see [http://www.formare.erickson.it/archivio/ottobre\\_06/8\\_TONIOLO.html](http://www.formare.erickson.it/archivio/ottobre_06/8_TONIOLO.html).

h) Organisational aspects

The debate on the management of e-learning has widened to also cover some important organisational, financial, and legal aspects. For example, the so-called “learning objects” must be protected just like any other product of the intellect. Legal interpretation, however, carries

some specific problems. Another question concerns the way in which the legal discipline could have a bearing on the quality of educational services.

Another important field of research looks into innovations in educational management and organisational models supporting e-learning in bureaucratic systems. For an analysis of the problems concerning the introduction of e-learning in the bureaucratic organisation of Italian universities, see the following work by Laura Barbagallo: [http://www.formare.erickson.it/archivio/ottobre\\_06/4\\_BARBAGALLO.html](http://www.formare.erickson.it/archivio/ottobre_06/4_BARBAGALLO.html).

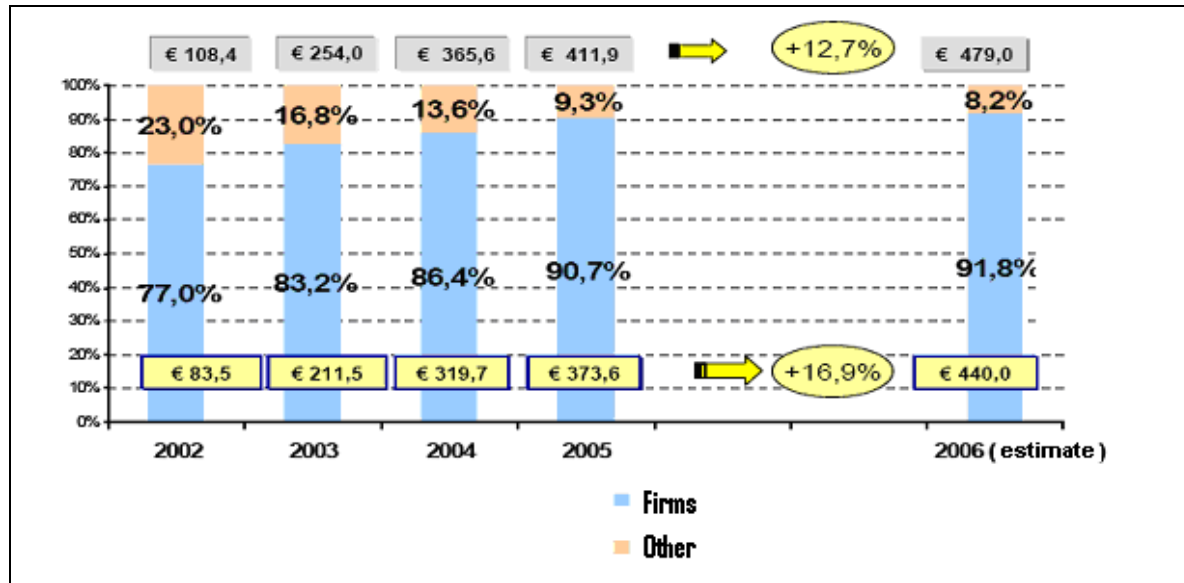
## 2. FIGURES ON THE USE E-LEARNING IN THE ITALIAN ACADEMIA

### 2.1 THE E-LEARNING MARKET

Below are some findings taken from one of the leading surveys on e-learning in Italy: the *Osservatorio ANEE-Assinform*. The 2006 survey on e-learning was conducted by Aitech-Assinform within the framework of a research and survey programme on the emerging sectors of the digital economy; this study was aimed at analysing the trends, the features, and the market perspectives of e-learning (the document is available at [www.anee.it/download06/e-learning2006.zip](http://www.anee.it/download06/e-learning2006.zip)).

For the fifth year in a row, e-learning in Italy has shown a positive trend. Research shows that, in 2006, the total spending on e-learning in Italy has grown by 12.7% compared to 2005 (estimates are based on partial data). As the graph illustrates, companies lead the way; in comparison, the amounts spent by other sectors appear to be increasingly negligible.

#### Evolution of the spending on e-learning in Italy (in millions of euros)



Source: Aitech-Assinform survey on e-learning, 2006

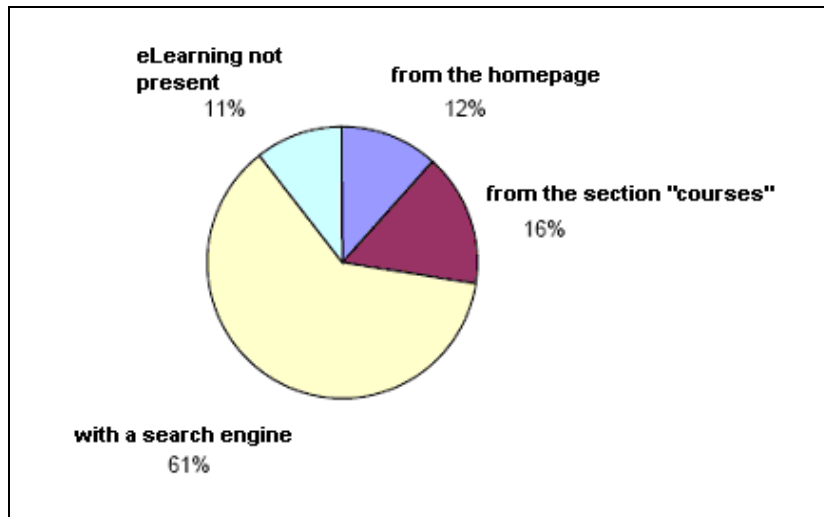
“In 2005 too, firms have been the real engine of growth. Not only did they retain their status as the biggest spenders on e-learning for 2005, but they also further increased their share (from 86.4% in 2004 to 90.7% in 2005). Conversely, other sectors (Public Administration, Universities, Schools, and End-User Clients) showed an overall decrease of 22.9%, dropping from 49.7 million euros in 2004 to 38.3 million euros in 2005” (ibidem).

## 2.2 THE ITALIAN ACADEMIA

With regards to Italian universities, the survey considered, on the one hand, the websites of each of Italy's 77 universities and, on the other hand, the answers provided to a questionnaire submitted by 26 universities, that is 34 % of the total number of universities. The analysis of university websites performed by the 2006 Survey also included the newly-established "online universities", which were a result of the opportunities created by the Moratti-Stanca law decree (see paragraph 4).

"The analysis performed shows that only as few as 9 universities offering e-learning activities in their curricula display a direct link to e-learning courses or even a broad definition of online education in their homepage navigation bar. In these cases, university portals highlight e-learning and display it as an integral part of their overall educational provision."(ibidem)

### Visibility of e-learning in the portals of Italian universities



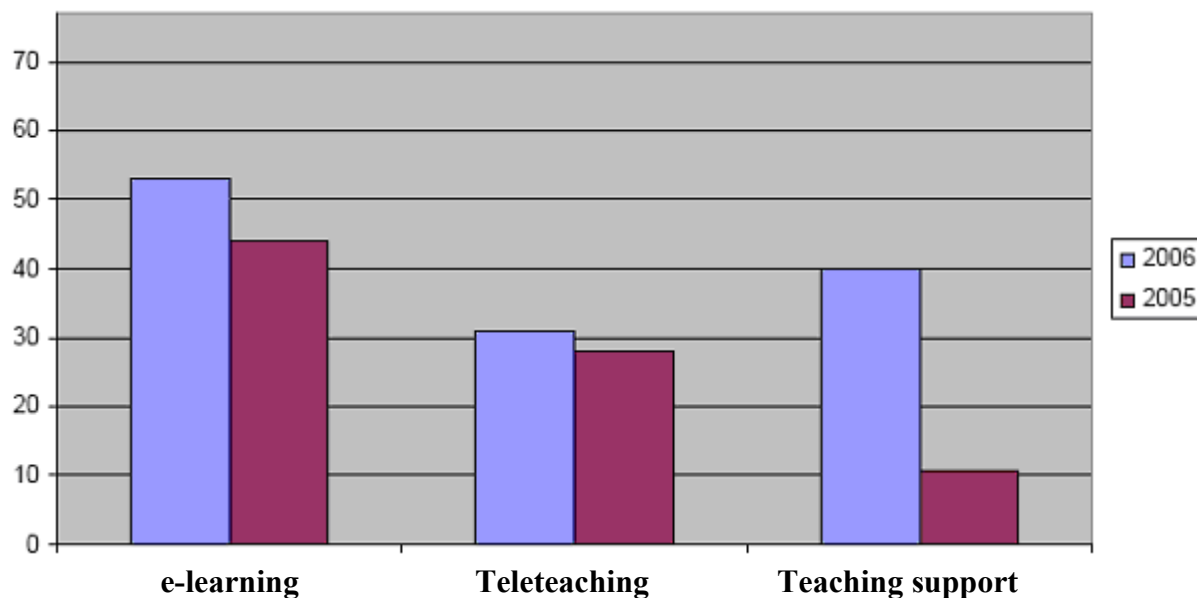
Source: Aitech-Assinform survey on e-learning, 2006

The ANEE-Assinform survey identifies three types of distance education programmes offered in the Italian Academia:

1. e-learning
2. teleteaching
3. web enhanced teaching (where ICT's support traditional teaching).

"We can say that, on the basis of what is stated on the websites considered, about 89% of Italian universities include different types of distance training options in their educational provision. This finding concerns the visibility that universities give to their e-learning courses. In this respect, there is a discrepancy with the results of an online questionnaire administered to people in charge of e-learning in each university. According to what is stated on university websites, of all Italian universities, only 8 institutes do not offer ICT-based training. Online educational provision mainly involves technical, economic, and scientific subjects. Nevertheless, faculties of Humanities are increasing their distance and e-learning provision in their undergraduate and postgraduate courses [...] As for solely e-learning based training courses, 53 universities out of 77 display this activity on their website, accounting for 68.8% of all universities." (ibidem)

### Ways of administering distance learning courses in Italian university portals



Source: Aitech-Assinform survey on e-learning, 2006

The main findings of the questionnaires that, as mentioned above, were filled in in 26 universities out of 77, are the following:

- the number of *Italian universities offering e-learning* has increased: it rose from 73% in 2003 to 83% in 2004; then, it went up to 85% during the last academic year and it reached about 92% in 2006;
- on the basis of the 2006 survey sample, it appears that about 73% of *universities have their own e-learning centre*;
- *the quality of the different types of distance learning courses has improved considerably*: between 2004 and 2005, actual e-learning provision rose from 32% to 57%, suddenly reaching over 50%; there has also been a concurrent increase in the provision of teleteaching (from 13% to 36%) and web-enhanced teaching” (ibidem).

### 3. THE LEGAL FRAMEWORK

After an initial pioneering phase, the so-called “Moratti-Stanca law decree on Online Universities of 17 April 2003,” provided the first normative document for all the individual initiatives that the universities concerned have undertaken in the last few years. This law lays down accreditation standards and procedures for distance courses delivered by State and private universities and by academic institutions entitled to award academic qualifications. It is stated that distance learning academic qualifications may be awarded by state- or privately-run university institutions. One of the factors that the decree recognises as a requisite for “accreditation” is the platform’s compliance with the SCORM standard.

The first “online graduates” in Italy passed their degree in July 2003 at the Milan Polytechnic<sup>1</sup>. This was the result of the experimentation of a degree course in Computer Engineering at the

<sup>1</sup> In actual fact, the first distance learning degrees in Italy were awarded by the *Nettuno* programme, established in 1993 and supported by the Turin Polytechnic, the Milan Polytechnic, and the University *Federico II* of Naples. However, at the beginning, *Nettuno* worked using a traditional teleteaching approach, whose aim was to make up for students’ inability to attend classroom lectures regularly.

Milan Polytechnic where, in the year 2000, the first totally online course in Computer Engineering was introduced, in collaboration with Somedia.

One of the most important novelties introduced by the Moratti-Stanca decree is that not only existing universities but also new state- and privately-run institutions complying with official accreditation standards and procedures laid down by this law can provide recognised academic qualifications. In this regard, the law set up a Ministerial Committee charged with accrediting “online universities”.

However, this law has also showed some shortcomings. In particular, it provides for some technological specifications that seem to create an extremely narrow and one-dimensional platform contemplating only a limited range of e-learning models. The *CRUI*, the Conference of Italian University Rectors, has repeatedly expressed their scepticism towards this law. On the one hand, they have criticised the introduction of new institutions (the already mentioned “online universities”) in the academic system alongside traditional universities. On the other hand, in order to counter the limitations and standardisations contained in the decree law, the *CRUI* proposed a bottom-up development model, based on multiple experiences and involving both instructors and students in open-ended and participatory processes.

This said, the Decree Law of 17 April 2003 adds considerable momentum to the spreading of e-learning and, most importantly, it raised the issue of creating units for the development and management of e-learning, which could also be set up outside academic institutions.

#### **4. IMPORTANT MEETINGS AND EVENTS**

Just like the journals and legal discipline, in the last few years, the agenda of e-learning events has become increasingly busy and articulated. The list below contains some of the major events. Except for the last one (the international meeting to be held in Italy this year), it lists periodic meetings that are generally held every year and that have become the main showcase for the latest e-learning theoretical and application developments aimed at people working in this sector.

##### *TED Genoa*

The main aim of *TED* is to promote wide-ranging reflection on the state of the art of educational training technologies. Website address: <http://www.ted-online.it/>

##### *Annual SieI meeting*

In 2004, *Sie-I.*, the Italian e-learning Society, started holding annual meetings. Website address: <http://www.sie-l.it>

##### *E-learning Expo Ferrara*

This is a showcase aimed at the business and professional training sector as well as at international online academic organisations.

[segreteria@expoe-learning.it](mailto:segreteria@expoe-learning.it)

##### *HANDImatica*

It is held in Bologna every two years and it attracts thousands of people from all over Italy. The 2006 edition was attended by about 5,800 visitors, while an additional one thousand people followed the main meetings through the Internet in audio/video streaming. *HANDImatica*'s motto for 2006 was: “*Accessibilità misura di civiltà*” (Accessibility as a measure of civilisation),

which denotes the possibility of enhancing the lifestyle of disabled people and others by enabling their effective access to ICT's. This event is composed of two parts:

- an exhibition section: it is a dedicated area showcasing some of the major manufacturers and distributors of IT and TLC devices and solutions as well as several Agencies and Institutions.
- a meeting section: three days of events featuring a common theme (training, technologies, communication...). Website address: <http://www.handimatica.it/>

#### *EDEN Annual Conferences*

The annual EDEN (European Distance and e-learning network) Conference will be held in Naples from 13<sup>th</sup> to 16<sup>th</sup> June 2007. It will be called: "NEW LEARNING 2.0?, Emerging digital territories. Developing continuities - New divides". Website address: <http://www.eden-online.org/>

#### *Macerata Annual Meeting*

This meeting is organised by the *CELF* (Centre for e-learning and integrated training), a unit of the University of Macerata aiming at supporting and coordinating the gradual methodological and technological development of telecommunications and multimedia-based learning and teaching processes. CELFI promotes research and development activities in this field also in collaboration with national and international agencies. Website address: <http://celfi.unimc.it/>

#### *Forum Formazione Samedia*

Every year, *Samedia*, a company that assisted the development of the first Italian online degree course, ([www.laureaonline.it](http://www.laureaonline.it)) organises the *Forum Della Formazione e delle Risorse Umane (Training and Human Resources Forum)*. This year, this free-entry event has come to its tenth edition. Here, managers, trainers, HR Directors, and national and international experts look into the latest issues around In-Company Training and Human Resources Management. Website address: <http://forumformazione.samedia.it/>

## **5. BIBLIOGRAPHY AND WEBGRAPHY**

### **5.1 BIBLIOGRAPHY**

- Bonaiuti G. (ed.) (2006), *E-learning 2.0. Il futuro dell'apprendimento in rete, tra formale e informale*, Trento, Erickson. *I quaderni di Form@re n. 6*

This book highlights the limitations of the main approach adopted so far in most e-learning experiences. It proposes a scenario of «second generation» e-learning, which will move towards the integration of formal and informal e-learning methodologies.

This work is part of a wide-ranging conceptual framework that in the WWW world is known as «Web 2.0». This approach highlights the social aspect of the Web, which is considered as the product of the collaboration of all its users/developers. Review taken from: <http://www.formare.erickson.it>

- Banzato M. (2002), *Apprendere in rete. Modelli e strumenti per l'e-learning*, Utet, Torino.

This book provides a general overview of the tools, the evaluation methods, and the implications of online learning environments and communities.

- Biolghini D., Cengarle M., (2000), (ed.), *Net Learning*, ETAS, Milano.

A comprehensive collection of theoretical contributions and practical experiences in the field of computer-based teaching and learning. The contributions deal with the roles, the competences, as well as with the design and evaluation trends to be followed in order to promote effective online training.

- Calvani, A., (1995), *Manuale di tecnologie dell'educazione*, Edizioni ETS, Pisa

This is a key reference work that provides the basic strategies to be adopted in the fields of research, communication, and education for online training.

- Calvani A., Rotta M. (2000), *Comunicazione e apprendimento in Internet Didattica costruttivistica in rete*, Erickson, Trento.

This book was written to identify and define essential attitudes and competences required of teachers in order to use the Internet for educational purposes. The authors aimed at enabling readers to distinguish between the transient aspects of the Internet, which are bound to become obsolete in a short time, from on the other hand, truly ground-breaking methodological and conceptual infrastructure.

The book also contains some in-depth studies on specific issues, some exercises for individual readers or groups to help them reach a basic level of operational competence, and paths for Web-browsing. Review taken from: <http://www.formare.erickson.it>

- Calvani A. (ed.) (2006), *Rete, comunità e conoscenza. Costruire e gestire dinamiche collaborative*, Trento, Erickson.

Group work is an increasingly popular methodology in online learning too. Consequently, the ability to manage a collaborative community is a strategic competence for the future. The Web, however, is affected by problems which, if left unchecked, might make any form of collaborative learning difficult, if not impossible. How can groups and communities develop knowledge and overcome the problems posed by Web communication? What methodologies and techniques should be used? From an updated analysis of the existing international literature on this issue, this publication provides a clear and scientifically accurate indication of what needs to be done and what mistakes should be avoided in order to allow groups to build shared knowledge. Review taken from: <http://www.formare.erickson.it>

- CNIPA - Centro Nazionale per l'Informatica nella Pubblica Amministrazione - (ed.), (2004), *Vademecum per la realizzazione di progetti formativi in modalità e-learning nelle pubbliche amministrazioni*, "I Quaderni". Publication edited by CNIPA (the National Centre for Information Technology in Public Administration), n. 2

This work describes and exemplifies specific e-learning educational methods; it illustrates best practices and tender specifications for the provision of contents, platforms, and services. Some of the contents of these guidelines have been used to produce the Guide to the use of e-learning in the Public Administration realised by CNIPA together with the ANEE-ASSINFORM e-Learning Working Group. This guide is available upon request also in an optical format. The publication of these documents is accompanied by information, awareness-raising, and training programmes, which are carried out in cooperation with the Department for Public Administration.

Web address: [http://www2.cnipa.gov.it/site/\\_files/cnipa\\_quaderno\\_2.pdf](http://www2.cnipa.gov.it/site/_files/cnipa_quaderno_2.pdf) (visited on 31/01/2007)

- Dal Fiore F., Martinotti G. (2006), *E-learning*, McGraw Hill

This is an all-encompassing e-learning manual, which focuses specifically on different factors to be considered in order to design a successful distance learning programme.

- Eletti V. (2002), *Che cos'è l'e-learning*, Carocci

A basic book on e-learning. It is easy to read and it summarises the main e-learning trends and the tools that are being used today.

- Ferri P. (2002), *Teoria e tecniche dei nuovi media. Pensare, formare, lavorare nell'epoca della rivoluzione digitale*, Milano, Guerini e associati

Communication has never been so important as it is nowadays. Mass media are constantly changing thanks to interactive and digital tools, which are the framework of the networked society. With their introduction in communication systems, television and publishing need to reconsider their model with a view to offering a global digital content provision service. In this new model, which was analysed starting from the case studies of Britannica, Mediaset/Mondadori, and Biscom, communication and information are brought together in one binary code, which is then sold and distributed through various digital platforms.

This results in the creation of a new market, which also features some new actors such as universities and research centres.

- Fini A., Vanni L. (2004), *Learning Object e metadati. Quando, come e perché avvalersene*, Trento, Erickson. *I quaderni di Form@re n. 2*

“Learning objects” are the basic technological and educational elements. They can be organised as modules in order to build a programme and then reused in different contexts. Potential users of the Learning Objects available online are, amongst others: students looking for some specific courses to meet their specific needs; teachers looking for teaching materials; online courses designers who want to develop some personalised learning programmes; workers who want to refresh their professional skills. This volume is the first publication in Italian that deals with Learning Objects in a systematic way. Review taken from: <http://www.formare.erickson.it>

- Ghislandi P. (ed.) (2002), *e-learning. Didattica e innovazione in università*, Trento, Editrice Università degli Studi di Trento

This contribution is specifically concerned with the teaching side of e-learning.

- Merlo G., La Capria C., Corti P. (2006), *Dentro o fuori. Il divario sociale in Internet*, Milano, Guerini Associati.

This work illustrates the figures concerning the digital divide in Europe and in Italy. It also look closely into the issue of the digital divide from a gender perspective. This was done by enquiring into the universe of daily communication practices through the accounts of female Web users.

- Ranieri M. (2006), *Formazione e cyberspazio. Divario e opportunità nel mondo della rete*, Pisa, ETS

The development of cyberspace currently poses new challenges for educational research on some aspects and fields that are likely to become increasingly important in the near future. The first challenge concerns the question of access to technological and information resources and, on the other hand, the new forms of marginality and the new cultural, cognitive, and social gaps it produces. The second challenge, on the contrary, stems from the problems caused by the so-called “information deluge”, which has gained considerable momentum in the last few years thanks to the digitalisation of information. Finally, the third challenge involves one of the most promising scenarios that global computer networking has produced. Cyberspace now appears as a favourable “place” to develop “collective intelligence”. This opens up possibilities that should be identified at the earliest possible time. Ultimately, this volume speculates on the very sense of training institutions in this digital revolution era.

Ranieri M. (2005), *E-learning: modelli e strategie didattiche*, Trento, Erickson. *I quaderni di Form@re n. 3*

E-learning has now focused the attention of people involved in training. Nevertheless, from a didactic viewpoint, it tends to be considered as a mere transfer of classroom teaching on the Web. This book starts from the assumption that e-learning can actually reshape classroom teaching and that the choice of methods is fundamental for the quality of an e-learning project. This work is aimed at course designers and trainers and it originates from the author's extensive experience in the field of Instructional Design applied to the Net. It also provides some guiding criteria and concrete benchmarks for the design of e-learning projects and online educational activities. Review taken from: <http://www.formare.erickson.it>

- Rivoltella P.C. (2003), *Costruttivismo e pragmatica della comunicazione on line*, Trento, Erikson,

This essay invites reflection on the Net. Due to the complex nature of this subject, the author opted for a transdisciplinary approach, including philosophy, pedagogy, sociology, communication and didactics. Starting from an interpretation of the Internet based on myth, this work puts forward a new, interesting theory: the Net should no longer be considered as a «distinct place» but, on the contrary, as a setting for action, as one of the many social and communication situations of our daily life. The author identifies three settings for computer action: communication, sociability, and teaching. Review taken from: <http://www.formare.erickson.it>

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Riotta M., Ranieri M. (2005), *E-tutor: identità e competenze. Un profilo professionale per l'e-learning*, Trento, Erickson. *I quaderni di Form@re n. 4*

The e-tutor is becoming a dominant figure of Internet-based training. This is because it plays a key role in the management of online teaching. This volume is a practical and immediately usable guide on online tutorship, containing suggestions and practical indications on giving direct and indirect support to e-learners; communicating effectively; managing online identity problems and collaborative groups. It is a fundamental book for those who are involved in e-learning or those who are approaching this world and need to gain a better understand of the competences of the new professional figure of the e-tutor. Review taken from: <http://www.formare.erickson.it>

- Saltarelli A., Anna M. Tammaro (2006)., *La biblioteca digitale*, Bibliografica Editrice

The new edition of this successful manual has been thoroughly updated in its contents and bibliography. The digital library is set to become part of our cultural heritage, although this concept is often not so clear. This work illustrates what a digital library is, the issues to be addressed, the people who create this type of library, the way to manage it, and the new role of the librarian. The book also deals with the different fields of library sciences involved in the advent of digital libraries like, for example, the management of book collections, access rights, cataloguing, preservation, legal problems, and evaluation methods.

- Trentin G. (2004), *Apprendimento in rete e condivisione delle conoscenze*, Franco Angeli, Milano

In Eastern cultures, tacit knowledge is not easy to see or articulate and it is deeply embedded in the actions and the experience of each individual: this knowledge is made of the individual's ideals, values, and emotions. This form of knowledge is brought into play in online collaboration processes, defined as “professional communities of practice”, which rest on the collaboration among its members and which can be seen as a way to understand online learning. Review taken from: <http://www.formare.erickson.it>

- Trincherò R. (2006), *Valutare l'apprendimento nell'e-learning*, Trento, Erickson. *I quaderni di Form@re* n. 5

This volume suggests practical strategies to evaluate learning in online environments. This is done by reconsidering methods and strategies on the basis of the opportunities provided by Information and Communication Technologies. This book is a practical guide for the design, the analysis, the review, and the fine-tuning of assessment tests and for the integration of these tests in some specific technology-supported learning environments. The underlying view is that assessment is not the final stage of a learning process; on the contrary, it is considered as an integral part of the process itself (along a continuum between «objective assessment» (structured tests) and «authentic» assessment (performance assessment and e-portfolio). Review taken from: <http://www.formare.erickson.it>

## 5.2 WEBGRAPHY

<http://www.indire.it/> *Indire* is the Italian National Institute of Documentation, Innovation and Research in Education. Under the monitoring of the Italian Ministry of Education, *Indire* works in three research fields: training, documentation, and communication.

<http://www.progettotrio.it/> *Progetto Trio* was set up in 1998. It is the Distance Learning Portal of the Regional Government of Tuscany and it offers a wide range of free distance courses.

<http://e-learning.regione.veneto.it/> It is the Distance Learning Portal of the Regional Government of Veneto.

<http://almatwo.ei.unibo.it/> This blog aims to be an observatory on e-learning. It originated from an industrial research project of the same name whose purpose was to create e-learning products and services.

<http://www.e-learning2.it/> It is a blog dealing with the issue of Web 2.0

<http://www.rapid-e-learning.it/> It is a blog on Rapid e-learning. This term identifies a series of software tools and a methodology aimed at creating and delivering low-cost teaching materials produced in a short development time frame.

<http://www.elimu.it/> *Elimu* is the website of an association concerned with Internet-based training, and in particular with issues regarding accessibility and the digital divide. Some projects to be mentioned are projects for the deaf and teacher training programmes in Africa.

<http://learningcommunity.info.it/> *LearningCommunity.Info* is an online community of practice that aims to be a reference point for people who are interested in e-learning and who wish to exchange views on this issue.

<http://www.e-learningeuropa.info/> *E-learningeuropa.info* is the portal of the European Commission devoted to all the aspects of e-learning.

<http://www.elsesociety.org/> *e-learning Society* is the portal dedicated to the project called “*La formazione, il cemento e la rete*” (Training, Concrete and the Net), realised by the IBM Foundation Italy and by the University of Milan-Bicocca.

<http://www.u-learn.it/> The *U-learn* portal introduces users to the training-related activities and services realised within the framework of the “U-learn” European project.

<http://www.e-learningtouch.it/> *E-learningtouch* is a portal dedicated to e-learning professional: experts, developers, scholars, tutors, and all those who use e-learning methods.

<http://www.sie-l.it/> *Sie-L* is the website of the Italian e-learning Society, who aims at promoting the development of online training and e-learning activities in Italy.

<http://www.je-lks.it/> The *Journal of e-learning and Knowledge Society* is aimed at researchers, instructors, and professionals who are interested in the technological innovation of online training and knowledge management. It is distributed online and in print.

<http://www.formare.erickson.it/> Newsletter for Internet-based training.

<http://ateneo.ctu.unimi.it/> *Ctu* is the virtual campus of the University of Milan.

<http://www.metid.polimi.it/> *Metid* is the agency of the Milan Polytechnic that promotes and supports the use of innovative tools for academic teaching. It specialises in teleteaching.

<http://www.conorzionettuno.it/> The NETTUNO consortium is a Television and Computer University that broadcasts its course programmes and carries out all educational activities by means of two satellite and internet television channels.

<http://www.itd.cnr.it/> *Itid* is the research institute for Educational Technologies of the Italian National Research Council.

<http://www.polito.it/> The website of the Turin Polytechnic contains a section dedicated to distance training.

<http://www.cca.unipd.it/> The “*Centro di Calcolo di Ateneo*” (University Data Processing Centre) of the University of Padua offers e-learning services to the University and to its students.

<http://portale.unitn.it/ateneo/portaledge.do?channelId=-8322> It is the website of the University of Trento devoted to OnLine Education. It was set up to give visibility to various initiatives going on at the University.

<http://www.uniurb.it/it/crisel/index.php> It is the research and academic services centre for e-learning established at the University of Urbino “Carlo Bo”

<http://www.lscmt.univ.trieste.it/> The laboratory of the Department of Human Sciences of the University of Trieste is involved in the testing of Web-based teaching services.

<http://www.cnr.it/istituti/> The *Istituto di Tecnologie Didattiche e Formative* (Institute of Educational and Training Technologies) of Palermo carries out research aimed at designing, developing, and evaluating teaching and distance training support systems.

<http://cepadlab.unicatt.it/> The website of the *Università Cattolica del Sacro Cuore* of Milan devotes a whole session to distance learning.

<http://www.fondazionecru.it/e-learning/> It is an observatory on e-learning in Italian universities belonging to the *CRUI* Foundation (Conference of Italian University Rectors).

<http://www.eformazionecontinua.it/> It is a website on continuous training that contains useful information, regulations, initiatives, and specific in-depth studies on company and staff training. It is run by the Ministry of Labour and Social Policies and by *Isfol* (the Italian Institute for the Development of Workers' Vocational Training)

<http://www.isfol.it/orientaonline/> *Isfol Orientaonline* is a portal for career guidance, choice, and training. It contains a databank with job-related information as well as accurate professional profiles and a guide to training programmes.

<http://www.handimatica.it> This website is devoted to the organisation of national conferences and seminars aimed at promoting the development and the use of IT in learning environments among people with disabilities.

<http://handitecno.indire.it/> This website was developed to encourage the use of IT at school on the part of people with disabilities. It pays a special attention to the spheres of information and teaching.

[www.asphi.it/](http://www.asphi.it/) This portal collects various initiatives and training projects aimed at disseminating different forms of distance learning enhancing the integration of people with disabilities in education and in the labour market.

- <sup>1</sup> See the Proceedings of the Third National Congress of the Italian E-learning Society, Rome, 12-13-14 July, *E-learning: formazione e professioni. Modelli, politiche e strumenti*, 2006
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- <sup>6</sup> Regarding the experience of the ePortfolio at the University of Milan-Bicocca, please see the following works: 1) Gui M., Pozzi C. (2006), *Gli ePortfolio nei corsi di laurea specialistica: l'esperienza di Milano-Bicocca*; which is available online at: <http://www.sociologia.unimib.it/wcms/file/bacheca/3740.pdf>; 2) Dal Fiore F., Gui M. (2005), Student Centered e-learning. Una sperimentazione sul cronotopo della Bicocca, in M. Delfino, S. Manca, D. Persico, L. Sarti (eds), *Come costruire conoscenza in rete?*, Menabò edizioni, Ortona, pp. 67-79; 3) Dal Fiore F., Gui M. (2005), Digital Portfolio: e-learning as a support for integrated professional development, *Journal of e-learning and Knowledge Society The Italian e-learning Association Journal*, n. 3.
- <sup>7</sup> Poce A., p. 28, Proceedings of the Third National Congress of the Italian E-learning Society, Rome, 12-13-14 July, *E-learning: formazione e professioni. Modelli, politiche e strumenti*, 2006
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- <sup>16</sup> Ricupero F., p. 104, Proceedings of the Third National Congress of the Italian E-learning Society, Rome, 12-13-14 July, *E-learning: formazione e professioni. Modelli, politiche e strumenti*, 2006
- <sup>17</sup> Fulantelli G., Taibi D., Gentile M., Allegra M., p. 114, Proceedings of the Third National Congress of the Italian E-learning Society, Rome, 12-13-14 July, *E-learning: formazione e professioni. Modelli, politiche e strumenti*, 2006
- <sup>18</sup> Bertazzo M., p. 109, Proceedings of the Third National Congress of the Italian E-learning Society, Rome, 12-13-14 July, *E-learning: formazione e professioni. Modelli, politiche e strumenti*, 2006