



Summary of the Regional Needs Analysis

THE USE OF WEB 2.0 IN
VET AND ADULT
TRAINING IN PIEMONTE
(ITALY)

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www.svea-project.eu



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Preface

This regional needs analysis illustrates the status quo, needs, trends and barriers in the spread of web 2.0 applications within VET and adult training in Piemonte (Italy). It will be the basis for the development of the SVEA web 2.0 training system and the collaborative platform aiming at strengthening the web 2.0 uptake within VET institutions in Europe.

The analysis will first have a brief look at the status quo in ICT and Social Media diffusion in Italy as well as in Piemonte region. Next needs, trends and barriers of integrating web 2.0 applications in VET and adult training will be outlined.

For this regional needs analysis, telephone interviews were conducted with private and public training institution in Piemonte region (Italy). Additionally, a round table workshop with training agencies was organized in order to investigate their specific needs and underline which are the functionalities that should be implemented in the collaborative platform.

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.

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 by 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** ¹
- a report commissioned by Piemonte Region on the **ICT diffusion in Piemonte** ²

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 on line 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.

¹ 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>

² The document "Sesto rapporto sull'innovazione nella Regione Piemonte" is realized by CRC, an initiative supported by Italian Government, made up by Piemonte Region, CSI-Piemonte, CSP and CNIPA. URL: http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

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

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

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

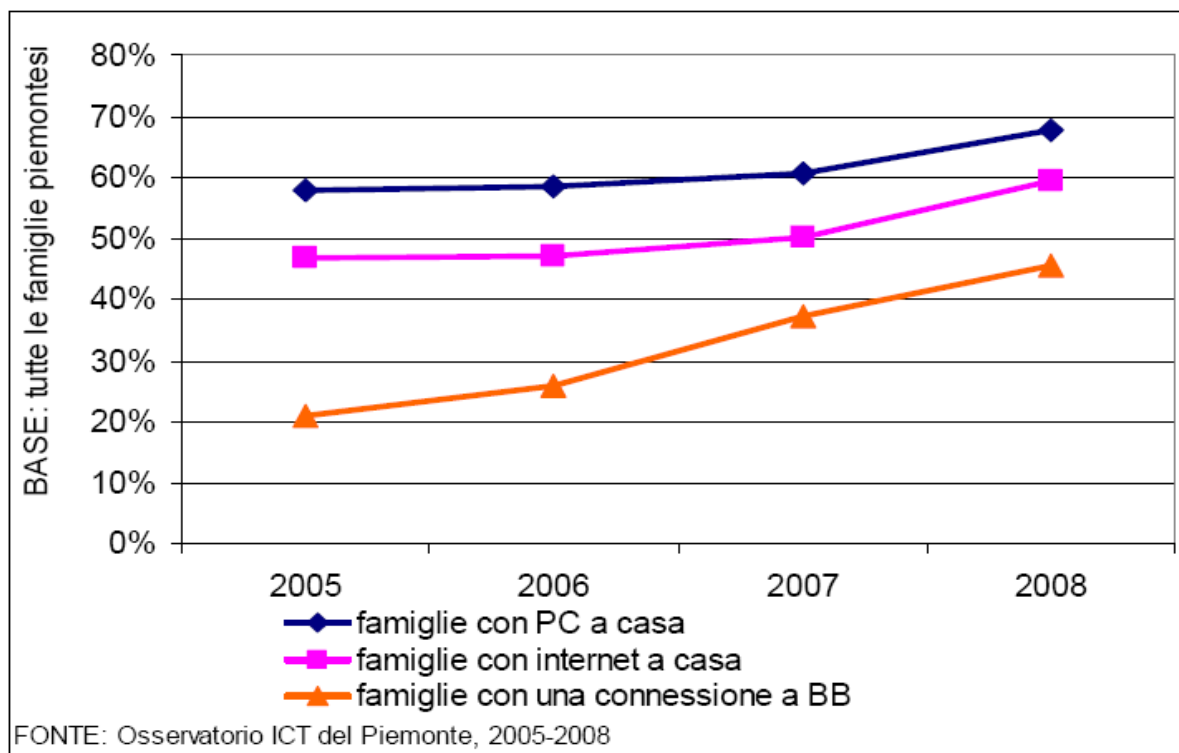


Figure 2. ICT diffusion in Piemonte Region
http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

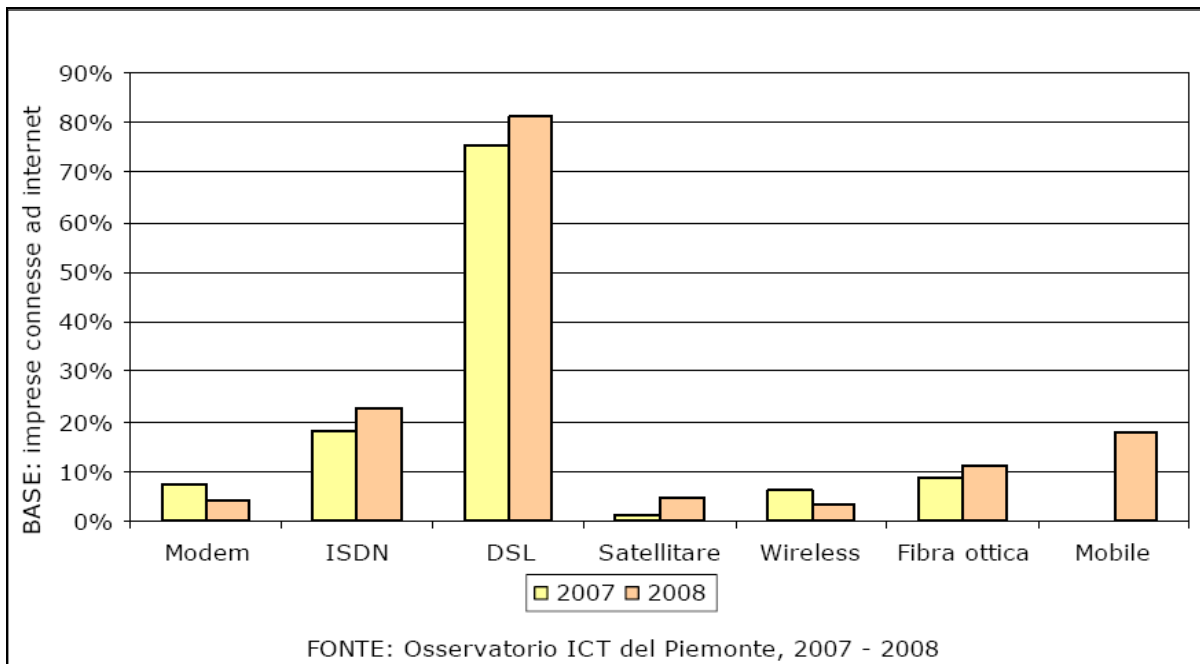


Figure 3. Internet connection in Piemonte Region

http://www.regione.piemonte.it/innovazione/images/stories/innovazione/dwd/rap_crc09.pdf

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.

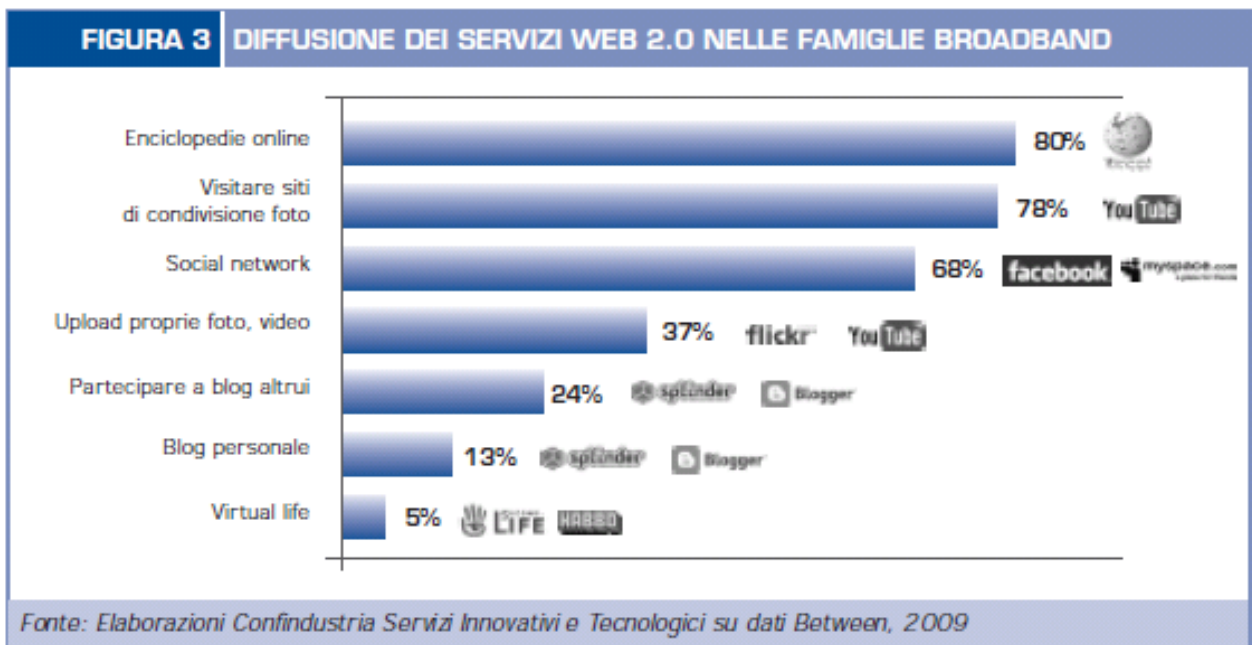


Figura 4. Web 2.0 diffusion in Italy (<http://www.ict.cnr.it/documents.php?id=271>)

Data 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)

Data show 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: on line innovative services are in fact offered by public administrations, private companies and organizations.

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

The evaluation carried out in Piemonte was structured in a first set of telephone interviews and a regional roundtable: 9 institutions were contacted and 15 people (7 manager and 8 trainers) participated in the roundtable that was held on the 20th of 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.

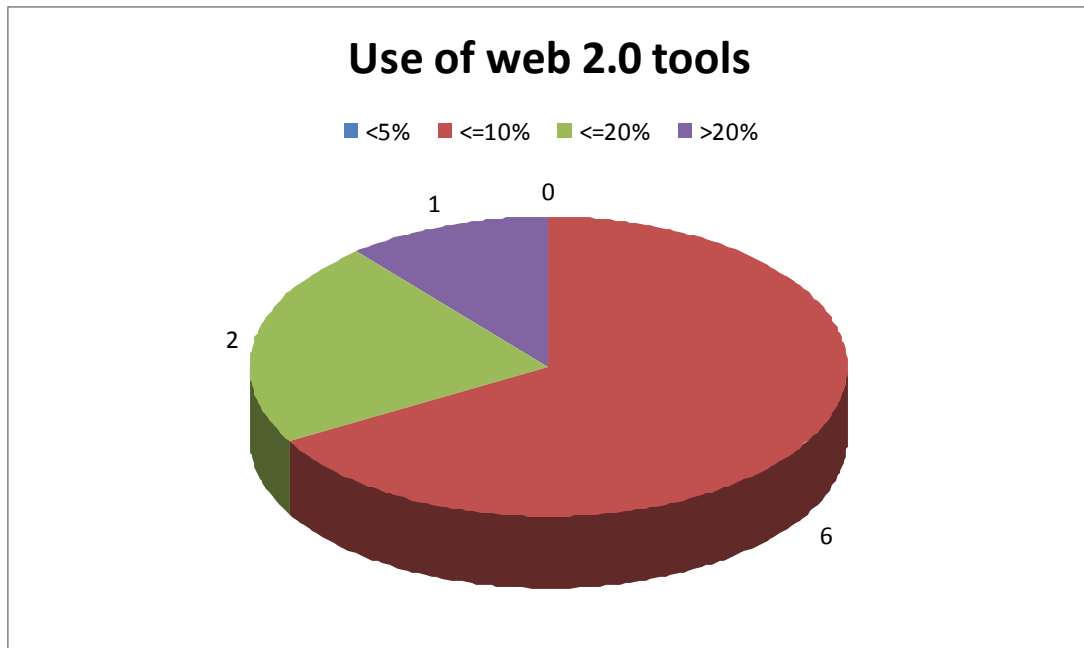
Participants were splitted in two groups (trainers and manager) in order to discuss the experiences they had in using web 2.0 tools as well as to collect their specific needs regarding the use of web 2.0 in their daily working activities.

2.1 Current use and knowledge of web 2.0 in the participant organisations ³

As regards VET context, the regional needs analysis outlined that the diffusion of web 2.0 tools is not so high, but during both the telephone interviews and the roundtable organizations declared a strong interest in understanding 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.

³ See Annex II: Statistical diagrams



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

Most of the participants know what social media are and got a general knowledge about the common tools (blog, wiki, social network, etc.) As regards "personal daily activities", 80% of the participant use some of them but meanwhile the use in their working activities is 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.

2.2 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.

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 institution do not have enough time and money to set up ones
- The lack of tools designed to measure the efficiency of the “knowledge transfer”

2.4 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 this 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

3. Use of Web 2.0 Tools within VET institution

Web 2.0 applications used within trainings 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 splitted in two groups.

3.1. 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 outlined 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 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 characterize most of the wiki solution available today. One of the main point 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 microblogging 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.

3.2. 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. This concern:

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

ANNEX

Annex I: Best practices in the Piemonte VET system ⁴

During the roundtable some good practices were collected from the participants.

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

⁴ A detailed overview on the involved public and private training institutions can be found at the end of this report (Annex II)

These good practices 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. These experiences show also that VET agency usually face technological barriers that hinder the adoption of elearning 2.0. They underline the need of technical and methodological support to promote the innovation process.

At the national level is useful to highlight an interesting initiative – called “LTEve⁵” - started in January 2007, that aims at joining students and alumni interested in continuing self-training within an online community.

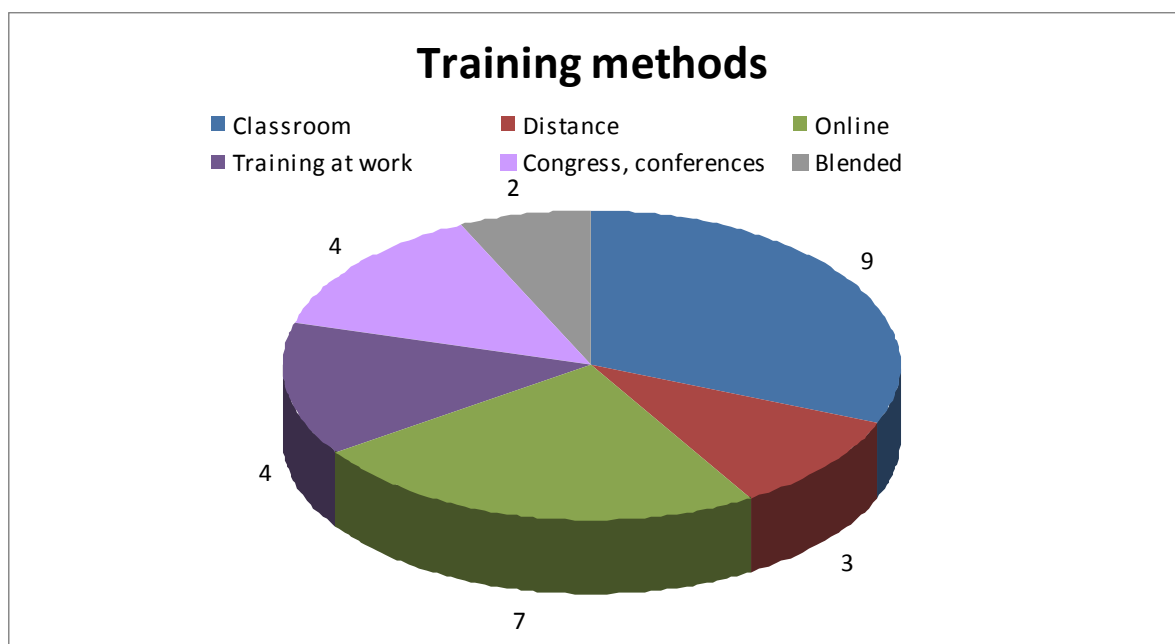
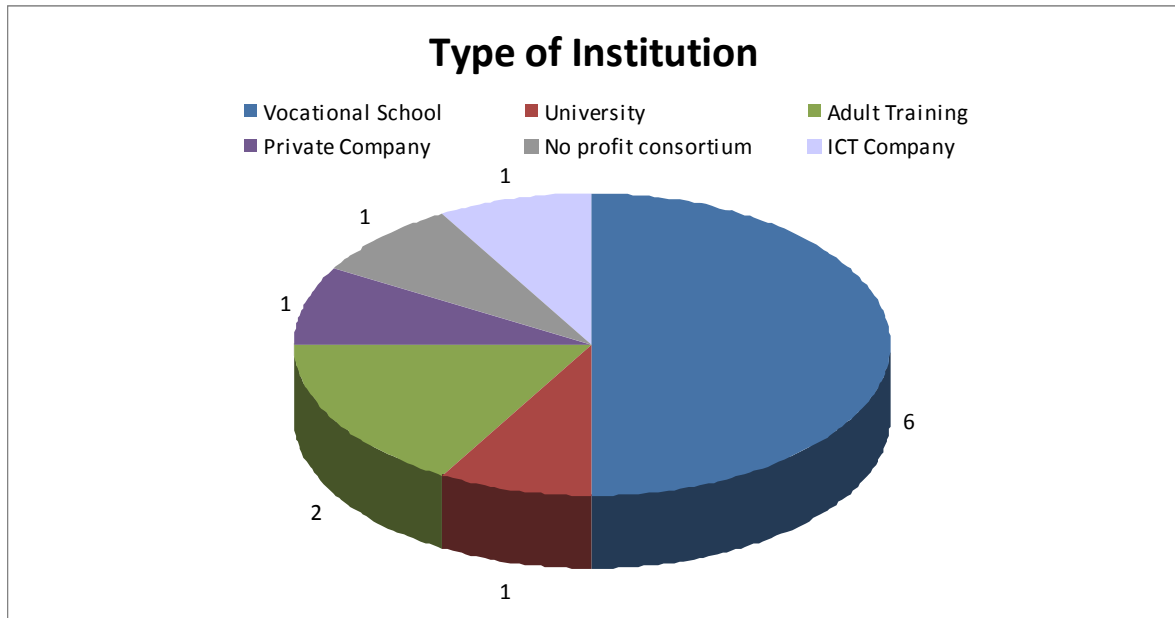
Students, teachers and collaborators of LTE can have their own personal space in order to create a blog, subscribe to pages and build their own communities.⁶

⁵ <http://www.lte-unifi.net/elgg/>

⁶ 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>)

Annex II: Brief description of the involved stakeholders from Piemonte (Italy)

The following public and private training institutions were involved in the regional needs analysis phase in Piemonte. The following graphs present the different institution as well as the training methods they adopt.



I. Public Training Institutions

CISI (Centro Interstrutture di Servizi Informatici e Telematici per le Facoltà Umanistiche Università degli Studi di Torino) [<http://cisiweb.unito.it>]

CISI - Center of IT and telecommunication services for the Humanities University of Turin - 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 and network as well as activities in classrooms and laboratories, performing direct teaching activities, consulting, research and software development.

Here the main activities carried out by CISI:

- Design, develop and run central systems and networks to enable widespread access to information addressed to humanities faculties. Moreover CISI develops its software assets;
- Design, develop and manage classrooms and laboratories for the teaching and research of faculties and departments;
- Work with institutions to develop their IT and telecommunication services, to facilitate the acquisition of equipment and services under the best conditions and to ensure maximum efficiency of network connections.

II. Private Training Institutions

CASA DI CARITA' ARTI E MESTIERI [<http://www.casadicarita.it/>]

Casa di Carità Arti e Mestieri is a non-profit training organization of Catholic inspiration. Its main activities are focused on training and career guidance as well as on education for young people and workers. Casa di Carità Arti e Mestieri offers several courses: postgraduate diploma for employment, for unemployment, immigrants, disabled, for trainers and so on.

Casa di Carità is structured in 16 training centers, 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.

CNOS FAP [<http://www.cnos-fap.it>]

The CNOS-FAP Federation, Centro Nazionale Opere Salesiane - Formazione Aggiornamento Professionale (National Centre of Salesian Institutions - Vocational Training and Updating), is an Italian association founded on December 9th 1977. It 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 is a non-profit organization.

It includes the Salesian Institutions and the local and regional CNOS-FAP Associations which provide vocational guidance and vocational training initiatives, mainly through Vocational Education and Training Centres.

The CNOS-FAP Federation operates in 16 Italian Regions with 60 Centres coordinated by the National Office.

COREP [<http://www.corep.it>]

COREP is a non-profit consortium founded in 1987.

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), COREP 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.

Indeed, COREP provides a point of convergence for the needs of enterprise, innovative solutions developed in the universities and research centres, the objectives set by local authorities and the interests of the new generations of graduates, that demand increasing qualifications and specialisation from the education system.

Presently, the Consortium can count 11 members:

- Academic members: Polytechnic of Turin, University of Turin, "A. Avogadro" University of Eastern Piemonte, the National Research Council;
- Institutional members: the Region of Piemonte, the Province of Turin, the City of Turin, Turin Chamber of Commerce;
- Private members: Turin Industrial Association, Fiat S.p.A., Telecom Italia S.p.A.

CSEA [<http://www.csea.it/>]

CSEA is a non-profit consortium founded in 1979 with the participation of Città di Torino.

CSEA is a vocational school and adult training institution that offers different type of courses: secondary level, vocational, life long learning and elearning. Training courses are addressed to youngs, unemployed and workers.

Each years school students are more than 4000.

CSEA offers courses on several topics and areas:

- Information and communication technologies
- Industrial Automation
- Hypertext and multimedia
- Environment
- Handicraft
- Industrial services

The institution has several schools in Turin and at national level. CSEA also works at European level participating in research and training programs funded by the European Union.

CSI Piemonte [<http://www.csipiemonte.it>]

CSI-Piemonte is a consortium of public bodies which promotes 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.

With its activity it allows Administrations to offer more efficient services to the population and businesses, promotes opportunities for collaboration at regional, inter-regional and international level and facilitates the re-use and sharing of best practices.

Regarding training department, CSI promotes training activities aimed at Public Administrations officials to enhance the acquisition of skills in the use of IT tools. These activities concern:

- e-learning: to coordinate training of Piemonte PA;
- action learning: for the networks of small Municipalities;
- network and services facilitators: professional figures 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. It is issued by the Regional and Autonomous Provincial Administrations.

En.A.I.P. Piemonte [<http://www.enaip.piemonte.it>]

En.A.I.P. Piemonte (Ente Acli Istruzione Professionale) is aimed at develop human resource. The main areas of intervention are training, guidance, counseling, job placement assistance and business creation.

The main activities carried out by En.A.I.P. are:

- Vocational Train
- Higher education
- Lifelong learning
- Training Company
- Mandatory training
- Trainings and stages
- Training for foreigners
- Training for apprenticeship

En.A.I.P. Piemonte is organized on the territory with a Directorate General and 17 Educational Service Centers (FSC).

En.A.I.P. Piemonte each year delivers more than 500 courses 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).

Every year En.A.I.P. Piemonte offers a total of 200,000 hours of training, for about 6,500 students.

It relies on the expertise of more than 300 employees between planners and coordinators, counsellors and tutors, trainers and project managers, technical and administrative staff.

It works with more than 2,000 consultants who work as designers, trainers, technical business consultants, academics, and has signed major partnerships with companies, associations, universities, schools and research centres.

ENGIM [<http://piemonte.engim.it/>]

ENGIM - Ente Nazionale Giuseppini del Murialdo - 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.

As NGO (Non Governmental Organization) has undertaken several international projects of development in Albania, Romania, Ghana, Sierra Leone, Guinea Bissau, Argentina, Brazil, Chile, Ecuador, Colombia, Mexico, India.

In full accordance with the laws, the ENGIM carries out its activities with funds provided by the Regions, the Ministry of Labour, European Social Fund, the local government as well as private funds.

ENFAP Piemonte [<http://www.enfap-piemonte.it/>]

ENFAP Piemonte operates in the labour organization area.

Established nationally in 1958, ENFAP Piemonte is a regional recognized educational agency and operates as institutional non-profit organization with the financial assistance of the European Union, Ministero del Lavoro, Regione Piemonte and in agreement with the Province.

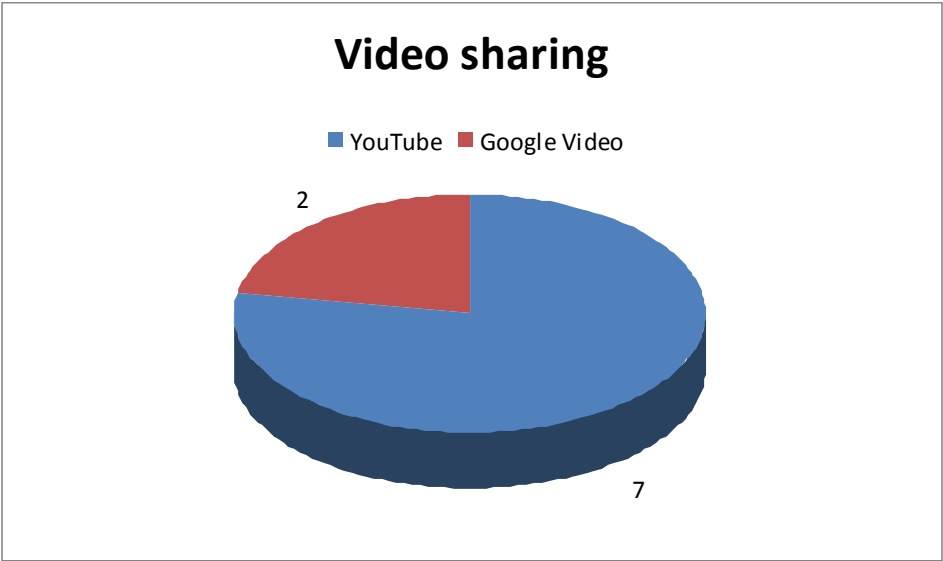
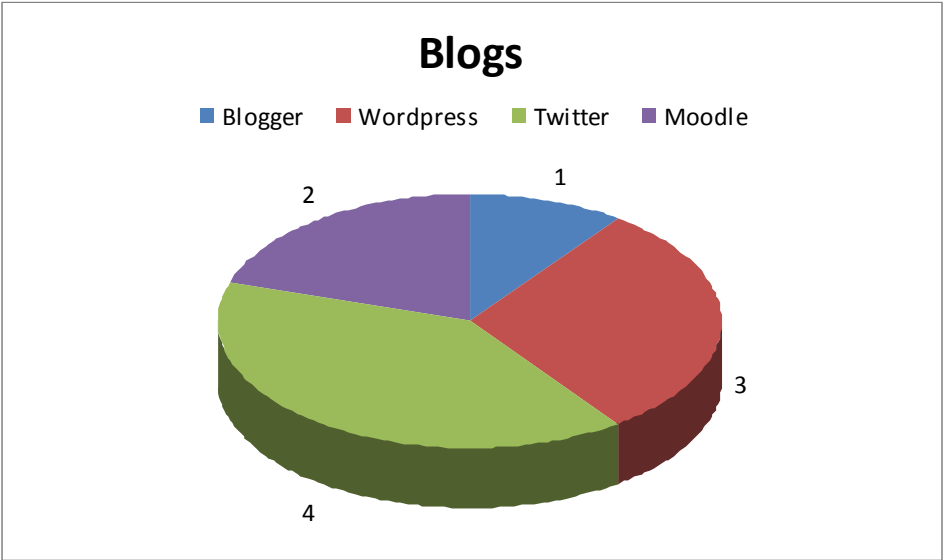
Its main activities are focused on:

- Vocational training and lifelong activities for employees;
- Training activities for unemployed;
- Career guidance, job-support, support to employment services.

This agency 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, organization of internships, tutoring activities in stages, monitoring the results of training activities, training evaluation, management and administration of educational services.

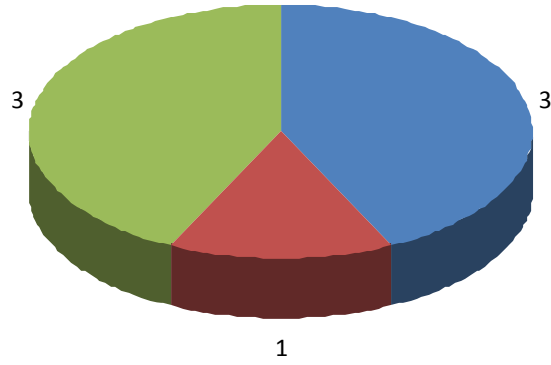
Annex III: Statistical Diagrams

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



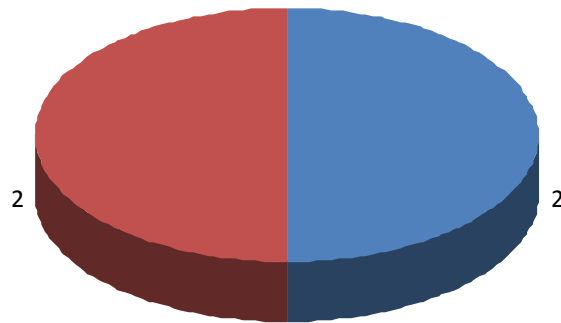
Web meetings

■ Skype ■ Google App ■ Xmind



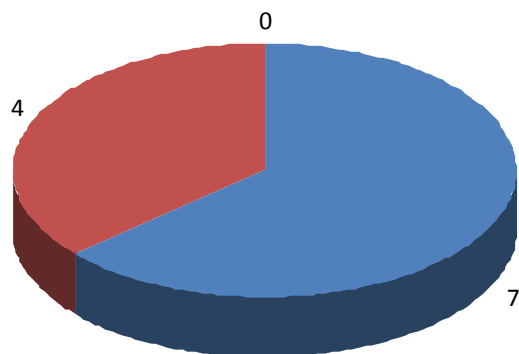
Wikis

■ moodle ■ Other



Social Networks

■ Facebook ■ LinkedIn ■ Myspace



Document sharing

■ Slideshow ■ Google Docs ■ Moodle

