



E-Learning in Europe: How do trainers, teachers and learners rate e-learning?

Colin Mc Cullough, Project coordinator, cmc@cedefop.eu.int

Virginie Aimard, Survey coordinator, vai@cedefop.eu.int

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Executive Summary

This European survey aims at assessing the state-of-the-art of e-learning from the perspective of the main frontline group of stakeholders involved in the learning scenarios: teachers, trainers and learners.

It has been carried out on the European Training Village site of Cedefop in April 2005 and has gathered viewpoints of more than 600 respondents.

The analysis presented here is structured around four main questions that it tries to answer :

- Who are the respondents ?
- What is e-learning according to teachers, trainers and learners' views ?
- How is e-learning rated, according to teachers, trainers and learners ?
- What is the future of e-learning according to teachers, trainers and learners ?

The overall impression which permeates from this analysis is that e-learning is perceived very positively by the target group and that its future is seen as bright and expanding. However, although the vast majority finds that e-learning is supporting their qualification process, clear challenges can be found in the data, as well. Attention is being drawn to the importance of the human dimension of e-learning (pedagogical and competence development) which now outshines its technological aspect. Respondents also stress the fact that e-learning requires a lot of skills (self-study-discipline, learning skills, etc.) which are not (yet) acquired by all learners and which therefore often lead to exclusion from these educational opportunities.

The data clearly shows that the idea of e-learning is no longer opposed to teacher/ trainer integrated educational scenarios. Rather it becomes obvious that guidance and moderation are needed through better and differently qualified teachers/ trainers.

The data also reveal that e-learning is not an isolated debate of some specialists but a comprehensive discussion about education on the whole. It becomes clear that where e-learning is integrated, it functions like a magnifying glass: challenges and barriers of the educational process become obvious and must be addressed. Amongst them the report shows the necessity to make e-learning more flexible, to integrate it into the life long learning process of acquiring knowledge and skills and to emphasize more on the learning and educational notion than on the "e".

It also shows that teachers and learners as the pace-makers for the e-learning future are aware of the current challenges, can address them and articulate concise visions about evolving educational scenarios.

Introduction

The European Commission in its *eLearning Action Plan: Designing Tomorrow's education* (2001), gives the following definition of e-learning: "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration." (p.2). This survey aims at showing how this definition becomes concrete in the reality of European e-learning.

E-learning plays a more and more important role in education across all sectors and in all European countries. However it has lacked to prove the potential associated with this form of learning so far. Different approaches have been developed to improve the impact of e-learning in order to make come true the prospect of a lifelong learning society supported by ICT.

Drawing an intermediate conclusion it becomes clear that e-learning will only fulfil the expectations if all stakeholders' needs are addressed in the developed learning scenarios. Cedefop takes this as the starting point to assess the state-of-the-art of e-learning from the perspective of the main frontline group of stakeholders involved in the learning scenarios: teachers, trainers and learners.

The presented survey comprises viewpoints of more than 600 respondents and was carried out between 6 April 2005 and 4 May 2005. It was designed as an on-line questionnaire which was promoted to the ETV site registered and was completed online in English, French, German, Italian and Spanish.

In the European Training Village, Cedefop's interactive website for all involved in vocational education and training, an online survey tool was introduced in 1999 to collect data of interest to specialists and researchers in vocational education and training on how e-learning is developing and its medium-term perspectives.

Since 1999, Cedefop has conducted a series of 12 surveys about e-learning. The themes covered are : technology supported learning (2000, 2003 and 2004), E-mail in e-learning (2000), Trainers' skills for e-learning (2000), economics of e-learning (2000), e-learning and adult basic skills (2000), European trade unions and e-learning (2001), e-learning for people with disabilities (2001), Training of trainers and teachers (2001), e-learning Europe (2002) and what is the extent of e-learning in Europe (2002). The reports that have been made of the results of these surveys can be found online on the ETV site http://www.trainingvillage.gr/etv/Projects_Networks/ELearning/survey/List.asp

This has also led to the publication of two Cedefop reference series published in 2002 :

- User's views on e-learning (Reference series n°3022)
- E-learning and training in Europe (Reference series n°3021).

The survey tool is also being used to support a European funded project, HELIOS the aim of which is to establish a European E-learning Observatory.

Survey Design

- The survey was designed as an on-line questionnaire and promoted among the ETV site registered users by e-mail and announcement on the site.
- ETV registered at the time of the survey comprised a total population of 56,832 among which 43,891 are from the EU25 members states (77%). The survey was open between 6 April 2005 and 4 May 2005 and was completed online by about 600 respondents.
- The questionnaire which was made available in five languages (english, french, german, spanish and italian) was composed of 15 multiple choice questions (among which 3 ranking questions) and one open question.

When reading the results, please note the following:

- If the sum of percentages in the tables exceeds 100% it is due to the fact that the respondent was allowed to choose more than one answer. This also generates a difference in the percentages in the graph in comparison to the percentages in the tables.
- The percentages in the graphs are calculated by dividing the number of responses to an answer possibility by the total number of respondents. The percentages in the tables are calculated by dividing the number of responses to an answer possibility with the total number of respondents to the question. Not every respondent answers all the questions. The results and graphs are based upon the total amount of responses to the question and not based upon the total number of respondents to the survey.
- The results only present the opinions of the respondents.

1 Respondents' profile

The view on e-learning is depending on the perspective and the background of the respondents. Therefore it is important to analyse the results against this background. This section aims at giving an overview of the respondents' profile according to their country of origin and to their role in the e-learning field.

1.1 Respondents by country

The major part of the 601 respondents are from the EU 25 countries (80%). However we also received responses from other countries : European other than EU 25 countries (51 responses), Africa and Middle East (8 responses), Asia (4 responses), Australia & South Pacific (16 responses), the USA and Canada (12 responses) and Latin America (19 responses). It shows the extensive outreach of the ETV network and the interest of the topic also across the European borders.

Among the EU 25 countries¹ which corresponds to 80% of all respondents, we obtain the following distribution (see fig. 1). Among the 10 new member states very few questionnaires were completed (23 questionnaires received which amounts to 4% of the total number).

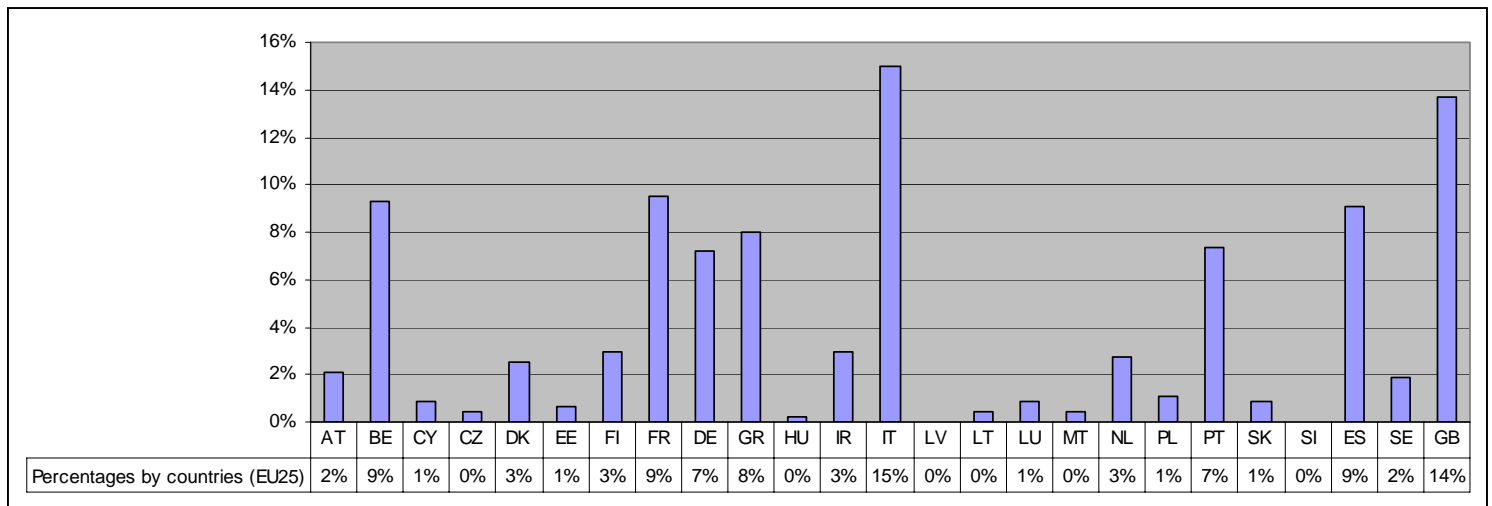


Figure 1 – Distribution of responses to the survey by countries (EU 25)

Cedefop series n°3021), we can say that whereas the number of responses coming from Germany has decreased (from 12 to 8%) an increased interest for taking the survey has been shown by respondents from Spain (3% of total responses in 2001 as opposed to 10% in 2005), from Belgium (5% in 2001 to 10% of responses in 2005), from Portugal (going from 4 to 8%). Italy registers

¹ Following the nomenclature in use in the Eurostat databases.

the highest increase from 7% in 2001 to 16% of the total number of responses in 2005. This is probably due to a changed composition of members in the ETV network in these countries, compared to the survey 2001.

The survey aims at drawing a European picture of how e-learning is rated amongst the target groups of trainers, teachers and learners. It addressed especially educational professionals and learners in a job-related context. It is thus interesting to assess the relative scale of coverage of the surveyed population against the distribution of the ETV registered members (who were invited to take the survey², see 1. Survey Design) on the one hand, and the distribution of the workforce on the other hand. Figure 2 shows that the distribution of respondents by country (in EU 25) is highly proportional to the distribution of the ETV registered users in these EU 25 countries (representing a total of 43891) and closely related to the distribution of the overall workforce, and thus is an indicator for an approximate benchmark for assessing the relative scale of coverage.

However some difference can be noted: firstly it is interesting to point out that the participation of Italy, the UK Belgium and Greece is quite substantial considering that the size of its workforce is somewhat greater than the percentage of total responses received (Italy is the fourth largest work force among the EU 25 countries). A unproportional distribution can also be seen for Belgium, Greece and Portugal which each represents 2% of the total work force and from which respectively 9%, 8% and 7% of the total responses were received.

One must of course be careful not to draw swift conclusions but the data might indicate a particular high interest for e-learning on the part of the surveyed population (ETV members) coming from these countries – if rated against the overall workforce data. This can be put in perspective with the distribution of ETV registered users in these countries – for example we find that the number of respondents from Greece is coherent with the percentage of registered users (8% against 9%) ; the same remark can be made for France (9% against 8%) and Portugal (7% against 6%).

This situation is reversed for Germany, France and Poland for which the percentage of responses received is lower than what would be expected considering their share of the work force.

² Although it must be noted that we have no means to monitor whether the invitation has been actually received, i.e. whether the email account is still valid.

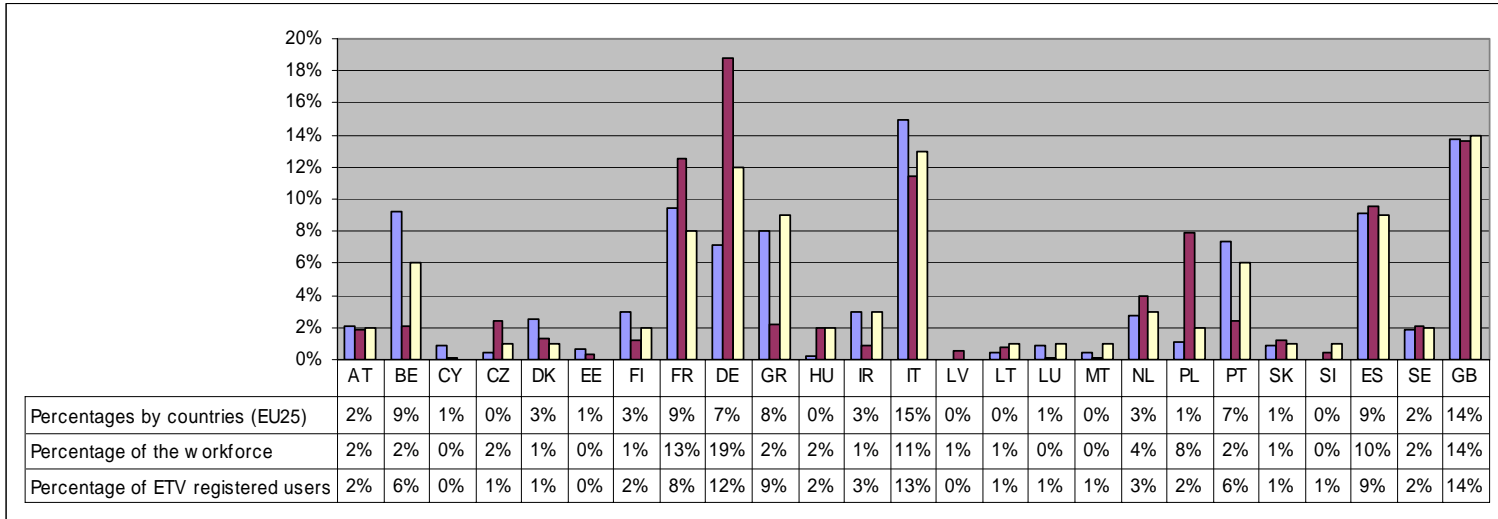


Figure 2 - Distribution of responses to the survey by countries (EU 25) in relation to the share of the workforce and the distribution of ETV registered users

1.2 Respondents by role in the e-learning field

The assessment of e-learning is always a judgement depending on the own context and perspective of the surveyed actors. Therefore the survey asked the respondents to state their role in relation to e-learning (see question 2 in the survey questionnaire in annex).

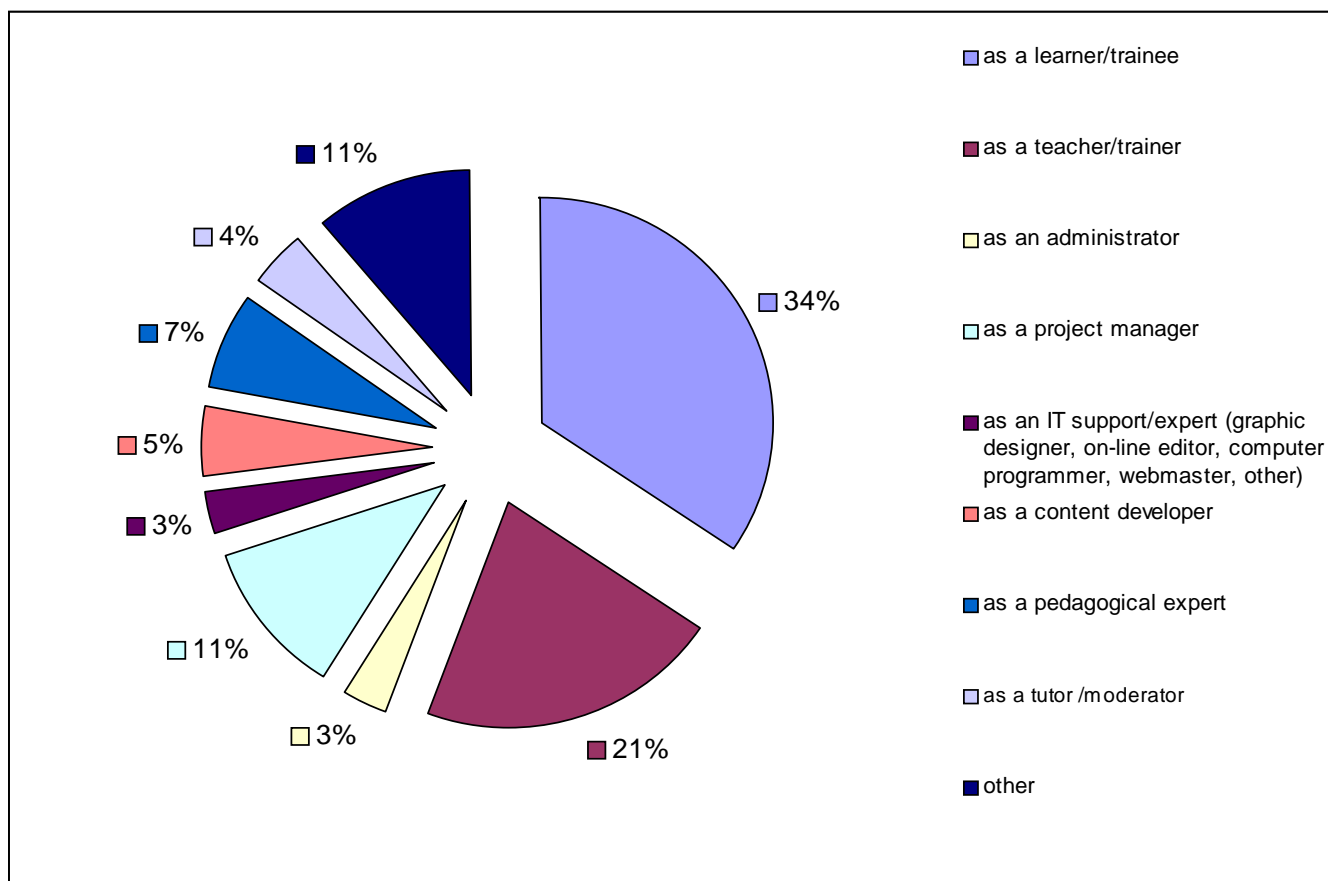


Figure 3 – How the respondents describe their roles in the e-learning field

The survey aimed at assessing views of pedagogical professionals and learners on e-learning. The majority of all collected responses (71%) came from these two groups, distributed almost equally between learners (34%) and pedagogical practitioners (37%) – the latter comprising teachers/trainers (21%), content developers (5%), pedagogical experts (7%) and tutors/moderators (4%).

E-learning imposes a diversity of role requirements on pedagogical practitioners, i.e. content developers, pedagogical experts and tutors/moderators. However, the survey showed that this specialisation has not yet been implemented in the reality of e-learning for pedagogical professionals. Only a small number of the respondents chose the specialised roles, like content developers, pedagogical experts and tutors/moderators. This could be the result of a tendency among the educational practitioners to define their roles in a more general scope (teacher/trainer) rather than a specialised and more restrictive one (e.g. tutor or content developer). It can be

assumed that this also represents the fact that often practitioners who participate in an e-learning training course may actually play different roles (e.g. content developer and tutor).

Overall, the data show, that the survey successfully covers the geographical and role diversity of European e-learning.

2 Respondents' background: e-learning experience

The assessment of e-learning is of course determined by the experience with e-learning and the context in which this experience is gained. It is therefore important to take this context into account. Therefore we have chosen to define it first in terms of context indicators consisting of

- a) the type of tools used,
- b) the learning method most encountered,
- c) the dominant pedagogical model and
- d) the theme most often covered by the e-learning training.

Secondly we are defining this context in terms of personal factors such as the

- a) number of years of experience in the e-learning field and
- b) the subjective perceived level of mastering of ICT skills.

2.1 Tools used

The respondents were asked to choose from a list of tools which they had been using already. This field is intrinsically linked with the definition of e-learning of the respective learning scenario. The European Commission, for example, in its *eLearning Action Plan: Designing Tomorrow's education* (2001), gives the following definition of e-learning: "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration." (p.2). This section intends to map out the area covered by the different technologies and their implementations (fig. 4).

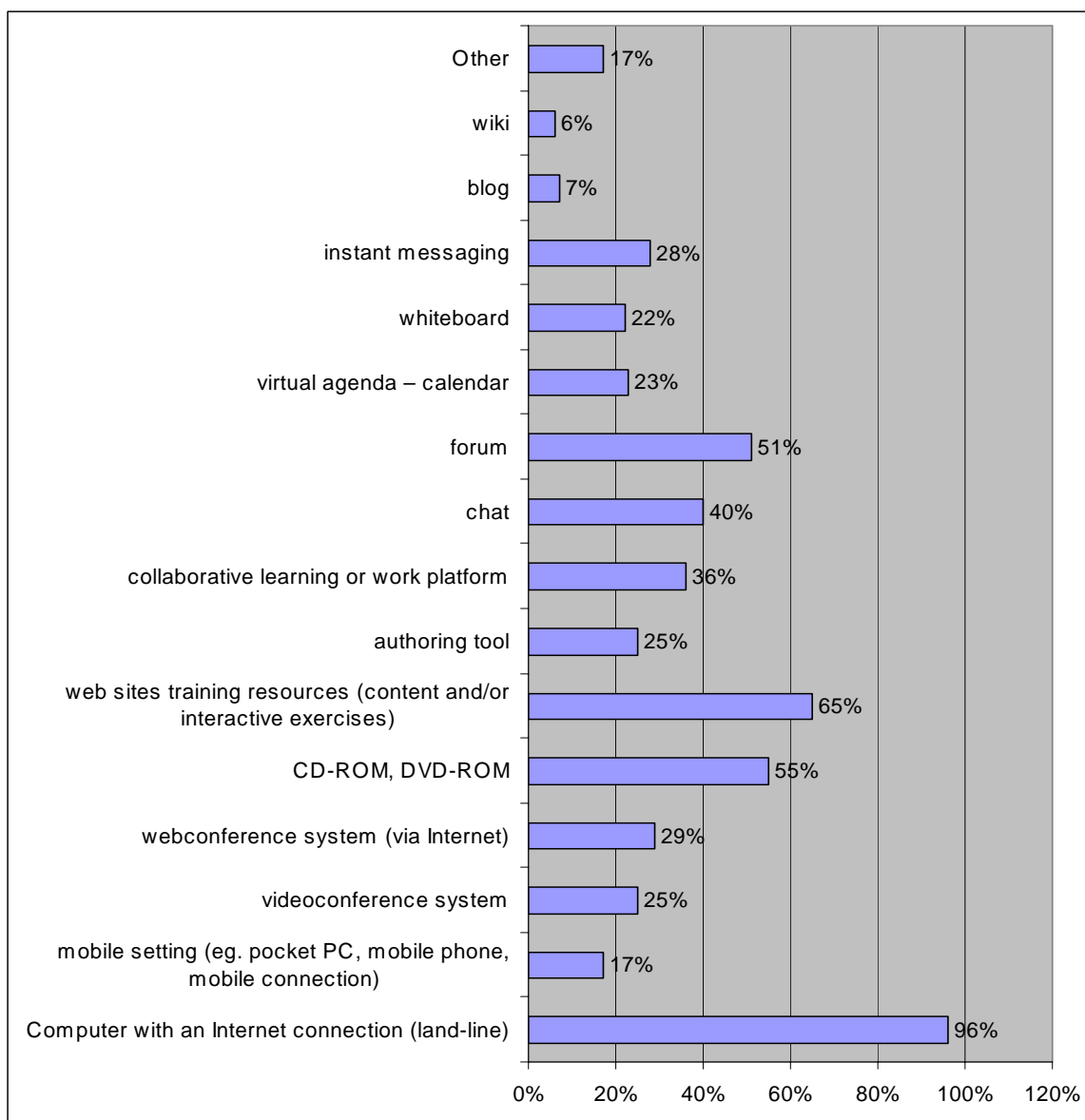


Figure 4 – Technological tools that have been used by the respondents either as a learner or as a trainer

96% of the respondents use a computer with a landline internet connection whereas only 17% claim to have used a mobile setting. M-learning (for mobile e-learning) seem not yet a widely extended reality among the surveyed population, although it is a field of interest to researchers and practitioners³.

CD-Rom and DVD-Rom are still being used (55%) but this number tends to decrease if we compare it to former surveys (cf. TSL 2004⁴ : 83,6%). In parallel to that, the use of collaborative platforms or environments is growing steadily (36% now, compared to 30,7% in TSL 2004 survey).

³ see projects funded by the EC : Leonardo project IRL/00/B/F/PP-119209 "from e-learning to m-learning" and MOBIlearn project <http://www.mobilearn.org/>. For reference see also Keegan, D. (2002). *The future of learning: From e-learning to m-learning*.

⁴ Technology Supported Learning Survey 2004, Cedefop http://www.trainingvillage.gr/etv/Projects_Networks/ELearning/survey/Survey_Technology_Supported_Learning_2004.pdf

Among the Internet applications, communication tools such as forum (51%), chat (40%) and instant messaging (28%) are now commonly used. The use of collaborative tools appears like an emerging trend : the web-conference (29%), the whiteboard (22%) and the virtual agenda (23%).

The newly born *blogs*⁵ and *wikis*⁶ are still marginally used (respectively 7 et 6%) though they are now widely advertised.

73 % of the respondents claim to also support their training with paper resources which indicates that e-learning is not only based on on-screen material but largely seconded by the paper medium.

E-learning is changing, as can be seen from the responses. It steadily becomes more web-oriented, more collaborative and the introduction of *wikis* and *weblogs* suggest open and more flexible learning scenarios.

⁵ For definition see glossary in annex

⁶ *Idem*

2.2 E-learning and distance learning

Which learning method did the respondents encounter most in the e-learning experience?

The survey shows that e-learning is most and foremost about distance learning (although one must not confuse the two aspects) : when asked about the learning method they have encountered as teacher or as learner, 88% of the respondents say they have taken part in an e-learning training course that was organised on a distance learning basis (as opposed to face-to-face 12%). E-learning is therefore mostly used in a way of substituting face-to-face scenarios and only in few occasions used to enrich face-to-face classes.

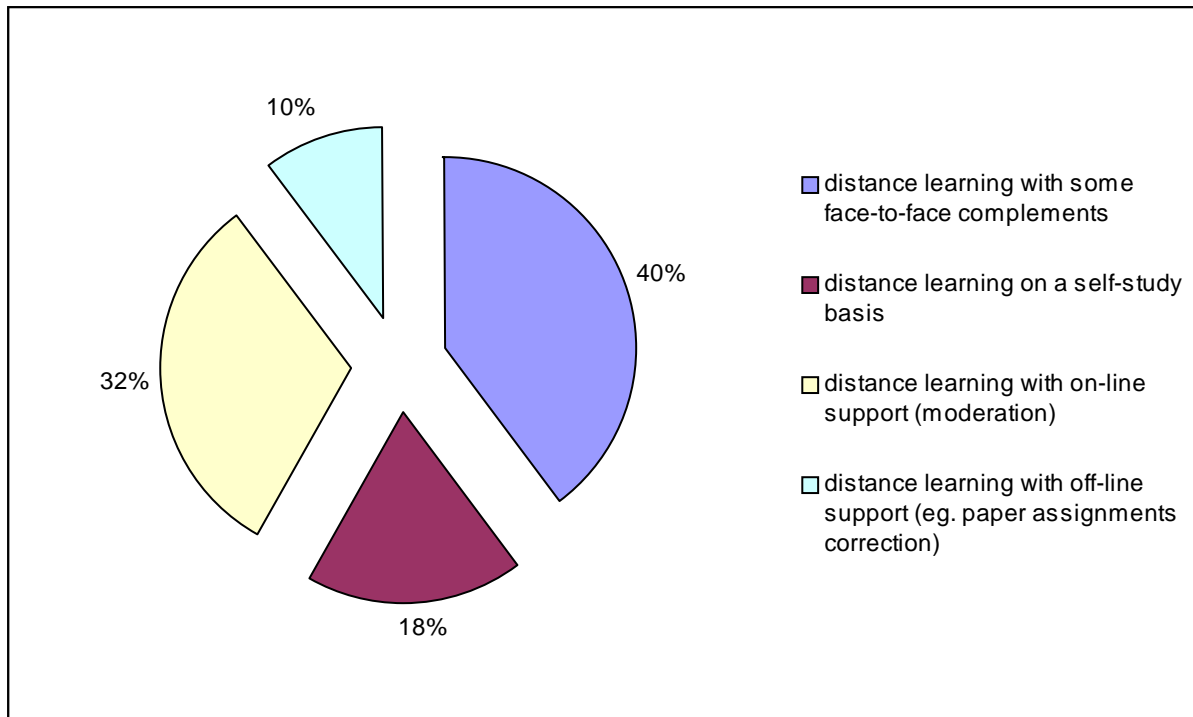


Figure 6 - Types of distance learning method encountered in e-learning training

As far as the distance learning method is considered, the main characteristic that appears is the strong presence of the pedagogical relation (82% of the e-learning training based on an distance learning method) whether it takes the form of face-to-face meetings, off-line support or on-line moderation. This aspect is then explored further in the next section.

2.3 Pedagogical model

All research so far has shown that the pedagogical model supporting the e-learning training represents a crucial aspect of e-learning, determining the success of the educational measure.

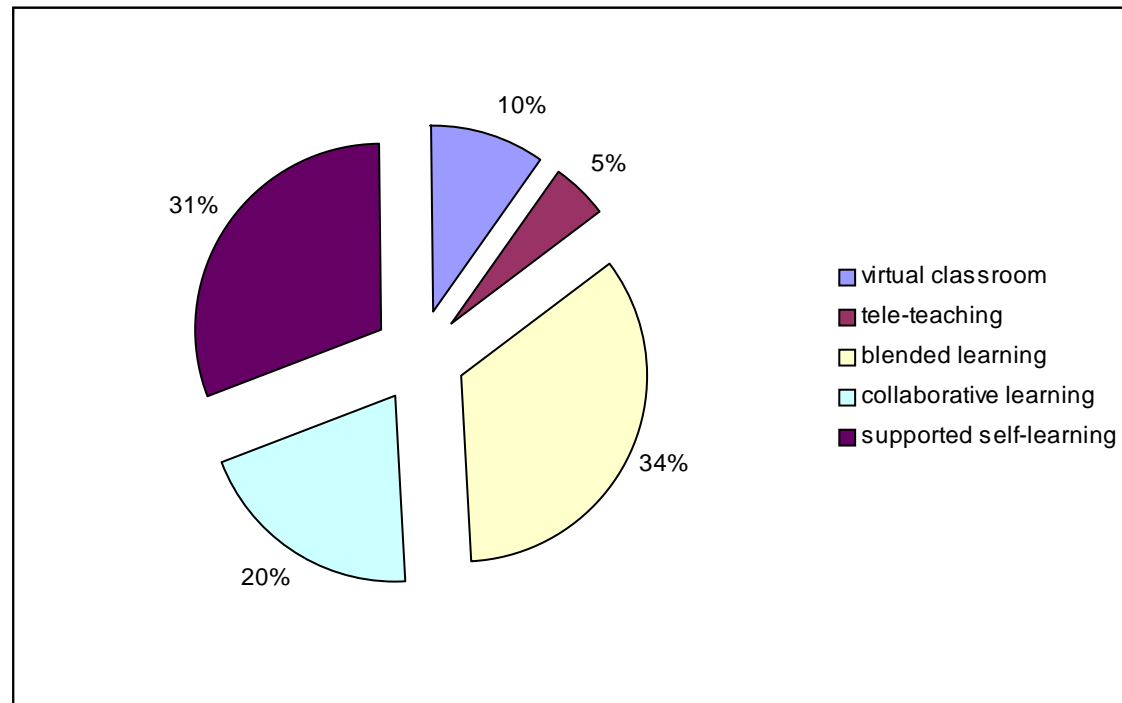


Figure 7 – Dominant pedagogical model in an e-learning training

In the survey the respondents were asked to select the pedagogical model they have most often encountered. The different models proposed were based on the typology presented in the Cedefop's study *E-learning for teachers and trainers* (2004)⁷, pp.17-18 : virtual classroom, tele-teaching, blended learning, collaborative learning and supported self-learning.

Blended learning appears like the most commonly found pedagogical model which goes with e-learning (34%). This model of learning is defined as "the blending of technology in all its forms (not just the Internet) with traditional learning, teaching and training practices."⁸

Supported self-learning is quoted as the second often used learning model (31%). The self-directed learning model corresponds roughly to the first generation of e-learning training when it was believed that e-learning was about delivering knowledge to learners on a self-access basis, thus saving costs on teaching human resources. What is interesting is that the supportive dimension of self-learning is now considered as fundamental and put an emphasis on the role of the teachers/tutors as guides for the learners.

⁷ cf. *E-learning for teachers and trainers, innovative practices, skills and competences*, 2004, Cedefop Reference Series n°3035

⁸ *idem.*, p. 17

The part of collaborative learning is also important (20%) and this confirms the trend that this model is actually taking importance although it is less implemented in its full form but comes rather as a blended form.

It is worth noticing that virtual classroom and tele-teaching are clearly underrepresented (10% and 5%). It seems that these modalities have now a minor importance as compared with the other modes.

2.4 Themes covered by e-learning

Is e-learning still used foremost in the IT sector for computer trainings? The survey shows that also soft-skills are on the rise – themes like communication, personal development, languages and marketing show a considerable amount in the data.

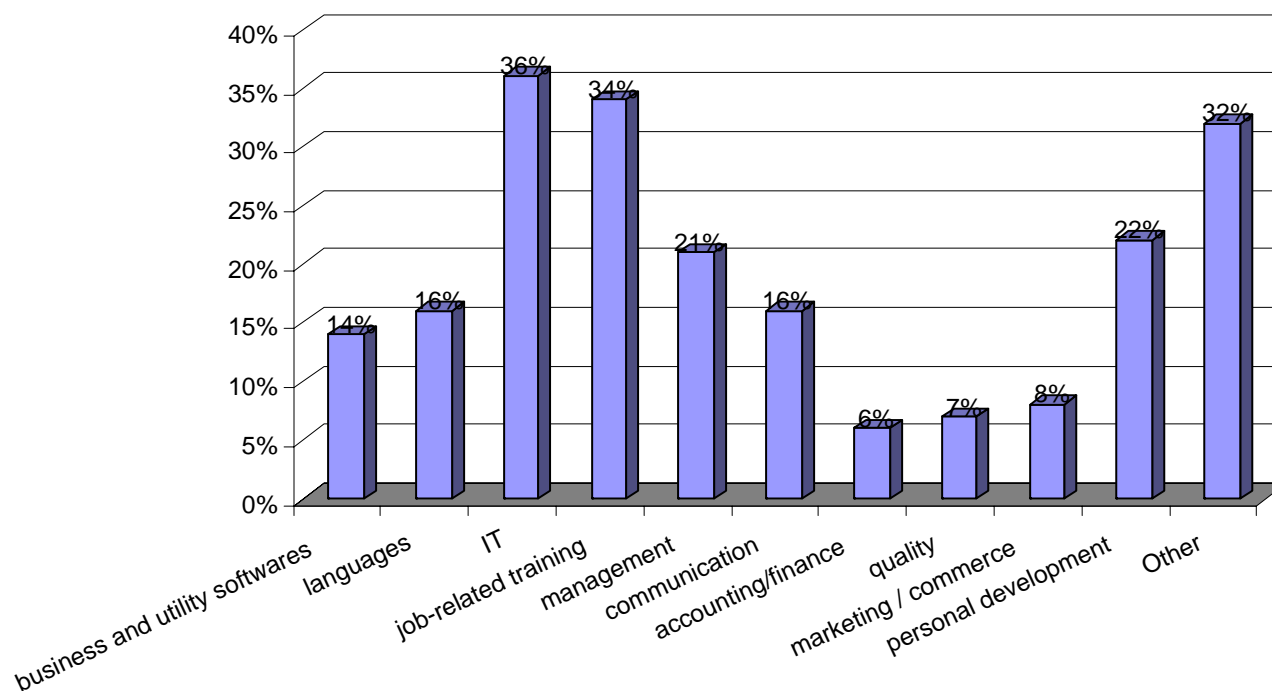


Figure 8 – Themes covered by the e-learning courses

IT and job-related training

Training on IT and job-related training represent the most commonly covered topics of an e-learning training course (respectively 36% and 34% of the responses). The second set of topics quoted is personal development and management (22% and 21%). Then come languages, communication and business and utilities softwares (16%, 16% and 14%).

The respondents had the opportunity to state “other” field of training if the given set did not match their experiences. The analysis of these data reveals another field of training which was not included in the list of topics: training for education. And it is interesting to note that in this field, the aim of the training is often e-learning itself. (See annex). This finding may be closely related to the specific target audience of the survey (teachers, trainers and learners).

Specificity of themes covered in an e-learning training?

The results of the survey also correspond in parts with findings in other statistics. Compared to the Eurostat data on training it shows that there are differences and similarities. The question arises therefore to compare whether there is a specificity in the themes addressed by an e-learning training as opposed to traditional training. One must of course be cautious when it comes to comparing statistics resulting from different methodologies but it is interesting to look at the Eurostat database in which we find a distribution of

the fields of training⁹. Without drawing outreaching conclusions, we could still point out the fact that while some fields of training seem to be covered on the same ratio basis (Marketing and sales, Accounting and finance, job related training), two fields stand out as wider covered in an e-learning training¹⁰ : foreign languages (5% in traditional training opposed to 16% in e-learning training) and management (10% against 21% in e-learning training). It is worth looking at more closely in future research to explore whether e-learning could be considered as a more relevant mode to address certain subject fields – and less to others.

⁹ Percentage of the total hours in CVT courses in EU25 countries, extracted on 24/08/2005

¹⁰ on the basis of our survey results

2.5 Experience in the e-learning field

The survey data are based on experienced users assessments. This is shown in the responses on the question of how long the survey participants have already been involved in e-learning.

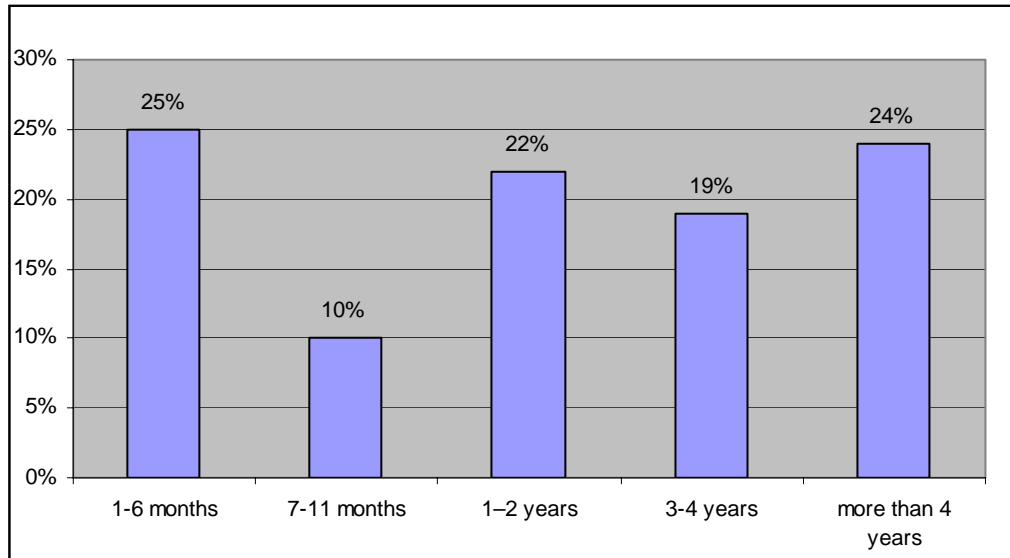


Figure 9 – Duration of involvement in e-learning activities

It becomes clear that it is an experienced population. 65% of the surveyed population have more than 1 year of experience in the field of e-learning (whether as a learner or as a trainer). 43% have been involved in e-learning activities for more than 3 years.

2.6 Level of mastering of ICT skills

The respondents show a high level of subjectively perceived ICT skills. These are the necessary – though not sufficient - requirements for achieving high results with e-learning-environments.

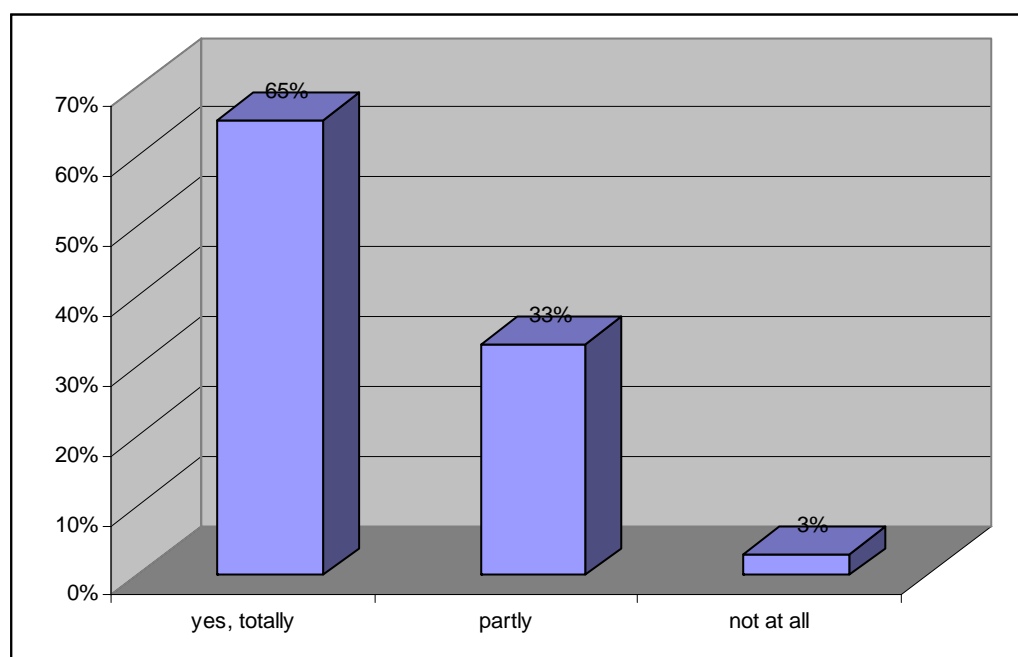


Figure 10 – Level of mastering of ICT skills

The respondents of the survey are a skilled population. 65% of the surveyed population claim to master the basic ICT skills. Whereas it can be said that basic ICT skills are of course a necessary prerequisite to be able to undertake an e-learning training – the scope of skills concerned is bound to evolve along with the evolution of the usage of e-learning. What would be considered as basic ICT skills five years ago (for example to manage a mouse and a graphical interface or to be able to use office applications), would mean something different nowadays (to be familiar with collaborative tools for example). The question of skills and what is basically needed to be able to cope with updated e-learning applications and tools is a crucial aspect that should not be neglected.

This first analysis of the results reveal that the surveyed population, namely mainly teachers, trainers and learners, is highly involved and experienced in e-learning.

3 Rating of e-learning

3.1 Overall rating of e-learning

The survey shows that e-learning supports teaching/ study – for the surveyed population of teachers, trainers and learners, already experienced and involved in e-learning measures. This goes along with findings that those who have crossed the border of using technology for educational purposes are achieving good results and promote a good learning experience through it. Almost (92%) of the surveyed population think that e-learning really supports their teaching/study.

3.2 E-learning as an enhancing factor for teaching/ study

In confirmation to the overall good rating of question 3.1, only 2% of the responses are describing e-learning as having no added value. The relevance of e-learning mode of training is strongly perceived by the respondents.

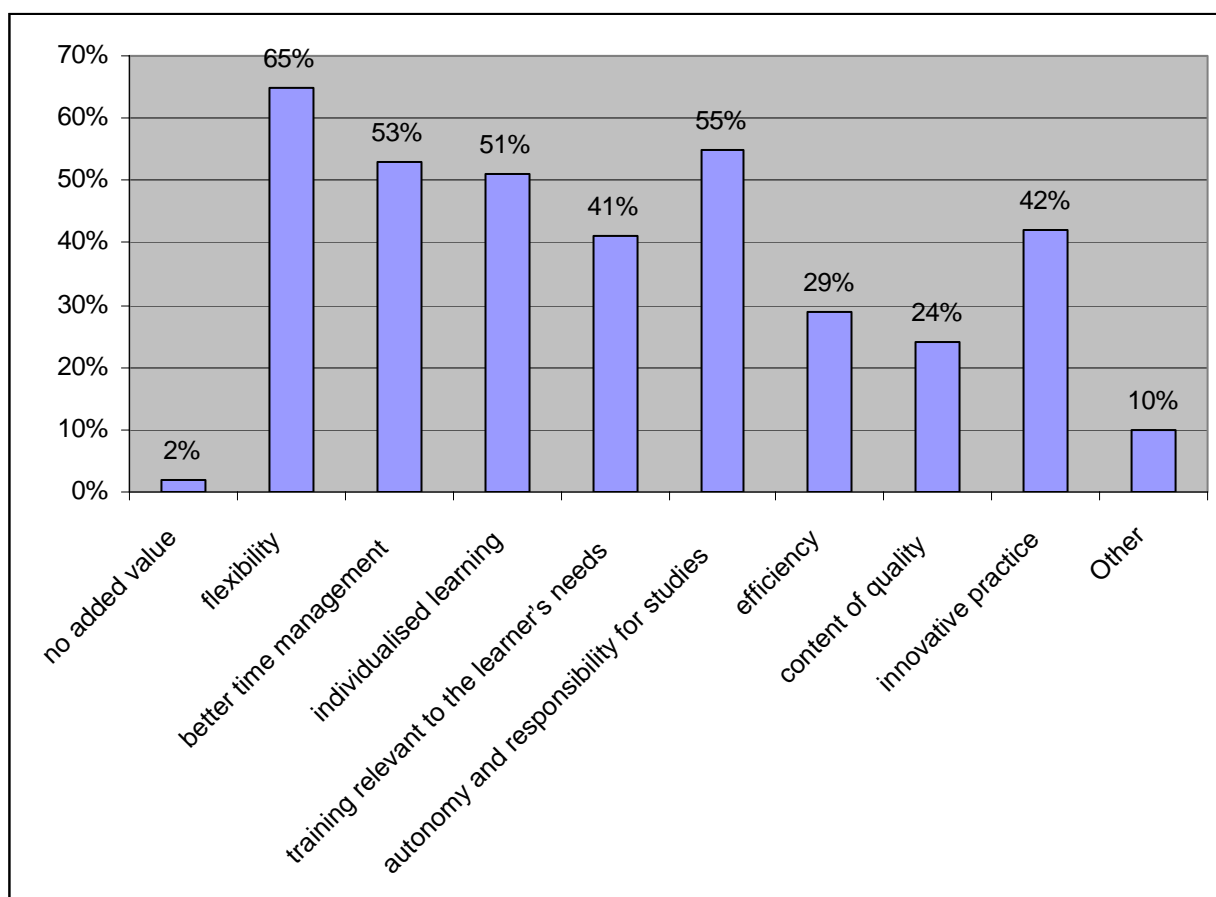


Figure 11 – Enhancing factors related to e-learning

Among the different factors quoted to explain in which ways e-learning enhances teaching/study, flexibility comes first (with 65% of all responses).

The second set of factors quoted by the respondents to specify the relevance of e-learning comprises "better time management" (53% of responses), autonomy and responsibility (55%) and individualised learning (51%).

Innovative practices (42%) and relevance to learners' needs (41%) are also considered as strong assets for e-learning.

It is interesting to note that the "quality of the content" is considered an asset by only 24% of responses and "efficiency" is rated as an enhancing factor in only 29% of the responses. This seems to indicate that e-learning is perceived interesting more in its process rather than the results it can generate.

3.3 E-learning as an obstacle to teaching/ study

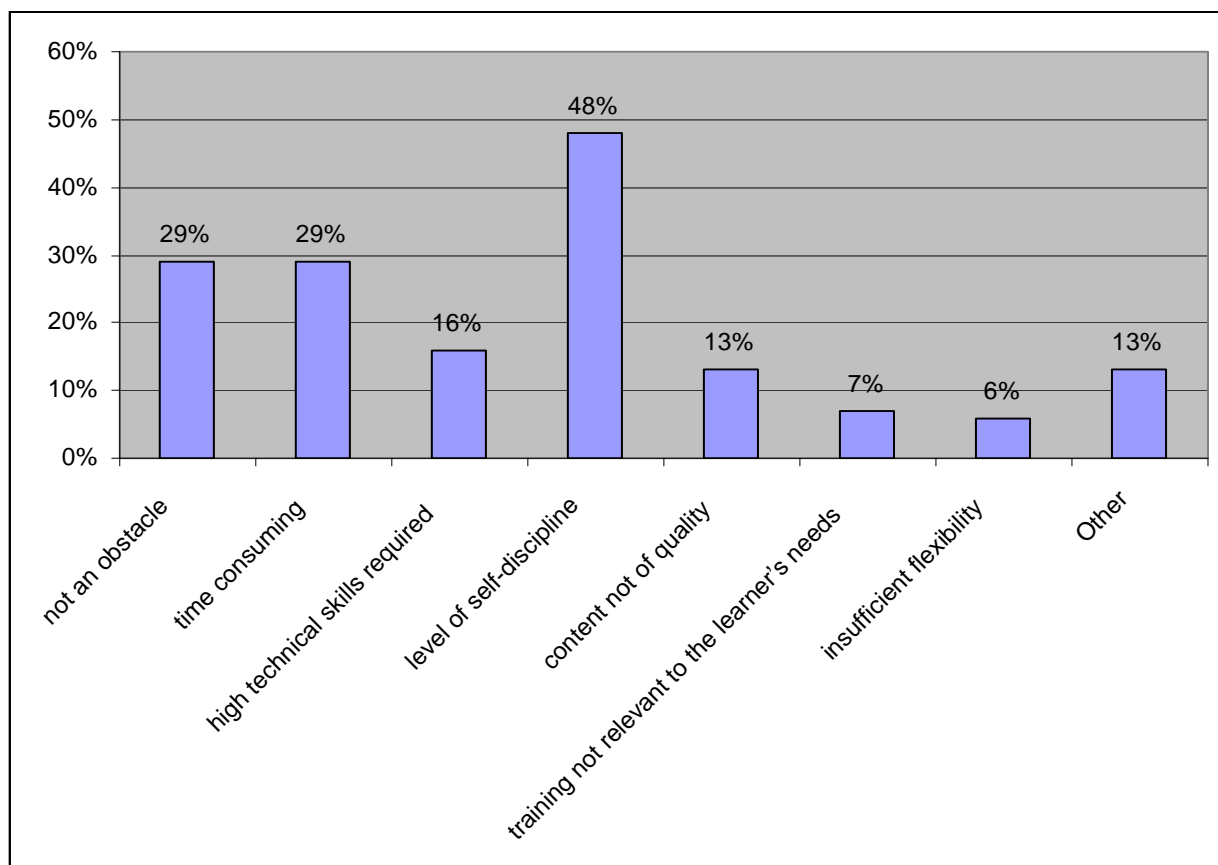


Figure 12 - Obstacles related to e-learning

Firstly an emphasis must be put on the fact that for some respondents e-learning bears no hampering factor (29% of the responses).

Among what is considered to be obstacles, the major obstacle to e-learning as perceived by the surveyed population is the level of self-discipline required when taking part in such a training (48% of responses). The second highest rated obstacle is the time-consuming nature of e-learning (29%).

The high level of technical skills is considered as a minor obstacle (only 16%) as is the poor quality of the content (thus going in the direction of what is described in §3.2 above). Surprisingly, the fact that the training is not relevant to the learners' needs¹¹ is not considered as a real obstacle.

¹¹ Although one has to be careful when referring to such a "relevance": does it apply to the personal needs, the needs of the learners in relation with the needs of the professional context of their workplace, of their work organisation etc.

3.4 What makes e-learning successful ?

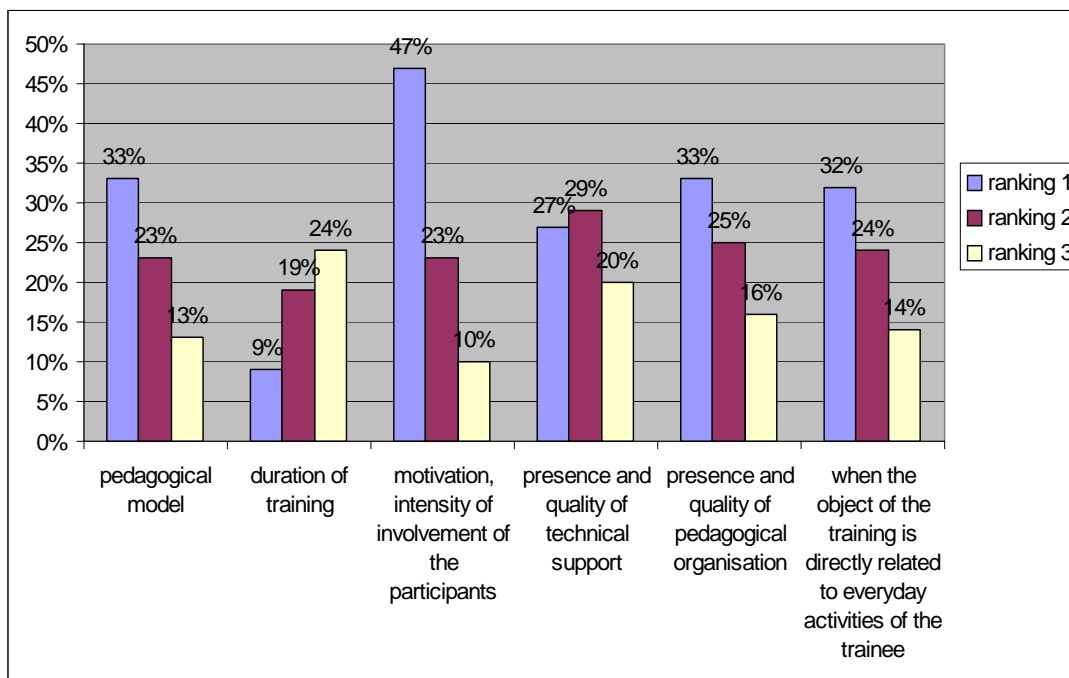


Figure 13 – Classification of factors of success for an e-learning course

In this table we have tried to show how our target population rank the different aspects which can contribute to a successful e-learning course¹². 47% of the respondents think that the "motivation" (intensity of involvement of the participants) is the most important success factor of an e-learning training.

The presence and quality of technical support is ranked as the second factor for a successful e-learning training course (by 29% of the respondents). The duration of training is the third in importance (by 24% of the respondents).

¹² In order to make the results more visible we have only kept the ranking items 1 to 3 (1 = highest importance). Percentages are calculated on the total number of respondents for each ranked item. Several choices are possible for each ranking (one can give the highest rank to several items).

3.5 E-learning and innovation

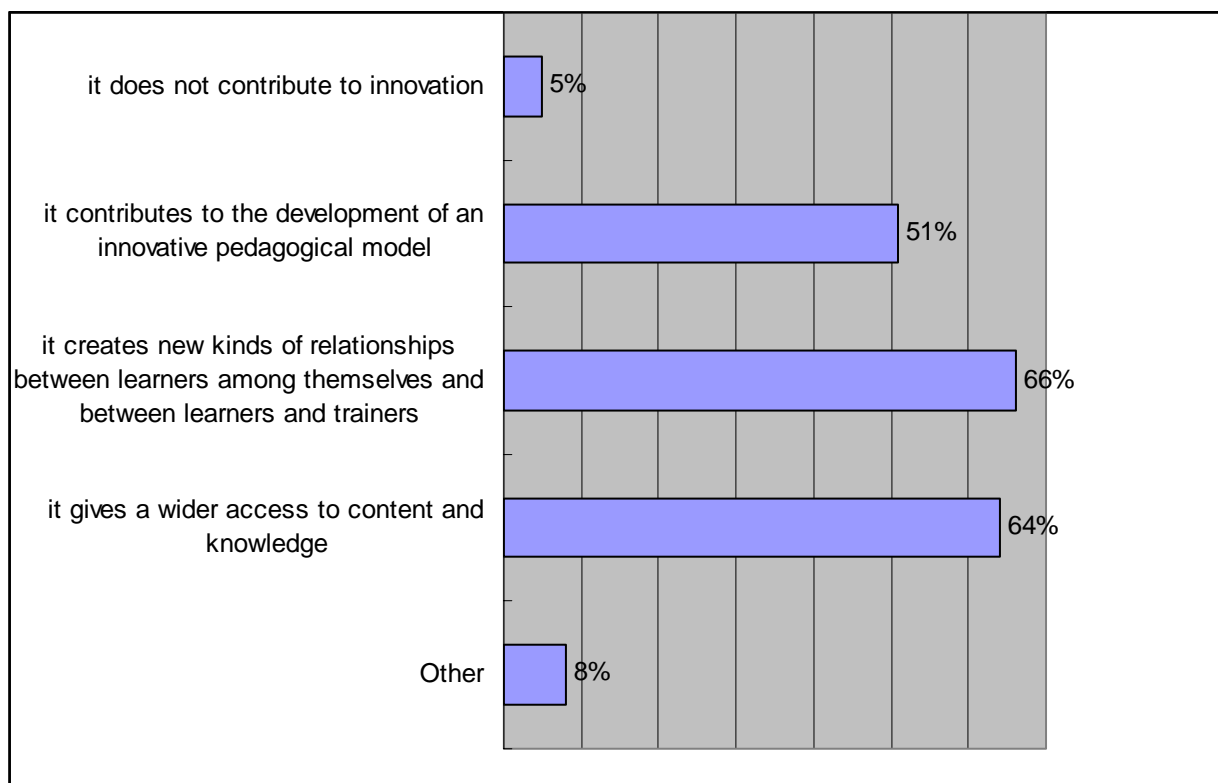


Figure 14 – E-learning and its contribution to innovation

Only 5% of the respondents believe that e-learning does not contribute to innovation.

Innovation is thus clearly associated with e-learning. Moreover it seems that innovation is highly perceived as related to an aspect which is central to collaborative learning : it creates new kinds of relationships between learners and between learners and trainers (a criteria selected by 66% of the respondents). Innovation is also associated with the fact that it gives a wider access to content and knowledge (64%).

3.6 E-learning and specific skills

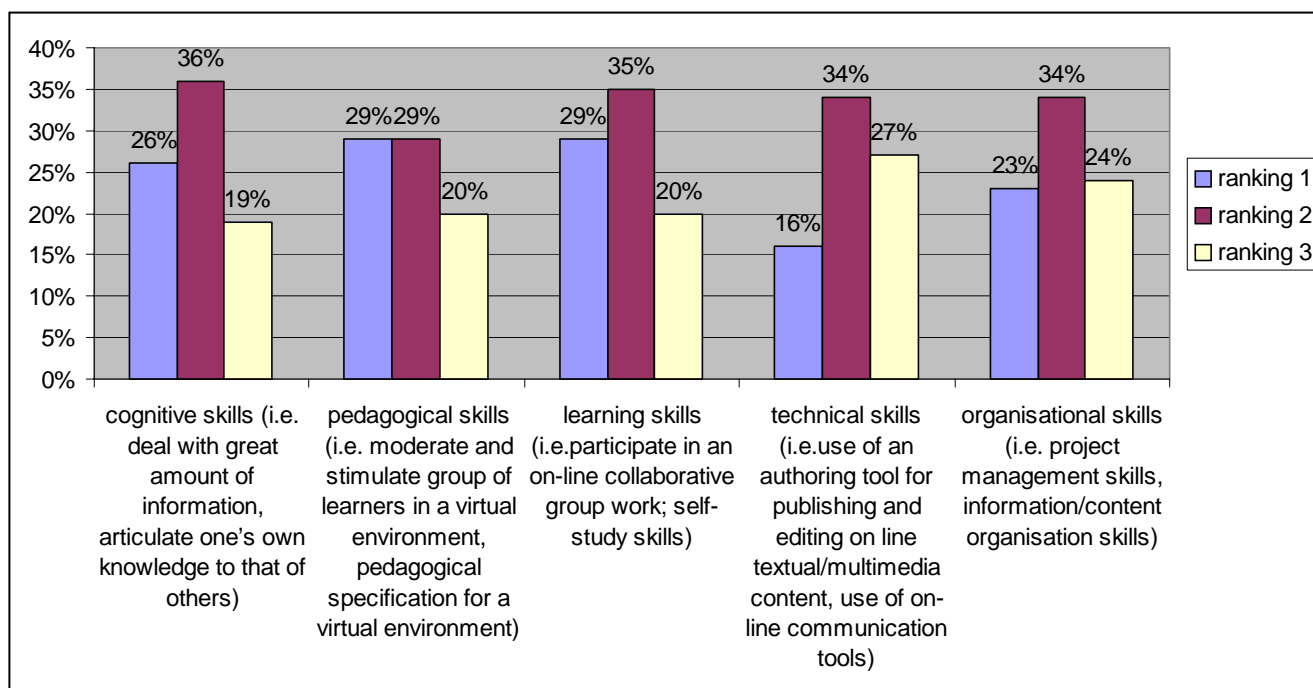


Figure 15 - Skills developed in an e-learning training course

This table shows how the surveyed population perceive the relative importance of the different skills developed when taking part in an e-learning training¹³.

Concerning the question of skills development, the survey reveals that pedagogical skills and learning skills are said to be the most likely to be developed in an e-learning training course (both ranked as the most important by 29% of the respondents).

Cognitive skills are considered the second area of skills developed through an e-learning course (by 36% of the respondents) and come before the technical skills, considered by our surveyed population as the third in importance (by 27% of the respondents).

It must be noted that the results do not allow a very clear outstanding dimension to emerge – it can be said that the five skills areas quoted are globally perceived as equally important.

Teachers, trainers and learners view e-learning as a means to enhance teaching and learning possibilities. The flexibility and the promotion of autonomy in learning are especially emphasized. However – it becomes clear that this goes along with an increasing demand for self-discipline and that it is time consuming. E-learning, it could be stated, is an enormous enhancement for those with high learning skills. Those who lack these skills need to be promoted in a better way in the future.

¹³ ranking 1 to 3 (1 is the highest importance)

4 Future of e-learning: Teachers, trainers and learners' vision

This section aims at presenting the vision of the surveyed population as far as the future evolution of e-learning is concerned. It corresponds to synthesis of the answers given by the respondents to an open question which was formulated as : "How do you see the future of e-learning?"

4.1 Introduction

The selection that we have operated reflects the most common and recurrent ideas (in terms of frequency). The number in brackets corresponds to the number of times the idea expressed has been found in the quotations (some quotations may contain several of these ideas and can thus fall into different categories).

The notion of e-learning is of a very broad nature and although we can agree theoretically on a definition¹⁴, the representation¹⁵ that the stakeholders have is related to their own context of action (the way they relate to it on a personal, experiential basis) and the vision of e-learning that they have is, of course, influenced by that.

Although some respondents expressed fears or doubts, the overall vision of the future of e-learning is very positive, expanding and growing.

In an attempt to render the gist of the different views, we have delimited eleven main topics which compose the overall vision¹⁶ of the future of e-learning as seen by the teachers/trainers and learners.

- (1) The future of e-learning is blended learning.
- (2) The future of e-learning is embedded in the lifelong learning and competence development process.
- (3) E-learning in the future must shift from the E to the Learning.
- (4) The future of e-learning must be quality oriented.
- (5) The future of e-learning must take into account the learners' needs.
- (6) In the future e-learning must accompany the development of the teacher/trainer's role and skills (e-mentoring, e-tutoring...).
- (7) The future of e-learning is collaborative learning.
- (8) The future of e-learning is m-learning : learning anytime anywhere.
- (9) The future of e-learning will go along with technological improvement.
- (10) The future of e-learning will bring about flexibility.
- (11) The future of e-learning must give access to academic content and certification.

¹⁴ Cf. the one given by the EC in the official communication on the eLearning initiative: "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration."

¹⁵ in the socio-psychological sense

¹⁶ Which is obtained through a synthesis work which sometimes requires approximations.

4.2 Towards an integrated development: the future of e-learning is blended learning

(76 instances)

The future of e-learning as a blended learning is the most commonly expressed vision among the respondents of the survey : it can be found in 76 quotations. What is meant by "blended learning" is not always clear and even confused sometimes. The following meanings can nevertheless be discerned.

Blended learning as a mix.

Blended learning is understood as mix with (1) traditional learning/e-learning (2) face to face learning / on-line learning. It was even understood as multi-media (mix of different media) – but this instance is more rare. Blended learning in that sense means using a mix, a range of different delivery methods.

Blended learning as a support.

Another meaning given to blended learning is that e-learning comes as a support or as a complement to other (traditional) modes of learning. This is to emphasize the idea that in the evolution process, e-learning first started to be seen as technology oriented and was considered by many stakeholders to be revolutionary and now the tendency is to see it as a tool among other tools rather than a panacea and the need is expressed to focus more on the pedagogical aspect and developing a specific pedagogy for it (see also section 3 below) which has to be learner oriented (see also section 5 below).

In the idea of *blended learning* as developed in the quotations of some of the respondents, is contained the idea that e-learning can not be only on-line or virtual : the training/teaching process can not do without face-to-face sessions and the particular dynamics of the physically present group. In some quotations, this seems to go along with a fear of loss of human contact or event the fear of losing control for the teacher/trainer.

Finally *blended learning* seems to convey the idea of an integrated environment as in the following quotations: "blended lifelong learning environment", "integrated learning environment" or "embedding e-learning within the curriculum".

QUOTATIONS

2. The notion of E-Learning as standing alone and remote from other delivery methods will disappear - One day most formal or semi-formal learning will involve the effective and appropriate use of technology. The key aspect is not to concentrate on the E but rather on the Learning. The focus for teachers, tutors trainers, educational managers, development workers etc. must be on pedagogical aspects and in particular in preparing learners for a changing and ever more complex world and in this context the E will be fitted to the Learning delivery.
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3. If we go on with developing forms and pedagogical skills for e-learning and support the interaction teacher/learner and learner/learner there is an expanding market for e-learning/blended learning.
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20. It will become a more popular, more often and in more fields applied. It will support the

traditional ways of learning - this role will be more and more important.
23. Used in a blended training method, is here to stay applied to all non behaviour training.
26. first evolution to blended learning
28. as a normal part of learning/teaching
39. Blended learning is the first admission that elearning is not the wunderkind. Blended learning is what every good teacher or trainer already does i.e. uses a range of different methods. Humans lag behind technological advance and elearning's evolution depends on whether it hijacks, supplants or supports moves towards more learner-centred and self-directed pedagogy.
40. I think that it will become more a blended Learning instead of e-Learning, because students need some face-to-face classes, they need to communicate among each other and with the teacher.
49. Mixed with traditional learning
53. I see as an important part of a blended approach to learning. I do not see it as the only method nor do I see it as the panacea for learning. There has to be a blended approach in order to ensure that all styles of learning are catered for.
54. E-learning will be widely used in higher education in the future and have academic-social credibility if supported by the print medium with appropriate face to face sessions. E-learning on its own would be impractical and it could de-humanize the teaching and learning process.
57. A complete mix of learning options suitable to learners based on learning style, time and cost.
73. The key for mass involvement is for the learning to be in accreditable chunks that fit with the time available and for online support to be much better along with access to face to face support.
74. Will become more embedded- expected part of the delivery of face to face
77. I believe that e-learning is an excellent complement to traditional methods of learning. It also allows access to continuous learning self improvement for people who cannot physically attend places of study i.e. rural communities. I think that there is a great future ahead for online learning/expansion of already obtained qualifications and believe that I will certainly take part in e-learning on a regular basis.
78. Growing but as a blended medium
87. blended learning models with high degree of learning attractions either in the classroom or by use of gaming knowledge.
93. greater inclusion of voice tools and virtual classroom tools enabling realtime collaboration and removing barriers of written literacy. More/ better targeted and quality, specialised training to support f2f teachers/trainers moving confidently and competently into a blended f2f + online mode.
98. To be effective e-learning should be augmented with classroom learning, or for verification of skills/knowledge, e-learning that leads to a qualification must have a controlled classroom test.
120. I think that it is most efficient used in blended learning and as another tool for the trainer, but should by no means be considered as a replacement or a cost cutting tool. There are a lot of examples of company training in languages where they have heavily invested in hardware and software to replace 'expensive' face to face training and the learners give up shortly after starting. I think e-learning is here to stay and will become more popular in the future, but used like say a video, tape recorder or language lab, ie as a tool for the trainer and under the control of the trainer who can direct the learner.
121. Very useful in offering a mixed media for learning e.g. a visual and action orientated approach alongside the reading of information. Therefore very helpful as part of a broader method for learning
128. Needs to be one element in a range of methods to provide learning opportunities. Must provide opportunity for learners to interact with one and other.
142. e-learning will blend with all other types of learning to enable learners the maximum flexibility to study what they want, how they want to and whenever and wherever they want to. Blended delivery will become the "normal" rather than the exception.
145. As e-Everything permeates culture(s) increasingly deeply, e-Learning will become more naturally embedded as an alternative/addition to other methods of delivery, whilst creating

novel, and thus not yet know, opportunities. There will be, no doubt, examples of bad, inexperienced or irrelevant application just as there still are in other delivery modes.
148. more blended courses - components of the learning will be online eg pre face to face reading or assessment. More collaborative group work on line
150. Part of blended learning approach. E-learning has always been one of many options in our organization.
156. Blended learning
170. As long as it is viewed as just one of many delivery mediums in a blended learning environment it will continue to flourish
183. In combination with other pedagogical methods.
185. Appropriate use of Technology within a blended life long learning environment. Institutions will focus on support and certifying learning outcomes.
195. In nearly every situation, there must be face-to-face interaction - ie, blended learning
203. as part of an integrated learning environment, but it never will and never should be seen as a substitute for conventional learning with human tutors and assessors.
213. In education, probably largely as Blended Learning, with many more organisations embedding e-learning within the curriculum, and as part of the widening participation process
215. Excited by blended learning and individual learning. Need resource banks with material relevant to the subjects taught. Need technical support networks. Development of self-assessment and course assessment thereby minimising the paper forms needed.
226. Not to replace the classic classroom, but as a vital complementary training.
233. It is often asserted that 'stand-alone' elearning has failed. In my experience this is not so, when the context is appropriate and it is related to specific work requirements elearning is more effective and efficient as a medium. In a blended learning environment the capacity for effective learning is magnified and in my experience the success rate is higher, learning is more self-managed and motivation levels are higher.
236. More Blending better contents more skills from trainers and moderator/tutors
242. I believe the early hype about e-Learning has now been replaced with a realistic view of its place alongside other forms of learning to enhance the learning experience. As the actual content of e-Learning materials becomes more interactive I think this trend will continue.
249. (...) Greater move towards blended learning i.e. more traditional courses building in elements of e-learning rather than more courses springing from no where.
252. I think good blended learning will give better learning encourage motivated selflearners may cheapen learning facilities
254. More blended learning approach than simply stand alone e delivered packages
FR
2. Le e-learning doit s'intégrer davantage dans un processus global de formation (présentiel + e-learning) pour se développer de façon moins anarchique (hétérogénéité en termes d'outils, de plateformes, de qualité, etc.)
3. evolution positive si le presentiel peut etre maintenu
7. Idéal pour ceux qui veulent apprendre à son propre rythme à la maison. Très utiles dans l'enseignement classique comme 'blended learning' methode
13. Sous forme de formation mixte avec complète intégration du présentiel et du e-learning
16. Il y a aura de plus en plus de combinaison avec l'enseignement présentiel. Avec l'arrivé de l'élargissement de la bande passante, il y aura de plus en plus de visioconférence possible et fiable donc on peut s'attendre a voir arriver un produit de plus en plus performant. A suivre !
32. Deux perspectives: un développement mettant en oeuvre une totale autonomie d'apprentissage grâce à des outils et des techniques de communication de plus en plus performants (logiciels de contenus interactifs et de gestion des formations) ..ou un développement de la formation presentielle comme rééquilibrage au rapport virtuel du e-learning, en alternant les deux modes de formation, sorte de formation en alternance mutipolaire.

37.	Vers une évolution type blended learning avec une individualisation de + en + poussée des apprentissages tout en favorisant les activités collaboratives.
57.	Un potentiel en développement, de nouvelles formes d'apprentissages / formation. Mais le e-learning ne peut pas remplacer le contact présentiel. indispensable
63.	Un mixte entre présentiel et e-learning. Un risque fort de marchandisation de la formation au detriment de sa qualite et de l'equite sociale.
ES	
36.	Que se mejoren los modelos pedagógicos y que se valore la necesidad de alguna parte presencial, por el tema de la motivación y la interacción, que son la clave más importante en cualquier actividad de formación
39.	Como complemento a la formación presencial
40.	se incrementará, pero como modalidad complementaria a la formación presencial, dado que algunas áreas de conocimiento precisan contenidos prácticos y manejo de equipamiento difícilmente sustituibles por medios virtuales
45.	Por otro lado, creo que sería importante completar la formación electrónica con alguna formación presencial, sobre todo en el caso de formación en idiomas.
46.	Siempre y cuando sea integrada con la formación presencial en términos de seminarios, será la evolución esperada desde mi opinión
48.	La tendencia que percibo es la de ir hacia una enseñanza mixta (blended learning)
50.	NUNCA SUSTITUIRÁ A LA FORMACIÓN PRESENCIAL. SERÁ COMPLEMENTO
51.	Más flexible, mejores contenidos, incremento de los métodos "blended"
52.	Como complemento a cualquier tipo de formacion ,tambien a la presencial.
IT	
9.	Non è da trascurare l'importanza dell'integrazione con attività di coordinamento/tutoraggio in presenza, soprattutto per rilevare le difficoltà di utilizzo delle tecnologie informatiche.
11.	Penso che in futuro ci sia sempre più spazio per la formazione "e-learning". Ritengo che sia importante la tipologia di "blended e-learning" o comunque dare rilievo anche all'interattività nella formazione a distanza.
24.	Vedrei bene una diffusione su grande scala dell'utilizzo di piattaforme per l'e-learning organizzate dalle singole istituzioni scolastiche a supporto dell'attività didattica in presenza. Sottolineo il termine "a supporto", in quanto ritengo ineliminabili, per studenti in età evolutiva, le dinamiche relazionali che si sviluppano nel gruppo classe
38.	nel blended learning
43.	E-learning success cannot be measured by itself; in Italy, "blended learning" still seems to be the more effective approach, especially regarding the commitment and motivational aspects.
DE	
4.	Zunehmende Bedeutung im Rahmen der beruflichen Weiterbildung, vor allem Umsetzung von Blended Learning Konzepten
8.	als integrativer Teil von Bildungsmaßnahmen und zur Förderung von selbstorganisiertem Lernen
9.	Vervielfachung des derzeitigen Angebots, Einsatz speziell in Form von "blended learning".
19.	Blended Learning wird zunehmen
20.	e-learning kann in Verbindung mit Präsenzveranstaltungen sehr wichtig werden
21.	e-Learning wird traditionelles Lernen niemals ersetzen, wird aber in hybriden Lernformen mit hohen sozialen Anteilen einen wichtigen Stellenwert einnehmen.
24.	zunehmende Relevanz, insbesondere in Verbindung von Präsenz- und "Fernunterrichts"-phasen
26.	Stärkere Verbindung mit Präsenzlernen
27.	als alleinstehende Methode sehe ich wenig positive Perspektiven für E-Learning, sehr wohl aber in gut konzipierten Kombinationen mit anderen Lernmethoden des Präsenzunterrichts; darüber hinaus scheint es ein 'Innovationspotential' für bestimmte Wirtschaftszweige (wie IKT, Softwareentwicklung, Schulungsunternehmen) zu beinhalten
29.	Weiterentwicklung maßgeschneiderter blended-learning Angebote unter Nutzung von open source CMS
32.	E-Learning wird sich als neue Form eines Lehrmittels als Ergänzung zum

konventionellen Unterricht etablieren.
42. Zunahme an blended-learning-Massnahmen ist zu erwarten und wünschenswert.
45. E-Learning wird in der Zukunft ein fester Bestandteil von Lernarrangements in allen Bildungssegmenten sein, aber den Präsenzunterricht sicher nicht ersetzen. Die Kombination wird sich auf lange Sicht durchsetzen.

4.3 E-learning embedded in the Lifelong learning and competence development process

(26 instances)

The future of e-learning must be accompanied by a recognition that it is based on rapidly changing technology which brings about the necessity to master media competencies, and additionally also include learning skills, specific to this mode.

For some e-learning would be the occasion to acquire more skills and lead to a better educated society with greater intellectual and social skills and higher level of competence – like transversal competences and relational abilities. It might even give greater opportunity to personal and professional development, more adapted to the market, which could in turn lead to more employment opportunities. Others emphasize that, if not accompanied by a specific and adapted competence development, it might lead to (social and educational) exclusion. A skills gap results from the difficulty for some part of the respondents to develop technology related skills and also specific learning and teaching skills (whether they are content development oriented or tutoring oriented). Some defend the idea that the lower skilled people may find it more difficult and their lack of skills can be an obstacle and risk of exclusion compared to those who already can be considered as higher skilled people and can continue to adapt and develop in changing situations.

The notion of competence development in lifelong learning for the learners and the teachers and trainers is often quoted as of paramount importance in the future of e-learning. According to the respondents, e-learning is particularly stimulating the lifelong learning process, providing a wider access to it and giving it more chance of success.

Moreover, the teaching/ training process should include education to training culture (and take into account the specificity of the e-learning mode), must be organised according to the learners' needs, and develop their competence on an individualised basis. This could mean a better identification of skills before and after the teaching/training process.

QUOTATIONS

2. (...)The focus for teachers, tutors trainers, educational managers, development workers etc. must be on pedagogical aspects and in particular in preparing learners for a changing and ever more complex world and in this context the E will be fitted to the Learning delivery.
3. If we go on with developing forms and pedagogical skills for e-learning and support the interaction teacher/learner and learner/learner there is an expanding market for e-learning/blended learning
17. growing for those who are able to work with ICT. Those who can't work with ICT won't be able to work with e-learning and will become the new generation of the uninformed because

all skills are changing in a very fast way and e-learning is offering the method of the future to follow new subjects in many different ways.
45. As a trainer I see the future of e-learning as a better way to acquire and develop better skills (cognitive, behaviour, and technique), not also in learning, but, much more important in training (e-training)
64. Technological improvements (wider bandwidth) will enable greater use of synchronous communication - including live video. However, this may exacerbate the already-existing "two-tier" situation where some learners have high technological skills and access to state-of-the-art equipment while other learners are left behind. There needs to be a fundamental recognition that the delivery medium does not subsume the pedagogical requirements of the programme and the individual needs of the learners.
124. Increasing its contribution to life long learning
129. demanding and constructive in creating citizens with skills according to the needs of self satisfaction and the market
153. E-learning is a tool to develop education & training among all people and is a tool for decreasing poverty & realizing sustainable development
167. Teachers get more skilled and develop eLearning pedagogy. Some of them concentrate on content development, some tutoring and some both of them. elearning will be part of the everyday work after some years. Meanwhile more and more teachers need IC-skills training. Also technical and teaching personnel need common conversation, common concepts and common view concerning eLearning.
178. Reaching all levels of society and all ages, and allowing those previously unable or unwilling to learn to discover they can learn. The end result is a better educated society with greater intellectual and social skills.
184. It has to first meet the skills of the students, unfortunately many students are intimidated by e-learning, particularly with people (of course) with low existing skill levels wanting to improve and get into the employment or better employment. Many programs for Long term unemployed are run on a budget and use e-learning to meet budget, however many of the learners lack the skills and resources to complete the program. My experience of E-learning is that the programs of lower completion rates and higher failure rates than traditional teaching models in Vocational Education and training, and I attribute this to the lack of existing skills and resources possessed by the students.
187. e-learning is an important "tool" in the future. It is significant in "life long learning" - mission that EU has.
FR
5. Comme une solution incontournable et un soutien important à l'effort personnel et professionnel de formation
12. ouvre des portes à des personnes qui désirent se former tout au long de leur vie, sans pouvoir forcément assister à des cours du soir. Permet de varier les connaissances. Mais il est important de mettre en avant la pédagogie, l'apprenant et non la technique. ce n'est pas non plus un remède miracle à l'apprentissage. Il faudra toujours beaucoup plus de motivation pour un télé-apprentissage que pour un apprentissage en présentiel.
51. Prenant appui sur une véritable structuration territoriale des points d'accès à la téléformation et sur le développement du nombre d'accédants à la formation tout au long de la vie car la FOAD se développe déjà bien pour la formation initiale et professionnelle.
10. l'e-learning doit aider à mieux identifier les compétences avant et après, à avoir un contenu orientable en fonction de la spécificité des besoins de l'apprenant, et doit avoir un contenu visant à conférer une permanence du transfert de compétence (c-à-d un contenu sur l'expérience à maîtriser, plus que de l'information à avaler)
47. De plus en plus d'outils de création de e-learning permettent d'adapter les modules aux besoins de l'apprenant. Cette orientation devrait voir proliférer des modules ciblés. Par contre, il faudra que les enseignants se tournent davantage vers une compréhension des curriculums individuels afin d'organiser l'enseignement/l'apprentissage autour de l'apprenant et des compétences qu'il lui faut développer. L'enseignant va au fur et à mesure de la progression de l'apprenant passer à un rôle de tuteur/coach. Enormes perspectives en vue et retour de "la personne" dans le processus e-learning - par télécommunications interposées.
ES

24. Creo que en la medida en que dicha formación se planifique y organice correctamente y sea acompañada por un animador o tutor se pueden alcanzar altos niveles de calidad y competencia para las personas formadas.
43. espero mayores aportaciones de expertos en educación para el diseño de modelos pedagógicos y materiales didácticos con valor; también un mayor desarrollo de habilidades, tanto por parte de alumnos como formadores, del manejo de las potencialidades de las herramientas electrónicas.
IT
3. Tuttavia non ritengo che l'e-learning possa sostituirsi completamente soprattutto per ciò che concerne le competenze trasversali e lo sviluppo di abilità relazionali o di risorse psicosociali.
10. Occorre insistere sulla educazione alla cultura della formazione in modalità a distanza, oggi la sola in grado di assicurare una circolarità di informazione e conoscenze ad ampio raggio (knowledge management)
23. opportunità: coinvolgerà più utenti rispetto all'insegnamento tradizionale, stimolerà il "long life learning" e il desiderio di formazione di molte persone, soprattutto di chi ne è spesso escluso Rischi: l'eccessivo uso delle tecnologie che peserebbe troppo (anche economicamente) sull'utente, costretto ad aggiornarsi molto rapidamente, e che esclude molti dalla formazione
40. sempre maggiore importanza, soprattutto per la formazione adulta e riqualificazione
45. sicuramente può assumere sempre più un ruolo fondamentale nella formazione, soprattutto quella continua legata alla specializzazione di forza lavoro e alla creazione di nuove possibilità occupazionali.
DE
22. Es ist ein unbedingt nötiges Lernsystem wegen der grossen Informationsflut; der Nötigkeit Wissen an bestimmten Stellen und Zeitpunkten zur Verfügung zu stellen; die einzige technische + pädagogische Möglichkeit das "live long learning" in die Praxis umzusetzen mit den besten Erfolgen.
46. Ich denke, dass E-Learning die Forderung nach "lebenslangem Lernen " erst realisierbar macht und daher immer stärker kommen wird, insbesondere dann, wenn schon viel Kompetenz und Wissen vorhanden ist.

4.4 From the E to the Learning: the pedagogical dimension must play a central part

(20 instances)

The idea expressed is contained in the words of this respondent: "the key aspect is not to concentrate on the E but rather on the Learning". An important number of respondents express this idea that e-learning of the future should be more focused on the pedagogical and didactical aspects. This includes better development of pedagogical models (which takes into account the specificity of the media), pedagogical engineering and scenarisation of content, and to better respond and go in the direction of the learners' needs and motivation. The relation with technology is still tight but the respondents stress the point that the "technological hype" is over, technology is now a component of the teaching and learning process (that is integrated, at the service of pedagogy). But it can also be an innovation vector when e-learning invites us to distance ourselves from the classical model of learning.

QUOTATIONS

2. The key aspect is not to concentrate on the E but rather on the Learning. The focus for teachers, tutors trainers, educational managers, development workers etc. must be on pedagogical aspects and in particular in preparing learners for a changing and ever more complex world and in this context the E will be fitted to the Learning delivery.

24. As the access to the E of e-learning is more and more standard the focus will go more

and more on the learning (pedagogical and didactical aspects). When it is now common to learn from a book it will very common in the future to learn from a electronic platform
199. It will increase as seen as cost-effective way of developing and delivering training (though is this always true?) Need to focus on quality of content and better development of media-appropriate pedagogical models. Potential for further expansion/improvements in access due to multiplatform products.
225. Technical development together with pedagogical innovation will enhance e-learning if e-learning will be considered as a tool not as an objective in itself.
241.. (...) the URGE is not to lure in more students and make more money, but to provide quality learning environment. Something the policy makers must have felt the same overwhelming frustrations. THE last for this time: EU policy makers have to make decisions. WITH the interests of the learners AND TEACHERS. Most of the time we see only about technologies. That would not work. Teachers generally understand a lot more what the students need. Ask the teachers.
248. an inevitable method but we have to be conscious that technocs are used as a tool! So, tech is important but the #1 is way you see learning/teaching process.
FR
12. ouvre des portes à des personnes qui désirent se former tout au long de leur vie, sans pouvoir forcément assister à des cours du soir. Permet de varier les connaissances. Mais il est important de mettre en avant la pédagogie, l'apprenant et non la technique. ce n'est pas non plus un remède miracle à l'apprentissage. Il faudra toujours beaucoup plus de motivation pour un télé-apprentissage que pour un apprentissage en présentiel.
14. Pour développer les potentialités du e-learning il faut des efforts intenses de réflexion pédagogique.
15. Un travail important à effectuer sur l'ingénierie pédagogique et la scénarisation de contenus... le gadget médiatique ne suffit pas pour apprendre et surtout transmettre. Mais ces remarques et ce recul sur la e-formation déteint sur le présentiel et invite à se poser des questions sur la qualité de l'ensemble des prestations pédagogiques
54. Il sera de mise puisque nous le contrôlons de plus en plus. Cependant, il exigera une modification des rapports au travail chez les enseignants parce qu'il est extrêmement exigeant en terme de temps
58. Le développement du e-learning et son efficacité dépend beaucoup de la maîtrise des théories (et pratiques) pédagogiques. Les TIC doivent être au service de la pédagogie et il y a une grande tendance de se concentrer sur les technologies au détriment de la pédagogie qui peut bloquer l'évolution du e-learning.
64. une exigence accrue de rigueur dans la démarche de création de cours et un recours plus important au suivi pédagogique en présentiel
ES
16. Un uso extensivo e intensivo cuando se apliquen metodologías y didácticas adecuadas.
32. Mejora en la calidad de los temas, mayor importancia de los aspectos motivadores y pedagógicos
36. Que se mejoren los modelos pedagógicos y que se valore la necesidad de alguna parte presencial, por el tema de la motivación y la interacción, que son la clave más importante en cualquier actividad de formación
43. espero mayores aportaciones de expertos en educación para el diseño de modelos pedagógicos y materiales didácticos con valor; también un mayor desarrollo de habilidades, tanto por parte de alumnos como formadores, del manejo de las potencialidades de las herramientas electrónicas.
IT
6. Non saprei. Sicuramente deve maggiormente distaccarsi dal classico modello di apprendimento, a cui è ancora troppo ancorato +
18. Trovo che attualmente, almeno in relazione alle mie sperienze professionali, si stiano impiegando le nuove tecnologie per l'apprendimento solo in un'ottica di "saving" e senza prestare la dovuta attenzione all'efficacia delle nuove modalità di apprendimento.
DE
13. E-Learning wird vor allem in der Weiterbildung, aber auch in der

Universitätsausbildung einen höheren Stellenwert einnehmen. Allerdings muss noch vermehrt auf Pädagogik und Didaktik eingegangen werden und die Lehrenden und Entwickler auf die Bedürfnisse der Lernenden mehr eingehen.

18. E-Learning Anteile werden zum generellen Werkzeug für die meisten denkbaren Anwendungsszenarien (siehe Diskussion um live long learning). Die Didaktik und die Implementation von IT-gestützten Qualifizierungsmaßnahmen steht Mittelpunkt - der technisch getriebene Hype ist vorbei.
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4.5 Quality

(20 instances)

The issue of quality seems to be of importance to the respondents – it represents an area of expected development, even for some of them a condition for sustainability for e-learning. The future of e-learning must be quality oriented. According to the respondents, quality must be sought as far as:

- the learning process,
- the courses,
- the training of teachers and trainers,
- the on-line materials,
- the pedagogical approach,
- the moderation process,
- the learning (virtual) environment are concerned.

The respondents clearly have a comprehensive vision of quality which is not technocratic or limited to the teaching/ learning process only. Quality is thus seen as a transversal topic which puts completely new requirements on organisational processes. In order to achieve high quality, criteria and quality standards must be implemented throughout a whole organisation and must comply with the development of a culture of quality which allows for continuous improvement.

QUOTATIONS

38 Gaining in importance quantity, quality and necessity
46 With appropriate IT infrastructure e-learning will contribute to reduce the digital divide and increase access to quality learning.
76 It is here to stay. Quality courses will survive others will die away.
93. greater inclusion of voice tools and virtual classroom tools enabling realtime collaboration and removing barriers of written literacy. More/ better targeted and quality, specialised training to support f2f teachers/trainers moving confidently and competently into a blended f2f + online mode.
154 Better quality of online materials with a focus on the development of concept driven and encapsulated 'learning objects' More use of mobile devices and repurposing of material/ resources to enable access by a range of devices. Better focus on engagement , motivation and fit for purpose online resources which ensure students realise the value added dimension of e-learning
186. I think it should become more accessible to students with work commitments and should expand with more quality material available and better links to recognised qualifications. Often needs to include back-up paper based materials and good tutor support.
199. It will increase as seen as cost-effective way of developing and delivering training (though is this always true?) Need to focus on quality of content and better development of media-appropriate pedagogical models. Potential for further expansion/improvements in access due to multiplatform products.
241 (...) policy makers would see things better manager, cohesieve, less competition therefore the URGE is not to lure in more students and make more money, but to provide

quality learning environment.
FR
15 Un travail important à effectuer sur l'ingénierie pédagogique et la scénarisation de contenus... le gadget médiatique ne suffit pas pour apprendre et surtout transmettre. Mais ces remarques et ce recul sur la e-formation déteint sur le présentiel et invite à se poser des questions sur la qualité de l'ensemble des prestations pédagogiques
20 Avec confiance... mais nécessitant de la patience. Il nous faudrait de grands projets intégrateurs focalisés sur l'usage des technologies EXISTANTES mais en les poussant à l'excellence pédagogique. Les exemples de bonnes pratiques sont intéressants mais devraient être complétés par des VISITES de bonnes pratiques, des PRATIQUES de bonnes pratiques, et pour cela, de grands dispositifs doivent pouvoir accueillir des visiteurs de tout type. Le eLearning nécessite encore des subsidiations importantes si l'on veut développer des pratiques de qualité dans toutes les sphères, y compris dans la sphère publique. Le eLearning prendra de plus en plus d'importance dans l'apprentissage, à nous d'en faire un outil de qualité.
38. l'évolution du e-learning va dépendre de l'offre proposée, de la qualité des contenus et surtout de la qualité du tutorat organisé
48 ça va changer et ajouter beaucoup de valeur ça va faciliter et généraliser les connaissances et les bonnes pratiques
ES
8. Creo que se va a desarrollar y extender. Es necesario para ello que se amplien las conexiones a internet en casa y en el trabajo, y que los contenidos sean de calidad e interactivos
10. acceso mas facil e contenidos de mejor calidad
28. Contenidos de mejor calidad; profesionales más cualificados: amplia difusión
32. Mejora en la calidad de los temas, mayor importancia de los aspectos motivadores y pedagógicos
47. Aumento de calidad de los centros virtuales de formación
50. SIEMPRE QUE SE CUIDE LA CALIDAD
DE
1. Positiv; allerdings wird sich das übergroße Angebot hoffentlich durch Qualitätskriterien mittelfristig auf essentielle Angebote verringern
38. Wenn Qualitätsstandards eingehalten werden, könnte es eine positive Entwicklung geben.

4.6 Taking into account the learner's needs

(17 instances)

E-Learning in the future should be learner oriented, taking into account their background, their needs and goals, in a flexible and personalised way. The *à la carte* mode seems a good option and also relates to the need of developing competences. The learner should also be involved from the designing stage of the course on. This implies a redefinition of the role of the teacher/trainer.

QUOTATIONS

14. especially useful in learning individual skills, on your own pace. I think this is the most efficient way for elearning to evolve in, for the immediate future.
36. More personalised - suited to the needs of the individual.
39. Blended learning is the first admission that elearning is not the wunderkind. Blended learning is what every good teacher or trainer already does i.e. uses a range of different methods. Humans lag behind technological advance and elearning's evolution depends on whether it hijacks, supplants or supports moves towards more learner-centred and self-directed pedagogy.
130. (...) ICT applications and e-learning will face a huge future, only if the applications can be used in a flexible way, with learner oriented goals and objectives (not as nowadays teaching products, teacher oriented)

144. As one tool in an array of methodologies, which can be used to individualise learning to suit the needs of the learner and the trainer and industry.
180. In future eLearning will consider the learning styles and needs of learners.
200. Effectiveness will improve as we learn to support development of relationship of learners with peers, facilitator, content and environment. Glorified correspondence through fancy learning objects is expensive and ineffective for most learners.
212. Unfortunately e-learning in many cases is being used as a new fashion rather than a primary learning tool. However when e-learning is tailored to the learner requirements it will increasingly offer a more flexible and efficient learning experience. However it is difficult to see how e-learning can replace current systems of physically "on-site" learning systems in the foreseeable future.
215. Excited by blended learning and individual learning. Need resource banks with material relevant to the subjects taught. Need technical support networks. Development of self-assessment and course assessment thereby minimising the paper forms needed.
FR
35. évolution vers une mutualisation de l'apprentissage enseignants / apprenants, c'est à dire que les apprenants pourront prendre part à l'évolution du "produit" en apportant sa propre expérience
45. personnalisation des formations plus de flexibilité de la formation créditée supports mobiles pour les contenus
46. E-learning à la carte - basé directement sur les connaissances déjà acquises de l'apprenant
47. De plus en plus d'outils de création de e-learning permettent d'adapter les modules aux besoins de l'apprenant. Cette orientation devrait voir proliférer des modules ciblés. Par contre, il faudra que les enseignants se tournent davantage vers une compréhension des curriculums individuels afin d'organiser l'enseignement/l'apprentissage autour de l'apprenant et des compétences qu'il lui faut développer. L'enseignant va au fur et à mesure de la progression de l'apprenant passer à un rôle de tuteur/coach. Enormes perspectives en vue et retour de "la personne" dans le processus e-learning - par télécommunications interposées.
52. Développement exponentiel car ce sera la solution aux exigences d'apprenants éparpillés (flexibilité) aux besoins diversifiés (formation à la carte), surtout pour la formation continue.
ES
48. La tendencia que percibo es la de ir hacia una enseñanza mixta (blended learning) con fuerte personalización y facilidad de acceso por parte de los alumnos (herramientas amigables)
IT
15. vorrei che ci fosse la possibilità di graduare meglio i corsi in base alle possibilità del discente.
DE
13. (...) Allerdings muss noch vermehrt auf Pädagogik und Didaktik eingegangen werden und die Lehrenden und Entwickler auf die Bedürfnisse der Lernenden mehr eingehen.

4.7 The teacher/trainer's role and skills need to evolve (e-mentoring, e-tutoring...)

(17 instances)

For the future of e-learning the respondents emphasize the development of specific e-teaching/e-training skills for the teachers and trainers. In particular e-facilitation or e-moderation skills for e-tutors are necessary. In this process some respondents point out the necessity for a radical change in the way teachers and learners view the learning process – and this is the way that

leads to genuine innovation. In this regard, the recognition of these skills as part of professional qualification is to be wider accepted and training of trainers curriculum must take it into account. The respondents also stress the importance of paying attention to the specific social situation of the trainers and teachers involved in an e-learning activity by giving them incentives and integrate this activity as an integral part of their work. The data clearly suggest to drop the myths of e-learning as opponent to teacher/ trainer integrated educational scenarios. Rather it becomes obvious that e-learning needs guidance and moderation through better and differently qualified teachers/trainers.

QUOTATIONS

1. (...) More instructors will be expected to have e-teaching or e-moderating skills. We will find ways to make it less time-consuming for participants and instructors.
2. (...) The focus for teachers, tutors trainers, educational managers, development workers etc. must be on pedagogical aspects and in particular in preparing learners for a changing and ever more complex world and in this context the E will be fitted to the Learning delivery.
13. It will become more prevalent and more sophisticated. However, e-facilitation skills may be lacking.
166. E-learning is very demanding for the teachers because from the quality of the preparation ,presentation of the course ,and of the quality of the tutoring, depends the quality of the learner's work , motivation and involvement. If there are no incentives for the trainers/teachers, for whom mostly the e-learning course is an addition (not paid and time consuming) to their traditional duties,I am afraid that e-learning will evoluate slowly. While it is very important .It is very good to get learners used to the system, but there should then be more attention to the social situation of the trainers/tutors.
167. Teachers get more skilled and develop eLearning pedagogy. Some of them concentrate on content development, some tutoring and some both of them. elearning will be part of the everyday work after some years. Meanwhile more and more teachers need IC-skills training. Also technical and teaching personel need common conversation, common concepts and common view concerning eLearning.
236. More Blearning better contents more skills from trainers and moderator/tutors
FR
38. l'évolution du e-learning va dépendre de l'offre proposée, de la qualité des contenus et surtout de la qualité du tutorat organisé
39. Après la phase des pionniers, la phase d'industrialisation peine à se mettre en place. L'évolution sera lente, car il faut régler les questions juridiques et administratives mais aussi et surtout celles liées à la place de l'enseignant. L'apprentissage en ligne modifie cette place, et ce type d'évolution prend toujours beaucoup de temps.
42. Je suis très mal placé pour parler de ce sujet. Je suis tuteur depuis 3 ans, mais je réfléchis sur les modèles d'apprentissage à distance depuis 11 ans (participation à un projet tutoré lors des sessions d'été de l'ISU en 1994. Tout au long de ma carrière professionnelle, j'ai travaillé, à un niveau ou à un autre, sur ces sujets. L'avenir de l'apprentissage à distance par le biais des TIC est celui que feront ensemble les futurs apprenants et enseignants. Mais une chose est sûre : cela n'a rien à voir avec le dispositif technique. Ce n'est que lorsque enseignants et apprenants changeront leurs position face à l'apprentissage que l'e-learning proposera un véritable changement : cela à toujours été le cas, et il n'y a aucune raison pour que cela change.
47. De plus en plus d'outils de création de e-learning permettent d'adapter les modules aux besoins de l'apprenant. Cette orientation devrait voir proliférer des modules ciblés. Par contre, il faudra que les enseignants se tournent davantage vers une compréhension des curriculums individuels afin d'organiser l'enseignement/l'apprentissage autour de l'apprenant et des compétences qu'il lui faut développer. L'enseignant va au fur et à mesure de la progression de l'apprenant passer à un rôle de tuteur/coach. Enormes perspectives en vue et retour de "la personne" dans le processus e-learning - par télécommunications

interposées.
54. Il sera de mise puisque nous le contrôlons de plus en plus. Cependant, il exigera une modification des rapports au travail chez les enseignants parce qu'il est extrêmement exigeant en terme de temps
ES
28. profesionales más qualificados
43. espero mayores aportaciones de expertos en educación para el diseño de modelos pedagógicos y materiales didácticos con valor; también un mayor desarrollo de habilidades, tanto por parte de alumnos como formadores, del manejo de las potencialidades de las herramientas electrónicas.
IT
17. In continuo aumento là dove vengono garantiti i supporti tecnici e e-tutor formati adeguatamente.
18. (...) In ambito universitario, poi, (sto frequentando il CdL per Formatore Multimediale presso l'Università degli Studi di Firenze) spesso si affida il ruolo di e-tutor a docenti che non sono assolutamente avvezzi a tali nuovi approcci. L'opera di divulgazione, sensibilizzazione e "formazione dei formatori" mi pare rappresenti uno dei primi obiettivi su cui concentrarsi nel prossimo futuro.
19. (...)L'e-learning inoltre promuove un tipo di rapporto docente-discente innovativo, che sicuramente aiuterebbe a far evolvere ruoli che in Italia, in ambito universitario sono ormai troppo rigidi, cristallizzati.
37. assolutamente auspicabile ma dipendente da adeguata formazione dei docenti

4.8 The future of e-learning is Collaborative

(14 instances)

The future of e-learning is linked with the development of collaborative learning taking place between the learners themselves, also between the learners and the teachers/ trainers and also between the teachers/trainers (in communities of practice). E-learning thus evolves to a full scale learning environment. Were the social learning aspects in the past often questioned, they are now strongly demanded for the future. The interaction and the cognitive learning are seen as positive components of collaborative learning and this does not contradict with the development of individualized learning. Collaborative learning is also perceived in connection with the development of specific tools (virtual collaborative platforms, real time communication with audio/video tools).

QUOTATIONS

22. e_Learning will escalate widely regardless of if people like it. It offers far greater access to knowledge than traditional teaching. Plus it also give you access to more teachers i.e. We all have the possibility to transmit what we know with cognitive learning taking place, in the process of collaboration.
32. I believe Blackboard to be an excellent tool in addition to normal lessons, because it gives pupils the opportunity to exercise on their own level and speed. I'm absolutely fond of the ICT-community we've created with some colleagues of other schools, and I hope we can do a lot more of interesting collaborating tasks such as developing learning units for our pupils.
79. It will be helpfull becuae it will create an atmosphere which has interaction between the learners and masters.
89. If the institution is able to motivate the learnes to form groups, which interact a lot on the e-learning work platform. Then it really will contribute to learning, because here people will be able to learn from eachother and not only in class-rooms, auditoriums and so on

93 greater inclusion of voice tools and virtual classroom tools enabling realtime collaboration and removing barriers of written literacy. More/ better targeted and quality, specialised training to support f2f teachers/trainers moving confidently and competently into a blended f2f + online mode.
128. Needs to be one element in a range of methods to provide learning opportunities. Must provide opportunity for learners to interact with one and other.
131. co-learning trainers and trainees
148. more blended courses - components of the learning will be online eg pre face to face reading or assessment. More collaborative group work on line
164. 1. Main means of knowledge transfer - with books as alternative. 2. A means of skills explanation (how to phrase open questions, for instance) - with simulation to develop practice, followed by face-to-face work. 3. Forums & chat rooms to share experiences. 4. Synchronous learning best done in classrooms, but where it is impossible or expensive to bring learners into one place then virtual classroom etc is acceptable alternative. In the future, all of this will be achieved increasingly using mobile technology (phone, PDA, WIFI, etc).
FR
8. collaboration knowledge management
37. Vers une évolution type blended learning avec une individualisation de + en + poussée des apprentissages tout en favorisant les activités collaboratives.
IT
8. permette di continuare collaborazioni e confronti in un corso virtuale e quindi possa essere considerato un valore aggiunto per la formazione
9. (...) Invece considero che il futuro dell'e-learning sia allargare la base dell'utenza, la creazione di piattaforme molto semplici soprattutto di gestione del lavoro collaborativo, con l'introduzione di una comunicazione sincronica fra i gruppi di lavoro.
19. (...) potrebbe anche promuovere un nuovo modo di studiare, promuovendo un tipo di apprendimento collaborativo (condivisione di risorse, domande, risoluzione dei problemi, prodotti: tesine, ricerche, ecc.; animazione di discussioni).

4.9 M-learning : learning anytime anywhere

(13 instances)

"Nomadic computing" will make progress in education. M-learning means greater accessibility to learning, to more people, at their chosen time and location, at their own pace in an adaptive and relevant manner for the learner. "Just in time" learning and instant available information and knowledge will result in creating more learning opportunities. Information and knowledge will thus be accessible through in different products and devices.

According to our respondents, m-learning is also connected with "the spread of democracy" - (m-)learning is for everybody, "from the senior managers to the socially excluded learners".

Respondents also point out the need for a recognised assessment (leading to official certification) which could be done online. See also section below on academic content and qualification.

Mobile learning development is also strongly correlated to the development of mobile technology (PDA, pocket PC, mobile phone and Wifi) – see also section below on technological improvement. However, technology plays the role of a delivery structure which allows for different scenarios. The didactical design still plays the primary role for all respondents.

QUOTATIONS

68. better access to learning for mobile learners, drivers, those working in the community etc
--

96. I see e-Learning growing in scope and applicability, especially as technology improves to facilitate greater access to a larger number of people.
109. we are just at the beginning... nomadic computing is the next evolution in education which will really affect the field of e-learning in a dynamic and innovative way. "Anytime - anywhere learning" will be the most important message and also affect the spread of global democracy.
209. From e-learning to m-learning, anytime, anywhere.
116. E-learning will move from prior learning to just in time learning and will transform to a great deal of meta learning. (a lot of knowledge (information will be instant available (embedded in products and devices)
110 (accessibility whatever the place is) It is a very useful tool, since it gives people more accessibility whatever the place is. very practical and helpful. an essential tool for learning.
118 Allowing student to study at their own time, location and speed. Curriculum accessed by ipod or telephone.
119 mobile, attractive, adaptive
164. Main means of knowledge transfer - with books as alternative. 2. A means of skills explanation (how to phrase open questions, for instance) - with simulation to develop practice, followed by face-to-face work. 3. Forums & chat rooms to share experiences. 4. Synchronous learning best done in classrooms, but where it is impossible or expensive to bring learners into one place then virtual classroom etc is acceptable alternative. In the future, all of this will be achieved increasingly using mobile technology (phone, PDA, WIFI, etc.
222. Growing rapidly involving mobile technology such as mobile phones and pocket PC
249. Accredited online assessment recognised by traditional awarding bodies. Use of m-learning increasing with both senior management groups and socially excluded learners. Greater move towards blended learning i.e. more traditional courses building in elements of e-learning rather than more courses springing from nowhere.
250. Embrace mobile technologies/become pervasive. More use of simulation, video, sound, graphics and highly interactive (e.g. scenarios). Higher use of interactive whiteboards and other collaborative tools (synchronous and a-synchronous).
FR
45. personnalisation des formations plus de flexibilité de la formation créditée supports mobiles pour les contenus

4.10 Technological improvement

(11 instances)

The future of e-learning as seen by the teachers/trainers and learners will involve technological improvements. This includes wider bandwidth, better learning platforms, use of audio/video, increased interactivity, collaborative communication tools. Technology is here to facilitate and increase access to learning.

Some respondents draw our attention on the risk of the digital divide related to the emphasis put on technology. Developing technology must go along with developing pedagogical innovation and quality. It is also worth noting that the instances which fall into this category are fewer than the ones which are related to pedagogy (see sections 3, 5 and 6).

QUOTATIONS

59 Increased innovation in presentation e.g. video gaming is the standard people expect and perhaps "games" will form a part of learning (virtual roleplay for example?)
64 Technological improvements (wider bandwidth) will enable greater use of synchronous communication - including live video. However, this may exacerbate the already-existing "two-tier" situation where some learners have high technological skills and access to state-of-the-art equipment while other learners are left behind. There needs to be a fundamental recognition that the delivery medium does not subsume the pedagogical requirements of the programme and the individual needs of the learners.

96 I see e-Learning growing in scope and applicability, especially as technology improves to facilitate greater access to a larger number of people.
114 I think the amount of e-learning will increase with the advancement of technology and it will become more of a norm and not just something done for convenience.
117 Growing in popularity as improving technologies open up the market to new users i.e higher bandwidth connections.
225 For certain student groups e-learning can be a very effective way of learning. Technical development together with pedagogical innovation will enhance e-learning if e-learning will be considered as a tool not as an objective in itself. I am very critical towards those who see e-learning as solution to all learning challenges and problems but I do speak very favorably for using e-learning when properly designed and organised.
250 Embrace mobile technologies/become pervasive. More use of simulation, video, sound, graphics and highly interactive (e.g. scenarios). Higher use of interactive whiteboards and other collaborative tools (synchronous and a-synchronous).
[technology as pervasive (negative)] = 86 more emphasis on technology rather than learning - which is not necessarily the best approach!!
FR
16 positive. e-learning is the learning of the future. It will become an important learning tool
32 Deux perspectives: un développement mettant en oeuvre une totale autonomie d'apprentissage grâce à des outils et des techniques de communication de plus en plus performants (logiciels de contenus interactifs et de gestion des formations) ..ou un développement de la formation presentielle comme rééquilibrage au rapport virtuel du e-learning, en alternant les deux modes de formation, sorte de formation en alternance mutipolaire.
ES
14. Mejora de las plataformas de teleformación, calidad didáctica y calidad técnica

4.11 Flexibility

(10 instances)

E-learning has the potential to improve flexibility in the organisation of learning for the learners. Applications can be used in a flexible way and can thus be more learner and competence development oriented, adapted to the learners' needs, requirements and objectives. Flexible patterns of education/training can be implemented. This flexibility will then empower the learners to manage their time.

At the same time, however, the respondents clearly see the new requirements going along with such a flexibility and demand for more and better teacher training and a specific recognition of necessary learning skills connected to successful e-learning for learners.

QUOTATIONS

11. It's the most interesting way of learning for people who don't have the opportunity to follow courses each week at a specific time in a classroom.
63. More and more people are interested in e-learning. Flexible and good structured e-learning will have in a future rising value and popularity.
130. ICT applications and e-learning will face a huge future, only if the applications can be used in a flexible way, with learner oriented goals and objectives (not as nowadays teaching products, teacher oriented)
132. I think the era is changing towards virtual education and it is very important to become quickly aware of these changes. E-learning provides more flexible patterns of education/training and when it is embedded within the company's strategy then it becomes a very useful tool.
196. I see more and more businesses going down this path. It allows flexibility but the support

has to be there
210. More people will turn to this mode of training as it is accessible at times that suit the individual and employers
212 Unfortunately e-learning in many cases is being used as a new fashion rather than a primary learning tool. However when e-learning is tailored to the learner requirements it will increasingly offer a more flexible and efficient learning experience. However it is difficult to see how e-learning can replace current systems of physically "on-site" learning systems in the foreseeable future.
251 It's here to stay; it blends in with young learners' everyday activities; adds flexibility. We need to take extra care not to blunder in too eagerly. E-learning, like any other innovation, takes time and devotion.
FR
47. De plus en plus d'outils de création de e-learning permettent d'adapter les modules aux besoins de l'apprenant. Cette orientation devrait voir proliférer des modules ciblés. Par contre, il faudra que les enseignants se tournent davantage vers une compréhension des curriculums individuels afin d'organiser l'enseignement/l'apprentissage autour de l'apprenant et des compétences qu'il lui faut développer. L'enseignant va au fur et à mesure de la progression de l'apprenant passer à un rôle de tuteur/coach. Enormes perspectives en vue et retour de "la personne" dans le processus e-learning - par télécommunications interposées.
IT
27. L'e-learning può ampliare in modo significativo la possibilità di apprendimento e aggiornamento delle persone anche se fortemente impegnate nel loro quotidiano.

4.12 E-learning in distance education and access to academic content and certification

(9 instances)

The e-learning of the future should have more academic credibility (especially in higher education) with institutions delivering more certifications for e-learning courses, with the possibility to organise online assessment, even at post-graduate levels. This would then give access to highly specialised academic contents, facilitating international virtual mobility in higher education. The questions arising from such a situation must nevertheless be dealt with : tuitions fees, regulations etc.

QUOTATIONS

54. (...) E-learning will be widely used in higher education in the future and have academic-social credibility if supported by the print medium with appropriate face to face sessions.
185. (...) Institutions will focus on support and certifying learning outcomes.
213. In education, probably largely as Blended Learning, with many more organisations embedding e-learning within the curriculum, and as part of the widening participation process
249.(...) Accredited online assessment recognised by traditional awarding bodies.
FR
1. Cela faciliterait grandement l'apprentissage à distance. Le jour viendra-t-il où l'on pourrait passer les examens au-delà de la Maîtrise par cette technique d'apprentissage ?
24. Il me semble qu'il nous sera possible de suivre de manière interactive et de passer des examens dans des universités étrangères sans devoir s'y rendre, ce qui nous permettra de suivre certains cours pointus et spécialisés. Les contenus académiques seraient alors véritablement disponibles à tous.
45. personnalisation des formations plus de flexibilité de la formation créditée supports mobiles pour les contenus

53. accessibilité à des contenus universitaires / à savoir si comment cet accès sera règlementé / déontologie / vérification des contenus / et accès payant / accès gratuit il n'est pas sur que cela se traduise par une démocratisation de l'accès au savoir

IT

14. complessa, perchè le istituzioni faticano a gestire in contemporanea i corsi tradizionali e quelli on line.

Summary of the main findings

Who are the respondents ?

Among the 600 respondents who participated in the survey, 80% come from EU 25 countries ; 71% of them are pedagogical professionals and learners.

This surveyed population is an involved, experienced (65% have more than 1 year of experience and 43% more than 3 years) and skilled population (65% claim to master basic ICT skills).

What is e-learning according to teachers, trainers and learners' views :

It is web oriented and enables collaborative communication.

It is distance learning but with strong pedagogical support component.

It is blended learning (34%), supported self-learning (31%) and collaborative (20%)

It is used for IT-Training (36%) and job-related training (34%). Languages and management are more specifically related to e-learning training.

How is e-learning rated, according to teachers, trainers and learners ?

92% of the surveyed population think that e-learning really supports their teaching/study.

The positive impact of e-learning is more perceived in relation with the process than with the results : flexibility (65%), better time management (53%) or autonomy/responsibility (51%) are the most quoted enhancing factors of e-learning for teaching/study, whereas quality of content (24%) or efficiency (29%) seem to be of less importance.

29% of the surveyed population think that there are no obstacles to teaching/study associated with e-learning. Among those quoted as such, the main obstacles are : self-discipline required (48%) and its time consuming dimension (29%).

The success factors are motivation defined as intensity of involvement of the participants (47%) and presence and quality of technical support (29%).

95% of the surveyed population associate e-learning with innovation, in that it creates new kinds of relationships between the different stakeholders involved in the learning/teaching process (66%) and gives wider access to content and knowledge (64%).

The pedagogical skills and learning skills are said to be the most likely to be developed in an e-learning training course ; these skills as well as cognitive skills are considered more important than the technological skills.

What is the future of e-learning according to teachers, trainers and learners ?

- (1) The future of e-learning is blended learning.
- (2) The future of e-learning is embedded in the lifelong learning and competence development process.
- (3) E-learning in the future must shift from the E to the Learning
- (4) The future of e-learning must be quality oriented.
- (5) The future of e-learning must take into account the learners' needs.
- (6) In the future e-learning must accompany the development of the teacher/trainer's role and skills (e-mentoring, e-tutoring...).
- (7) The future of e-learning is collaborative learning.
- (8) The future of e-learning is m-learning : learning anytime anywhere.
- (9) The future of e-learning will go along with technological improvement.
- (10) The future of e-learning will bring about flexibility.
- (11) The future of e-learning must give access to academic content and certification.

MINI-GLOSSARY

Blog

"A **weblog** (usually shortened to **blog**, but occasionally spelled **web log**) is a web-based publication consisting primarily of periodic articles (...) Blogs range in scope from individual diaries to arms of political campaigns, media programs, and corporations. They range in scale from the writings of one occasional author, to the collaboration of a large community of writers. Many weblogs enable visitors to leave public comments, which can lead to a community of readers centered around the blog; others are non-interactive." Source : Wikipedia <http://en.wikipedia.org/wiki/Blog>
For further reference see Walker, J. 2005 "Weblogs: Learning in Public", *On the Horizon*, Vol 13, Issue 2, 2005. Pages 112-118.

Wiki

"A **wiki** is a web application that allows users to add content, as on an Internet forum, but also allows anyone to edit the content. The name is based on the Hawaiian term *wiki wiki*, meaning "quick" or "informal". Source : Wikipedia <http://en.wikipedia.org/wiki/Wiki>

Blended learning

"**Blended Learning** is defined as a method of learning (or training) which uses ICT-based learning (web-based or CD-Rom-based) predominantly, with any other method/medium used in addition to complete or enhance a learning programme."
Source : Formatic <http://www.formaticonline.net/>

"The term **blended learning** is used to describe a solution that combines several different delivery methods, such as collaboration software, Web-based courses, EPSS, and knowledge management practices. Blended learning also is used to describe learning that mixes various event-based activities, including face-to-face classrooms, live e-learning, and self-paced learning" in Valiathan, P. 2002. "Blended Learning Models" <http://www.learningcircuits.org/2002/aug2002/valiathan.html>

"(...) Blending involves a planned combination of approaches, such as coaching by a supervisor; participation in an online class; breakfast with colleagues; competency descriptions; reading on the beach; reference to a manual; collegial relationships; and participation in seminars, workshops, and online communities."

in A. Rossett, F. Douglass, & R. V. Frazee. 2003 "Strategies for Building Blended Learning". <http://www.learningcircuits.org/2003/jul2003/rossett.htm>

M-learning

Short for mobile learning. The term refers to giving "ubiquitous access to appropriate learning objects by linking to the Internet via mobile connections and devices, according to innovative paradigms and interfaces." Da Bormida, G. *et al.* 2003 [MOBIlearn's Open Mobile Access Abstract Framework](#), 5th International Conference On Enterprise Information Systems: Angers, France.

REFERENCES and further reading

Cedefop Publications - Reference Series

E-learning for teachers and trainers, 2004

Perspectives for European e-learning businesses, 2003

User's views on e-learning, 2002

E-learning and training in Europe, 2001

Cedefop Publications - Panorama Series

The challenge of e-learning in small enterprises, 2003

Quality in E-learning, 2005

See <http://www2.trainingvillage.gr/etv/publication/publications.asp?section=23>

Eurostat - Information Society indicators

Percentage of enterprises using e-learning applications for training and education of employees (2004)

Percentage of individuals having used the Internet in relation to training and educational purposes (2004)

Percentage of households with access to the Internet (2004)

See <http://epp.eurostat.ec.eu.int>

Eurostat – Statistics in Focus

18/2005 Internet Usage by Individuals and enterprises

45/2004 Regional Divide in the information Society

OECD

E-learning in Tertiary Education Where Do We Stand? OECD Publishing - Centre for Educational Research and Innovation 2005

Further information on E-learning in Europe

European Community sites

- **The eLearning program of the EC**
http://europa.eu.int/comm/education/programmes/elearning/index_en.html
- **elearning Europa Portal**
<http://elearningeuropa.info>
- **IST program**
<http://www.cordis.lu/ist/>
- **Cedefop and e-learning**
http://www.trainingvillage.gr/etv/Projects_Networks/Elearning/

European Networks

- **European Foundation for Quality in E-Learning**
<http://www.qualityfoundation.org/>
- **EIFEL**
<http://eife-l.org/eifel>
- **The eLearning Industry Group (eLIG)**
<http://www.elig.org/>

- **eTTNet**
<http://ettnet.trainingvillage.gr/default.asp>
- **TTNet Virtual Community**
<http://communities.trainingvillage.gr/ttnet>
- **MENON**
<http://www.menon.org/aboutmenon/>

General information

- **Checkpoint eLearning**
<http://www.checkpoint-elearning.com>
- **HELIOS**
<http://www.education-observatories.net/helios/about/>
- **E-Learning Centre**
<http://www.e-learningcentre.co.uk/eclipse/Resources/europe.htm>
- **Algora (fr)**
<http://www.algora.org/>
- **Centre for Educational Research and Innovation (CERI /OECD)**
http://www.oecd.org/document/27/0,2340,en_2649_34519_2516571_1_1_1_1,00.html

Education

- **FORMATIC Leonardo project (2003-2005) with resources for teachers and trainers**
<http://www.formaticonline.net/>
- **ETTCampus**
<http://www.saveriopescuma.it/ettcampus/modules/news/>
- **eTwinning**
<http://www.etwinning.net/ww/en/pub/etwinning/index2005.htm>

Thematic e-learning

Blended learning

- **Strategies for building blended learning**
<http://www.learningcircuits.org/2003/jul2003/rossett.html>
- **ECOSME**
<http://www.ecosme.org/home/>
- **What happens when you hear or see the term 'Blended Learning'?**
R.Wade
http://www.elearningeuropa.info/index.php?page=doc&doc_id=4173&doclng=6&menuzone=1

Collaborative learning

- **TELL project**
<http://cosy.ted.unipi.gr/tell/>

- **COLDEX**
<http://www.coldex.info/>
- **Article on Conditions for achieving communication, interaction and collaboration in e-learning environments**
http://www.elearningeuropa.info/index.php?page=doc&doc_id=6494&doclng=6&menuzone=1
- **Collaborative learning online bibliography**
<http://users.ox.ac.uk/~ctitext2/service/workshop/collab.html>

Quality in E-Learning

- **European Quality Observatory**
<http://www.eqo.info/>
- **SEEQUEL**
<http://www.education-observatories.net/seequel/index>
- **SEEL**
<http://www.eife-l.org/activities/past/seel>

M-learning

- **the MOBIlearn project**
<http://www.mobilearn.org/index.php>
- **bibliography on m-learning**
http://www.mobilearn.org/download/biblio/mobilearn_biblio.txt

E-Moderation – E-facilitation

- **G. Salmon ATIMOD : useful links for e-moderators**
<http://www.atimod.com/e-moderating/links.shtml>
- **The Online Community Toolkit**
<http://www.fullcirc.com/community/communitymanual.htm>
- **Online tutoring e-book by Carol A. Higgison**
<http://otis.scotcit.ac.uk/onlinebook/>