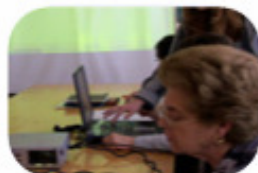


Guidelines to encourage the participative use of technologies in the Adult Basic Education



... INFORMATIONAL SOCIETY

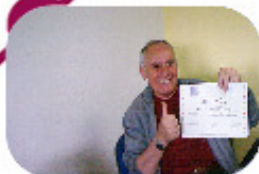
... PEOPLE



VIRTUAL EDUCATION ...



... EQUAL OPPORTUNITIES

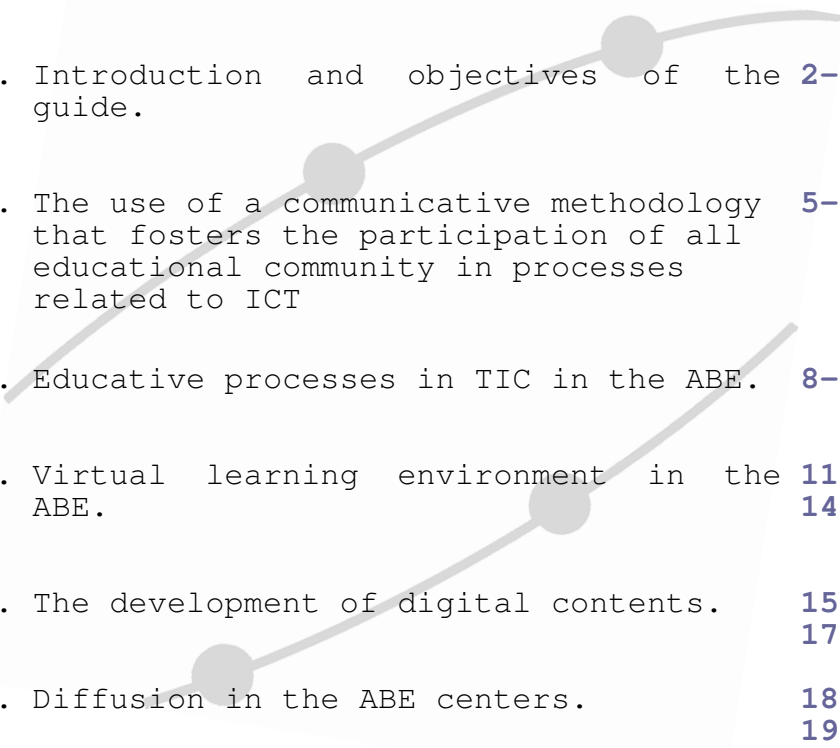


TECHNOLOGIES ...





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INTRODUCTION AND OBJECTIVES OF THE GUIDE



The main aim of this guide is to propose guidelines to foster the participative use of ICT in Adult Basic Education (ABE), from their development to their use.

We want to make proposals on ABE which enable ICT projects that break the barriers for participation, involvement, study and learning and to generate e-learning contexts which day by day give an incentive to learn and to participate.

This document presents the main conclusions of the Minerva project "*ABE Campus. Virtual Adult Basic Education Communities In Europe*" financed by the European Commission and developed from 2003 to 2005 in seven different European organizations.

This project was born out of the necessity to equip ABE with pedagogical resources based on ICT resources such as new methodologies, learning environments and digital materials to improve the learning of adults at basic education levels with the participation of the users. For that reason, the major results



of this project are, on one hand the development of virtual environments and digital contents, and on the other hand, and most important contribution, is the investigation and the applications of a communicative and participative methodology which ensure the success of the technology created.

Having as a theoretical reference Paulo Freire and other authors as Dewey, Apple, Flecha or Giroux¹ we start from one innovative conception of ABE in education as a tool of transformation and change of society where the dialogue is the key element to initiate a democratic and communitarian formative process.

So, if we choose this transformational theoretical frame as a consequence of the belief in the possibility to get a democratic society, we need to begin to take into account the inclusion of new characteristics in the conception of ICT

¹ Flecha, R. 1999. Compartiendo palabras. Barcelona: Paidós.
Flecha, R. 1990. La nueva desigualdad cultural. Barcelona: El Roure.
Freire, P. 1995. Pedagogy of Hope. Reliving Pedagogy of the Oppressed, New York: Continuum.
Freire, P. 1972. Pedagogy of the Oppress., Harmondsworth: Penguin.
Dewey, J. 1938. Experience and Education, New York: Collier Books. (Collier edition first published 1963).
Dewey, J. 1916. Democracy and Education. An introduction to the philosophy of education. New York: Free Press.
Apple, Michael W. 2004. Ideology and Curriculum, 25th Anniversary 3rd Edition. New York: Routledge.
Apple, Michael W. 1996. Cultural Politics and Education. New York: Teachers College Press.
Giroux, Henry A. 1989. Schooling for democracy: critical pedagogy in the modern age. London: Routledge.
Giroux, Henry A. Flecha, R. 1992. Igualdad educativa y diferencia cultural. Barcelona: El Roure.



projects in order to exceed many of the methodologies and techniques that limit the participation of the users in this process. The participating in ABE have demanded the inclusion of ICT in their learning processes since they consider it to be a right to get high quality ICT education as an answer to the requirements of the present Information Society.

The guide is a useful tool for all those involved in ABE work, as administrators and educators, who everyday have to adapt their educative practices responding to the education challenges of the future and the inclusion of new technologies.

In this guide each section is based on different processes, which any ABE centre incurs before the introduction of ICT: the use of a communicate methodology, the use of virtual environment, the creation of digital contents, the formative processes, and the diffusion in the ABE centers.

People with low levels of formal education participating in ABE belong to the groups in society who encounter greater difficulties to access new technologies of information and communication. Moreover, in many European countries ABE is still conceived as a compensatory education sub-system. One of the consequences of this conception is that ABE is incorporating Information and Communication Technologies at a much slower pace than other sectors of the educational system. In doing so large sectors of population remain excluded from basic knowledge on the use of ICT and from a knowledge society built on lifelong learning strategies. Nevertheless, those are these same groups that are contributing in the overcoming of this situation through numerous projects and social mobilizations.

THE USE OF A COMMUNICATIVE METHODOLOGY THAT ENCOURAGES THE PARTICIPATION OF ALL EDUCATIONAL COMMUNITY IN PROCESSES RELATED TO ICT



There are numerous publications that emphasize the high importance of the educational and social context in the development

and the introduction of information and communication technology in learning centres. Taking into consideration the context and the people of the organizations in these processes becomes in many cases in one of the key factors of success or failure of these technologies.

In the tactical mission of ABE, we can see that the people who are going to use those information technologies are adult people who have a clear vision of their objectives and their processes of learning. It is crucial to listen to their voices throughout this methodological process. The communicative



Virtual adult basic
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methodology makes possible this
participation.

The project *ABE Campus Virtual adult basic education communities in Europe* has been developed from the beginning to follow the principles of communicative methodology which has allowed the opening of processes normally so closed as the management, the design and the implementation of computer science programs (virtual learning environment), digital contents or the formation and diffusion that accompanies the introduction of technologies in educational centres.



General Principles for the Use of a Communicative Methodology

... **To start from the belief that the egalitarian dialogue is possible and that everybody is able to use ICT.** All the people know what they want and are able to express it, independent of their academic education. Habermas (1987-1989) developed a theory of communicative competition where he demonstrates that all the people are able to communicate and to generate actions. Sustained in these communicative abilities, by means of the egalitarian dialogue, the contributions are considered not from criteria based on hierarchy and authority, for example by the status of the person that speaks with them, but by the validity of the arguments. In this sense it is possible to say that the main barrier of this egalitarian dialogue is in many occasions the specific terminology used by each member of the group depending on the field of performance: teaching staff, computer science, etc. In order to surpass this barrier all the people have to reach a consensus and to use a familiar vocabulary.

... **To adopt an egalitarian dialogue between participants, professionals and people who contribute with ideas for the project.** The adoption of a common vocabulary, closer and less technical has to situate every person in an egalitarian position in order to contribute with their own ideas throughout the process.



... To increase the prominence of participants in the test and evaluation of technology and their resources. It is necessary to include techniques that not only keep the interaction between people and programs but emphasize the egalitarian dialogue among professionals and participants as well in order to collect the best contributions.

... To guarantee the presence of the participating people in all the areas of management and decision of the technological projects, it is necessary that in the projects of technologies the participant people follow and contribute in the management of the projects to aim the adoption of their necessities but also to initiate the creation of a positive attitude for ICT in the centres.

... To foster the creation of interactive and multidisciplinary groups to develop more ICT projects. It is important to open the ICT projects to the entire educative community, including the volunteer people. The experience and knowledge of such diversity of people is an opportunity -not a menace- to enrich the project.

In this sense a major mission in *ABE Campus Virtual Adult Basic Education Communities In Europe* was to create in each partner country MIXED COMMISSIONS formed by participants and teaching staff in charge to take decisions throughout the project. The participation of these mixed commissions in the project has not been limited to the management of spaces; they have had a fundamental role during the process of evaluation and testing of the technological application and its resources.

EDUCATIVE PROCESSES IN TIC IN THE ABE



The development of ICT skills in ABE has been identified as one of the key points for enable the introduction of digital software and contents in ABE centres. ICT tools can be powerful, but they are of no use, if people do not have the skills to apply them. In addition many teachers in ABE lack technological skills, the learners have often little knowledge relating to computer technologies. Furthermore there is a shortage of materials and tools in ABE.

There are **two basic objectives** that ABE must consider:

- I. To get everybody in our association/ organization to develop digital skills. The use of new applications, as for example virtual learning environments and the Internet, should not be a problem for anybody. It is necessary to include a longer educational phase for the



development of digital literacy in our organizations.

II. To turn the new computer and ICT tools into educational tools to be used by the teaching staff and the learners as a normal process of teaching/ learning.

Aim and Characteristics of ICT Education

a. This is a central question. Education in ICT technologies is necessary for all learners, and should not be left to some experts, professors, people, who like the subject. **Education in ICT has to be an integral part of ABE centres.**

b. **ICT education needs to be adapted to the users**, with adapted materials, in a language that is understood, in schedules which are adjusted to the needs of the users.

c. **Flexibility in the organization** is required that enable that the learning programs and activities we design can be diverse, can be learned in class with a computer and a team, in the computer room of the school, in individualized sessions, during an intensive one day or one week cultural session, etc.

d. **Practical education** The ICT education has to be practical and therefore the organization must allocate sufficient resources to carry it out.

e. **Continuous education.** ICT education



should not only be taught at the beginning. The learners need spaces and opportunities to practice what they have learned and to solve problems throughout their educational processes.

f. **Change of rolls.** The teaching staffs lose their role as a protagonist and need to adapt a different role, to make the learning environments dynamic. They are not the only supplier of knowledge. All the knowledge all the people contribute needs to be taken into account. All the decisions, which affect the group, need to be taken by means of discussion and consensus.

For example in the Project *ABE Campus Virtual Adult Basic Education Communities In Europe* we do education in the Campus forming concentric groups with different types of learners with different computer skills:

- 1st group: team of people educated by the project leader and the tutor/reference person
- 2nd group: team of people educated by a teacher
- 3rd group: team of people - educated by participants



The dissolution of the rolls and the idea that any person in the group or the institution can share what they know increases



interaction compared to the traditional bilateral interaction between teacher-student, which improves and accelerates the learning process.

The students become actors and produces of their education and not simple digital product consumers. This enhances the learning process with two fundamental aspects: motivation and creation of sense. With these ingredients it is easy that the students animate themselves to continue sharing knowledge outside the centre, in their private lives and they become lifelong learners.

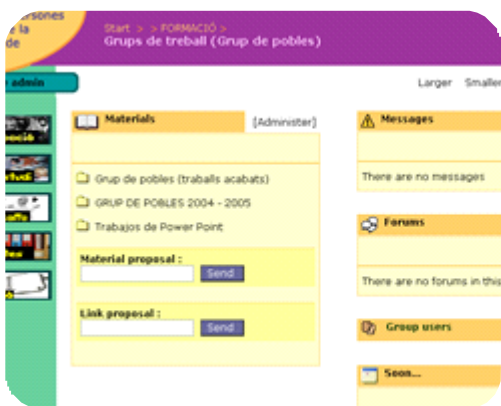
This methodology has been observed as one of the best ones in teaching ICT because the support of the group accelerates the loss of the initial fear which accompanies ICT learning, which is an insurmountable barrier for many people, who simply have remained without learning for fear of touching a computer.



VIRTUAL LEARNING ENVIRONMENTS IN ABE

One of the main results of *ABE Campus Virtual Adult Basic Education Communities In Europe* has been the development of a virtual learning environment generated from and for the ABE community. Although the development of the learning environment and the contents is already an important innovation, the main contribution of the project has been, without doubt, the application of a methodology that has encouraged the active participation throughout the process of development and implementation of the virtual campus in the learning center.

Definition of Virtual Learning Environment in ABE



A Virtual learning environment can be simply defined as a virtual and communitarian learning space, which we can access from any computer with Internet

connection.

It is extremely important that this environment is a space that represents



our educative organization, so it is extremely important that this environment allows us to find possibilities to learn, to participate, to manage and to enable anything that we design and organise in a face-to-face form. Therefore, it must allow us to:

- a. Know what we are doing and what we are going to do in our organization.
- b. Participate in the management and organization of our entity.
- c. Communicate with other people who assist the organization.
- d. Learn from educational material made and chosen by the persons who teach the subject as well as by the students.

Main Characteristics required for virtual learning environments in ABE

From our work and research in the project *ABE Campus Virtual Adult Basic Education Communities In Europe* we draw some conclusions for the requirements of a virtual learning environment in ABE.

The most important elements in the conception and use of **the virtual learning environment of ABE** must imply:



... **The Virtual learning environments must respond to the necessities expressed by the participants in ABE.** The adult people who participate in the basic education of adults are a group with characteristics and own necessities at the time of creating virtual surroundings. An example of these concrete needs is the size of the letters. It is important that the virtual environment has a type of letter enough big to cover the elder people's difficulties of vision to read easily the screen.

... **The virtual learning environments shall not imply a barrier for anybody.** The ABE centers can offer a wide range of initial formation in ICT that nevertheless does not overcome the greater barrier that had to face the people who want to begin in technological formation: the fear to the ICT. It is for that reason why the initial formation in the ICT and the formation in the use of virtual learning environment must be with priority in the centers by means of the application of actions that assure the access from all the people to the virtual surroundings, whatever it is his initial formation.

... **The virtual learning environment must encourage collaborative learning between the different agents from the educational community.** Some practices that can serve as examples are: to establish a forum between the students who work in sciences and those who work



in languages so that they can help each other mutually; or the creation of commissions of participants to work and to deepen some subjects.

... **Use of sustained pedagogical methodologies in blended-learning.** One of the greater fears accompanying the introduction of e-learning in ABE is that online classes will replace traditional classes. Many of the participating have raised this question when implementing virtual learning environments in their centres. That is why it is crucial in ABE to complement materials, contents, traditional learning, etc. with virtual ones and vice versa. Besides the necessity to improve and increase instrumental learning and make learning efficient in virtual learning environments it is important to create the warmth and social atmosphere, which can be found in ABE organizations.

... **The use of the virtual learning environment and its contents depends on the possibilities of each educational organization.** Each centre of ABE must think and plan the use of virtual learning environments to respond to its concrete necessities. When implementing virtual learning environment in an ABE organization it is important to define and agree on its own specific model. Time needs to be allocated to select the sections and groups, the structure, the access features, the tools for each group, etc.



These environments must have dedicated sections for:

a. **Education and learning.**

b. **Participation** supporting the creation of virtual communities formed by people who like to work together, to debate and to decide on the themes and curricula of the centre. An example could be a shared space where the commission in charge organizes the celebrations of the centres. Another example could be a space for the administration of the centres with management documents, minutes of meetings or other information accessible for all the participants

c. The work of the **project teams**: most adult education schools are financed through public and private projects; therefore, the campus also must guarantee spaces of work dedicated to the teams in charge of the projects.

d. The **study classroom**: where any person can find any public document and materials published on the campus. These way learners attending initial levels of education have access to all other materials, such as materials related to the digital literacy and are motivated to learn on.

e. The **administration and management**: a learning management system for registration, a directory of participants, of teaching staff and voluntary service, a schedule, a mailbox for proposals, etc.



... **The participants in the virtual learning environment must have, at any moment, control of their own learning and their learning experience.** This requires strong support by the teaching staff, especially in the initial stages of introducing digital literacy. In addition it is recommendable that there is a physical space with computers for public use in ABE centres and, if it possible, that there is a dedicated person to support the participants and to help them in their technological learning.

... **The virtual learning environment as well as the digital contents developed for ABE should be released under licenses that allow free education** so that all the centres who want to, not only can enjoy the advantages but can contribute to their future improvement (software and content development, localizations, etc.) and share the resources with other organizations of ABE.

DEVELOPMENT OF DIGITAL CONTENTS



There are few digital contents directed to people without any previous knowledge in ICT. For that reason, ABE schools not only must develop their own materials

but must become equipped with digital resources and tools, if they want to introduce ICT technologies in their daily practice.

Basic Principles for the Digitalization of Contents in ABE

From the reflections by the participants and the professionals in the the Project *ABE Campus Virtual Adult Basic Education Communities In Europe* we recollected solid and coherent criteria, which can guide the elaboration of digital contents for ABE have emerged. These are the most important criteria:

... **Attractive.** Firstly the digital contents have to be motivators, they must match the learning needs of the students. Secondly, the design is



important. Images and suitable colours are important, when working in front of the computer.

... **Language and simple design.** The participants of ABE stress that they want digital contents, which are very easy to understand, and this itself does not concern only the content of the material, but also the vocabulary related to the navigation and the usability of the program, for example a button saying "return" is easy to understand by an ICT expert or someone used to computers, but it can be incomprehensible for an adult person in an initial learning phase. Therefore, digital contents must be designed for people without previous ICT knowledge, so that not many instructions are necessary.

... **Flexibility.** It is useful to develop materials and contents with different levels of flexibility, materials, with a theoretical and a practical part, and possibilities for the users to download the files, print them, and read them.

... **Intuitive Navigation.** ABE has to use technology to obtain a greater flexibility and a greater autonomy in the learning process of their students, since adult learners are able to decide and to manage their own learning. For that reason participants in able need to be able to search and find materials and contents easily without help. The materials have to be



organized well, have to be easy to find and the navigation must be intuitive.

Benefits of the Inclusion of Participative Processes in the Digitalization of Contents

The major conclusions of the project ABE Campus is that the use of a methodology that encourages the participation of learners in the creation of digital contents guarantees greatest usability for the end users.

Learner participation is a great advantage for the technicians from the very beginning, who improve without doubt the quality of the product, following the necessities of the group.

Furthermore the interactivity between the content and the user is improved since the user learns to alter the content or to elaborate it. Digital contents and software designed with a participative methodology are full of sense and meaning for the participants of ABE. The materials are not merely exercises, which need to be finished during the course, the learners identify with the materials. In addition to all this, the participative methodology encourages solidarity, since it is easier to learn if the learning is shared with other students in ABE.



Another most important result for ABE is that the reflections of the users and inclusion of their voices in the development and learning process allow to extract criteria for the use and elaboration of digital content, which can be a basis to develop guidelines for quality in ICT training in ABE.

DISSEMINATION IN THE ABE CENTERS



The ABE organizations, which plan to implement ICT technologies for learning, face a great challenge, since they also need to adapt learning and teaching processes. For this reason the development of powerful tools such as the virtual learning environments in ABE need to be accompanied with intensive efforts to disseminate them and to implement them in learning centres.

Dissemination and Implementation Require the Following Actions

... **To inform and to form.** It is most important that the whole educational community knows and learns how to use ICT or the new tools that they want to implement in their centres. Everybody needs to be aware of this, also people educating themselves. This implies actions of all type, from the use of the tools in the classes, or their cultural presentation in common spaces of the school and the organization of awareness days, weeks, etc. to the design of specific training sessions to teach to use the programs.



... **To create sense.** Sense creation is a deeper level of commitment, which needs to be adopted by whole educational community. They need to be convinced of the benefit and the importance of the new tools for learning. Sense creation is obtained using a participative methodology, including all the people of the community, professors, volunteers, students, etc. They need to participate in all the aspects of the implementation process: the decision making, the design, the creation, education and dissemination of those new technologies that the school adopts. Including all the stakeholders makes it easier to implement new technologies and process since it reveals the importance and the scope the new technology has for the centre, for the learning, and for the personal development of each participant.

... **Transfer to the next community:** What has been observed in the ABE Campus project is that when the participants create a sense for the new developments, they adapt a level of conscience and see the importance to extend the project beyond the school. The participants have clearly experienced the benefits of the new tools that contribute to many innovations in the centre and want to share it with other centres and communities.

... **Creation of networks.** The will on the part of the centres to create networks, to work with other institutions or countries is a consequence of the sense creation. There is a desire to



extend the project. The participating people in the educational community become aware that in order to continue the learning and innovation process it is essential to share it with others in the same situation.

In general, the dissemination in the centres must be adapted to the circumstances of each centre. It is important to design a dissemination plan at the beginning of the project and not to wait to the end. The involvement of the users assures dissemination at a deep level, which goes beyond the centre and helps to create sense in the ABE community.



THE VOICE OF THE PARTICIPANTS PEOPLE ON ABE

Education and training are some indispensable means to promote social cohesion, active citizenship, personal and professional realization, adaptability and employability. (...) It has to allow acquiring the enough knowledge to participate as active citizenship in the informational society and in the labour market.

Resolution of the Council of the European Union on June 27th 2002 about the permanent education (2002/C 163/01)

"When people involved in the educative action the teaching staff, students and collaborators have lived the experience to participate and to elaborate together a project like the "ABE Campus. Virtual Adult BASIC Education Communities In Europe ", their comments reveal the importance of continuing working in the creation of methodologies and tools that are adapted to their necessities and that they connect them to the digital world in which we live".

"The campus is a very necessary resource for the school, since it helps everybody to have access to the new technologies and a space where to learn".

"For the school and students the campus have to work well, the participants introduce their works and can send them from home. Is much useful, we in the campus have posted many works and also we have put warnings, the greatest difference is that we can get in from house".



"For me it is useful, because when I get in I am aware of the things that there are, if not you have to carry the calendar in the pocket the whole day. The initial levels can make use of the campus. What it contributes to them is that they enter to the present world and I believe that gives more mental agility to them, working with the computer is as a game and they like it because they like the new things".

"As we have found out in working many years with online learners is that they still need a physical place to meet, to get coaching with the use emotional aspects are very important to get people excited about ICT technologies and e-learning in general".



ABE campus project



Supported by the
European Commission



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ASSOCIATION OF PARTICIPANTS



Directorate-General for
Education and Culture