



Summary of the Regional Needs Analysis

THE USE OF WEB 2.0 IN
VET AND ADULT
TRAINING IN SVEA
CONSORTIUM'S
REGIONS

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PROMOTING WEB 2.0 IN VET AND ADULT TRAINING



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About SVEA

SVEA addresses the collaboration and web 2.0 skills of teachers and trainers in both VET and adult training institutions, with a special focus on personnel and organizational development. Providing these institutions with the means for target oriented communication and knowledge exchange, it will stimulate active co-development of organisational processes and tools, and will at the same time enable teachers and trainers to use those tools to empower learner-centred and self paced teaching.

SVEA will develop an online platform offering custom web 2.0 tools for trainers and teachers, combined with both an online and a face to face training programme to help the target group to master these web 2.0 applications. Guidelines and training material will also be designed to guarantee successful implementation.

SVEA's goal is to cultivate new work processes and communication strategies through the use of net-based technology. Upgrading e-skills in VET and adult training institutions will foster innovation and change in personnel and organisational management.

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I. Introduction

The term "Web 2.0" is commonly associated with web applications that facilitate interactive information sharing, interoperability, user-centred design and collaboration. Web 2.0 applications allow users to interact with each other as contributors to the website's content, in contrast to websites where users are limited to the passive viewing of information that is provided to them.

The use of collaborative social platforms such as wikis and blogs offer not only new possibilities for networking and project management, but also for exchanging and developing knowledge together with other users in the worldwide web. In VET and adult training in particular, these web 2.0 tools can be used to allow more learner-centred and self-explorative learning. Several barriers to integrate such flexible tools in training courses remain however.

Which are those barriers and what are the reasons for the still quite small use and integration of web 2.0 applications within the VET and adult training systems in Europe? The SVEA project aims to answer those questions in this regional needs analysis report which integrates the most important findings of the analyses conducted in each partner region (Baden-Württemberg (D), Vlaams-Brabant (BE), Extremadura (ES), Piemonte (I) and Wales (UK)) through interviews with 60 private and public training institutions. Each interview explored the current use of web 2.0 applications in VET delivery, the potential for its use in the future and the training needed by institutional staff to use web 2.0 tools effectively. Additionally, one round table workshop per partner region brought most of the interviewed institutions together to offer them a deeper platform of exchange and to get to know their real needs better.

More specifically the report describes the current cultural, structural and institutional barriers to the use of web 2.0 applications in education, as well as providing examples of the existing benefits for teachers and learners. The report outlines the success factors identified by the regional stakeholders that encourage web 2.0 uptake and it describes how training institutions are already using web 2.0 applications in their training and administrative systems.

The report not only outlines the current needs and status quo in the use of web 2.0 tools in VET and adult training, but also responds to the identified needs and barriers by outlining appropriate follow-up measures.

The regional analysis will be the basis for the development of the collaborative online-platform as well as the web 2.0 training developed by the SVEA partners which will be offered to VET and adult training trainers from January 2011 onwards. The aim is to strengthen the web 2.0 uptake within adult training institutions in Europe.

II. Methodology

The SVEA regional needs analysis is a result of five regional analyses conducted in the SVEA consortium's regions. All together 60 representatives from different VET and adult training institutions participated in the analysis which was structured in the following four phases:

1. Stakeholder mapping

The first step in the regional analysis was to identify relevant regional stakeholders from public as well as from private training institutions. The selected stakeholders were invited to participate in the regional analysis phase to outline their needs, experiences and benefits in the use of social media applications in their training system.

2. Desktop research

Parallel to the stakeholder mapping each project partner conducted a desktop research exercise on the status quo of the use of web 2.0 applications and the internet in general for lifelong learning purposes in the consortium's regions.

3. Phone interviews

In preparation for the round table workshop in each region preliminary interviews were conducted with the workshop participants to get an idea of their knowledge on web 2.0 and the actual integration of web 2.0 tools in their training institutions. The phone interviews were conducted on the basis of unified multiple choice questionnaires distributed to the interviewees some days before the interviews were held. The main results were summarised and presented to the stakeholders at the beginning of the round table workshops to give the participants an idea of the status quo of the web 2.0 use in VET in their region.

4. Regional round table workshops

The aim of the regional round table workshop was to discuss and identify common needs, barriers and trends in the use of web 2.0 in VET programmes in the SVEA partner regions. In each partner region one round table workshop took place between April and June 2010. To get more active contribution from the participants the workshop did not only consist of a discussion but also used interactive tools such as scenario development in smaller groups to identify web 2.0 tools which would be actually used by the training institutions and what functionalities those web 2.0 applications should have.

III. Current ICT and Social Media Usage in Europe

Internet diffusion in Europe has risen in recent years and has had an increasing effect on the private and professional life of European citizens. Nevertheless there are still differences among the member states. In 2009¹ 90% of households in the Netherlands, 87% in Luxemburg, 86% in Sweden, 83% in Denmark, 79% in Germany, 78% in Finland and 77% in United Kingdom had internet access. At the other end of the scale, the lowest percentages were registered in Bulgaria (30%), Greece and Romania (38%).

Access to broadband connections is also growing in Europe. More than 60% of the population in Germany (65%), Belgium (63%) and United Kingdom (69%) had broadband by 2009. In Spain half of the population can surf at high speed (51%), whilst Italy has still a lot of work to do in its infrastructure to allow people to enjoy the benefit of broadband (39%).

The internet is not just used for leisure purposes or for work but more and more also for educational and learning purposes (Figure 1): Within Europe blogs and social networking are the most frequently applied tools in education. It is interesting to note that generic web 2.0 applications are being adopted for learning purposes, rather than specific learning support tools developed for this aim. Other applications typically employed in education are discussion platforms and wikis, photo- and video-sharing platforms, podcasts, and social tagging. Also used are more specific tools such as Learning Management Systems/Virtual Learning Environments. Most of these tools are usually applied by adult learners.²

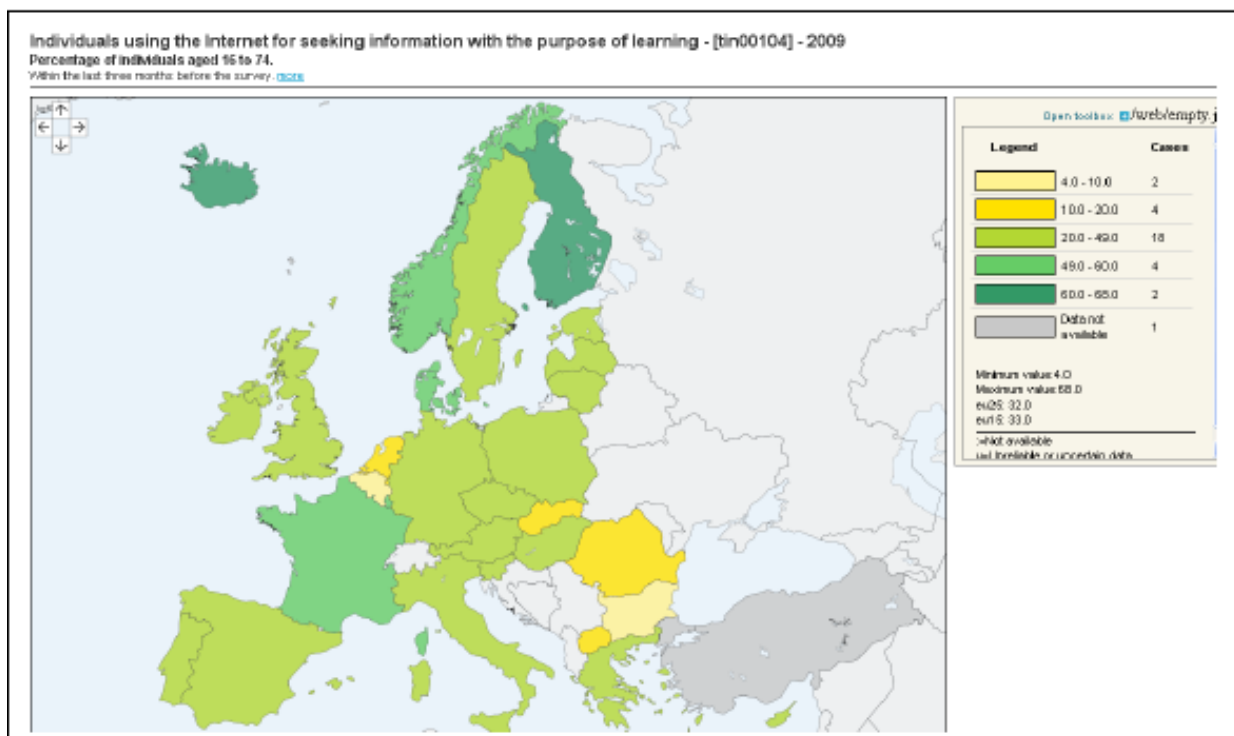


Figure 1.- Eurostat data on the use of internet for seeking information with the purpose of learning (2009)

¹ Eurostat, (8 December 2009), Internet access and Internet use in the year 2009

² C. Redecker, K. Ala-Mutka, M. Bacigalupo, A. Ferrari Y. Punie, (2009) "Learning 2.0: The Impact of Web 2.0 Innovations on Education and Training in Europe", JCR Scientific and Technical Report

There can also be identified a new trend in the use of social media for knowledge exchange and learning in Europe by looking at the exchange of audiovisual content as illustrated in the following table.

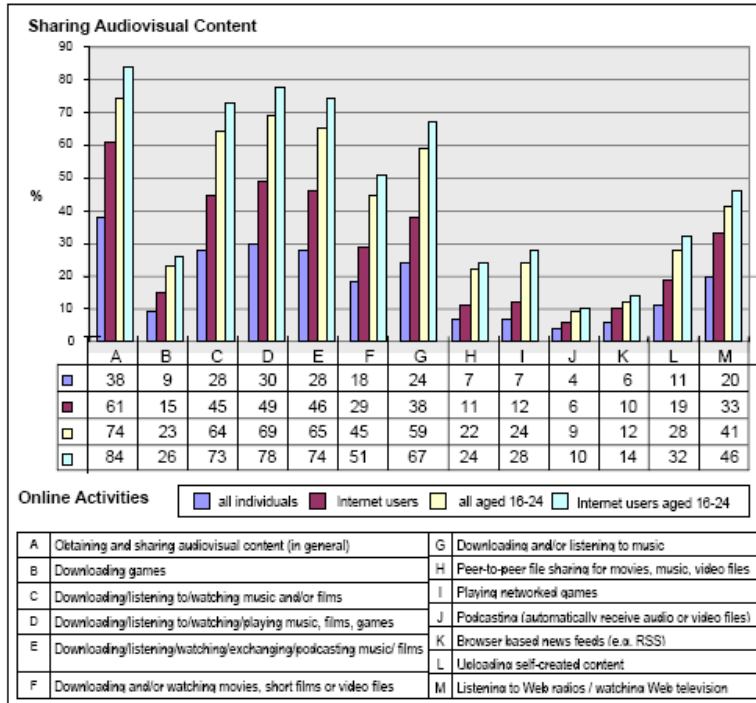


Figure 2.- Eurostat data on the use of internet for sharing audiovisual content (2008)

Taking into account that social media applications and instruments have only been available for a relatively short time the high use of those tools and applications demonstrate a rapid and extensive acceptance by the European population.³

³ ibid.

IV. Results of the Regional Needs Analysis in SVEA Regions

The following chapter will give an overview of the main results of the regional analysis in the SVEA partner regions. The presentation of each region's specific status quo on the use of ICT and social media for learning purposes and the different needs and barriers in the actual use and integration of social media in their VET and adult training institutions will be the basis for the conclusions and common results in chapter five and six of this report.

4.1 Baden-Württemberg

4.1.1. ICT and Social Media Usage in Germany

An important precondition for a successful implementation and integration of collaborative online applications into the VET and adult training system is a competent and proficient use of ICT and Social Media applications by the learners. The following figures outline the status quo.

Internet usage rose in all age groups between 2008 and 2009, especially among the over 60s. Internet use reaches 80% of people under 50 and the average age of the Internet user in 2009 was 40,6 years old.⁴ It can be assumed that broadband diffusion has been crucial for this increase. In 2009 2/3 of German households had been reached by broadband.

The main use of social media in Germany involves communications, information and knowledge management applications. In particular, the free encyclopaedia Wikipedia is the most popular and trusted with 65% of surfers using it (though just 24% use it weekly). Wikipedia is particularly popular and used by young people between 14-19 years old (94%), but also among people between 20-29 years (77%) and by those between 30-39 (70%).

Video-sharing platforms are used by more than half of the population (52%), with men being more active than women (58% and 45%). Once again youth and young adults are the most active groups: 93% of people between 14 and 19 years old use video-sharing platform as do 79% of people between 20-29 years old. Not so popular are weblogs (used by just 8% of the total population over 14), professional networking sites (9%) and social bookmarking websites (4%).⁵

The wide diffusion of social media in Germany within different age groups constitutes a good precondition for their usage, not only for personal and entertainment purposes but also in learning. Personal competence in the use of social media is becoming stronger in the population, though still not exploited to its full. However, the statistics point to a growing usage of these tools in different environments and with various aims. They also indicate that adults enjoy more and more the potential of social media tools and rely on them for information searching and knowledge management.

A good example of social media usage in learning comes from German higher education institutions.

4 Eurostat 2009 "Internet access and use in 2009";
<http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/09/176&format=HTML&aged=0&language=EN&uiLanguage=en>

5 ARD/ZDF Onlinestudie – Genutzte Web 2.0 Angebote 2009;
<http://www.ard-zdf-onlinestudie.de/index.php?id=165>

A survey conducted in Germany by HISBUS (a project developed by HIS Hochschul-Informationssystem GmbH and founded by the Bundesministerium für Bildung und Forschung)⁶ shows that 73% of the interviewed students from higher education institutions spends between 1 to 3 hours per day on the Internet, while 23% spend even between 4 to 6 hours. 60% of the students use Wikipedia quite often and 52% believe that its content and information is reliable. Also social networking websites such as StudiVZ, Facebook, MySpace and Xing are quite popular and frequented with 51% using them regularly. Chat and Instant Messaging are used by a third of the students (36%), while Video-Communities, Wikis and Online-games are still not so largely diffused (16% - 15% - 9%). The use of those tools for learning purposes mainly involves the keeping in touch with schoolmates, a condition which allows clarifying answers and doubts (59%) as well as helping by the exam preparation (55%) and the exchange of information and literature (49%).

58% of the interviewed students consider the use of videos and podcasts of lessons and presentations as potentially "very useful" or "useful", while 52% regarded online texts and exercises as "useful". Helpful tools for learning seem to be also Wikis (46%) and web-based trainings resources (45%), though not so many students actually used them regularly.

These figures demonstrate that there exists already a good basis of digital literacy in Germany that will allow a stronger to stronger integration of web 2.0 applications within further education training.

4.1.2. The Current Use of Web 2.0 Applications within VET and Adult Training in Baden-Württemberg

Within the evaluation phase in Baden-Württemberg 13 training institutions participated in the telephone interviews (March – April 2010) and the round table workshop which was held on 5 May at MFG Baden-Württemberg in Stuttgart. The aim of this evaluation was to identify the needs, trends and barriers in the use of web 2.0 applications within VET and adult training courses.⁷

During the telephone interviews and the round table workshop in Baden-Württemberg the following status quo concerning the use of web 2.0, needs and barriers to use web 2.0 applications within VET and adult trainings was identified:

a) Current use and knowledge of web 2.0 tools in the participant organisations⁸

All participating institutions knew the definition and the possibilities that web 2.0 instruments are offering to enhance the learning process. Nevertheless, there are still very few who regularly use those applications to offer more collaborative and learner centred training.

Most of the interviewed training institutions in Baden-Württemberg do use some social media tools for marketing and for training support. For example micro blogging tools such as Twitter or social network groups such as Facebook, LinkedIn or Xing are used to inform their target groups of news related to their institution or to reach new students and learners.

6 B. Kleimann, M. Özkilic, M. Göcks, (2008) "Studieren im Web 2.0", HISBUS - Kurzinformation Nr. 21; <https://hisbus.his.de/hisbus/docs/hisbus21.pdf>

7 A detailed overview on the involved public and private training institutions can be found at the end of this report (Annex 1)

8 See Annex III: Statistical diagrams

Within their trainings many institutions are offering collaborative elements within their closed learning platforms which the trainers can use to organise their training. However, it is mostly up to the trainers to decide whether they really want to use them and to what extent.

b) What are the barriers to use social media tools within the organisation and their training delivery?

Culture / Acceptance

- Lack of acceptance: There is still a lack of acceptance of the use of web 2.0 tools in training by both the trainers and the learners. Mostly this is due to the low level of broad digital literacy skills and the resistance to use of new techniques when they just do not know the benefits such tools are offering.
- Lack of good practice: There are still too few examples of good practice which could persuade trainers and institutions to use those tools by outlining their effectiveness and efficiency.
- Strong reservation: There is a large reservation at management level in the different institutions regarding the integration of social media applications in their organisation or within the course structure.

Structural /Institutional barriers

- No practicable accounting system to pay the trainers: the current accounting system is linked to the face-to-face training. A solution on how to pay the additional work including the support of the learners during the preparation phase and the follow up of the courses using web 2.0 has not yet been established.
- Concerns on the safety of open web 2.0 applications: Several institutions do not allow their employees to use open social media platforms such as YouTube, Slideshare or Facebook due to data protection reasons. This implies that the institution can only use closed systems which are mostly not available for free. However, some institutions cannot afford to buy such closed systems and consequently can neither work with their own platform or offer training integrating web 2.0 tools.
- In several VET institutions learning has to be scalable. As learning with web 2.0 applications often has a more informal character VET institutions have difficulties in giving credits for such training.
- Within top-down oriented training institutions the management level decides how learning has to be carried out. Often, the management is not that digitally literate and are not really aware of the benefits web 2.0 instruments offer. Consequently, institutional management does not push the use and integration of those tools within the training systems or within the institution itself.
- For free mentality: There exists already several web 2.0 learning applications and resources in the worldwide web (e.g. language learning tools). This complicates the sustainable implementation in the training institutions as they have to set up new training structures for which learners are still willing to pay a course fee even if there are online tools that apparently offer similar benefits.

c) What are the benefits for teachers and learners to use web 2.0 applications?

- The importance of lifelong learning is being increasingly recognised and individuals are seeking to acquire new knowledge very quickly. Web 2.0 solutions offer the possibility to deliver smaller knowledge entities compared to traditional seminars which last typically one day.
- Due to the fact that more and more people are working in different places more flexible, collaborative and interactive learning tools have to be implemented. Web 2.0 fulfils all those requirements.
- Courses integrating web 2.0 applications are much more learner and target group oriented than classical face-to-face training. Hence the learning success is potentially higher.
- Learning is becoming more interactive: Learners can exchange their knowledge and information directly with the other learners and have the opportunity to receive a more personalised assistance by the trainer using web 2.0 tools.
- The communication and the exchange of knowledge, information and content can not only take place in the face-to-face course but also in the preparation or the follow-up phase using web 2.0 tools. This is a benefit for both teachers and learners. The learners have the opportunity to deepen their knowledge or to solve problems in an easy and flexible way either directly with the trainer or in cooperation with other learners. Each learner also has the opportunity to follow their own personal rhythm in learning. Similarly, the trainer can be more flexible in the preparation and the follow-up of courses using such tools. Most of Baden-Württemberg's stakeholders underlined this advantage of web 2.0 applications within VET.

d) What are the success factors that will encourage web 2.0 uptake?

- User friendliness: During the round table workshop the participants underlined the necessity of implementing and using user friendly and attractive social media tools. Otherwise new users will not use those applications in a sustainable way.
- Reliability: Web 2.0 tools used within training courses have to guarantee data protection to ensure that the trainers can integrate them in their courses. The training institutions / trainers are also responsible for the content's reliability developed collaboratively during the courses.
- Exemplar: The benefits have to be outlined very clearly and have to be demonstrated to potential users. The exemplar function is very relevant in this field so that a domino effect starts within the training institutions that encourages the use of web 2.0 applications for training purposes.
- Trust: In order to establish widespread confidence in web 2.0 applications by the users, experts have to show them how to use web 2.0 tools effectively and also demonstrate how they can add value to the learning process. This applies to both the trainers and the learners and both must see the use of such tools as an attractive way of supporting learning for them to be adopted.

4.1.3 Use of Web 2.0 Tools within Training Courses

The web 2.0 applications used within training can have different functions depending on when and how the tool is used. By offering training on the use of web 2.0 tools to trainers it is important that the use of such tools is also linked to clear exemplars, scenarios and topics that make the benefits clear to the users.

The following course scenario is divided in three phases. It outlines the web 2.0 tools which the round table workshop participants from Baden-Württemberg would use to organise the training.

a) Preparation phase

- For communication purposes social networking groups (e.g. Facebook, LinkedIn, Xing) or micro blogging tools (e.g. Twitter) could be used to encourage interested learners to join the course and to inform them of the course content.
- To share their interest, their knowledge, their intentions, expectations and to get to know each other better a blog system/micro blogging system (e.g. www.yammer.com) offering also social networking tools could be integrated on the course platform. The participants could upload their profile and inform the trainer of their expectations, needs and knowledge level and to introduce themselves to the other course participants. This system would have to be a closed system to which only course participants have access to so that the participants can freely express their intention etc.
- To further share information, RSS feeds could be integrated in the micro blogging system to inform the other participants on interesting links relevant for the course.

b) Course

- Establishing the community in a long lasting way.
- Wiki: Integrating a wiki to develop texts and content collaboratively; to be used as a tool to aggregate the main course topics/results at the end of the presence course to ensure sustainability; developed wiki texts have to be evaluated so that the learners get used to the feedback mechanism web 2.0 applications normally offer. The wiki will also serve to strengthen the learner's independency in learning and in developing new content in a collaborative way.
- To share information and to deepen the participant's knowledge on the course topic RSS feeds will be used to inform the other participants on interesting links related to the course topic.

c) Follow-up phase

- Wiki: It will be completed by the course participants collaboratively to deepen their knowledge on the course topic.
- Webinar: This tool can be used as a closing of the course where all the participants will come together again and to summarise the main conclusions.
- RSS feeds: To share information and to deepen the participants' knowledge on the course topic the RSS feeds will be used to inform the other participants on interesting links related to the course topic.

- Evaluation on which collaborative tools were used the most during the course.

The course setting developed by the training institutions during the Baden-Württemberg round table workshop in Baden-Württemberg outlined the necessity to integrate web 2.0 applications

- to further strengthen the share and exchange of information and knowledge
- to further strengthen the ability to collaborate together, to develop content collaboratively
- to receive more feedback from other course participants but also from the trainer
- to establish a sustainable learning community.

4.2 Piemonte

4.2.1. Situation of the ICT and Social Media Diffusion in Italy

An important precondition for a successful implementation and integration of web 2.0 tools and approach into the VET and adult training system is, of course, the spread of ICT.

Data reproduced below are related to ICT diffusion in 2008 and 2009 and are taken from two official documents containing data both on national and regional level:

- a document commissioned by the Italian Government and by the Industrial Association (Confindustria Servizi Innovativi e tecnologici) on the ICT and Web 2.0 diffusion in Italy ⁹
- a report commissioned by Piedmont Region on the ICT diffusion in Piemonte ¹⁰

The table attached below shows the percentage distribution of ICT from the point of view of citizens, enterprises and public bodies in Italy and in other European countries. Data shows that in Italy:

- 42% of families has a internet connection
- 39% of families has a broadband internet connection
- 66% of enterprises has a internet connection (54% of them broadband)
- 45% of public bodies offer online services

Regarding age groups, we note that Internet is used a lot by young people between 16-24 years (91%), while it is only used by the 13% of adults between 55-74 years.

TABELLA 2 IL RITARDO DIGITALE					
Indicatori	Italia	Francia	Germania	Spagna	Regno Unito
Cittadini					
Famiglie con Internet fisso	42%	62%	75%	51%	71%
Famiglie con Broadband	39%	61%	56%	45%	62%
Utenti internet (negli ultimi 3 mesi)	47%	63%	75%	57%	70%
Donne on-line	32%	64%	71%	53%	66%
Ragazzi 16-24 on-line	91%	92%	97%	90%	96%
Adulti 55-74 on-line	13%	36%	38%	15%	44%
Utenti B2C on-line	7%	28%	63%	40%	49%
Imprese					
Imprese con internet	66%	57%	95%	95%	93%
Imprese con BB (% su imprese con accesso a internet)	54%	50%	84%	97%	87%
Imprese che comprano su internet	13%	18%	26%	16%	47%
P.A.					
Imprese che dialogano con la PA on-line (invio moduli)	45%	67%	45%	45%	51%
Cittadini che dialogano con la PA on-line (invio moduli)	5%	25%	11%	9%	12%

Fonte: Commissione Europea, DG Information Society

Figure 3. ICT diffusion in Italy, France, Germany, Spain, United Kingdom
<http://www.ict.cnr.it/documents.php?id=271>

⁹ The document "Osservatorio Italia Digitale 2.0" is realized by "Dipartimento per la digitalizzazione della pubblica amministrazione e l'innovazione tecnologica" and by "Ufficio Studi Confindustria Servizi Innovati e Tecnologici". URL: Executive summary <http://www.ict.cnr.it/documents.php?id=271> Full text: <http://www.key4biz.it/files/000122/00012226.pdf>

¹⁰ The document "Sesto rapporto sull'innovazione nella Regione Piemonte" is realized by CRC, an initiative supported by Italian Government, made up by Piedmont Region, CSI-Piemonte, CSP and CNIPA. URL: http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

As regards the Piemonte Region, ICT diffusion is higher than in other Italian regions, as shown below:

- 60% of families has an internet connection
- 45% of families has a broadband internet connection
- 90% of enterprise has a broadband connection

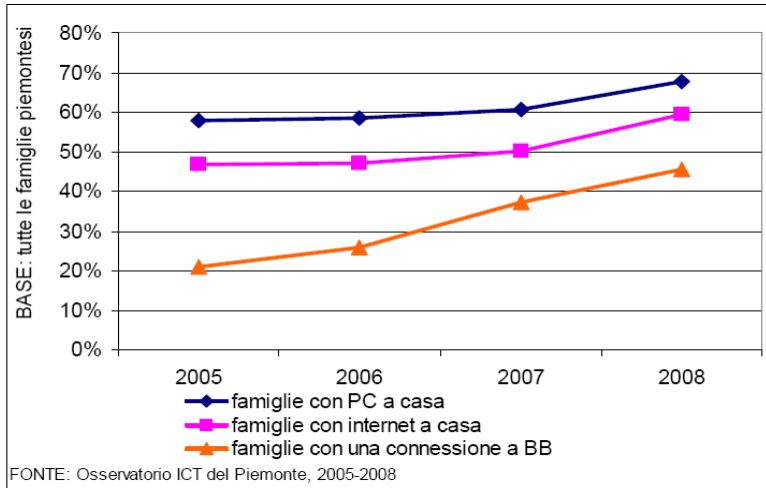


Figure 4. ICT diffusion in Piemonte Region
http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

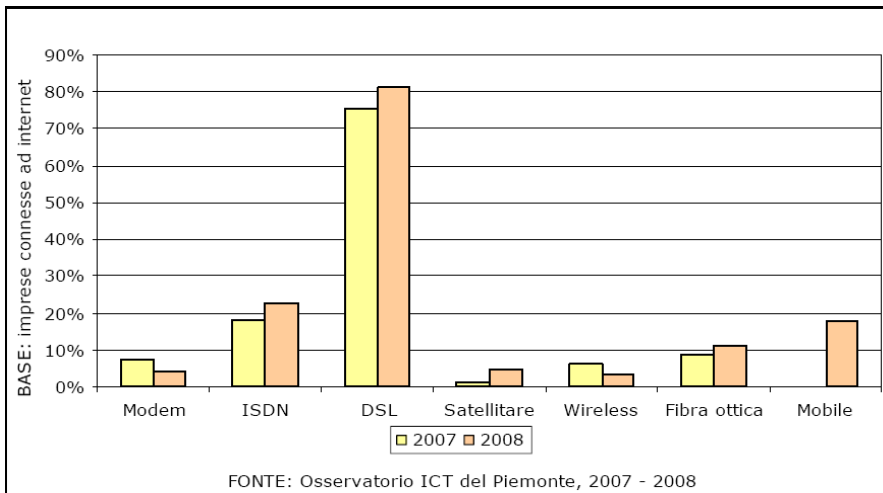


Figure 5. Internet connection in Piemonte Region
http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

These data show an increase in the percentage of internet users. The document on the Piemonte situation evidences also an improvement of services online, availability of accessible and free content and spread of broadband networks.

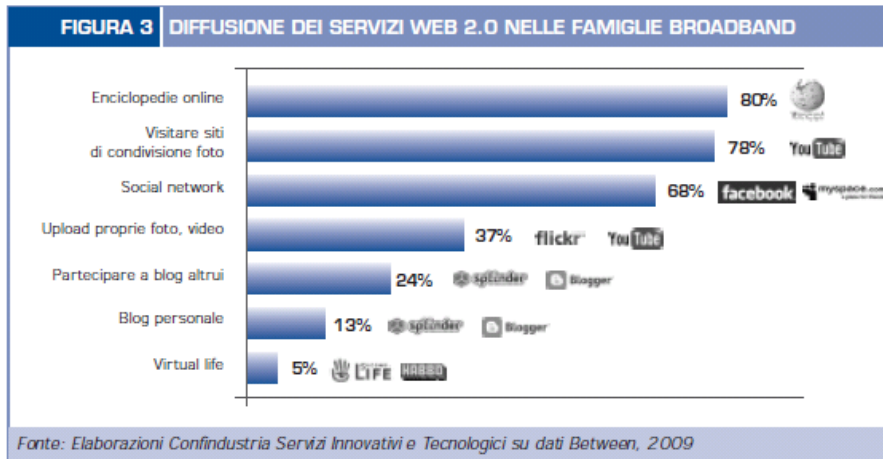


Figure 6. Web 2.0 diffusion in Italy (<http://www.ict.cnr.it/documents.php?id=271>)

The data in figure 5 show as well that the web 2.0 services are spreading among “broadband families”.

- 80% uses online encyclopedia (as wikipedia)
- 78% uses video sharing (as youtube)
- 68% uses social network (as facebook and myspace)
- 37% uploads photo and video (as flickr and youtube)
- 24% reads blog (as blogger)
- 13% has a personal blog (as blogger)
- 5% uses virtual environment (as Second Life)

This illustrates that a transition is occurring from the *information society* to the so-called *knowledge society*. In fact the network seems to evolve from a communication protocol to an infrastructure designed to deliver innovative services and contents.

The spread of Web 2.0 applications and services is significantly increasing in several fields: online innovative services are in fact offered by public administrations, private companies and organizations.

4.2.2. Status Quo on the Use of Web 2.0 Applications within VET and Adult Training

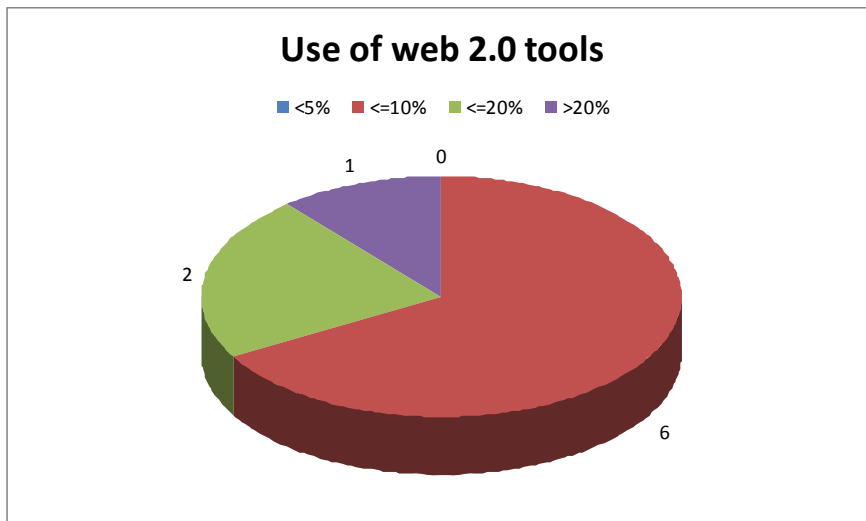
The evaluation carried out in Piemonte was structured firstly through a set of telephone interviews and then a regional roundtable: 9 institutions were contacted and 15 people (7 managers and 8 trainers) participated in the roundtable that was held on 20 April 2010 in Torino. These activities were focused on the investigation of needs, trends and barriers in using web 2.0 applications within VET and adult training courses.

Participants were split in two groups (trainers and managers) in order to discuss the experiences they had in using web 2.0 tools as well as to collect their specific needs regarding the use of web 2.0 in their daily working activities.

a) Current use and knowledge of web 2.0 in the participant organisations ¹¹

In the context of VET, the regional needs analysis showed that the current diffusion of web 2.0 tools is not so high, but during both the telephone interviews and the roundtable, the participating organizations declared a strong interest in understanding better how these tools could be used in training.

The trials described by some agencies (see the next paragraph) underline that VET institutions are interested in this new model and at the same time the perceived barriers are related to a lack of knowledge more than to a lack of interest.



In general, participants recognized a need of web 2.0 tools to collaborate and share knowledge and resources.

Most of the participants know what social media are and had a general knowledge about the common tools (blog, wiki, social network, etc.)

As regards "personal daily activities", 80% of the participants use some of them but the use in their working activities was lower.

Regarding trainers some of them do not use web 2.0 tool at all during their face-to-face courses while the others use specific LMS platform like Moodle (even if only the basic functionalities).

In general **the main barriers** for the introduction of web 2.0 tools are related to a lack of money and time to gain competences as well as the lack of a technological platform.

As regards the **cultural barriers** trainers were more open to such changes, whereas managers show more resistance.

In conclusion the institutions were very interested in gathering a state-of-the-art report of web 2.0 tools in order to better understand which tools they could eventually implement and use in order to achieve their goals.

b) What are the barriers to use social media tools within the organisation and the trainings?

The following needs / barriers for the inclusion of web 2.0 in VET and adult training were identified during the telephone interviews in Piemonte.

¹¹ See Annex III: Statistical diagrams

Barriers:

- Insufficient infrastructure and broadband
- Cultural barriers and technical capacity
 - We note a cultural resistance by teachers as regards knowledge sharing. It is necessary to make the learning process more participatory.
 - The consciousness regarding web 2.0 is growing thanks to the spread of use of social networks like LinkedIn, Facebook, Youtube and Slideshare
- Lack of time and resources
 - Participants underlined the lack of time to manage new tools and platforms, to learn and to teach the use of different tools and services.
 - Teachers need special courses in order to take advantage of innovative tools and the institutions do not have enough time and money to set up ones
- The lack of tools designed to measure the efficiency of the “knowledge transfer”

c) What are the success factors to enhance the web 2.0 uptake?

As regards benefits for teachers and students in the use of web 2.0 applications, the following points were underlined:

- Web 2.0 is used and popular among students
 - Students are very interested in this topic
 - An increasing number of students use these kind of tools in order to communicate
 - By using these tools it is possible to reduce barriers in the learning process
- To share information and experience during and after courses
 - Documents and resources sharing is really important for students and teachers
 - Keeping in touch with other people/colleagues with similar interest is strategic for most of the interviewed
- The methodology as well as the philosophy behind the new paradigm is very interesting: the participative feature that characterizes web 2.0 tools is seen as a new possibility also in the training context to involve students in a new way
- To recover information and content related to specific topic in an easier and faster way
- To participate in the content creation process in an easy way

4.2.3. Use of Web 2.0 Tools within Training Institutions

Web 2.0 applications used within training courses can have different functions depending on the activities of VET they are involved in.

The scenario was structured considering the position of participants and focused on the identification of common needs and main functionalities in the use of Web 2.0 from the point of view of trainers as well as of managers. In order to outline these different aspects the participants were split in two groups.

b) Group 1: Web 2.0 within training courses

Considerations reported here are gathered during the roundtable workshop, in the scenario developed for trainers.

The training institutions are interested in using web 2.0 tools and platforms in order to satisfy general needs regarding communication, collaboration and information sharing. Participants felt that web 2.0 tools could be used to:

1. Communicate organizational information

- to communicate information related to courses (like class scheduling, test dates, lesson date, activities and calendar).
- to give general information such as news, jobs announcement, stage proposals.
- to share calendar and message board.

2. Improve and support the communication process during courses

- to allow everyone to communicate and express themselves freely.
- to structure the information in a more effective way on the basis of topics and working groups.
- to define different roles in groups (different access to information).
- to allow communication in private groups and between different groups.
- to collect feedbacks and suggestions.
- to communicate using personal blogs (both for trainers and students).
- to support the growth of communities of practice.
- to allow the communication between trainers on professional topics and on teaching and learning methods.
- to collect and maintain user profiles.
- to support videoconferences.
- to support the communication among different classes and courses.
- to allow the communication after the end of the course.

The web 2.0 tool that can address these underlined needs is a blog system or a social network model, in which every user can easily communicate with each other, building their own communities of interest and share relevant information with

specific user groups. These tools could be used both during courses and in the follow-up phase.

3. Support the information retrieval

- to archive resources in a flexible and human/personal manner (for example using tag)
- to facilitate the recovery of documentation, messages, blog posts, comments, etc.
- to receive notification of new items related on different thread (by mail or RSS feed)
- to archive formal documents as well as informal contents
- to collect audio and video documentation

These activities are relevant specially during courses, and can be supported by the use of search engines, better if specifically designed for collaboration platforms and based on tags.

The use of RSS Feed, typical of the web 2.0 paradigm, is very useful in order to share information among users and it is now consolidated in most of the collaborative environment.

4. Monitor and trace the student activities

- to enhance the traceability of the learner-process.
- to collect data like page views, access time, etc.
- to have a summary page about each student showing his activities during the course with statistics on participation and page views (calendar).

5. Enable the collaborative writing of documents

- to structure the wiki pages on the basis of topics and working groups.
- to define different roles in groups and wiki sections.

These functions characterise most of the wiki solution available today. One of the main points to underline when analyzing wiki solution is the barrier to entry: many wikis, in fact, require the knowledge of a specific syntax and are not so easy to use for unskilled users.

Wikis can be used in the preparation phase in order to develop the material as well as during the course to write collaboratively texts and content.

During the roundtable workshop the trainers expressed their interest in having a web platform to better collaborate, share information and communicate. They also expressed some considerations and suggestions concerning the design of the platform. They considered as necessary:

- to merge individual and collective visions: they would like a tool showing what a student – as well as a group –has done and has to do
- to define guidelines to manage communication and participation processes

- to integrate different functionalities in a transparent manner
- to include external applications like Twitter or another kind of micro logging tool
- to favourite the consolidation of knowledge (putting in evidence the passage between page in progress and finished documents)
- to have a user friendly and accessible interface.

c) Group 2: Web 2.0 for management activities

During the roundtable workshop, managers outlined different points regarding their needs of an integrated platform based on web 2.0 tools. These concerns:

- to transform “tacit” knowledge into “explicit” knowledge through the use of easy-to-use tools;
- to improve the circulation of information between and within working groups, reducing the use of emails;
- to facilitate the collaborative writing of documents as well as the recovery of documentation;
- to increase the visibility of information about people and their skills.

They outlined the need of a kind of “dashboard” with an easy access to different 2.0 tools: this kind of model could support users to personalize the platform considering their specific needs. The group outlined that needs may change from one organization to another as well as in the same organization according to working groups and daily working activities.

4.3 Extremadura

4.3.1. Current ICT and Social Media Usage in Spain

During the third quarter of 2009, the perception of new technologies by the Spanish population remains positive. The most valued aspects are still the contribution that new technologies offer both in education and in the workplace. It has also been an improvement in the perception of security regarding shopping through the Internet.

The last year has shown an increase in the importance of new technologies in social relations as well as in the freedom they can offer. 71% of the population agrees with the importance of new technologies in education and 66% consider them significant in the workplace¹².

According to data offered by the *Spanish National Institute of Statistics (INE)*¹³

- ✓ 51.3% of Spanish households has broadband connection to Internet
- ✓ the number of Internet users grew by 6.0% in the last year and is approaching 21 million people, which is around the 50% of the Spanish population. 15.7% of the population uses e-commerce

The growth and success of social networking has been rapid. Expert sources have reported that no other product has seen such a massive expansion of use. There are hundreds (or more) of social networking sites. In Spain the most rapidly growing networks include Facebook and Tuenti while others like Twitter, hi5, linkedin, slideshare and ning are growing more slowly.

The following graph outlines the evolution of numbers of users participating in social networks (2009-2010):

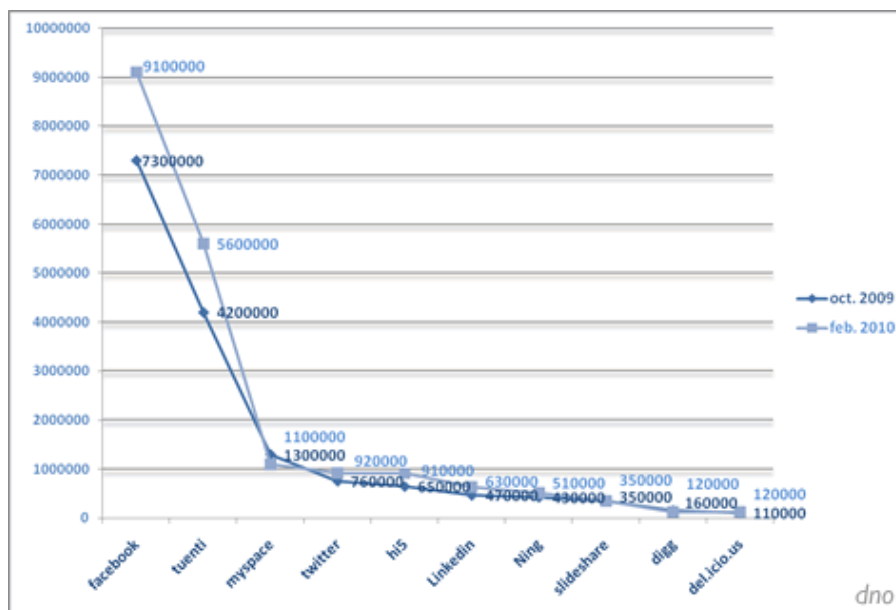


Figure 7. Spanish National Institute of Statistics (INE) 2009/2010

¹² "ICT in Spanish households" ONTSI (National Observatory for Telecommunication & Information Society)

¹³ INE, Spanish National Institute of Statistics www.ine.es

The statistics on social networking usage in Spain are astonishing. According to *Nielsen*¹⁴, Spain is second only to Brazil in its usage of social networking sites. Three of every four Internet users visit them and spend 5.3 hours per month on average.

More than half of the Spanish Internet users belong to social networks, making Internet access more frequently and for longer: the 61.5% of web users visit these networks every month.

In another study carried out by independent research firm *Forrester Research*¹⁵, Spanish users rank as the "commentators" more enthusiastic about social channels, including chat forums, and blogs, as well as social networks themselves.

When talking about gender, Spanish women still participate less in social networks than in other European countries, although their presence has increased compared to the first review of these results in October 2009. Currently, the presence in social networks of women has reached 39.6%, while the presence of men is 60.4%.

Social Network	Women (%)	Men (%)	User-s/month	Source
del.icio.us	28	72	120000	Google Ad Planner
digg	21	79	120000	Google Ad Planner
facebook	46	54	9100000	Google Ad Planner
flickr	41	59	1500000	Google Ad Planner
hi5	50	50	920000	Google Ad Planner
Linkedin	34	66	630000	Google Ad Planner
myspace	39	61	1100000	Google Ad Planner
Ning	46	54	510000	Google Ad Planner
slideshare	50	50	350000	Google Ad Planner
tuenti	48	52	5600000	Google Ad Planner
twitter	32	68	910000	Google Ad Planner
Youtube	-	-	Not available data	
Media	39,6	60,4		

(February 2010)

Figure 8. *Spanish National Institute of Statistics (INE) 2009/2010*

¹⁴ NIELSEN, leader Company in Information Services and Market Research
<http://es.nielsen.com/site/index.shtml>

¹⁵ Forrester Research, technology and market research company www.forrester.com

4.3.2. The Current Use of Web 2.0 Applications within VET and Adult Training

Within the evaluation phase in Extremadura 10 training institutions participated in the telephone interviews (March – April 2010) and the round table workshop which was held on 19 May in Badajoz. The aim of this evaluation was to identify the needs, trends and barriers in the use of web 2.0 applications within VET and adult training courses.¹⁶

During the telephone interviews and the round table workshop in Extremadura the following status quo concerning the use of web 2.0, needs and barriers to use web 2.0 applications within VET and adult trainings was identified:

a) Current use and knowledge of web 2.0 tools in the participant organisations

When we talk about a personal and private use of web 2.0 tools, all agree that is expanding at a high speed. However, in terms of its use in training/educational processes, the discussion is geared more toward the convenience of online training rather than face-to-face and vice versa. It is clear that *if the objectives are clearly marked and an appropriate methodology is used, the same results can be obtained.*

In the case of Extremadura, it appears that *there is NOT an extensive use of web 2.0 tools in training/education, and neither does there exist any general guidelines on how to use such applications or guidance on new/good practices.*

Regional Policies are NOT encouraging its use and there are NO clear methodologies to help both private and public companies to their use.

However, there is a wide use and recognition of e-learning in general, which point the way to the use of these web 2.0 tools.

b) What are the barriers to use social media tools within the organisation and their training delivery?

One of the main barriers the participating trainers identified was the students' lack of interest in using new digital technologies. This is especially the case for elderly learners. For the trainers it is very difficult to persuade them to use those new tools.

Moreover, control over the content seems of utmost importance for trainers in this type of platform and therefore the debate of whether *learning processes can be controlled in full or not by using web 2.0 tools is very important.*

All agreed that these *tools are easy to use but they are not sure of finding the right tool* (from among all available web 2.0) for each case.

On the other hand, the consulted **managers** are particularly concerned about the *lack of references and use cases* that could show whether there is clearly consensus on the benefits or disadvantages of their use.

In addition, the users/students recognized the heavy *burden of work involved in this type of training*, as well as the *high degree of learning generated*, gaining prestige and *cost savings* as this is a method of training which can address a large number of participants. Finally, the managers highlighted the *lack of resources at organizational/enterprise level* necessary to orient and gear them towards the web 2.0 model.

¹⁶ A detailed overview on the involved public and private training institutions can be found at the end of this report (Annex II)

BARRIERS
Lack of students motivation
Lack of knowledge of teachers
Lack of resources at the organisational level
Lack of methodology
Lack of references and good practices
Certification: How? When? What kind?

c) What are the benefits for teachers and learners to use web 2.0 applications?

MAIN BENEFITS
Easy to use
High assessment of on-line training
High level of learning
High level of collaboration
Saving money in training material
Increased access
Convenience and flexibility to learners
Permanent and rapid access to training material

d) What are the success factors that will encourage web 2.0 uptake?

From the results obtained by analyzing the questionnaires distributed to the different stakeholders collaborating in the realization of this regional report, the following potential success factors were identified:

- **Marketing:** From the point of view of administrative management of the institutions that have participated in the study, the current use of these applications is still limited, mainly reserved for actions to disseminate the training plans they offer (in 90% of the cases web 2.0 application is only used for this purpose). However, most of these institutions are very open to the introduction of new internal management tools (in order to implement both the processes of communication and proper management).
- **Flexibility:** Private training institutions have a high capacity of adaptation to new situations; web 2.0 applications can help them with this task.
- **Knowledge management:** Sharing of knowledge management is a key factor in our contemporary society, the development of tools that simplify this process will be well received by managers and by training teachers.
- **Social interaction:** When talking about young students, we can say they are aware of how to use these applications and are highly motivated towards them; all of this despite the fact that, until now, they have been using these tools mainly for social purposes. This is very positive for the introduction of these applications by teachers.

4.3.3. Use of Web 2.0 Tools within Training Courses

According to the survey carried out by FUNDECYT in the region of Extremadura as well as to the responses from the trainers (7 of the 14 participants were trainers or teachers) there are large differences in the use of web 2.0 tools, especially concerning the different implementation of web 2.0 tools within the different training phases. This mainly depends on the objective, on the outcomes of use that every one is looking for when using this kind of tool.

For instance, in the preparation phase of the learning process, when teachers are preparing the content for their lessons and are choosing a learning methodology, the use of social networks and postcards and so on is based on the collection of digital materials that has been created by other teachers, using for that mainly blogs or an official online platform (one example is the platform Educarex¹⁷ which has been developed by the Regional Ministry of Education in Extremadura, as a space for the relationship between teachers and students). Anyway, the vast majority of the people that has participated in the survey think that the web 2.0 tools can help to extend the quantity of digital contents for the development of their lessons.

Continuing with the implementation phase of the courses, all the teachers agreed that web 2.0 tools can improve the communication process within the relationship trainer-learner (chats, online documents, etc.) but anyway, the most usual instrument in this case is the email. In fact, they still think on the web 2.0 tools as a threat instead of a facilitating tool.

In addition, it should be noted that, currently, only one of the participants in the survey uses web 2.0 tools during the implementation phase of their lessons. For the rest it seems very difficult to find a way to utilise these instruments in their current learning processes.

¹⁷ www.educarex.es

4.4 Vlaams-Brabant

4.4.1. Current ICT and Social Media Usage in Belgium

Following a recently published documentation from Eurostat¹⁸ in Belgium around 80% of the population between 16 and 24 uses the internet on a daily basis. There is a difference however, when comparing this age group with an age interval of 16 to 74, which only amounts to roughly 55% of participants using the Internet on a daily basis. This trend is evident in most European countries. The current percentage of households in Belgium that has a broadband connection amounts to 63 % in 2009, which is a steady increase from the 54 %, three years earlier. While these data don't provide any specific insight into the use of web 2.0 tools, it's safe to assume that a proper Internet distribution among the population is a prerequisite for a successful implementation of web 2.0 training.

The TacCLE survey, published in July 2008, did collect some interesting data on ICT and web 2.0 use among trainers and educators however¹⁹. Survey studies across Europe show that a mere 25% of educators considers themselves to be experienced in the use of ICT technology, while 60 % of respondents claims some familiarity with ICT. In Flanders, the use of e-mail (99,3 %), word processing (97,1 %) and powerpoint (53,7 %) are most commonly mastered. The use and knowledge of forums (28,1 %), media sharing (28,7 %, e.g. youtube, flickr,...) and direct communication tools (29,1 % e.g. skype, msn,...) are less common. Blogs (8,4 %), wikis (9,7 %), podcasts (4,2 %), social networking (13,4 %) and social bookmarking (4,0 %) aren't all that widespread among respondents.

Aside from powerpoint (50,7%) and specific software for interactive exercises (28,5% e.g. eXe, HotPotatoes,...), ICT technology is rarely used as a teaching tool or to create a learning environment. Most of the surveyed institutions (predominantly secondary schools) host an electronic learning environment or learning management system (71,9 % e.g. Toledo, Smartschool, Moodle,...). These systems are rarely used in teaching methods (46,8 %), and even then mostly for administrative purposes.

These figures illustrate that the basic framework for Internet connectivity is already present, but the use of web 2.0 as a teaching tool is still limited.

4.4.2. The Current Use of Web 2.0 Applications within VET and Adult Training

During the regional analysis in Leuven and Vlaams-Brabant, 8 different training institutions closely cooperated with our analysis through telephone interviews (March – June 2010) and the round table workshop that was held on 8 June at EuroPACE in Leuven. The aim of this evaluation was to identify the needs, trends and barriers in the use of web 2.0 applications within VET and adult training courses.²⁰

During the telephone interviews and the round table workshop in Leuven, the following status quo concerning the use of web 2.0, needs and barriers to use web 2.0 applications within VET and adult trainings was identified:

¹⁸ Eurostat 2009 "Internet usage in 2009 – Households and individuals"

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-QA-09-046

¹⁹ TACCLE Partnership 2008 "Results of the TACCLE survey"

www.tacCLE.eu/component/option,com_docman/task,doc...2/.../lang,en/

²⁰ A detailed overview on the involved public and private training institutions can be found at the end of this report (Annex II)

a) Current use and knowledge of web 2.0 tools in the participant organisations²¹

Most participants knew the definition of web 2.0 and the possibilities of web 2.0 instruments to enrich the learning experience. Nevertheless, there are still few institutions that regularly use those applications to offer more collaborative and learner centred training. The familiarity with web 2.0 tools was mostly limited to the use of media sharing sites like Youtube and Flickr, collaborative wikis, and networking tools such as Facebook. When web 2.0 tools are used within the organisation it is mostly for administrative purposes, there are rarely guidelines or scenarios available to use web 2.0 in an education practise.

b) What are the barriers to use social media tools within the organisation and their training delivery?

Culture / Acceptance

- In addition to the common resistance to change in many organisations, there is also a lack of acceptance of the perceived benefits of web 2.0 tools. This is sometimes due to the low level of broad digital literacy, and the resistance to use new and unfamiliar techniques. Using web 2.0 is also often unjustly perceived as unnecessary time sink, and the training of students and staff as too time- and energy consuming.
- Many students enrolling in VET or adult education courses do so for social reasons. The face-to-face group dynamic is an essential part of many lifelong learning tracks, and it is sometimes felt that web 2.0 is incompatible with such dynamics.
- There are still too few best practice scenarios that could persuade trainers and institutions to use those tools, and outline their effectiveness and efficiency.

Structural /Institutional barriers

- Choosing the right web 2.0 application to fit the organisation's needs, needs to be done according to a careful analysis of present and future trends. Identifying those needs and trends is crucial for a successful implementation.
- Adopting a web 2.0 platform requires a certain investment of resources in staff training. When working with a large number of freelance trainers however, the cost/benefit ratio of training new (sometimes only temporary) staff becomes more difficult to assess.
- Assessment and evaluation through web 2.0 requires a different approach from the classical right or wrong summative assessment. Learning goals, and therefore course material and teaching methods, will have to be adjusted accordingly, and not everyone trainer/teacher is willing to invest in that.
- Open source networks are often considered as too informal, and too accessible (available to communities beyond the intended target audience) for education purposes. The possibility for user-generated content also means less control over the content of the learning platform, which is an important consideration for many organisations.

²¹ See Annex III: Statistical diagrams

Technological barriers

- There is an overabundance of tools and utilities available on the web, with a plethora of widgets/apps/tools that often cannot be properly integrated in existing networks. This can feel overwhelming to those who are not as digitally literate.
- A digital gap (across generations or socio-economic status) is still very much in existence. When targeting a lifelong learning audience, the subset of the population that lack basic ICT skills needs to be taken into account.
- Usability: Acquiring the skill set to use and navigate a web 2.0 application might present a steeper learning curve for some than it does for others. Any form of web 2.0 training should center on presenting basic functionalities, and not drown the potential user in a sea of options.

c) What are the benefits for teachers and learners to use web 2.0 applications?

- Distance and blended learning allow courses to target more and more specific audiences in the area of lifelong learning.
- Hosting courses and providing learning material through web 2.0 enables more learner centred, and self paced learning.
- Hosting courses through web 2.0 allows the building of a learning community that can persist through several courses/training modules. This community can interact and share content through the many social tools of web 2.0 networks. Interaction is also possible between different communities across content modules.
- Coaching and evaluation (both summative and formative) are no longer limited to face-to-face contact moments, allowing for more flexibility.
- Media uploads can make course content available to students with specific disabilities (e.g. audio podcasts for the visually impaired).

d) What are the success factors that will encourage web 2.0 uptake?

- Usability: Learning to use a new technology requires an investment of time and energy. The easier a tool is to adopt (for a given level of functionality), the higher the chance of a successful implementation.
- Best Practice scenarios: Providing clear guidelines and concrete examples on the optimal use of web 2.0 for a specific context will result in a higher rate of success, and a greater level of acceptance.
- Change management: Any change in institutional policy or philosophy has to be guided over a certain period of time. The rationale behind the choice for web 2.0 has to be if not embraced, then at least accepted, by future users.
- Hands-on experience: Acceptance of new technology and methodology is more likely when the concepts turn from abstract to concrete experience. Preferably in a controlled setting at first.

4.5 Wales

4.5.1. Current ICT and Social Media Usage in the UK

For web 2.0 usage to be effective in education it is important that the general population has an appropriate level of ICT skills and familiarity with the use of the internet. This section presents statistical information that describes the current usage and skills in the UK. The overall picture is that ICT skills and internet usage is increasing year on year and that the use in education is becoming more effective as a result.

In the UK²² 77% of the population had access to the internet in 2009 and 69% had broadband connectivity. 83% of young people and 60% of those over 24 years old reported using the internet on a daily basis. 66% had used the internet to purchase goods or services in the past year.

The proportion of people using ICT in their jobs in the UK was 77% in 2009²³ and a direct link has been shown between digital life skills and employability. 24% of companies surveyed said that ICT skills needed to be improved in the workforce and 72% had increased their training spend to address that skills gap. As a result of recent government policy to concentrate public funding of adult skills provision on longer qualification-bearing courses, however, there has been a decrease of more than 50% in publicly-funded ICT course enrolments since 2005. A digital life skills agenda has been proposed for to address this issue and provide for the estimated 11m digitally excluded adults in the UK today.

In practice, the UK population largely gains its ICT skills through informal self-study and practical experience. The internet has made this much easier by providing just-in-time access to guidance materials for both hardware and software. For basic ICT skills this, together with the local support community of practice represented by friends and family, is sufficient. Most domestic PC and internet users are able to develop the skills they need to create basic documents, use email and engage with social networking sites without formal training. For anything beyond the basics, however, informal unstructured ICT skills development is both inefficient and ineffective. This applies as much to individuals employed in education as in other industry sectors and the SVEA project will contribute structured training opportunities in the use of web 2.0 applications in that sector.

An analysis of the purpose of using the internet in the UK population shows that the primary motivation is accessing information using search engines and that education was a small but significant reason for internet usage. It is clear that the internet is used for multiple purposes and that the population uses search engines *and* social network sites *and* webmail, etc, when they go online.

In 2009, 80% of the UK internet users visited a social networking site, a 9% growth over 2008. Facebook remains the most popular social networking site with visitors growing by 57% to nearly 24 million between 2008 and 2009, whilst Bebo, fell by 28% to 8.5 million visitors over the same period. A particularly interesting statistic is that, in the UK, the use of Twitter increased by over 3,000% between 2008 and 2009! In the UK the amount of time people spend per month on social networking sites is amongst the highest in the world at 6 hours. A current indication of social networking site usage in the UK is shown below²⁴.

22 http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables

23 Digital Britain: Creating Skills for the Digital Economy, submission to Lord Carter by eSkills UK and Skillset, 2009

24 <http://www.clickymedia.co.uk/2010/02/social-media-statistics-february-2010/>

Industry	Share of UK Internet visits
Search Engines	12.16%
Social Networks and Forums	10.61%
Entertainment	11.80%
Shopping and Classifieds	8.74%
Business and Finance	6.48%
Webmail services	3.63%
News and Media	6.20%
Sports	3.09%
Travel	3.34%
Education	2.66%
Source: Experian Hitwise	

Figure 9. UK Social Media Stats, <http://www.clickymedia.co.uk/2010/02/social-media-statistics-february-2010/>

Top Social Networking Websites

The following report shows **websites** for the industry '**Computers and Internet - Social Networking and Forums**', ranked by **Visits** for the **week** ending **20/02/2010**.











Rank	Website	Visits
1.	Facebook	51.05% 
2.	YouTube	17.04% 
3.	Twitter	2.10% 
4.	Bebo	2.03% 
5.	MySpace	1.40% 
6.	Yahoo! Answers	1.02% 
7.	Google videos UK	0.88% 
8.	Club Penguin	0.70% 
9.	Windows Live Home	0.67% 
10.	Yahoo! UK & Ireland Answers	0.55% 

Figure 10. Social Networking Site Usage in the UK

4.5.2. The Current Use of Web 2.0 Applications within VET and Adult Training

The current use of web 2.0 applications in the education sector in Wales was surveyed through telephone/face-to-face interviews with key representatives of 10 institutions/organisations representative of VET & Adult training in the region. The outcomes of these interviews were combined in a spreadsheet to present both quantitative and qualitative data. Statistics of web 2.0 usage are included in Annex II at the end of this report.

A Regional Round Table meeting was held with representatives from each of the 10 institutions and the outcomes of the survey discussed. The current use and understanding of web 2.0 applications in education was considered as well as the future potential of the technology in enhancing educational delivery.

The meeting concluded with a discussion of the training that institutional staff needed in order to exploit the benefits of web 2.0 applications in the delivery of VET and adult training. The outcomes of the discussion are summarised in this report.

a) Current use and knowledge of web 2.0 tools in the participant organisations

All of the people interviewed were fully aware of the range of web 2.0 applications available on the internet and their usage in a social context. Many of the most popular applications were regularly used; Facebook being the social networking application of choice, YouTube and Flickr for video and photo sharing, LinkedIn for professional networking and, increasingly, Twitter for daily networking.

As far as the participant organisations were concerned, however, the picture was very mixed. The range of personal usage by staff, first of all, covered the entire spectrum from just basic email and web browsing through to active blogging and the regular use of Facebook and other applications. The institutions also varied from having a very positive approach to the use of such tools, to the banning of use by both staff and students for control and security reasons.

b) What are the barriers to the use social media tools within the organisations and their training delivery?

Culture / Acceptance

- The traditional educational culture: The tertiary educational sector in the UK has established processes and procedures that change very slowly. They are closely linked to academic quality issues and a perception that the UK model is proven and should be preserved;
- The attitude of staff: Staff in VET and adult education are typically mature practitioners, often coming into education after a vocational career. As such, they are currently amongst the least active internet users and, as a consequence, the least likely to have either the skills or motivation to use social media tools in their delivery;
- The mixing of work and social life: There was evidence that some students were uncomfortable with mixing their social networking media with their work environment. There was also evidence that staff felt uncomfortable with the implied social nature of the interaction as a 'friend' of their students.

Structural /Institutional barriers

- Managerial control: The use of web 2.0 applications in both training delivery and in institutional management is regarded as a potential risk by institutional management. It is concerned about the control and security of information and the duty of care it has for younger students.
- Legal responsibility: The recent Digital Economy Act in the UK imposes significant responsibility on institutions for the actions of both staff and students in the use of digital assets on the internet. Institutional management tends to be risk-averse and, when unsure of the consequences, will prevent access to online resources and services;
- Institutional policy: Several of the institutions had no institutional policy regarding the use of the internet in teaching delivery. As a result of this, there were no policies, procedures or processes available to staff involved in curriculum design and delivery;
- Technical reliability and support: Teachers were concerned that reliance on technologies that were outside their control could impact on delivery and were a risk. Institutional managers were unclear about the implications for

technical support and whether they had the capacity to service the needs of teachers in using web 2.0 applications.

c) What are the benefits for teachers and learners to use web 2.0 applications?

- Web 2.0 is a fundamental tool for modern educational delivery, particularly where a learner centred model of learning and teaching is applied. The effective delivery of VET involves people working in different places and requires more flexible, collaborative and interactive learning tools. Web 2.0 provides those tools;
- VET and adult learning takes place in the workplace and at home as well as in the institutions. Web 2.0 applications facilitate online distance learning in a very efficient and effective way;
- Web 2.0 is not only advantageous as a method of delivering flexible and user-centric learning, it is also an important subject to be learned about in its own right. Learners will gain essential ICT skills as well as the subject specific skills;
- The advantage for institutions in the use of Web 2.0 tools is, amongst other things, in the cost effective way it allows learning to be delivered. By employing cloud computing resources and learner owned equipment, the investment required for course delivery is significantly reduced;
- Adult learning involves the development of new underpinning knowledge and practical skills development and the integration of this with existing professional work-based competencies. Web 2.0 facilitates a discovery learning approach and allows learners to manage their development in a way that suits their personal requirements and circumstances. It also blurs the distinction between formal and informal learning as the learner is able to take much more control and responsibility for where and when they study, and how they access their learning resources;

d) What are the success factors that will encourage web 2.0 uptake?

- Demonstrable effectiveness: Both teachers and institutional managers need to be convinced that the use of web 2.0 tools is clearly beneficial compared with the conventional tools of educational delivery. If only the same benefits, or marginally improved benefits are demonstrated, then institutions will not be motivated to change;
- Security and reliability: The systems used for educational delivery must work every time, must have no technical weaknesses and must ensure that data, both personal and for academic quality purposes, is protected and private. Institutions will only use web 2.0 applications if they do not compromise or weaken business processes;
- Sustainability: Institutions need to be convinced that web 2.0 is the future for education and that the time invested in developing new delivery systems that involve these applications will not be wasted. If the argument is convincing, then the implication is that *the whole institution* will use web 2.0 resources and the decision is therefore mission-critical;
- Cost-effectiveness: A key message that arose from the regional round table discussions was that web 2.0 needed to deliver on its promise of being

significantly more cost-effective for it to be adopted. This was seen to be the major selling point in times when public sector funding is under great pressure.

4.5.3. Use of Web 2.0 Tools within Training Courses

The regional round table followed the proposed format of scenario building and discussed the issues from the point of view of the trainers and also of institutional managers. The outcomes had a number of common elements:

a) Trainers

The group identified that most of the points on the list in the discussion template were valid and should be used as the basis for new course development. Whilst collaboration was high on the agenda, it was felt that this was more appropriate to 'experienced' adults rather than undergraduates in some cases or younger learners. 'Content light' courses with only outcomes provided allowed learners to explore using a range of Web 2.0 tools as part of the discovery learning model, however it was felt that a more structured and managed approach was needed for younger learners.

The group agreed that the benefits to the teacher, the learner and the institution must be demonstrated before Web 2.0 could be integrated into learning. It was felt that technology enhanced learning and Web 2.0 in particular would only become embedded with greater understanding of course design and the adoption of learner centric models that provided a range of tools for teachers to 'select' and integrate into their courses.

The issues of security were raised once more and the halfway house model would allow institutions to maintain their 'duty of care' and embrace new Web 2.0 tools.

The training materials that need to be developed to support the project will therefore need to be Web 2.0 based, demonstrate effective practice and be accessible online in bite sized chunks of learning. In the future it was expected that learning technologies should have a much higher profile in Post Graduate qualifications for any new teacher at any level.

b) Managers

Participants agreed that there was a significant staff skills deficit that needed to be addressed.

There was a general view that significant progress in achieving staff engagement with the use of web 2.0 tools would only be achieved if clear benefits could be demonstrated *for the individuals involved*. Even management directives that obliged staff to undertake training would not be effective if staff thereafter did not apply those skills.

The discussion that followed about appropriate online training materials for staff highlighted the following factors:

- The need to keep it simple, focussed and personally adaptable. Materials that both satisfied the basic needs of late adopters and allowed relatively skilled users to cherry-pick to fill holes in their knowledge;
- The attraction of micro-modules of just-in-time learning that could be assimilated by staff in a lunchtime-length break;

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- The need to include (and encourage staff to use) discovery learning opportunities to drill down to the level of detail they were personally looking for;

It was agreed that the proposed learning object framework would be appropriate for these requirements and that it would cater for the needs of both managers and trainers.

The kind of web 2.0 tools that would be useful for management include:

- Blogs for regular staff information updating, Twitter for ad hoc information exchange;
- Google docs for management document sharing and collaborative working;
- Skype for management voice and video conferencing;
- Wikis as general collaboration and resource sharing tools that can also be set up as an institutional portal.

V. Common Identified Barriers and Benefits

Even though each region in this report shows local trends and different levels of web 2.0 usage, it is nonetheless possible to identify needs and benefits that recur in each country. Similarly, trainers and managers in the five analysed regions mentioned common fears and resistances that could constitute a barrier in the uptake of web 2.0 in VET and adult training.

From an analysis of the most recurrent barriers, which were identified by the participants in the regional round tables, it is possible to list some common barriers which still have to be addressed in the five countries. Among them the most significant are:

BARRIERS	
DESCRIPTION	CATEGORY
<p>Lack of students motivation: Especially those who are older and not so familiar with new digital technologies and are not easily persuaded by teachers to use new web 2.0 applications.</p>	CULTURAL / ACCEPTANCE
<p>Lack of acceptance: There is still a lack of acceptance by both trainers and learners of the value of using web 2.0 tools. Sometimes this is due to a lack of knowledge, as well as the concern that it would require a change in the way training is designed and delivered.</p>	
<p>The mixing of work and social life: There is evidence that some students are uncomfortable with mixing their social networking media with their work environment. Similar concerns were expressed by trainers and teachers.</p>	
<p>Strong reservation: There is a strong reservation at management level in the different institutions, mainly for reasons of security and academic quality, regarding integrating social media applications in their organisation or within the course structure.</p>	
<p>Lack of references and good practices: General guidelines on how to use such applications or guidance on new good practises are not easily identified.</p>	
<p>Institutional policy: Several of the institutions had no institutional policy regarding the use of the internet in teaching delivery.</p>	STRUCTURAL / INSTITUTIONAL
<p>Lack of money and time: To gain competences as well as the lack of a technological platform.</p>	
<p>Legal responsibility: Copyright was identified as an issue. As we are talking about collaborative tools, it is not easy to control the exchange of content among students.</p>	
<p>Digital gap: Poor digital literacy and lack of web 2.0 usage, particularly amongst lifelong learners, was identified by all countries as a problem.</p>	TECHNOLOGICAL BARRIERS
<p>Usability: Acquiring the skill set to use and navigate a web 2.0 application might present a steeper learning curve for some than it does for others. Any form of web 2.0 training should center on presenting basic functionalities, and not drown the potential user in a sea of options.</p>	
<p>Lack of safety: Institutions have a duty of care to young students and there are safety issues when using open web 2.0 applications.</p>	

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An analysis of the needs and benefits identified in each of the partner regions also revealed a number of benefits common to each region:

BENEFITS			
DESCRIPTION	CATEGORY		
	Teachers	Managers	Students
CULTURAL BENEFITS			
The high level of collaboration that web 2.0 tools offer, allowing remote group/individuals to collaborate through a variety of online communications methods.	X		X
The opportunity to acquire new knowledge very quickly by integrating web 2.0 tools and internet resources in training courses.	X		X
STRUCTURAL/ INSTITUTIONAL BENEFITS			
The cost effective way web 2.0 tools allow institutions to deliver courses online. Savings can be made in training materials development and delivery, as well as saving time and travel costs for distance learners.		X	X
High level of learning , due to the facilities offered: students can connect at any time, in any place and critically analyse the information available.			X
Courses integrating web 2.0 applications are much more learner and target group oriented than classical face-to-face trainings. The learning success is consequently has the potential to be much higher.			X
The building of a learning community that can easily persist through several courses/training modules.	X	X	
TECHNOLOGICAL BENEFITS			
Improved technical infrastructure that allows institutions to support staff and students more flexibly and market courses more effectively		X	
Development of new underpinning knowledge and practical skills integrated with existing professional work-based competencies	X		

VI. Common Identified Trends in VET and Adult Training in the Participating Regions

For the development of a targeted training it is relevant to look also at the trends and what knowledge the trainers will need in the near future to keep pace with the new developments.

Within the regional analysis in the SVEA regions the following common trends were identified:

- Training at work is becoming more important. Therefore the concentration on and availability of information is relevant as well as the flexibility to offer tailored courses. This can be offered more easily by using flexible web 2.0 applications.
- Learning in the workplace requires fast access to knowledge, information and expertise. The learning content has to be provided in a more flexible manner, e.g. adequate, where appropriate, for mobile devices.
- A mixture of face-to-face and online training is becoming important as it offers more flexibility. Face-to-face training will remain an important component in most cases, though fully online delivery will be an option.
- Virtually all aspects of modern society are being transformed by the Internet and education is no exception. The Internet will become a real asset to the future delivery of training.
- The use of web 2.0 tools within the preparation and the follow-up phases of training courses will increase.
- Due to the increased use of smart phones and other mobile devices, the offer of as well as the demand for mobile and game based learning will grow.
- Due to the omnipresence of the Internet in private and professional life and also the broad acceptance of the Internet as a relevant source of information informal learning via the Internet will increase. The challenge for the learner will be to handle this large information flow.
- The trainer's role will change: It will be more and more a moderator offering a framework for learning to the learners, guiding them through the information to gain the relevant knowledge. The learners will generate the learning content on their own by using collaborative online tools.
- While the current focus in innovation lies in the means of providing the learning materials through new technologies, the future may see a renewed interest in innovating the content of the learning material itself. The society's needs are changing, and the interaction between society and education tends to shape the direction that schooling takes (e.g. new defining technologies like cloud computing, that may require specific programming skills and degrees in the future).

VII. Detected Needs/Barriers and SVEA's Answers

SVEA seeks to respond to the needs as well as to the trends identified within the five regional needs analysis with appropriate measures and activities, which leverage on the possibilities offered by web 2.0 tools. In the following table, the needs and barriers emerged (on the left side) are matched with the actions (on the right side) that will be undertaken during the lifetime of the project to offer concrete solutions by SVEA to close the identified gaps and to have adequate answers to the trends which need to be responded to in the near future.

a) SVEA's answers on the identified common needs:

Needs	SVEA's answers
Trainer's side	
Possibility to get smaller knowledge/learning units	Short training modules/units (in different format: video, slide, podcast) that can be downloaded for free online and used according to the users need and time
Flexible tools, user-friendly and easy to use, to allow distance learning	Platform with different kind of tools (wiki, blog, rss, social network) that allow distance and self-paced learning
Higher personalization and interaction in learning	Platform with a customizable home page where users can: <ul style="list-style-type: none"> • Decide which information receive and being easily up-to-date (home page with widgets that shows which information has been added on the platform) • Share information (through RSS feed, blog, wiki) • Interact with other students and trainers (e.g. through social network), building a community of practice • Provide feedback and asking questions on training
Possibility to adjust the learning process to the learner's needs and rhythm	
Allow learners to interact at any time with trainers and provide them feedback on courses and methods	
Create a community among learners	
Providing follow-up for the training courses to extend the learning benefits	Webinars offered online after the end of the SVEA's face-to-face training
Management's side	
Flexible and fast communication tools to reach and inform learners on organisational matters	RSS, microblog (e.g. Twitter), social network (e.g. Facebook) to reach a wide range of people where they already are
Monitor and trace students' activities	Tools on the platform that allow: <ul style="list-style-type: none"> • To have a summary page on each student with statistic on his participation in the course and page views • To collect data (like page views, access time etc..) which enable the traceability of the learning process • Feedback form for the learners on the institution's management
Allow a better circulation of information and more effective collaborative working among the management of learning institutions and with the trainers	The same platform could be used for organisational matters to: <ul style="list-style-type: none"> • Share information between colleagues (avoiding mails) • Share files and calendars • Facilitate the collaborative writing of documents as well as the recovery of documentation • Increase the visibility of information about people and their skills

b) SVEA's answers on the identified common barriers:

Barriers	SVEA's answers
Culture / Acceptance	
Lack of acceptance from trainers and learners	Sensibilisation through trainings on the topic: <ul style="list-style-type: none"> • Short training modules for trainers (video, slide, podcast) that can why be downloaded for free online and that can be used/seen in spare time outling also the benefits web 2.0 offers and how to easily use web 2.0 tools within training courses • Training / recommendations for the management level on web 2.0
Lack of time and resources to understand how web 2.0 tools work and adopt them in the daily routine	
Lack of digital literacy in the management level which limits the adoption of digital tools in their institutions	
Lack of good practices	Collection of good practices in the Regional report
Learners and trainers' fear of mixing their social networking life with their work/learning environments	Ad hoc platform (Open Atrium) to be used for learning purposes: <ul style="list-style-type: none"> • The platform reflects the way similar web 2.0 tools work (no waste of time in learning new tools) • The platform allows the integration of external tools / resources in a safe environment (no need to duplicate information which already exists in other platform ex. Flickr, YouTube)
Safety	
Concerns on safety of open web 2.0 applications	Safe and closed platform
Legal responsibility connected to the use of web 2.0 (copyright and safety issues)	Guidelines on copyright and safety issues + training on creative commons
Lack of institutional policies on internet use	Recommendations on how to set a internet policy inside a training institution
Structural / Institutional barriers	
Difficulties in recognizing credits for online training (no scalability)	Suggestions / Best practices on how to measure and evaluate online training
No practicable accounting system to pay the trainers	Suggestions / Best practices on how to measure the work of trainers online and pay them for that
For free mentality	Costs-benefits examples which clarify why it is convenient to adopt online training and web 2.0 for learning purpose

Annex I: Good Practices Identified in SVEA's Partner Regions

During the round table workshops in the SVEA consortium's regions several good practices on how to use web 2.0 in VET and adult training courses or for organisational and administrative purposes within the institutions were identified. These good practices shall give interested training institution an orientation on what different web 2.0 applications can be integrated in the course system as well as in the administrative system of ones training institution and how they can be used.

These good practices also demonstrate the interest of agencies regarding the use of web 2.0 tools and the potential of the web 2.0 approach applied to educational and training purpose. The experiences show as well that VET agencies usually face technological barriers that hinder the adoption of web 2.0 which underlines the need of technical and methodological support to promote the innovation process.

a) Baden-Württemberg (D)

Volkshochschule Böblingen-Sindelfingen

The Volkshochschule Böblingen-Sindelfingen has developed two collaborative systems one addressing the training system the other offers services to the administrative / managerial level of training institutions:

- **VHS-Club:**
Volkshochschule Böblingen-Sindelfingen is the adult education centre for the two cities Böblingen and Sindelfingen (located in the South-West of Germany) offering further education courses for all ages in a very broad field such as general, vocational, or political education, languages, information technology, arts etc.
The Volkshochschule Böblingen-Sindelfingen has set up a collaborative online community (www.vhs-club.de) for all the students of German Volkshochschule (Adult education centres). On this platform each registered user has its own profile and can access information regarding the courses he is attending or can upload additional information relevant also for other course members. Furthermore the users can create their own social network on the platform to get in contact with other course participants. On a blackboard the users can read news related to their courses, general news written by other community members or news linked to specific topics. Böblingen-Sindelfingen Volkshochschule itself developed the software for this platform and offers it to other adult education centres in Germany. So far, the vhs club has 7,000 members.
- **VHS intern:**
For other adult education centres VHS Böblingen-Sindelfingen has also set up an intranet system (www.vhs-intern.de) offering web 2.0 applications such as document sharing, a chat system, collaborative project management elements facilitating the knowledge / information exchange as well as collaborative content development between VHS employees. Additionally, an RSS feed links the platform to Google News updating the user on relevant topics by providing daily press texts. So far, VHS intern has 2,000 members.

b) Piemonte (I)

CSI Piemonte

- They use a wiki platform (Doku-Wiki - <http://www.dokuwiki.org/dokuwiki>) in a project dedicated to their management board: managers are supposed to plan their activities by using this tool. Despite an initial mistrust, the platform is successfully used by the users involved in the project
- They use a groupware and a wiki platform (Doku-Wiki - <http://www.dokuwiki.org/dokuwiki>) in a course in which employees of different working groups and departments are asked to cooperate for the development of a project. The wiki platform is successfully used during the course and, after that, during the following steps of the project.

More information: www.csipiemonte.it

ENGIM

- They use a social bookmarking tool (Delicious - <http://delicious.com/>) in a course managed by Moodle for sharing links. Students and trainers agree to use a specific tag to collect resources and they create an application which can be imported into the Moodle platform.

- They provide students with a wiki for taking notes during presence lessons so that the notes are also available for absent students. This experimental initiative has been successful but requires the intervention of trainers for the content validation.

More information: piemonte.engim.it

CISI - Centro Interstrutture di Servizi Informatici e Telematici per le Facoltà Umanistiche Università degli Studi di Torino

- They manage a master course using Moodle and a wiki. The course is a blended learning course (presence/distance) and the training method is focused on the resolution of a legal case. Students work in groups; cooperate on a wiki for drafting documents and discussing the main topics on a forum. Initially, CISI has technical difficulties in implementing this system. But now, it considers this method a best practice and repeats the training model every year.

More information: cisiweb.unito.it

On the national level, it is useful to highlight an interesting initiative – called “LTEve²⁵” - started in January 2007, that aims at joining students and alumni interested in continuing self-training within an online community.

Students, teachers and collaborators of LTE can have their own personal space in order to create a blog, subscribe to pages and build their own communities.²⁶

c) Extremadura (ES)

Escuela 2.0

- Escuela 2.0 is a blog made by a high school teacher heavily involved in the use of new technologies and especially in integrating the Web in education. It is a compilation of Blogs Wikis and other materials created to teach courses related to educational web 2.0.
- It focuses on providing students with access to content across the web and publication of thematic blogs by students in the same web. The blog gives access to the building of webquest and offers many links to educational sites. It is, therefore, a tool for free exchange of knowledge on the network.

More information: <http://aula21.net/aulablog21/escuela-20>

d) Vlaams-Brabant (B)

Open University Leuven

- The OU study centre Leuven has a Facebook account on which it posts all activities within the study centre
- Students can indicate when they need help from other students with course material or research internship
- Students can interact and arrange meetings, open to everyone who is interested in joining
- Tutors can guide students through practical exercises via Elluminate
- Students are able to take oral exams through Elluminate if they prefer not to undertake the drive to the location in Holland where the professor is located.

e) Wales (UK)

• Work-based access to learning through e-services (WALES)

The WALES project at the University of Glamorgan used mobile phones and social networking sites such as Facebook to enhance the learning experience of online work-based learners in higher education courses. This was achieved by helping them to interact more easily with their tutors, fellow learners and virtual learning environment. The intention was to integrate the institutional technologies, such as Moodle, with the personal technologies used by the learners and with web-based services in a way that added value to the learner experience. Students found that using the phone software brought a valuable flexibility and immediacy to the learning process by alerting them to events on Moodle and by significantly increasing the speed with which tutors responded to help requests. Where social networking software was successfully integrated into the course

²⁵ <http://www.lte-unifi.net/elgg/>

²⁶ A more detailed overview can be found on the JRC Scientific and Technical Reports "Learning 2.0: The impact of Web 2.0 Innovations on Education and Training in Europe" (<http://ftp.jrc.es/EURdoc/JRC55629.pdf>)

delivery, it was welcomed enthusiastically by the learners and proved very effective, especially for group work.

More information: <http://wales.pbworks.com/>

- ***Re-usable content for IT education (ReCITE)***

Swansea Metropolitan University has been exploring how educational materials from one course can be re-purposed and re-used in other curriculum areas and in different institutions. One area in particular where this is useful is where the resources can be delivered through online work-based learning to address the training needs of small businesses. The resources used in the project were originally created by the Wales e-Training Network as part of an on-line Foundation Degree in e-Commerce, and were re-purposed for three other study programmes to include both campus-based and distance learning online delivery. The work of the ReCITE project has shown that online content from one curriculum area can be successfully repurposed for use in another and was well-liked by users, easy to navigate and effective in supporting and enhancing individual IT skills.

More information: <http://recite.pbworks.com/>

Annex II: List of Stakeholders who Participated in the Regional Analysis

The following public and private training institutions were involved in the regional needs analysis phase:

a) Baden-Württemberg

I. Public Training Institutions

Volkshochschule Böblingen-Sindelfingen, Böblingen

- Volkshochschule Böblingen-Sindelfingen is the adult education centre for the two cities Böblingen and Sindelfingen offering further education courses for all ages in a very broad field such as general, vocational, political education, languages, information technology, arts etc.
- It has set up an online community (www.vhs-club.de) for all the students of German Volkshochschule (Adult education centres). On this platform each registered user has its own profile and can access information regarding the courses he is attending. Böblingen-Sindelfingen Volkshochschule itself developed the software for this platform and offers it to the other Volkshochschule in Germany.
- For other adult education centres VHS Böblingen-Sindelfingen has set up an intranet (www.vhs-intern.de) offering also web 2.0 applications such as document sharing, chat system, collaborative project management elements.
- It also uses Facebook and Xing (social network for business professional).
- It also offers Live Events.

More information: www.vhs-aktuell.de

Führungsakademie Baden-Württemberg, Karlsruhe

- Führungsakademie Baden-Württemberg is the competence centre for employees, managers and institutions of Baden-Württemberg's public sector. It offers courses in the field of organisational and personnel development.
- So far, it has no explicit experience in integrating web 2.0 applications within its training.
- It uses its own developed learning platform which also offers collaborative applications such as a wiki or a forum. The platform is directly accessible via the Internet. All Baden-Württemberg public authorities can use the knowledge management to work collaboratively on topics in the environmental, planning field or on the regulation commercial and industrial business.
- It offers courses on topics such as: Competence management, education management, coaching as blended learning courses.

More information: fueak.bw21.de

Volkshochschulverband Baden-Württemberg e.V.

- Volkshochschulverband Baden-Württemberg e.V. is the association of all Baden-Württemberg adult education centres.
- It has made its first experiences with web 2.0 applications by using the "VHS Club" developed by the Volkshochschule Böblingen-Sindelfingen and by using a closed virtual team room platform.
- It focuses on the further education of VHS employees in Baden-Württemberg.

More information: www.vhs-bw.de

Polizei Online

- It is a public private partnership between the police Baden-Württemberg and the Deutsche Telekom AG.
- It provides tools such as blended learning trainings, knowledge management systems, competence management, virtual class rooms, document sharing system as well as a common Intranet. Throughout these tools the employees of Baden-Württemberg' police can exchange knowledge, receive further education trainings and can utilise the new acquired knowledge.

More information: www.polizei-bw.de/sites/p-online/Seiten/Default.aspx

Landeszentrale für politische Bildung Baden-Württemberg, Stuttgart

- Centre for political education Baden-Württemberg offers courses for all citizens.
- It is offering eLearning courses since 10 years.
- As learning platform it uses Moodle. Depending on the target group also web 2.0 applications such as a wiki or a blog will be integrated in the course system.

More information: www.lpb-bw.de

II. Private Training Institutions

MFG Akademie, MFG Baden-Württemberg mbH

- MFG Akademie is offering seminars with a special focus on ICT and Media. Since two years it is also offering webinars.
- Many seminars of the MFG Akademie are focusing on "Learning with web 2.0"

More information: www.mfg-innovation.com

TÜV Süd Akademie GmbH, Filderstadt - München

- It works in the field of adult education, vocational education training and e-learning
- It uses Twitter, Youtube and Xing, but a clear social media strategy is still missing.
- It uses an external but closed learning platform which offers collaborative elements e.g. document sharing tool.

More information: www.tuev-sued.de/akademie_de

Steinbeis School of International Business and Entrepreneurship GmbH

- Steinbeis School of International Business and Entrepreneurship GmbH is the international Business School of Steinbeis University Berlin. It offers MBA courses on part-time basis.
- It uses Moodle and eLearning for several years now.
- So far web 2.0 tools are only used for some administrative purposes such as reaching potential clients (companies and students) via Facebook, Xing or Twitter.

More information: www.steinbeis-mba.de

AKAD. Die Privat-Hochschulen GmbH, Stuttgart

- It has its own closed learning management platform used by 8000 students from all over Germany containing all the information regarding the courses. The learning management platform includes its own educational evaluation system.
- It uses different communication channels to keep in touch with trainers and students.
- AKAD is currently setting up a new learning management system integrating more collaborative web 2.0 applications.

More information: www.akad.de

Know How AG!, Stuttgart

- The Know How AG develops individual elearning solutions as well as elearning software, offers seminars and coaching as well as inhouse consulting and qualification.
- In the field of adult education Know How AG! offers eLearning, mobile learning and game based learning solutions.

More information: www.knowhow.de

IHK Bildungshaus

- It is the educational institution of Chamber of Commerce and Industry Stuttgart region
- It works with its own online learning platform which so far does not integrate any web 2.0 applications due to data protection reasons.

More information: www.ihk-bildungshaus.de

Integrata AG

- Integrata AG is a full service provider for qualification services. It offers public and in house seminars in the fields of IT, personnel and organisational development.
- It offers 60% IT courses and 40% courses focused on soft skills
- It uses web 2.0 applications internally but integrate them also actively within their course structures

More information: www.integrata.de

Technische Akademie Esslingen

- It offers vocational trainings such as seminars but also part-time graduate studies.
- So far, they do not use any web 2.0 applications within their courses. They have a moodle platform but it is up the trainers to use it or not.

More information: www.tae.de

b) Piemonte (I)

I. Public Training Institutions

CISI - Centre of IT and telecommunication services for the Humanities University of Turin

- CISI - aims to promote the development of telematics and informatics in the humanities faculties, both for teaching and research.
- CISI designs, develops and runs IT systems, networks as well as activities in classrooms and laboratories, performing direct teaching activities, consulting, research and software development.

More information: cisiweb.unito.it

II. Private Training Institutions

CASA DI CARITA' ARTI E MESTIERI

- It is a non-profit training organization of Catholic inspiration focusing on training and career guidance as well as on education for young people and workers.
- It offers several courses: postgraduate diploma for employment, for unemployment, immigrants, disabled, for trainers and so on.
- Casa di Carità is structured in 16 training centres, an ONLuS and a Training Services Company, offering guidance and training in industry and crafts, services, tourism and social welfare. Every year Casa di Carità has more than 5000 students, teenagers, apprentices, school leavers, graduates, workers, non-EU groups at risk of discomfort.

More information: www.casadicarita.it/

CNOS FAP - National Centre of Salesian Institutions - Vocational Training and Updating

- The CNOS-FAP Federation, a non-profit organisation, coordinates the Italian Salesians who provide a public service in the vocational guidance, vocational education and training, following the educational methodology of St. John Bosco.
- It includes the Salesian Institutions and the local and regional CNOS-FAP Associations providing vocational guidance and vocational training initiatives, mainly through Vocational Education and Training Centres.
- CNOS-FAP Federation operates in 16 Italian Regions with 60 Centres coordinated by the National Office.

More information: www.cnos-fap.it

COREP

- COREP is a non-profit consortium founded in 1987 and one of the few consortia providing a link with the Piemonte's higher education system (University of Turin, University of Eastern Piemonte, Polytechnic of Turin).

SVEA Regional Needs Analysis

- It implements initiatives of collaboration between those institutions, the world of manufacturing and services, and local authorities in two main fields: high-level advanced training and services for consortium members.

More information: www.corep.it

CSEA

- CSEA is a non-profit consortium founded in 1979 with the participation of the city of Turin.
- It is a vocational school and adult training institution offering different type of courses: secondary level, vocational, life long learning and elearning. Training courses are addressed to young people, unemployed and workers.
- Each year more than 4,000 students are attending the courses on topics such as:
 - Information and communication technologies
 - Industrial Automation
 - Hypertext and multimedia
 - Environment
 - Handicraft
 - Industrial services

More information: www.csea.it

CSI Piemonte

- CSI Piemonte is a consortium of public bodies promoting innovation in the Public Administration through ICT technologies.
- With over 1,200 employees, six premises in the region and 85 associated organisations, CSI is now one of the main ICT firms in Italy.
- It offers trainings to Public Administrations officials to enhance their acquisition of skills in the use of IT tools on topics such as:
 - e-learning: to coordinate training of Piemonte PA;
 - action learning: for the networks of small municipalities;
 - network and service facilitators: professionals who provide assistance to Public Administrations employees.
- As regards Citizen Training, CSI keeps track of the skills acquired during the training and work experience and facilitates matching demand and offer.

More information: www.csipiemonte.it

En.A.I.P. Piemonte

- It aims to develop human resources by offering the following activities:
 - Vocational Training
 - Higher education
 - Lifelong learning
 - Training Company
 - Mandatory training
 - Trainings and stages
 - Training for foreigners
 - Training for apprenticeship
- It delivers more than 500 courses per year in the areas: compulsory education (for boys and girls leaving school), Labour Market and Continuing Education (for unemployed adults and employment), Employment Directive (employees or executives of Public Administration).

More information: www.enaip.piemonte.it

ENGIM - Ente Nazionale Giuseppini del Murialdo

- It is a non-profit association dedicated to professional training. Its activities are addressed to young people and workers in order to improve their professional skills, promoting personal and social activities through training and vocational guidance.
- Besides working in the region it also undertakes several international development projects in Albania, Romania, Ghana, Sierra Leone, Guinea Bissau, Argentina, Brazil, Chile, Ecuador, Colombia, Mexico and India.

More information: piemonte.engim.it

ENFAP Piemonte

- As regional educational agency ENFAP Piemonte operates in the labour organisation area.
- Its main activities are focused on: Vocational training and lifelong activities for employees; Training activities for unemployed; Career guidance, job-support, support to employment services.
- It provides services that include the entire educational process: needs analysis, training planning, teachers' selection and identification, coordinating education, classroom management and delivery of training content, organisation of internships, tutoring activities in stages, monitoring the results of training activities, training evaluation, management and administration of educational services.

More information : www.enfap-piemonte.it/

d) Extremadura (ES)

I. Public Training Insitutions

@vanza Project

- @vanza Project is an initiative of The General Directorate of Vocational Training and Lifelong Learning of the Ministry of Education of the Junta de Extremadura-financed by the European Social Fund, whose purpose is to develop distance learning courses via the Internet.
- @vanza project becomes the model of distance education in the region of Extremadura.

More information: <http://avanza.educarex.es/portal/principal/index.jsp>

Gabinet of Youth Initiative

- Gabinet Youth Initiative is established by the Extremadura Government, through the Regional Ministry of Youth and Sports, for promoting a new development model in Extremadura based on the ability to imagine, create and innovate young entrepreneurs.
- It has introduced an activity focused on youth education through social networks and Web 2.0 in coordination with the Ministry of Education.

More information: www.iniciativajoven.org

INTAEX – Agrifood Technology Institute of Extremadura:

- The assignment of INTAEX is the provision of technology services with high added value, by conducting research and technological development, technical assistance and technology transfer projects, whether public or under contract, in order to improve the competitiveness of the agri-food sector in Extremadura through the promotion of innovation and technological development in SMEs, improving and increasing the quality of their products.

More information: <http://intaex.juntaextremadura.net>

BADAJOS COUNTY COUNCIL- Area de Igualdad y Desarrollo Local

- The primary objective of this section is to facilitate the ongoing process of modernisation of local authorities in the province of Badajoz by
 - Improving the quality of services provided to citizens
 - Promoting professional and personal improvement of human resource serving to municipalities in the province, helping them in the process of needs detection.
- With these activities the Badajoz County Council looks for the participation and involvement of local authorities in training and lifelong learning. The training proposal, for local authority staff in the province, focuses, among other things, in new technologies and their implementation within the framework of the public administration.

More information: www.dip-badajoz.es/diputacion/delegaciones/dlocal/index.php

REDEX – Rural Development Network of Extremadura

- The Rural Development Network of Extremadura (REDEX) brings together 24 Local Action Groups (LAGs).

SVEA Regional Needs Analysis

- Local Action Groups and Rural Development Groups are partnerships that integrate public (Municipalities, Associations) and private institutions (business), as well as social service associations: youth, women, cultural or unions.
- They act on a specific territory which is the scope of this entity and fight for social and economic development of the area of reference. Their functions range from the management of aid and grant and payment to beneficiaries, to the monitoring implementation of projects, and other key tasks such as information, entertainment, advice and training of the population.

More information: www.redex.org

FINCA LA ORDEN

- The activities of this centre are related to agricultural and livestock sectors as well as forest and pasture resources with the following functions:
 - Experimentation
 - Research
 - Plant Genetic Resources
 - Development of novel technologies for the agricultural sector in relation to companies.
 - Technology Transfer
 - Training: Training of researchers and technologists, as well as practical training of university students from faculties or schools related to the agricultural sector.

More information: www.centrodeinvestigacionlaorden.es

II. Private Training Institutions

FOREM – Foundation Training and Employment EXTREMADURA

- Private, non-profit Institution, represented in all Regions in the Spain.
- The main activity since its creation in 1991 is the management and development of training and career guidance. Its activities are aimed at:
 - Unemployed persons: those seeking for a first job, those that have just lost their job and / or those belonging to the group of long-term unemployed.
 - Men and women who need to acquire new skills to adapt to the changing labour market and / or need professional qualifications.

More information: www.foremextremadura.com

CETIEX – Extremadura Industrial Technology Center

- Private, non-profit foundation, CETIEX Technology Centre develops research activities and technician training (among others activities) based on:
 - The momentum of the development of scientific, technical, economic, social and cultural activities in the field of engineering.
 - Effective contribution to the technological process from a technological and industrial promotion based on the promotion of the business network in Extremadura.

More information: www.cetiex.es

FMI – Training Institute for Business Techniques

- The Institute of Technology, Electronics, Computer & Communications, develops, innovates and produces educational materials as well as authoring tools under an Interactive multi-media Training Courses concept.
- Its aim is to respond to technological and training needs within the Training Sector as well as adapt the different contents to major changes in the world of training.
- Its educational offer is based on:
 - Flexibility, both in terms of accessibility as content.
 - Adaptability to all needs, with particular commitment to the Vocational Education for Employment and Training, both active workers as unemployed.

More information: www.multimediafmi.com

ADALID

- Adalid Extremadura is the most extensive training centre network in the region. It has Training Centres in 90% of the cities with more than 10,000 inhabitants as well as in rural and remote areas. Among its objectives we can found:
 - Quality Training
 - Wide range of Training Courses with an increased interest in new fields of training.
 - Greater flexibility in providing training solutions anywhere in our region by using methodologies that guarantee the quality and effectiveness of results.
 - Customisation / specialisation. Training programmes designed to meet the needs demanded by the different productive and service sectors.

More information: www.adalidextremadura.com

e) Vlaams-Brabant (B)

I. Public Training Institutions

CVO VTI Leuven

- CVO VTI Leuven is the adult education branch of one of the major associations of schools in the area of Leuven. The CVO offers mostly VET training, but also hosts the SLO, the specific teacher training.
- Like the rest of the schools in the association, CVO VTI uses a Toledo based learning management system called ELO-V, it is mostly used for administrative purposes, but also hosts content sharing and forum functions.

More information: www.cvovtileuven.be

CVO SSV VIVA

- SSV is an adult and VET education centre that focuses primarily on crafts for a female audience. SSV does not host any formal learning platform.

More information: www.CVO-SSV-brabant.be

CLT – Centrum voor Levende Talen

- CLT is a branch of the Katholieke Universiteit Leuven that primarily host international language courses in adult training formats.
- CLT uses the Blackboard (Toledo based) platform that is used across the KUL. Most training packages are more informal and the use of wikis and social networking is relatively widespread, depending on trainer experience and preference.

More information: www.CLT.be

CVO SSH

- CVO SSH is the adult education branch of the Katholieke Hogeschool Leuven. Their education program is aimed at social work and social sciences in a lifelong learning context.
- The SSH uses a Toledo learning management system. The use of ICT in training courses differs among trainers. The more commonly used tools are media sharing sites such as Youtube and Flickr, and social networking sites such as Facebook.

More information: www.CVO-SSH.be

Open University Belgium

- OU is a leading institution in the field of Distance and blended learning, with a great interest in lifelong learning.
- OU Belgium is embedded within the organisation structure of the KUL, but they provide their own learning content, mostly through a combination of distance learning and ICT.

More information: www.avnet.kuleuven.be/ou

AVnet

- Avnet is an education technology research centre operating within the KULeuven.
- Avnet is on the forefront of research and training on the use of web and ICT in education.

More information: www.avnet.kuleuven.be

II. Private Training Institutions

VDAB

- VDAB is the federal service for employment and vocational training. They organise a wide range of VET content, to help people find their way into employment.
- VDAB is also a leading research institution on the use of ICT in training and on the work floor.

More information: www.vdab.be

Obelisk bvba

- Obelisk is a primarily soft skill consultancy agency that focuses on resource and competency development in human resources and the work environment.
- They are currently exploring the need for change management, and the potential of social networking in their training portfolio.

More information: www.obelisk.be

f) Wales (UK)

I. Public Training Institutions

Coleg Sir Gâr, Llanelli

- Is a public-funded further and higher education institution;
- Has 12 years experience of online distance learning delivery using its own online learning environment;
- Has converted to the use of Moodle and uses wikis, blogs and the Joomla document management application;
- Has been a partner in several online learning development projects, including the testing of web 2.0 applications

More information: www.colegsirgar.ac.uk

The University of Glamorgan, Pontypridd

- Is a public funded UK university;
- Has a dedicated *Centre for Excellence in Teaching and Learning* that has responsibility for the development of TEL (Technology Enhanced Learning) across the institution;
- Has participated in a number of major international e-learning initiatives;
- Has led projects involving the testing of web 2.0 applications in education.

More information: www.glam.ac.uk

Swansea Metropolitan University, Swansea

- Is a public funded UK university;
- Uses the Blackboard online learning environment, primarily for campus-based students;
- Is currently revising its teaching and learning strategy, particularly with regard to the use of TEL;
- Has led projects involving the testing of web 2.0 applications in education.

More information: www.smu.ac.uk

Trinity University College, Carmarthen

- Is a public funded UK university;
- Uses the Blackboard online learning environment, primarily for campus-based students;
- Has participated in a number of major e-learning initiatives;
- Is leading a major VET initiative involving a number of the other institutions in this survey.

More information: www.trinity-cm.ac.uk

Swansea College, Swansea

- Is a public-funded further and higher education institution;
- Has a small dedicated team for the development of TEL in the institution;
- Uses Moodle as an online learning environment and has student and staff desktop portals to access resources;
- Has led and participated in a number of major e-learning initiatives.

More information: www.swancoll.ac.uk

Gwent College, Usk

- Is a public-funded further and higher education institution;
- Uses Moodle as an online learning environment;
- Has carried out a formal survey of staff use of TEL and web 2.0 applications in their teaching;
- Results showed that 40% use YouTube, 20% use Wikipedia and 10% use Facebook.

More information: www.coleggwent.ac.uk

Ystrad-Mynach College, Ystrad-Mynach

- Is a public-funded further and higher education institution;
- Uses Moodle as an online learning environment and Mahara as an e-portfolio;
- Uses the wiki and blog in Moodle and Mahara. Also experimenting with podcasts and webcasts;
- Institution currently blocks Facebook and other social networking sites.

More information: www.ystrad-mynach.ac.uk

Pembrokeshire College, Haverfordwest

- Is a public-funded further and higher education institution;
- Uses Moodle as an online learning environment. Well established use across the institution;
- Widespread awareness by staff of web 2.0 potential, but currently using the functionality available through Moodle;
- Institution has participated in a number of collaborative e-learning projects.

More information: www.pembrokeshire.ac.uk

Maes-yr-Yrfa School, Llanelli

- Is a public funded secondary school;
- Limited use of Moodle by small number of staff;
- No technical support available;
- Example of the limited penetration of web-based technologies in the schools sector in the UK.

II Public Funded Organisations

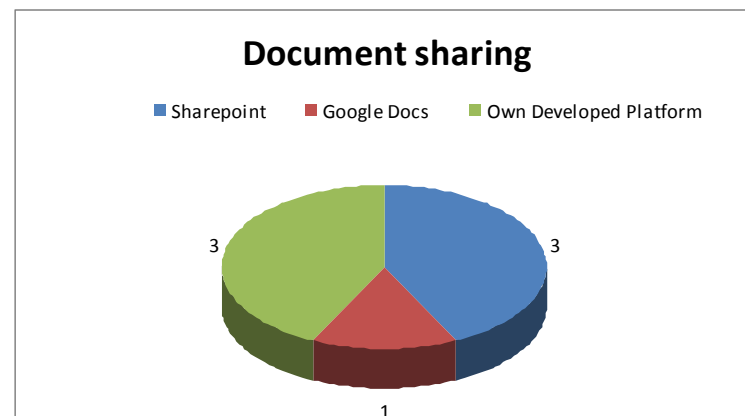
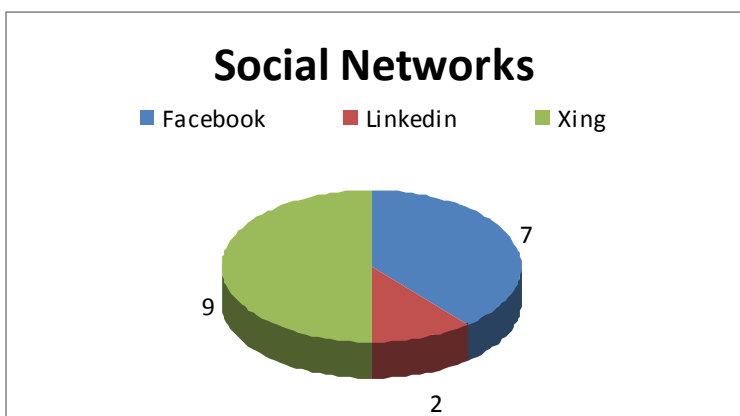
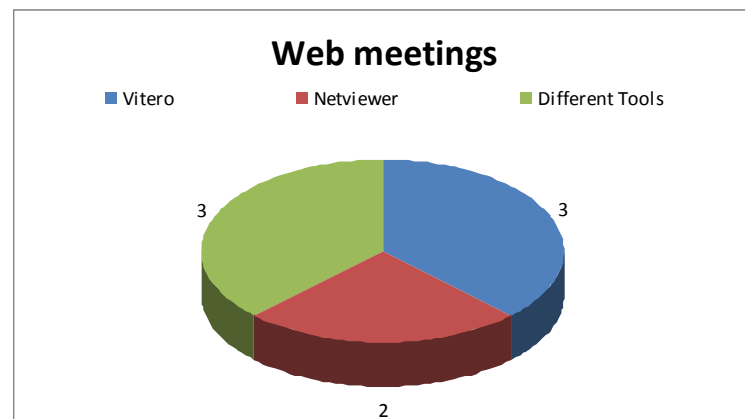
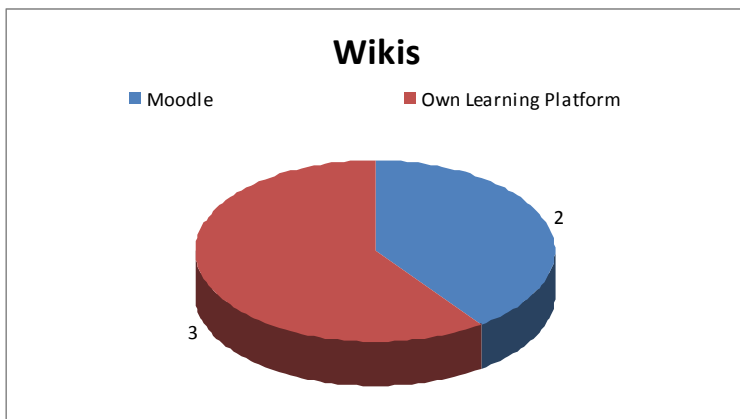
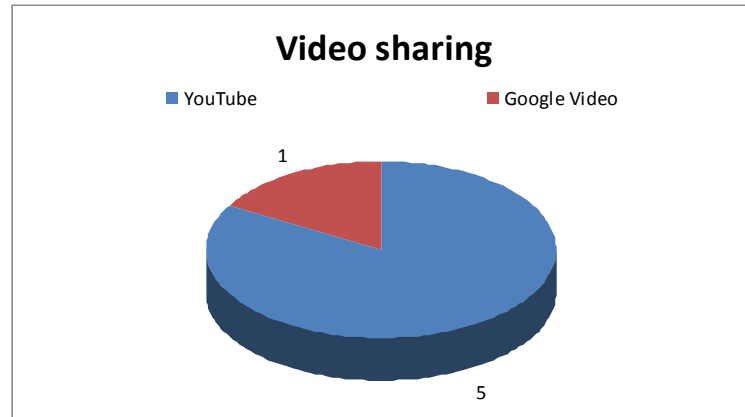
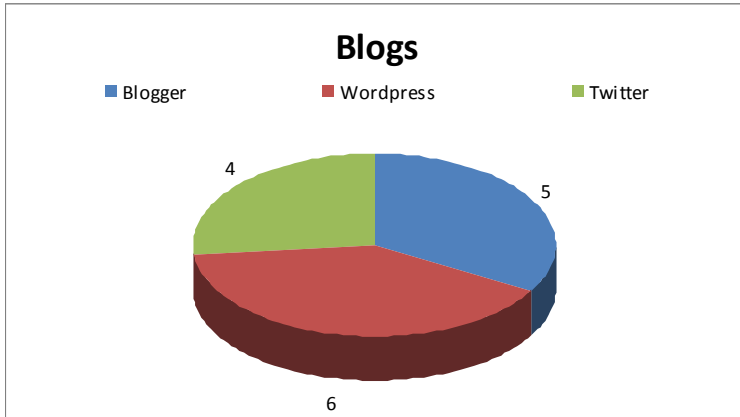
JISC Regional Support Centre, Wales, Swansea

- Is part of the regional support network provided by the UK national organisation responsible for the promotion of TEL in tertiary education;
- Team of specialist TEL advisors provide staff development services and advice for institutional staff;
- Team has been involved in a number of innovative e-learning projects carried out by the institutions in the survey, including projects experimenting with web 2.0 applications

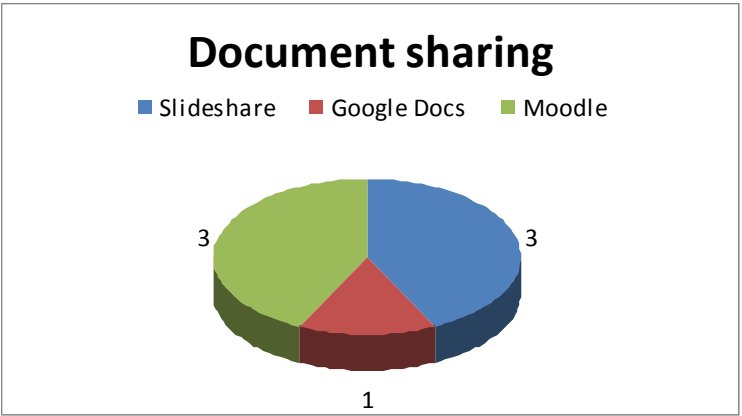
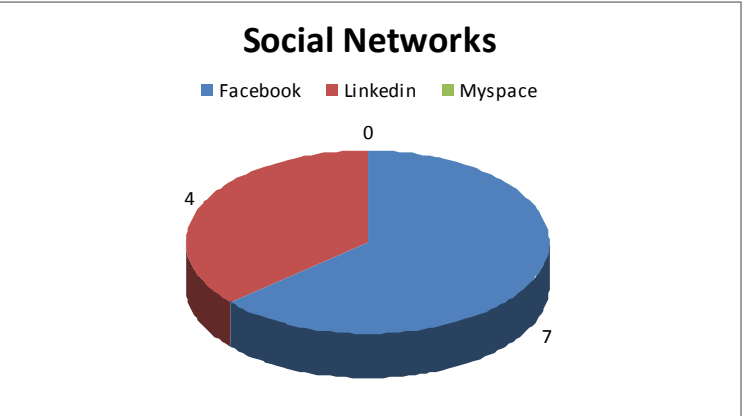
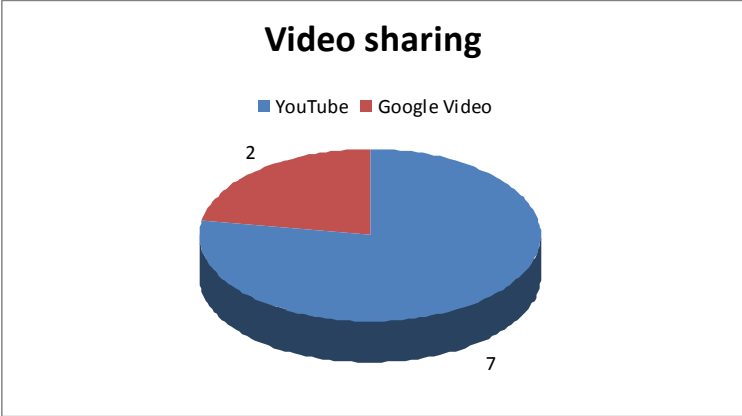
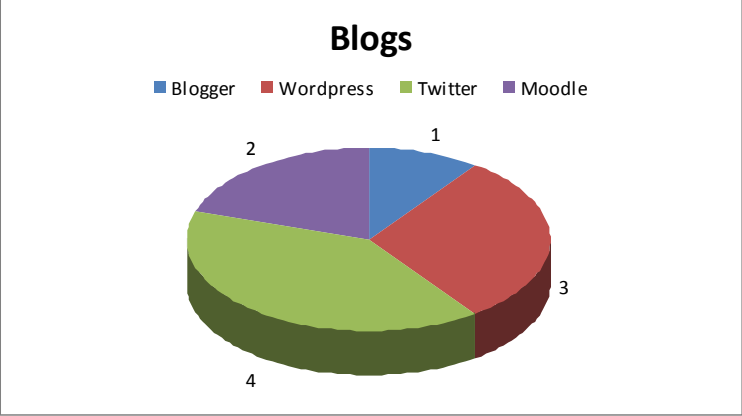
More information: www.jisc.ac.uk

Annex III: Statistical Diagrams

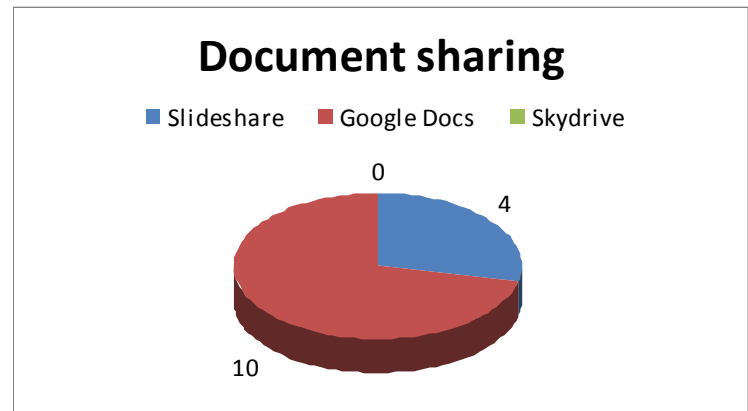
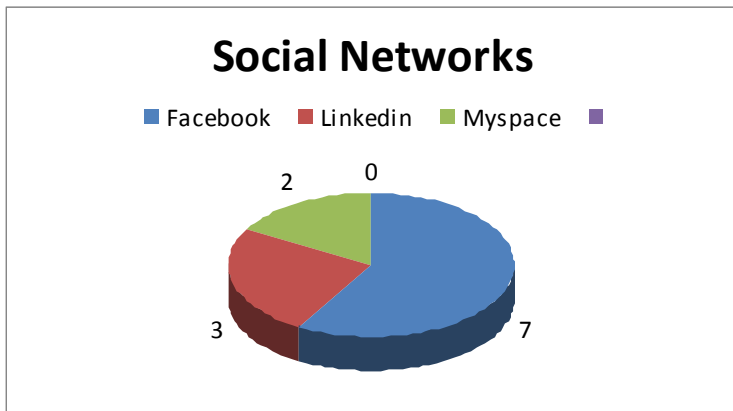
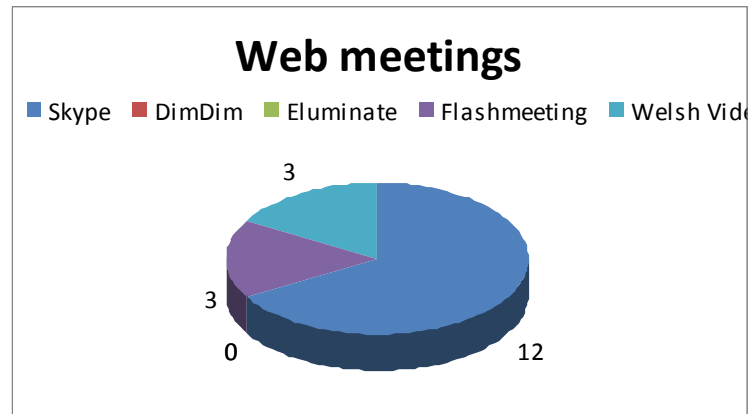
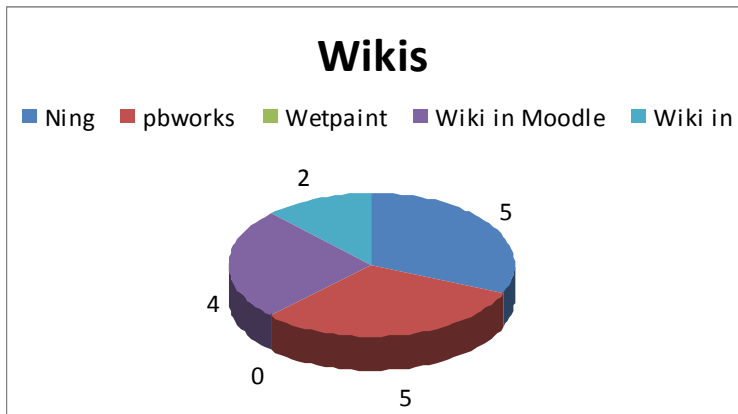
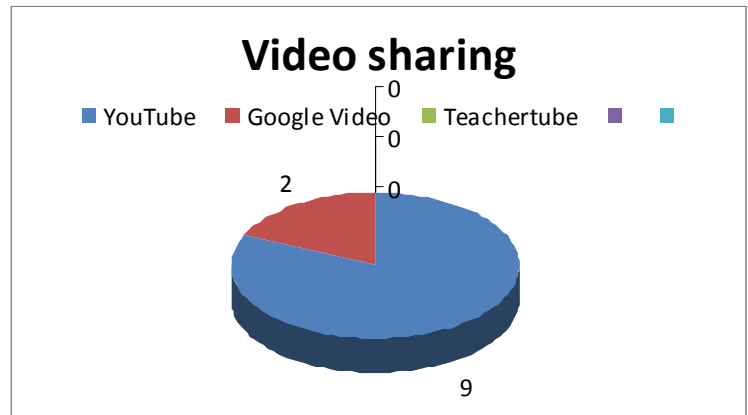
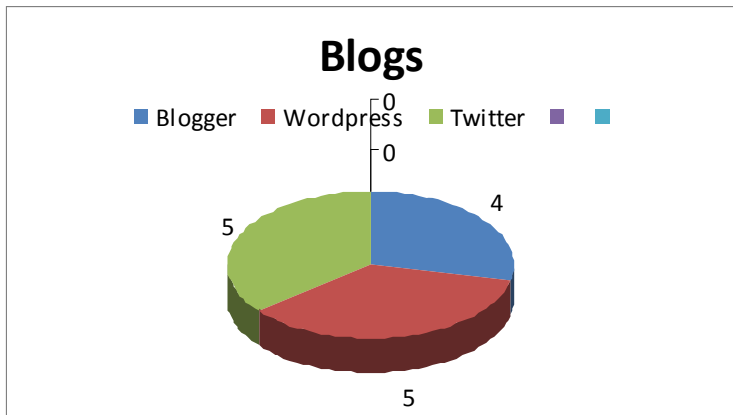
a) Web 2.0 tool usage within Baden-Württemberg's adult training institutions following the telephone interviews with 13 adult training institutions



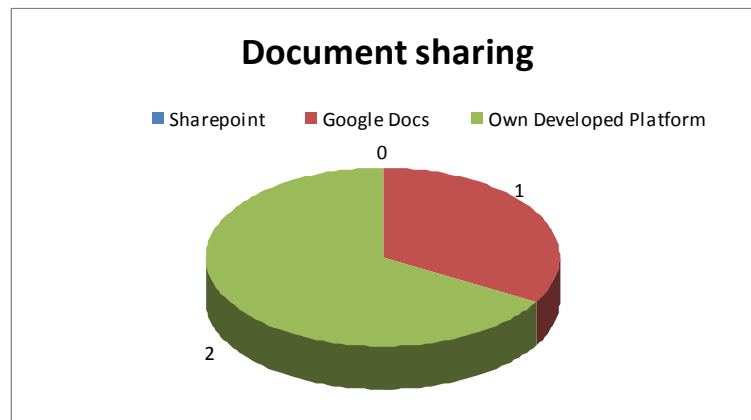
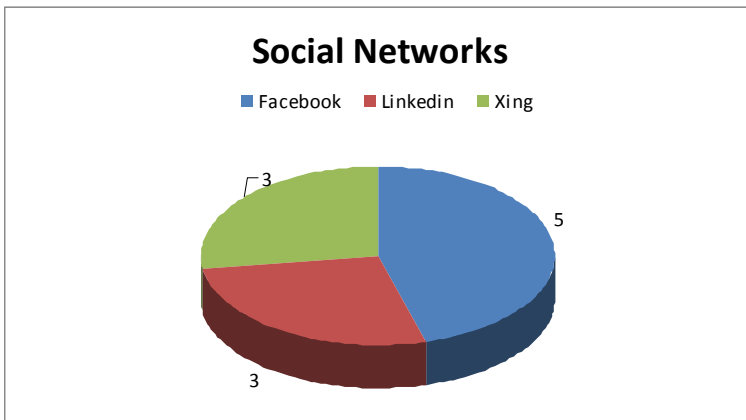
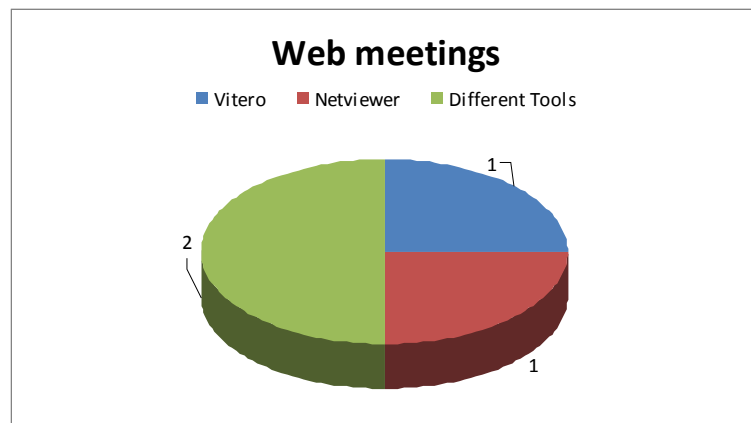
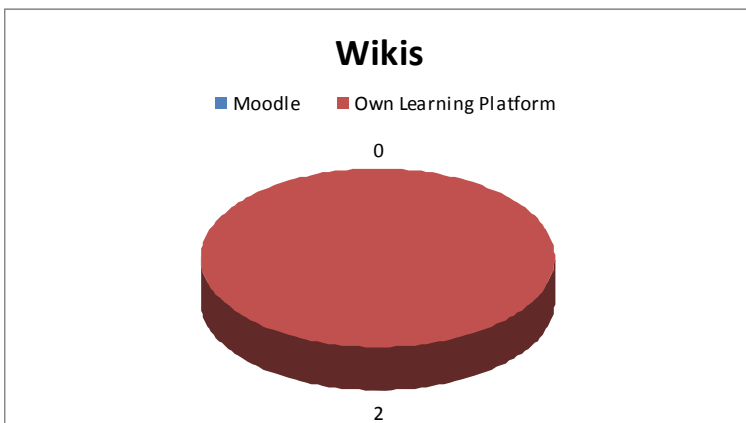
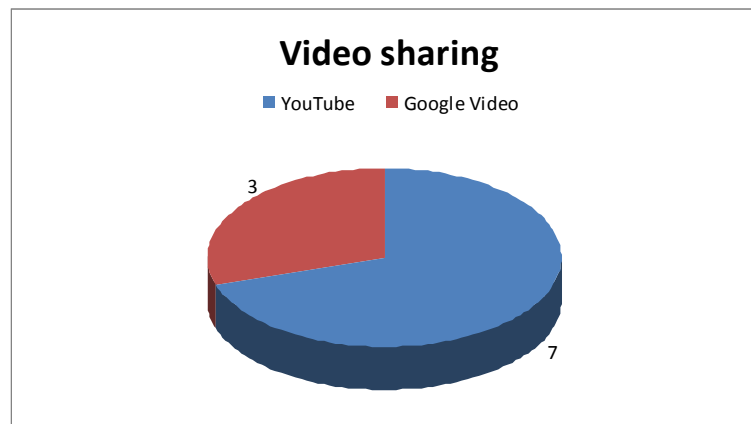
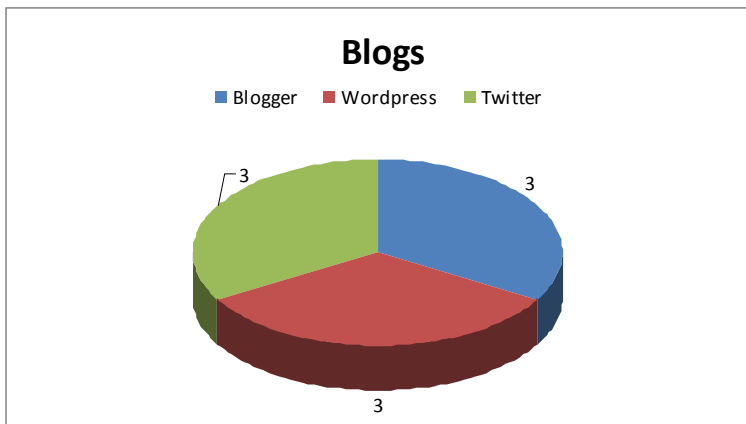
b) Web 2.0 tool usage within Piemonte's adult training institutions following the telephone interviews with 9 adult training institutions



c) Web 2.0 tool usage within Extremadura's adult training institutions following the telephone interviews with 10 adult training institutions



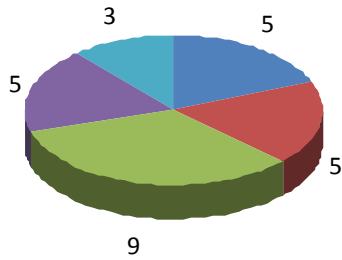
d) Web 2.0 tool usage within Vlaams-Brabant's adult training institutions following the telephone interviews with 8 adult training institutions



e) Web 2.0 tool usage within Wales' adult training institutions following the telephone interviews with 10 adult training institutions

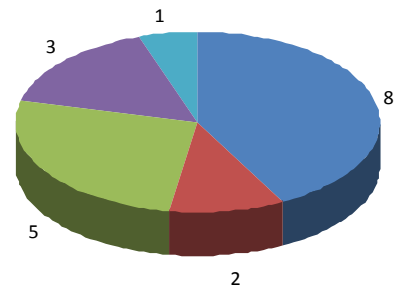
Blogs

■ Blogger ■ Wordpress ■ Twitter ■ Blog in Learning Environment



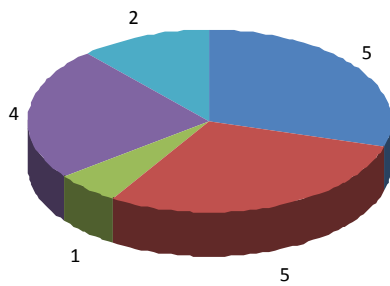
Video sharing

■ YouTube ■ Google Video ■ Teachertube ■ Molenet ■ ClickView



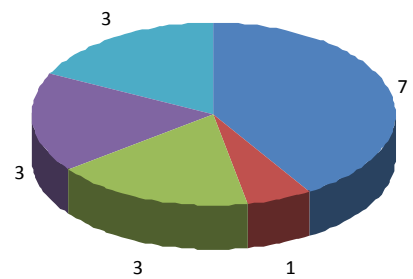
Wikis

■ Ning ■ pbworks ■ Wetpaint ■ Wiki in Moodle ■ Wiki in Blackboard



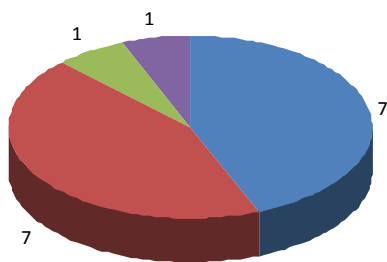
Web meetings

■ Skype ■ DimDim ■ Eluminate ■ Flashmeeting ■ Welsh Video Network



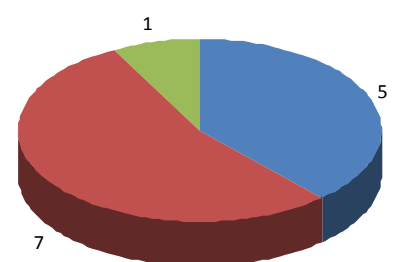
Social Networks

■ Facebook ■ LinkedIn ■ Myspace ■ Xing



Document sharing

■ Slideshare ■ Google Docs ■ Skydrive



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