Learning through Networks:

Reflections on Creating Joyful Learning Experiences

Edited by:
Frank Fabri
Kevin Harrington

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Let's do it
CREATIVELY

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To all teachers and adult learners.

May learning always be joyful.

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Preface and Acknowledgements

There is general agreement at European level that adult learning and training should serve for the personal fulfillment, social inclusion and active citizenship and employability of individuals in a knowledge based society. *Learning through Networks: Reflections on Creating Joyful Learning Experiences* is a collaborative project resulting from the Grundtvig Learning Partnership 'Let's do it Creatively: for the Benefit of Adult Learners' (Project Number: GR2009-05C) intended to exhibit how these challenges are being addressed in real contexts facilitated by established educational institutions, in this case by County Dublin Vocational Education Committee, Joanne Pinewood education, Spiru Haret University-CTID Poeisti, Palacky University Olomouc, Centro de Educatión de Adultos Cáceres, Arte-Via Cooperative, Akademie 2. Lebenshälfte, MacDAC Engineering Consultancy Bureau Ltd., Office of the College Principal Saint Theresa College and Andirin Centre of Education of People. *Learning through Networks: Reflections on Creating Joyful Learning Experiences* provides policy makers, adult education and training providers, employers and learners themselves another challenge in making adult learning and training systems valid and relevant in response to these challenges.

The chapters that run through this book reflect current knowledge about adult learners and learning and provide a series of accounts on how each member within the network facilitated adult learning and training in relation to the Key Competences Framework (EC, 2005). *Learning through Networks: Reflections on Creating Joyful Learning Experiences* provides narrative accounts on the network development and project implementation using vignettes, testimonials and case studies to help explain how in practice the key competences, which are multi-functional, transferable and pre-requisites, are being addressed in a variety of ways for successful life in a knowledge society. Although the book was never intended to be another policy document or a piece of academic research, it provides both a framework for key competences in a knowledge-based society and a framework for joyful adult learning. It is essentially an evidence-based

publication about adult learning and training, providing anecdotes about different strategies and techniques that motivate adults to learn in different scenarios within a variety of educational institutions involved in the network from Ireland, Germany, Spain, Malta, Portugal, UK, Czech Republic, Romania and Turkey.

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Frank Fabri
Kevin Harrington

Chapter 1
Introduction

Long-established bureaucratic and hierarchical structures of various types of organisations are being challenged for their inability to foster commitment and creativity in workplaces (Murphy and Beck, 1994) and to cope with the fast-paced social and economic changes that are permeating and influencing all aspects of life today. Similar criticism at international level has been directed to the rigid traditional organisational structures of educational settings (Fabri, 2010; Fabri and Bezzina, eds., 2010).

European countries are trying to recover from a severe economic and financial crisis with high unemployment rates particularly amongst young people[1]. The crisis has emphasised the need to reform economies and societies and to become smarter, more sustainable and more inclusive. The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020 recognised that to achieve this reform flexible, high quality education and training systems which respond to the needs of today and tomorrow are needed.

Present practices of leading and managing educational institutions have been in use for such a long period of time that they have become institutionalised and made it exceptionally difficult to institutionalise other changes, innovations and reforms. Various researchers in education (Caldwell, 2005; Fullan, 2005; Hargreaves, 2005; OECD, 2001) stressed the need to transform the traditional operational structures and strategic visions of educational institutions. Caldwell (2005) argued that "technologies of learning" are changing and educational institutions need to respond to these changes if they are to survive as institutions of learning in the future.

The Partnership 'Let's do it creatively…for the benefit of adult learners', which is a Grundtvig Lifelong Learning Project, promoted the European Commissions' Framework of eight competences through its challenging and joyful training and learning opportunities to adults in formal, non-formal and informal educational settings.

1 *The figures from the Eurostat (September 2010) for the EU 27 Member States indicated a general unemployment rate of 9,6 % and a youth unemployment rate of 20,3 %.*

Adult Learning

Adult learning is a theory that holds a set of assumptions about how adults learn and emphasises the value of the process of learning. It uses approaches to learning that are problem-based and collaborative rather than didactic, and also emphasises more equality between the teacher and learner (Lieb, 1991). This 'art and science of helping adults learn' is founded on at least six principles that were outlined by Knowles (cited in Zmeyov, 1998) in the 1970's:

- Adults are internally motivated and self-directed
- Adults bring life experiences and knowledge to learning experiences
- Adults are goal oriented
- Adults are relevancy oriented
- Adults are practical
- Adult learners like to be respected

Lieb (1991) refers to motivation from adults as an important aspect for adult learning. At least six factors serve as sources of motivation for adult learning:

- **Social relationships:** to make new friends, to meet a need for associations and friendships.
- **External expectations:** to comply with instructions from someone else; to fulfill the expectations or recommendations of someone with formal authority.
- **Social welfare:** to improve ability to serve mankind, prepare for service to the community, and improve ability to participate in community work.
- **Personal advancement:** to achieve higher status in a job, secure professional advancement, and stay abreast of competitors.
- **Escape/Stimulation:** to relieve boredom, provide a break in the routine of home or work, and provide a contrast to other exacting details of life.
- **Cognitive interest:** to learn for the sake of learning, seek knowledge for its own sake, and to satisfy an inquiring mind.

The workshops held over the course of the project revealed a number of common strategies and techniques that were used by the partner institutions in order to maximise training effectiveness with their adult learners. At least eight aspects were being practised in adult learning by individual partners:

- Learning was provided in a supportive environment
- Emphasised personal benefits of training
- Used training method that required active participation
- Used different teaching methods
- Provided structured learning opportunities
- Provided feedback on practice
- Addressed adults' individual learning needs
- Made course content relevant and coherent

The Partnership: Let's do it Creatively

The Partnership is entitled 'Let's do it creatively…for the benefit of Adult Learners' and the partners[1] in this project represent a variety of types of educational institutions from Ireland, the United Kingdom, Romania, Czech Republic, Spain, Portugal, Germany, Malta and Turkey. Each has their own learner profile and specialism. However, common to all partners is that they are involved in adult education, with all the challenges that entails, such as motivating adult learners and managing the expectations and agendas that adult learners bring to the learning situation.

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1 *The partners are: County Dublin Vocational Education Committee (Ireland), Joanna Pinewood Education (United Kingdom), Spiru Haret University (Romania), Palacký University Olomouc (Czech Republic), Centro de Education de Adultos Caceres Spain), Arte-Via Cooperative (Protugal), Akademie 2. Lebenshälfte (Germany), MECB Ltd. (Malta), Andirin Centre of Education of People (Turkey), and Saint Theresa College (Malta)*

The Partnership 'Let's do it creatively', symbolically being represented by the logo below,

related training and development learning and opportunities with the European Commission's Framework of eight key competences[2] which are listed below:

» communication in the mother tongue

» communication in foreign languages

» competences in maths, science and technology

» digital competence

» learning to learn

» interpersonal, intercultural and social competences, & civic competence

» entrepreneurship

» cultural expression.

The Partnership had three main objectives in order to apply the above key competences in their adult training and learning opportunities:

» Develop creative and innovative methods

» Teachers as facilitators in the learning process

» develop a joyful learning atmosphere

2 *(http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/416&format=HTML&aged=0&language=EN&guiLanguage=en)*

Rationale Behind Objectives

In 2005 the European Commission identified key competences that provide added value for the labour market, social cohesion and active citizenship by offering flexibility and adaptability, satisfaction and motivation. Because these competences should be acquired by everyone, the European Commission recommended that these key competences are fully integrated into all education programmes. The European Commission also stated that many of the competences in the Framework cannot be taught in 'traditional' ways but require new approaches in organising learning. Teachers need to work together with each other, with the local community and deal with heterogeneous groups. Obviously, teachers also need new competences and continuous learning in order to respond to these new challenges.

There is an emerging consensus that the most useful learning in the modern world is learning how to learn. The emphasis in adult education should be as much, if not more, on the process of learning as on the subject matter being taught. In order to encourage this, there is general consensus that the teacher should be more of a facilitator of learning rather than the traditional view of the teacher as a subject expert who imparts knowledge. Adult learners who are enabled to engage actively in their own learning process will learn more effectively and with more enthusiasm.

It is the experience of the partners, and also borne out by academic studies, that many adult learners returning to education after a number of years have negative perceptions about education as a result of experiences from their earlier school days. It is therefore important to foster a welcoming and supportive environment for adult learners.Such an environment should be one where education is not seen as drudgery to be endured, but rather as something to be embraced as a positive, fulfilling and life-enriching experience. To develop such an experience the partners believe that it is important to design and develop a learning environment that encourages the learners to be active in the learning process in a happy and enjoyable environment. By encouraging such active learning in a warm and supportive environment, the project partners believe that this will lead the adult learners to engage more readily in the process of learning and developing key competences. Often this means the learner is developing key competences without

realising it, by fostering an environment where the learner is willing to engage in discussion and debate with other members of the group, the learner is developing the key competence of communication in the mother tongue, as well as developing interpersonal and social competence. The desired outcome is that learners develop a more positive attitude to education and will be therefore, more motivated to continue on the path of life-long learning.

Defining Adult Education

According to the Partnership 'Let's do it creatively' adult education consists of formal, non-formal and informal education adapted to the needs of persons 15 and older who are still involved in their first or initial cycle of education or who are not in the regular school, further or higher institution or the university system. The Partnership believes that it has become increasingly difficult to separate adult learners from first time students attending regular school or university. The traditional pattern of study has changed and with an increasing number of students moving in and out of the educational system and the labour market it is difficult to identify who is in the first cycle of studies and who is a recurrent learner.

Perspectives on Adult Learning

A thematic review conducted by the OECD about adult learning policies and practices in 17 OECD countries showed a growing recognition by policy makers of the necessity to invest in adult learning to achieve economic efficiency and address equity deficiencies (OECD, 2005). Adult education has long been defined as a vehicle for social change and transformation (Baumgartner, 2001; Mezirow, 1990; 2000) and the role of adult learning on the productivity, innovation and employment chances of individuals (OECD, 2004; OECD, 2005) has come to the fore.

The Partnership 'Let's do it creatively' was aware of at least two dominant perspectives on adult learning, mainly the learning market and the learning networks. The partnership was conscious that while for simplification purpose both perspectives are being separated, both perspectives have their own value, and aspects from both perspectives are inter-related and intertwined in adult learning opportunities and initiatives provided by the partners within the Partnership. The

Partnership 'Let's do it creatively' is a network of educational organisations from European countries that provide adult learning and teaching opportunities in formal, non-formal and informal learning settings and reflect both the learning market and the learning networks within a learning society. The Partnership holds the importance of both self fulfilment and job retention and opportunity, which is reflected in Ján Figel's comments:

We need to develop our skills and competences throughout our lives, not only for our personal fulfilment and our ability to actively engage with the society in which we live, but for our ability to be successful in a constantly changing world of work. (EC, 2007: 1).

The Learning Market

There is literature that looks at a learning society which embeds a learning market where lifelong learning is a key instrument in developing a competitive, multi-skilled workforce. Brown, Green and Lauder (2001), and Livingstone (2005) pointed to a growing diversification of the labour market and questioned the premise of a general demand for a better skilled labour force. The learning market has the potential to increase the permanent exclusion or marginalisation of segments of the population and exacerbate socio-economic divisions (Rubenson and Schuetze, 2000). On the other hand, adult learning is also seen as part of a response to the danger of further polarisation in society and it gives citizens the chance to acquire adequate skills to prevent low-paid jobs from becoming life cycle traps (Epsing-Andersen, 1996).

The dominant notion in late 80s and early 90s has been of a learning society which embeds a learning market, with the market responding to economic issues and individuals rather than social imperatives (Edwards et al. 1998). A learning market enables institutions to provide services for individuals as a condition for supporting the competitiveness of the economy. Learning opportunities are developed to meet the demands of individuals and employers for the updating of skills and competencies.

The notion and practice of a learning market is challenged at least on three counts. Firstly, the learning needs of society are too important to be decided by the

marketplace, and the learning market reproduces patterns of inequality in terms of who can participate in learning (Macrae, et al. 1997; Coffield 1997 and McGivney, 1996). Martin and Shaw, 1997, Riddell at al., 1997, and Benn, 1997 argue that the learning market silences the voice of many communities and undermines forms of locally based community and adult education. Most of the discourse fails to recognise the structural barriers to learning such as class, race, gender and location (Coffield, 1997). There is evidence that illustrate the social divisions which characterise patterns of participation in learning (Macrae, et al., 1997, Keep, 1997, McGivney, 1996).

Secondly, the learning market supports the logic of individualism that fails to foster commitment to lifelong learning (Elsey, 1993, Gorard et al., 1996). It tends to hinder the importance of group loyalties, social networks and forms of social activism in facilitating involvement in lifelong learning.

Thirdly, while the importance of work-related learning is acknowledged, the concentration on economic and employment concerns is challenged on the grounds that the social demand for learning which results from demographic, social and cultural changes also need to be addressed (Coffield, 1997; Belanger, 1994; Chisholm, 1996; Macrae et al., 1997).

Learning Networks

There is literature about lifelong learning that emphasise the individual and how this can empower learners, provide more choice and flexibility of opportunity. However, there are questions about how well an individual-centred approach will meet national education and training needs. Others stress the importance of group loyalties and social networks in facilitating learning. It is worth noting that research suggests that a more equitable investment in skills enhances overall labour force productivity (Coulombe, Tremblay, & Marchand, 2004; Statistics Canada, 2005). Consequently, addressing unequal opportunities to adult learning is as much an economic as a social issue. Equalising opportunities in education is "one of the most important conditions for overcoming social injustice and reducing social disparities in any country […] and is also a condition for strengthening economic growth" (UNESCO, 2008: 24).

The concept of learning networks highlights the social purpose of education. It considers complex notions of society in that different forms of sociality and learning networks are developed (Edwards et al. 1998). Rather than focusing on any hypothetical single form of society, it recognizes a variety of overlapping and inter-related local, regional, national, international and global societies (Edwards, 1997).

Learning is seen as a function of social relationships and is extended beyond solely the acquisition by individuals of formal qualifications. Research by Benn (1997), Elsey (1993), Gorard et al. (1996) and Merrifield (1997) highlighted the significant role which learning networks can play in support of lifelong learning. Learning then ties in with a set of other relationships within organisations, families, communities and the economic sector (Benn, 1997). Learning networks can include family and peers, community groups, voluntary organisations, social movements, and youth organisations. They connect individuals to the wider community and facilitate learning in many different ways.

Three Basic Categories of Settings

Studies have shown differing patterns of engagement in adult education and training compared to intentional forms of informal learning (e.g. Livingstone, 1999; Statistics Canada, 2001). Adults learn through the accumulation of formal, non-formal and informal learning (see EC, 2000; 2001). The Partnership 'Let's do it creatively' was aware that while policy documents and international organisations such as the OECD and Eurostat overwhelmingly subscribe to distinctions between formal, non-formal and informal learning, the literature contains many different and competing definitions and questions the advisability of trying to seek clear definitional distinctions between the three concepts (Colley, Hodkinson & Malcolm, 2002). In this Partnership, formal and non-formal learning are referred to as organised forms of learning and informal learning is seen as a non-organised form of learning:

Formal learning: adult learning, organised by County Dublin Vocational Education Committee, Joanna Pinewood Education, Spiru Haret University, Palacký University, Centro de Education de Adultos Caceres, MECB Ltd. and Andirin Centre of Education of People typically took place in their education and training

institution, was structured (in terms of learning objectives, learning time or learning support) and led to certification. Formal learning is intentional from the learner's perspective.

Non-formal learning: Joanna Pinewood Education, Spiru Haret University, Centro de Educacion de Adultos Caceres, Arte-Via Cooperative, Akademie 2. Lebenshälfte, MECB Ltd. and Saint Theresa College provided learning that occurred in their education or training institution and typically did not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning opportunities may be provided in the workplace and through the activities of civil society organisations and groups. Non-formal learning is intentional from the learner's perspective.

Informal learning: partners like Spiru Haret University, Arte-Via Cooperative, Akademie 2. Lebenshälfte, and Saint Theresa College facilitated learning that results from daily life activities related to work, family, community or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but is often non-intentional from the learners' perspective. Informal learning, experience and practice are closely related concepts. Without careful distinction, most life experiences can be viewed as involving informal learning, but clearly, certain types of activities are more relevant than others when it comes to the formation of relevant competencies. Although still contested in the literature, a strong hypothesis is that merely learning in the course of daily life without some systematic prior reinforcement, such as formal education, may not be sufficient for developing competencies that have economic and social value (Svensson, Ellström and Åberg, 2004).

Motivations for and Obstacles to Learning

There is research evidence that identifies a number of motivations in adult job-related and non-vocational learning and training opportunities. On the other hand, the Partnership 'Let's do it creatively' is aware of a number of obstacles to learning and reasons for not learning. The Pathways in Adult Learning Survey (2004) and the National Adult Learning Survey (2006) list a number of job related motivations in self-directed training and learning as shown in Table 1.1. The list below reflects the experience in general of adults involved in learning and training as provided by the partners within the Partnership.

Table 1.1: Job Related Motivations
New skills development for job at the time
Career development
Job satisfaction
New job opportunity
Change type of work
Pay rise
Promotion
Set up business
Work related health problems
Job retention
Others

Table 1.2 is an adapted list of non-vocational motivations in self-directed learning from the Pathways in Adult Learning Survey (2004). The Table below provides a list of motivations that tend to attract adults to training and learning, and is of particular relevance to all those partners within the Partnership that provide non-vocational training.

Table 1.2: Non-Vocational Motivations
Skills and knowledge improvement
Curious about subject
Do something interesting
Fun
Fill spare time
Meet new people
Help child with school work
Keep active
Start another/a course
Voluntary/ community involvement
Help with health problems/disability
Others

Other motivations for taught (formal) learning identified in the National Adult Learning Survey (2006) are included in Table 1.3:

Table 1.3: Wider Motivations
Improve my knowledge/ability in the subject
Gain a certificate or qualification
To gain skills/knowledge that would be useful in my everyday life
Do something interesting
To find out about the subject
Make new friends/ meet new people
Start another course
Have some fun
Do something with my spare time
Keep my body active
Get involved in voluntary or community activities
Help my child(ren) with their school work
Help me with my health problems/disability

Training and learning activities may be obscured by a number of obstacles to

learning and reasons for not learning. Cross identified three types of barriers that generate inequities in access and participation: institutional, situational and dispositional (Cross, 1981). Institutional barriers include institutional practices and procedures that discourage or prevent participation. Situational barriers arise from an individual's life situation at a given point in the family life-cycle and working life, whereas dispositional barriers refer to psychological factors that may impede an individual's decision to participate.

The National Adult Learning Survey (2006) identified a list of obstacles to learning and reasons for not learning. Table 1.4 lists these obstacles which again, is a list that serves as eye opener for all partners in the design of training and learning opportunities.

Table 1.4: Obstacles to Learning
Prefer to spend time doing other things
Not interested in learning
Do not need to learn for the current work
Do not see any point in education
Lack of time due to work
Lack of time due to family
Hard to get time off work to learn
Lack of time due to children
Lack of time because care for an adult
Hard to pay course fees
Would only do learning if some one paid fees
Benefits would be cut if did course
Does not know about local learning opportunities
Cannot find local opportunities to learn

Does not know where to find out about course
Unsure which courses would be interesting/useful
Unable to find the training wanted
Nervous about going back to classroom
Do not have qualifications to get onto course
Worried about keeping up with course
Difficulties in reading and writing
Problems with numbers
Too old to learn
Problem arranging transport to course
Course difficult due to health/ disability
Employer would not support learning
Others

Chapter 2
Description of Network

Introduction

This Grundtvig Learning Partnership arose out of a Contact Seminar organised by the Maltese European Union Programmes Agency (EUPA) in December 2008. These contact seminars are regularly organised by different agencies around Europe to allow organisations interested in participating in a scheme such as Grundtvig Learning Partnerships to meet like-minded organisations with a view to developing and participating in such a project. The contact seminar in Malta was somewhat unusual in that it involved organisations not only from the field of Adult Education, but also from second-level schools who were interested in participating in a Comenius project. The result of this was that there were a limited number of organisations from an Adult Education background.

During the course of the contact seminar, those organisations from an Adult Education background held a number of discussions to try and identify a project proposal that would address issues of common concern to all prospective partners. Initially, these early discussions in many ways highlighted the differences of the organisations present, rather than serving to identify common concerns that could serve as focus for a possible project. These differences can be put in focus when the diverse nature of these organisations is considered. They ranged from the largest private university in Romania, to the Physics department of a large university in the Czech Republic to a life-long learning co-operative in Portugal that operates through volunteers. Other prospective partners from Spain, Ireland, Germany and the UK came from equally diverse backgrounds.

However, it soon became apparent that one area that all the organisations obviously had in common was that we were engaged in facilitating adult learning. It was then agreed that the focus of the project, in general terms, would be the

development and sharing of good practice in adult education. This objective was obviously very general so it was necessary to put more of a focus on this objective. After conducting some research, it was agreed that we should tie our project into the framework of European policy on adult education. In particular, it was concluded that the project should aim to address a key objective of the European Commission: the development of 'key competences' in learners. This proposal from the commission is driven by the 'Lisbon Strategy'.Its aim was to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion", by 2010. It was set out by the European Council in Lisbon in March 2000.

Key Competences for Lifelong Learning in Europe

A European framework of basic skills to be provided through lifelong learning was originally suggested as part of the Lisbon Strategy. The proposal was to provide, for the first time at the European level, a reference tool on key competences that all citizens should have for a successful life in a knowledge society.

A framework of the key competences was announced by the European Commission in November 2005. The aim of the Key Competences Framework, prepared by experts from 31 countries and European level stakeholders, is to "help policy makers, education and training providers, employers and learners themselves in reforming education and training systems to respond to these challenges". [3] The key competences were identified as those that serve for personal fulfilment, social inclusion and active citizenship and employment.They are multifunctional, transferable and pre-requisites for successful life in a knowledge society.

3 http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/416&format=HTML&aged=0&language=EN&guiLanguage=en

The Key Competences

- communication in the mother tongue
- communication in foreign languages
- competences in maths, science and technology
- digital competence
- learning to learn
- interpersonal, intercultural and social competences, and civic competence
- entrepreneurship
- cultural expression.

In order to enable all adults to learn, maintain and update their key competences, the framework calls for comprehensive infrastructures and coherent strategies, developed in collaboration with social partners and other stakeholders. The Commission also states that this requires teachers to work together in developing effective approaches to teaching these competences.

The learning partnership therefore aimed to develop and share best practice in the delivery of these European-wide objectives. By working through this project the partners hoped to develop a sense that the challenges we share as adult education practitioners are not unique to our institutions or countries, but are trans-European challenges and by working together on a European-wide basis we can develop common strategies and approaches in overcoming these challenges to the benefit of all adult learners throughout Europe.

In tandem with this, the project also aimed to promote 'enjoyment in learning', with a focus on the generation and sharing of innovative and creative approaches to adult learning. It will afford adult education practitioners an opportunity for professional development and reflection on practice. It was planned that, through a series of workshops, participants will reflect on, share and design innovative approaches to supporting the development of key competencies for education and training as identified by the European Commission. Building on the 2009 European Year of Creativity and Innovation, the project also aimed to encourage teachers to become

facilitators of learning rather than merely imparters of knowledge. Their work with learners should foster positive attitudes towards life-long learning, promoting access, transfer and progression for a diverse learning community with varied learning needs.

In summary, the project identified three objectives to be adrresed during the course of the two years.

The Three Objectives

» To develop and share creative and innovative methods to engage learners so that they will develop the 'key competences' all individuals need for personal fulfilment and development, inclusion and employment.

» To encourage teachers to see themselves as facilitators in the learning process rather than just subject experts who disseminate knowledge.

» To encourage the development of a 'joyful' learning atmosphere.

A full discussion of these objectives, together with how we worked to achieve these objectives is given later in this chapter. But before considering these matters it is important to have an overview of all the partner organisations involved in the project.

The Partner Organisations

The project involved a number of partners from ten different organisations involved in adult education, all of whom have a depth of experience in developing key competences in learners. The project aimed to draw upon this knowledge and expertise in achieving the three objectives of the partnership. Although, the partners came from very diverse backgrounds and areas of expertise, what at the outset was perceived to be a drawback, was very soon recognised as a strength of the project as this very diversity enabled the partners to fully engage with all of the key competences identified by the European Commission.

Ireland

County Dublin Vocational Education Committee (Co-ordinator)

County Dublin Vocational Education Committee (VEC) is one of the largest providers of education in Ireland and delivers full-time education to over 10,000 students. The VEC's services include: primary and second level education; adult and further education; youth services and support services such as Psychological, Childcare and Adult Guidance services.

In terms of this project, County Dublin VEC was represented by of a network of six colleges that provide further and adult education under the auspices of County Dublin VEC. These colleges provide education to learners who have recently completed their second-level education and also to adult learners who may be returning to education after some years of being away from a formal education environment. These colleges face a specific challenge in engaging and motivating these students to complete their courses in a welcoming and supportive environment, and also to enable them to progress to further and higher education.

Web: www.codubvec.ie

United Kingdom

Joanne Pinewood Education

Joanna Pinewood Education (JPE) is a proactive, personalised tutoring facility in London, operating from two tuition centres: one in Wandsworth, SW12 8TY and the other in Uxbridge UB8 2QW, covering Kent, Surrey South and West London. They offer specialised holistic tutoring programmes for students of all ages, abilities and levels. Their philosophy is that every student can learn, just not on the same day or the same way. JPE offers one-to-one tuition and group tuition 7 days a week during term and school holidays. Their role is to counsel, facilitate and catalyse the student to be more creative in discovering themselves and the way that they can organise their study. Through working with adults they use what they learn and pass this experience on to their younger students.

JPE also runs elocution workshops for migrants to learn English. It is their experience that many Polish, Lithuanian, Russian, Ukrainian, African and Asian migrants understand English but are afraid to speak for fear of appearing foolish. They train migrants and older parents to support their primary-school children in Key Stage 3 through homework and revision. JPE also tutors, supports and mentors older learners.

It was envisaged that the beneficiaries of the project in the UK would be older adult learners: East Europeans settling in South East London, Lambeth, Wandsworth, Hammersmith, Ealing, Hounslow, Slough(Buckinghamshire) and Hillingdon; also ladies from the Bangladeshi, Pakistani and Afro-Caribbean community resident in the London Borough of Hillingdon; also carers of relatives from the Wandsworth Carers' Centre and Hillingdon Carers' Centre. It was their primary intention during this project to visually record good practice and difficulties and help organise a mobility workshop that develops innovative ways of teaching communication in a foreign language (English for Migrants) and motivating learners with learning difficulties.

Web: www.jpetutors.com

Romania

Spiru Haret University-CTID Ploeisti

Spiru Haret UNIVERSITY is the largest private university in Romania. Spiru Haret University of Bucharest works with the Foundation "Romania of Tomorrow" (the owner of two TV stations, one educational and a cultural one) and SC Media "Romania of Tomorrow" (which publishes over 2000 titles of books in the university's own printing press), and is led by a group of famous professors from one of the major providers of education in Romania. The staff of the three institutions are active in developing educational, scientific, cultural and social activities for life-long learning.

Their institutions provide: university level education (both licence and master cycle), education for older learners - employees who complete their studies in the educational system remotely, both in Romania as well as for Romanian citizens working in the EU. In Prahova region, Spiru Haret –CTID PLOIESTI, through

the Spiru Haret Society for Education, Culture and Science also holds training activities for teachers (seminars, debates etc.); activities to motivate all adults in order to attract them into a continuous process of learning; and partnerships with major institutions of culture (concerts, theatre performances, books etc.) that aim to transform the leisure of adults into a joyful learning experience to encourage them to actively engage in learning.

Spiru Haret SN-ECS Prahova had as a specific aim of this project to support activities for students, parents and students who have returned to education (due the loss of their jobs in EU) or students from disadvantaged areas (rural areas or parents with modest incomes).

Web: www.infoidploiesti.ro

Czech Republic

Palacký University Olomouc (Faculty of Natural Sciences)

Palacký University is the second oldest university in the Czech Republic and was founded by Jesuits in 1573. Nowadays, as a public higher education centre, it consists of 8 faculties with approximately 21,000 students and about 1,000 members of the academic staff. The university provides all levels of academic degrees (bachelor, master and PhD) and plays an important role in the development of the surrounding region, which has an above-average unemployment rate in comparison with rest of the country.

The Faculty of Natural sciences, as a partner of this project, aimed to develop and share creative and innovative activities and approaches to Further Education for science teachers in order to allow them to motivate their own students and to share this knowledge with a network of cooperating faculty schools around the whole region. They were particularly interested in developing innovative ways of teaching the competences of maths, science and technology.

Web: www.prf.upol.cz/en

Spain

Centro de Educación de Adultos Cáceres

This is an Adult Education provider that belongs to the regional Education Authority. It covers a wide range of demand in the area of Caceres. They currently serve more than 3000 students. Their organisation provides formal education for illiterate adults; for adult learners that are seeking the Secondary Education Certificate; and vocational training in printing for a group of early school leavers. They also prepare people older than 25 who want to take the exam to enter into University. Finally, they provide non-formal education to different groups of adult people: Spanish for foreigners, mainly migrant workers; Computing, and history of Cáceres.

For the Secondary Education Certificate, the Institution offers three different modalities: Face-to-face, distance and E-learning. The distance learning modality covers most villages of the province, with the backing of part time teachers hired locally by local Authorities. Most of the students failed to get the basic certificate in the regular school, and they get a second chance through the Centro de Educación de Adultos. Teachers from this organisation have been, and still are, involved in the process of implementing basic skills into the Adult Education corpus in the region.

Web: *http://cepacaceres.juntaextremadura.net/*

Portugal

Arte-Via Cooperative

Arte-Via Cooperative in Lousã, district of Coimbra, is a regional, cultural, non-profit association, whose members work as volunteers. Founded in 1999, it is involved in promoting classes for older people and migrants in a variety of subject areas, such as: painting, handcrafts, yoga, Reiki, English, Spanish and Italian languages. The cooperative organises events such as readers' communities, international seminars, writing contests, art exhibitions and multimedia performances. They are also actively involved in a number of other European projects.

Web: *www.arte-via.org*

Germany

Akademie 2. Lebenshälfte im Land Brandengurg e.V.

Förderverein Akademie 2. Lebenshälfte is a non-profit organisation with the aim of integrating older people into the workforce and in social life through educating, advising, counselling and self-help. The main objective is developing the competences of the older generation. The academy has experience in the education of older people for more than 15 years in Brandenburg, Germany. It has been developing more and more into a centre of excellence for adult education. Over 15,000 older adults from several areas have improved their lives by availing of their services over the last number of years.

The Akademie 2. Lebenshälfte has outreach centres in ten towns and a lot of partners. For example: together with companies from North-east-Brandenburg, as well as the Institute for Development of Companies and Regions of technical Eberswalde, the Academy developed the project 'Campus BARUM 50+' for older unemployed people. It is a new way of 'learning by doing' and is indicative of the organisation's commitment to progressive adult education.

Web: www.akademie.whpr.net/

Malta

MacDAC Engineering Consultancy Bureau (MECB) Ltd.

MECB Ltd, a corporate member of the Malta Chamber of Commerce Enterprise & Industry, is an established consultancy bureau providing adults in public and private entities with specialised training and technical support services, including mentoring, related to a range of technologies and methodologies. Relevant to this project is that MECB provides expertise and relevant case-studies on the core competences of creativity and innovation.

MECB firmly believes that there are methods which can be learnt to make individuals more creative and innovative. Of relevance to this project is that MECB has acquired expertise on a range of skills and competences through its consulting jobs for both private and public entities, including: creativity and innovation management techniques (IMT), quality, environmental, technology

management & selection, design, computer aided design, 3D modelling, e-Learning (Learning management systems), lean manufacturing and maintenance management. Furthermore, MECB also brought to the project experience gained from a number of previous EU projects including Leonardo da Vinci, Grundtvig 1 and Grundtvig 3.

Web: www.mecb.com.mt

Turkey

Andirin Centre of Education of People (ACEP)

ACEP is the only adult education centre in Andirin. The province is a rural area and 75% of the population live in villages or rural areas. One difficulty the centre has is in reaching out to prospective students given the geographical spread of their target population. The central philosophy of the centre is spreading adult education throughout the population by making learning joyful to everyone.

It usually has in the region of 1,500 students but this number depends on the courses they hold during the year. At the commencement of the project they had 190 staff; 5 of whom were full-time. The centre provides a wide-range of courses for adult learners. These are in a variety of subjects ranging from ICT competences, language learning, to fruit growing or mechanics. There are no application criteria. People can apply for a course or demand a course with a group of 12.

Web: http://andirin.meb.gov.tr/

Malta

Office of the College Principal, Saint Theresa College

St Theresa College includes a network of seven state schools of which four are primary and three are secondary schools. Primary schools host children from early age of three to ten years. Secondary schools host students from eleven to sixteen years of age. The Office of the College Principal facilitates the leadership, management and administration of the College and schools.

The College includes around 400 teachers and it provides compulsory education for almost 4000 students. The College provides professional training and development sessions for senior management team members teaching staff

in different specialist areas; professional training and development sessions for teaching staff in different specialist areas; and professional training and development sessions for parents.

Web: www.kulleggsantatereza.edu.mt

Objectives of the Network

As has been previously stated, the project team agreed three key objectives:

1. To develop and share creative and innovative methods to engage learners so that they will develop the 'key competences' all individuals need for personal fulfilment and development, inclusion and employment.

2. To encourage teachers to see themselves as facilitators in the learning process rather than just subject experts who disseminate knowledge.

3. To encourage the development of a 'joyful' learning atmosphere.

A fuller description of each these objectives, together with a brief discussion of why these were chosen, as well as how the project proposed to complete these objectives, now follows.

Objective 1: **To develop and share creative and innovative methods to engage learners so that they will develop the 'key competences' all individuals need for personal fulfilment and development, inclusion and employment.**

Rationale for Objective 1: In 2005 the European Commission identified key competences that provide added value for the labour market, social cohesion and active citizenship by offering flexibility and adaptability, satisfaction and motivation. Because these competences should be acquired by everyone, the Commission recommended that these key competences are fully integrated into all education programmes.

The Commission also stated that "many of the competences in the Framework cannot be taught in 'traditional' ways but require new approaches in organising learning. Teachers need to work together with each other, with the local community and deal with heterogeneous groups. Obviously, teachers also need new competences and continuous learning in order to respond to these new challenges."[4]

A more detailed description of the key competences is outlined in chapter 3.

The organisations involved in the project each have their own strengths in terms of developing these competences in their learners. The partners, through the workshops, aimed to share best practice in the delivery of these competences to the benefit of all partners and the wider educational community.

A major focus of the project would be therefore, to explore creative and innovative ways of teaching these competences. It was hoped that these new approaches would be adapted by each of the partner organisations as they worked in partnership with their adult learners to develop these competences.

Approach to Objective 1: A number of workshops were organised throughout the course of the project. Each of these workshops adopted a number of the key competences as the theme for the workshop.

Each partner prepared a presentation describing examples of good practice in their own organisation on innovative and creative approaches to developing the key competences that were the focus for that seminar.

These presentations were discussed as to how each partner can adapt the approach described in their own organisation.

The presentations and the discussions were uploaded on the project's website.

The seminars also consisted of 'brainstorming workshops' where the participants were asked to develop creative and innovative approaches to teaching the key competences in focus. These approaches were often tried out by the participants themselves.

4 http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/416&format=HTML&aged=0&language=EN&guiLanguage=en)

The workshops were video recorded and uploaded to the project's website. This allowed them to be reviewed afterwards to discuss their effectiveness.

Objective 2: **To encourage teachers to see themselves as facilitators in the learning process rather than just subject experts who disseminate knowledge**.

Rationale for Objective 2: There is an emerging consensus that the most useful learning in the modern world is learning how to learn. The emphasis in adult education should be as much, if not more, on the process of learning as on the subject matter being taught.In order to encourage this, there is general consensus that the teacher should be more of a facilitator of learning rather than the traditional view of the teacher as a subject expert who imparts knowledge. Adult learners who are enabled to engage actively in their own learning process will learn more effectively and with more enthusiasm.

Approach to Objective 2: At each of the workshops organised throughout the project, the participants were encouraged to reflect on how they can develop their practice as facilitators of learning.

This was also incorporated into the workshops and discussions described previously in the approach to Objective 1.

Descriptions of existing good practice and ideas developed during the workshop were uploaded on the project's website.

Objective 3: **To encourage the development of a 'joyful' learning atmosphere.**

Rationale for Objective 3: It is the experience of the partners, and also borne out by academic studies, that many adult learners returning to education after a number of years have negative perceptions about education as a result of experiences from their earlier school days. It is therefore important to foster a welcoming and supportive environment for adult learners. Such an environment should be one where education is not seen as drudgery to be endured, but rather as something to be embraced as a positive, fulfilling and life-enriching experience.

To develop such an experience the partners believe that it is important to design and develop a learning environment that encourages the learners to be active in the learning process in a happy and enjoyable environment. By encouraging such active learning in a warm and supportive environment, the project partners believe that this will lead the adult learners to engage more readily in the process of learning and developing key competences. Often this means the learner is developing key competences without realising it, e.g. by fostering an environment where the learner is willing to engage in discussion and debate with other members of the group, the learner is developing the key competence of communication in the mother tongue, as well as developing interpersonal and social competence. The desired outcome is that learners develop a more positive attitude to education and will be therefore, more motivated to continue on the path of life-long learning.

Approach to Objective 3: At each of the workshops organised throughout the project, the participants shared examples of how they fostered a welcoming and supportive learning environment.

These examples were listed on the project's website.

In the workshops where the participants developed innovative and creative approaches to adult learning, equal emphasis was placed on developing a 'joyful' learning environment.

Adult learners were often included in these sessions and their feedback sought as to how effective this was.

The knowledge gained through these workshops was documented and posted on the project website.

A key part of this objective was to establish a framework for organisations to assess the learning environment in the context of the "enjoyment of learning" strand. It was envisaged that the partners will then incorporate this framework throughout all aspects of designing and delivering adult learning in their own organisations. A fuller discussion of this Framework of Enjoyable Learning Approaches is outlined in Chapter 6.

Chapter 3
Key Competences for Lifelong Learning

Introduction

As previously stated, the European Commission has identified a number of key competences that should be acquired by everyone. One of the main objectives of this project was to explore creative and innovative ways of teaching these key competences to Adult Learners. Given the importance of these key competences to the project, it is important that they are discussed in some detail.

The Key Competences

1. communication in the mother tongue
2. communication in foreign languages
3. competences in maths, science and technology
4. digital competence
5. learning to learn
6. interpersonal, intercultural and social competences, and civic competence
7. entrepreneurship
8. cultural expression

The Commission also stated that "many of the competences in the Framework cannot be taught in 'traditional' ways but require new approaches in organising learning. Teachers need to work together with each other, with the local community and deal with heterogeneous groups. Obviously, teachers also need new competences and continuous learning in order to respond to these new challenges."[1]

1 http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/416&format=HTML&aged=0&language=EN&guiLanguage=en

It is in order to meet the challenges posed in developing these key competences in adult learners that the partners in the project decided to develop and share creative and innovative approaches to organising the learning of these key competences. The idea of developing creative and innovative approaches dovetailed with the fact that 2009 was the European Year of Creativity and Innovation.

Background to the Key Competences[2]

The background to the identification of these key competences arose from the EU's Lisbon Strategy adapted in 2000 that aimed to deal with the low productivity and stagnation of economic growth in the EU, through the formulation of various policy initiatives to be taken by all EU member states. The broader objectives set out by the Lisbon Strategy was to be attained by 2010.

It was adopted for a ten-year period in 2000 in Lisbon, Portugal by the European Council. It broadly aimed to make Europe, by 2010, the most competitive and the most dynamic knowledge-based economy in the world.

In order to achieve this, there was broad agreement that Europe's education and training systems needed to adapt to the demands of the knowledge society. One of the main components of this approach was to be the promotion of new basic skills. To this end, the Lisbon European Council called upon the Member States, the Council and the Commission to establish a European framework defining 'the new basic skills' to be provided through lifelong learning. This framework should cover ICT, technological culture, foreign languages, entrepreneurship and social skills.[3]

A year later, the Stockholm European Council adopted the report 'The concrete future objectives of education and training systems'.[4] This document identifies three strategic objectives (quality, access and openness of the education and training systems), broken down into 13 associated objectives. The Barcelona European Council (February 2002) then adopted a detailed work programme[5]

2 *For a more detailed discussion of the background to the development of these Key Competences, please refer to the European Commission's document: http://ec.europa.eu/education/policies/2010/doc/basicframe.pdf from which a lot of this section's discussion is drawn.*

3 *Presidency conclusions. Lisbon European Council 23-24 March 2000, point 26.*

4 *Council document 5980/01 of 14/02/2001.*

5 *Detailed Work Programme on the follow-up of the objectives of education and training systems in Europe (2002/C 142/01)*

for achieving these common goals and objectives by 2010. The detailed work programme extended the list of basic skills as follows: literacy and numeracy (foundation skills), basic competences in mathematics, science and technology, ICT and use of technology, learning to learn, social skills, entrepreneurship and general culture.

The Barcelona Council conclusions also stressed the need for action to improve the mastery of basic skills.In particular, it called for attention to digital literacy and foreign languages. Moreover, it was considered essential to promote the European dimension in education and to integrate it into pupils' basic skills by 2004.

Following the adoption of the detailed work programme, the Commission established expert groups to work on one or more of the thirteen objective areas. These groups consisted of experts from Member States, EFTA/EEA countries, associated countries and European-level associations. The working group on key competences started its work in 2001.[6] The main objectives of the working group was to identify and define what the new skills are and how these skills could be better integrated into curricula, maintained and learned through life. There was a particular focus on less advantaged groups, those with special needs, school dropouts and adult learners.

The working group drew on work that was current at time by other transnational agencies, such as the OECD's project Definition and Selection of Competences (DeSeCo)[7] that looked at what the key competences for a successful life and well-functioning society should be. A similar approach was also chosen by the ASEM initiative.[8] The PISA 2000 international survey[9] also highlighted the importance of the acquisition of broader competences needed for successful learning. In addition to performance in reading and mathematics, it also assessed some generic competences such as student motivation, attitudes and ability to regulate one's learning.

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6 http://www.europa.eu.int/comm/education/policies/2010/objectives_en.

7 *The OECD's Definition and Selection of Competences: Theoretical and Conceptual Foundations (DeSeCo) Project and the ASEM initiative in lifelong learning.*

8 *The Asia-Europe Meeting's lifelong learning initiative. For details, see: http://www.asia-europeinstitute.org/ASEM-LifeLong-Learning/lllcontent.htm.*

9 *OECD. Knowledge and Skills for Life. First results from PISA 2000. Paris: OECD, 2001d.*

The Principles Underlying the Definition of the Key Competences

The progress report of the working group in November 2003 set out the following underlying principles for the definition of the key competences:[10]

i. The framework is the first European-level attempt to provide a comprehensive and well-balanced list of the ***key competences that are needed for personal fulfilment, social inclusion and employment in a knowledge society***. It aims to serve as a ***"reference tool"*** for policy-makers and for those responsible for creating learning opportunities for people at all stages of lifelong learning, allowing them to adapt the framework as appropriate to learners' needs and contexts.

ii The terms ***'competence'*** and ***'key competence'*** are preferred to *'basic skills'*, which was considered too restrictive as it was generally taken to refer to basic literacy and numeracy and to what are known variously as 'survival' or 'life' skills. 'Competence' is considered to refer to ***a combination of skills, knowledge, aptitudes and attitudes,*** and to include the disposition to learn in addition to know-how. A 'key competence' is one crucial for three aspects of life:

a) ***personal fulfilment and development throughout life (cultural capital)***: key competences must enable people to pursue individual objectives in life, driven by personal interests, aspirations and the desire to continue learning throughout life;

b) ***active citizenship and inclusion (social capital):*** key competences should allow everybody to participate as an active citizen in society;

c) ***employability (human capital):*** the capacity of each and every person to obtain a decent job in the labour market.

iii. Given the chosen approach, namely defining the key competences in broader terms, it is neither possible nor relevant, in most of the competence domains, to distinguish between the very ***'basic levels'*** of mastery of a competence from more advanced levels of mastery. The term 'basic' refers to something that depends on the requirements of the situation and circumstances: mastering a skill well enough to solve a problem in one situation might not be enough in another situation.

10 *Progress report of Working Group B on Basic skills, foreign language teaching and entrepreneurship, November 2003. Available at http://www.europa.eu.int/comm/education/policies/2010/objectives_en.html#basic.*

In a constantly changing society, the demands faced by an individual vary from one situation to another and from time to time. Therefore, in addition to possessing the specific basic skills for accomplishing a certain task, ***more flexible, generic and transferable competences*** are needed to provide the individual with a combination of skills, knowledge and attitudes that are appropriate to particular situations. For these reasons, many of the definitions describe rather ***the essential elements that comprise the competence and that are crucial as the competence develops from a basic level of mastery towards a more advanced mastery of the competence.*** The definitions thus leave room for judging the appropriate level of mastery of a competence with regard to the ***contextual factors*** involved.

iv. Moreover, ***measurement of the mastery of most of these competences*** is so far limited. The existing measurement tools such as PISA and IALS give an indication of levels of mastery as regards literacy and numeracy. The Council of Europe's Common European Framework of Reference for Languages ***(CEF)*** describes levels of mastery in foreign languages and research has been done to measure the 'learning to learn' competence. In addition, there are a number of national measurement tools for identifying the appropriate levels of mastery of basic skills in order to guide policymaking at various levels. ***While only some of the key competences are measurable, the framework helps to place these in the context of equally important generic and transversal competences that are more complicated to measure.***

This broad overview of the nature of the Key Competences was synthesised into the following definition:

> ***Key competences represent a transferable, multifunctional package of knowledge, skills and attitudes that all individuals need for personal fulfilment and development, inclusion and employment. These should have been developed by the end of compulsory schooling or training, and should act as a foundation for further learning as part of lifelong learning.***

The working group emphasised that key competences should be transferable so that they a can be applicable in many situations and contexts; and multifunctional, so that they can be used to achieve several objectives, to solve different kinds of problems and to accomplish different kinds of tasks.

A more detailed description of each of the eight competences, as outlined in the working group report, is given in the following pages.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:

Domain	Definition of the Competence	Knowledge	Skills	Attitudes
1. Communication in the mother tongue	Communication is the ability to express and interpret thoughts, feelings and facts in both oral and written form in the full range of societal and cultural contexts — work, home and leisure.	Sound knowledge of basic vocabulary, functional grammar and style, functions of language. Awareness of various types of verbal interaction (conversations, interviews, debates, etc.) and the main features of different styles and registers in spoken language. Understanding the paralinguistic features of communication (voice-quality features, facial expressions, postural and gesture systems). Awareness of different types of literary text (fairy tales, myths, legends, poems, lyric poetry, theatre, short stories, novels) and their main features as well as types of on-literary text (CVs, applications, reports, editorials, essays, speeches, etc.) and their main features. Understanding the main features of written language (formal, informal, scientific, journalistic, colloquial, etc.). Awareness of the variability of language and communication forms over time and in different geographical, social and communication environments.	Ability to communicate, in written or oral form, and understand, or make others understand, various messages in a variety of situations and for different purposes. Communication includes the ability to listen to and understand various spoken messages in a variety of communicative situations and to speak concisely and clearly. It also comprises the ability to monitor whether one is getting one's message across successfully and the ability to initiate, sustain and end a conversation in different communicative contexts. Ability to read and understand different texts, adopting strategies appropriate to various reading purposes (reading for information, for study or for pleasure) and to various text types. Ability to write different types of texts for various purposes. Monitor the writing process (from drafting to proof-reading). Ability to search, collect and process written information, data and concepts in order to use them in study and to organise knowledge in a systematic way. Ability to distinguish, in listening, speaking, reading and writing, relevant from irrelevant information. Ability to formulate one's arguments, in speaking or writing, in a convincing manner and take full account of other viewpoints, whether expressed in written or oral form. Skills needed to use aids (such as notes, schemes, maps) to produce, present or understand complex texts in written or oral form (speeches, conversations, instructions, interviews, debates).	Development of a positive attitude to the mother tongue, recognising it as a potential source of personal and cultural enrichment. Disposition to approach the opinions and arguments of others with an open mind and engage in constructive and critical dialogue. Confidence when speaking in public. Willingness to strive for aesthetic quality in expression beyond the technical correctness of a word/phrase. Development of a love of literature. Development of a positive attitude to intercultural communication.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

The competence consists of the following Domain Definition of the t elements of knowledge, skills and attitudes as appropriate to the context:

Domain	Definition of the Competence	Knowledge	Skills	Attitudes
2. Communication in foreign languages	Communication in foreign languages is the ability to understand, express and interpret thoughts, feelings and facts in both oral and written form in an appropriate range of societal contexts— work home, leisure, education and training — in languages other than the mother tongue and the language(s) of instruction at school, according to one's wants and needs.	Knowledge of vocabulary and functional grammar, intonation and pronunciation. Awareness of various types of verbal interaction (for example, face-to-face and phone conversations, interviews, etc.). Knowledge of an appropriate range of literary and non-literary texts (for example, short stories, poems, newspaper and magazine articles, web pages, instructions, letters, short reports, etc.). Understanding of the main features of different styles and registers in spoken and written language (formal, informal, journalistic, colloquial, etc.). Awareness of societal conventions and cultural aspects and the variability of language in different geographical, social and communication environments.	Ability to listen to and understand spoken messages in an appropriate range of communicative situations (topics that are familiar, of personal interest or pertinent to everyday life). Ability to initiate, sustain and conclude conversations on topics that are familiar, of personal interest or pertinent to everyday life. Ability to read and understand non-specialist written texts on a range of subjects or, in some cases, specialist texts in a familiar field and to write different types of text for various purposes in an appropriate range of situations. Appropriate use of aids (for example, notes, diagrams, maps) to understand or produce written or spoken texts (for example, conversations, instructions, interviews, speeches). Ability to initiate and sustain an appropriate range of autonomous language learning activities.	Sensitivity to cultural differences and resistance to stereotyping. Interest in and curiosity about languages in general (including neighbouring, regional, minority or ancient languages, sign language, etc.) and to intercultural communication

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:

Domain	Definition of the Competence	Knowledge	Skills	Attitudes
3.1 Mathematical literacy	At the most basic level, mathematical literacy comprises the use of addition and subtraction, multiplication and division, percentages and ratios in mental and written computation for problem-solving purposes As mathematical competence develops further, it involves, as appropriate to the context, the ability and willingness to use mathematical modes of thought (logical and spatial thinking) and presentation (formulas, models, constructs, graphs/charts) which have universal application in explaining and describing reality.	Sound knowledge and understanding of numbers and measures and the ability to use them in a variety of everyday contexts is a foundation skill that comprises the basic computation methods and an understanding of elementary forms of mathematical presentation such as graphs, formulas and statistics Sound knowledge of mathematical terms and concepts, including the most relevant theorems of geometry and algebra. Knowledge and understanding of the kinds of questions that mathematics may offer an answer to.	Ability to apply the basic elements of mathematical literacy such as •addition and subtraction; •multiplication and division;•percentages and ratios; •weights and measures to approach and solve problems in everyday life, e.g.: • managing a household budget (equating income to expenditure, planning ahead, saving); • shopping (comparing prices, understanding weights and measures, value for money); • travel and leisure (relating distances to travel time; comparing currencies and prices). Ability to follow and assess chains of arguments, put forward by others, and to uncover the basic ideas in a given line of argument (especially a proof), etc. Being able to handle mathematical symbols and formulae, to decode and interpret mathematical language and to understand its relations to natural language. Ability to communicate in, with, and about mathematics. Ability to think and reason mathematically (mastering mathematical modes of thought,: abstracting and generalising where relevant to the question and modelling mathematically (i.e. analysing and building models) by using and applying existing models to questions posed. Being able to understand and utilise (decode, interpret and distinguish between) different sorts of representations of mathematical objects, phenomena and situations, choosing and switching between representations as and when appropriate. Disposition towards critical thinking; ability to distinguish between different kinds of mathematical statements (between e.g. an assertion and an assumption, etc.); understanding of mathematical proofs and the scope and limitations of a given concept. Ability to make use of aids and tools (including IT).	Readiness to overcome the 'fear of numbers'. Willingness to use numerical computation in order to solve problems in the course of day-to-day work and domestic life. Respect for truth as the basis of mathematical thinking. Willingness to look for reasons to support one's assertions. Willingness to accept or reject the opinions of others on the basis of valid (or invalid) reasons or proofs.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY				
		The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:		
Domain	**Definition of the Competence**	**Knowledge**	**Skills**	**Attitudes**
3.2 Competence in science & technology	Scientific competence is the ability and willingness to use the body of knowledge and the methodology employed in the field of science to explain the natural world. Competence in technology is viewed as the application of that knowledge in order to modify the natural environment in response to perceived human wants or needs.	Knowledge of basic principles of the natural world, of technology and of technological products and processes. Understanding of the relationship between technology and other fields: scientific progress (for example in medicine), society (values, moral questions), culture (for instance multimedia), or the environment (pollution, sustainable development).	Ability to use and manipulate technological tools and machines as well as scientific data and insights to achieve a goal or reach a conclusion. Ability to recognise the essential features of scientific inquiry. Ability to communicate conclusions and the reasoning that led to them.	Curiosity about and a critical appreciation of science and technology including safety or security issues as well as ethical questions. Positive yet critical attitude towards the use of factual information and awareness of the need for a logical process in drawing conclusions. Willingness to acquire scientific knowledge and interest in science and scientific or technological careers.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

		The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:		
Domain	**Definition of the Competence**	**Knowledge**	**Skills**	**Attitudes**
4. Digital competence	Digital competence involves the confident and critical use of Information Society Technologies (IST) for work, leisure & communication. These competences are related to logical and critical thinking, to high-level information management skills, and to well-developed communication skills, including At the most basic level, this is the use of multi-media technology to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in networks via the Internet	Sound understanding of the nature, role and opportunities of IST in everyday contexts comprises: • Understanding the main computer applications, including word processing, spreadsheets, databases, information storage and management; • Awareness of the opportunities given by the use of Internet and communication via electronic media (e-mail, videoconferencing, other network tools); and the differences between the real and virtual world • Understanding the potential of IST to support creativity and innovation for personal fulfilment, social inclusion and employability; • Basic understanding of the reliability and validity of the information available (accessibility/acceptability) and awareness of the need to respect ethical principles in the interactive use of IST.	As IST have many and growing applications in everyday life, such as learning and leisure activities, the required skills comprise: • Ability to search, collect and process (create, organise, distinguish relevant from irrelevant, subjective from objective, real from virtual) electronic information, data and concepts and to use them in a systematic way; • Ability to use appropriate aids (presentations, graphs, charts, maps) to produce, present or understand complex information; • Ability to access and search a website and to use internet-based services such as discussion fora and e-mail; • Ability to use IST to support critical thinking, creativity and innovation in different contexts at home, leisure and work.	As IST have many and growing applications in everyday life, such as learning and leisure activities, the required skills comprise: • Ability to search, collect and process (create, organise, distinguish relevant from irrelevant, subjective from objective, real from virtual) electronic information, data and concepts and to use them in a systematic way; • Ability to use appropriate aids (presentations, graphs, charts, maps) to produce, present or understand complex information; • Ability to access and search a website and to use internet-based services such as discussion fora and e-mail; • Ability to use IST to support critical thinking, creativity and innovation in different contexts at home, leisure and work.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:

Domain	Definition of the Competence	Knowledge	Skills	Attitudes
5. Learning to learn	'Learning-to-learn' comprises the disposition and ability to organise and regulate one's own learning, both individually and in groups. It includes the ability to manage one's time effectively, to solve problems, to acquire, process, evaluate and assimilate new knowledge, and to apply new knowledge and skills in a variety of contexts — at home, at work, in education and in training. In more general terms, learning-to-learn contributes strongly to managing one's own career path.	Knowledge and understanding of one's preferred learning methods, the strengths and weaknesses of one's skills and qualifications. Knowledge of available education and training opportunities and how different decisions during the course of education and training lead to different careers	Effective self-management of learning and careers in general: ability to dedicate time to learning, autonomy, discipline, perseverance and information management in the learning process. Ability to concentrate for extended as well as short periods of time. Ability to reflect critically on the object and purpose of learning. Ability to communicate as part of the learning process by using appropriate means (intonation, gesture, mimicry, etc.) to support oral communication as well as by understanding and producing various multimedia messages (written or spoken language, sound, music etc.).	A self-concept that supports a willingness to change and further develop competences as well as self-motivation and confidence in one's capability to succeed. Positive appreciation of learning as a life-enriching activity and a sense of initiative to learn. Adaptability and flexibility.
6.1 Interpersonal, intercultural & social competences	Interpersonal competences cover all forms of behaviour that one must master as an individual in order to be able to participate in an efficient, constructive way and resolve conflict in social life, in interaction with other individuals (or groups) in personal, family and public contexts	Understanding of codes of conduct and manners generally accepted or promoted in different societies. Awareness of concepts of individual, group, society and culture and the historical evolution of these concepts. Knowledge of how to maintain good health, hygiene and nutrition for oneself and one's family. Understanding of the intercultural dimension in European and other societies.	Ability to communicate constructively in different social situations (tolerating the views and behaviour of others; awareness of individual and collective responsibility). Ability to create confidence and empathy in other individuals. Ability to express one's frustration in a constructive way (control of aggression and violence or self-destructive patterns of behaviour). Ability to maintain a degree of separation between the professional and personal spheres of life, and to resist the transfer of professional conflict into personal domains. Awareness and understanding of national cultural identity in interaction with the cultural identity of Europe and the rest of the world; ability to see and understand the different viewpoints caused by diversity and contribute one's own views constructively. Ability to negotiate.	Showing interest in and respect for others. Willingness to overcome stereotypes and prejudices. Disposition to compromise. Integrity. Assertiveness.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

	The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:			
Domain	**Definition of the Competence**	**Knowledge**	**Skills**	**Attitudes**
6.2 Civic competences	The scope of civic competences is broader than that of interpersonal competences by virtue of their existence at societal level. They can be described as the set of competences that allow the individual to achieve participation in civic life	Knowledge of civil rights and the constitution of the host country, the scope of its government. Understanding the roles and responsibilities of institutions relevant to the policy-making process at local, regional, national, European and international level (including the political and economic role of the EU). Knowledge of key figures in local and national governments; political parties and their policies. Understanding of concepts such as democracy, citizenship and the international declarations expressing them (including the Charter of Fundamental Rights of the European Union and the Treaties). Knowledge of the main events, trends and agents of change in national, European and world history; the present situation of Europe and its neighbours. Knowledge of emigration, immigration and minorities in Europe and in the world.	Participation in community /neighbourhood activities as well as in decision-making at national and European levels; voting in elections. Ability to display solidarity by showing an interest in and helping to solve problems affecting the local or the wider community. Ability to interface effectively with institutions in the public domain. Ability to profit from the opportunities given by the EU. Necessary skills in the language spoken in the country	Sense of belonging to one's locality, country, the EU and Europe in general and (one's part of) the world. Willingness to participate in democratic decision-making at all levels. Disposition to volunteer and to participate in civic activities, support for social diversity and social cohesion. Readiness to respect the values and privacy of others with a propensity to react against anti-social behaviour. Acceptance of the concept of human rights and equality as a basis of solidarity and responsibility in the modern democratic societies of Europe; acceptance of equality between men and women. Appreciation and understanding of differences between value systems of different religious or ethnic groups. Critical reception of information from mass media.

FRAMEWORK FOR KEY COMPETENCES IN A KNOWLEDGE-BASED SOCIETY

The competence consists of the following Domain Definition of the following elements of knowledge, skills and attitudes as appropriate to the context:

Domain	Definition of the Competence	Knowledge	Skills	Attitudes
7. Entrepreneurship	Entrepreneurship has an active and a passive component: the propensity to bring about innovation oneself, but also the ability to welcome and support innovation brought about by external factors. Entrepreneurship includes welcoming change, taking responsibility for one's actions (positive or negative), setting objectives and meeting them and having the motivation to succeed.	Knowledge of available opportunities in order to identify those suited to one's own personal, professional and/or business activities	Skills for planning, organising, analysing, communicating, doing, de-briefing, evaluating and recording. Skills for project development and implementation. Ability to work co-operatively and flexibly as part of a team. Being able to identify one's personal strengths and weaknesses. Ability to act proactively and respond positively to changes. Ability to assess and take risks as and when warranted.	Disposition to show initiative. Positive attitude to change and innovation. Willingness to identify areas where one can demonstrate the full range of enterprise skills — for example at home, at work and in the community.
8. Cultural expression	Appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, corporal expression, literature and plastic arts	Basic knowledge of major cultural works, including popular culture, as an important testimony of human history, Awareness of national and European cultural heritage and their place in the world; Awareness of Europe's cultural and linguistic diversity; Awareness of the evolution of popular taste and of the importance of aesthetic factors in daily life.	Capacity for artistic self- expression through a range of media consistent with the individual's innate capacities; Ability to appreciate and enjoy works of art and performances based on a broad definition of culture; Ability to relate one's own creative and expressive points of view and manifestations to those of others; Ability to identify and realise economic opportunities in cultural activity	An open attitude to diversity of cultural expression; Willingness to cultivate an aesthetic capacity through artistic self-expression and continuing interest in cultural life; A strong sense of identity combined with respect for diversity.

Chapter 4
The Implementation of the Project

Introduction

Having agreed clear objectives for the project, it was equally important to set a 'roadmap' for the duration of the project in order to ensure that these objectives were met in full. Having a clear division of tasks and ensuring the active involvement of all partners is central to the success of networks similar to those involved in this project.

At the outset, seven clear activities/responsibilities were identified in order to ensure the success of the network. These were:

1. The overall co-ordination and 'driving' of the project
2. The organisation of workshops
3. The evaluation and documenting of these workshops
4. The ongoing evaluation of the project
5. The development and maintenance of the project website
6. The video recording and editing of the workshops and uploading these up to the project website
7. The publication of Guide to Best Practice

In addition, it was also agreed that two surveys would be conducted during the project. One would be to investigate the experiences of adult learners in different countries in order to come to some understanding of the difficulties they face in adult education, and also to ascertain if there are any noticeable differences in their experiences across the various partner countries. The second survey was for teachers of adult learners.

It was completed by teachers in each of the partner organisations in order to determine what their views on teaching adult learners were and also to identify what these teachers felt were the most effective strategies for teaching adults. The aim of both of these surveys was that their findings would be used to inform and shape the outcomes for the project as a whole.

In addition to these activities, an additional activity was agreed and developed during the project. This was the production of case studies that could be used to inspire and motivate adult learners. It was felt that these case studies would be invaluable additional resources. The addition of these case studies demonstrates that such networks should be dynamic and open to new proposals that draw upon the individual strengths of each partner in the network.

Each of these activities will now be described in order to give an overview of how they were implemented in practice. Given their centrality to the project, the workshops and the project's website will be discussed in some detail, while the other activities will be described to a lesser degree.

But given the fact that their findings were being used to inform the rest of the project, we will first examine briefly the two questionnaires that were conducted during the lifetime of the network. A full examination of the findings of these questionnaires will be given in Chapter 6 where the findings will be used in the development of the Framework of Enjoyable Learning Approaches.

The Questionnaires

Introduction

From the outset, it was felt that the project obviously needed to involve learners in the process of developing creative and innovative ways of teaching the key competences. A short questionnaire was designed that sought to identify some of the key concerns and difficulties they have in participating in adult education. The results of this questionnaire would be used to inform the development of best practice in teaching the key competences to adult learners, as well as helping to shape the framework for best practice.

It was also deemed important to elicit the views of the teachers from each organisation in order to determine what they felt were the difficulties and barriers involved

in teaching adult learners. The questionnaires would also be used to determine what these teachers felt were the most effective teaching strategies, as well as seeing if these experienced teachers had suggestions for effective strategies in delivering adult education. Again, the outcomes of these questionnaires would be used to inform the development of the framework for best practice in delivering effective and joyful adult learning sessions.

The Questionnaire for Adult Learners

This questionnaire was completed by adult learners in each of the ten organisations involved in the network. It was designed to identify some of the key concerns and difficulties that they have as adult learners. It also allowed the learner to state which teaching methodologies they felt to be the most effective when teaching adults.

The questionnaire was designed to be completed in five minutes or less, and the language used was designed to be straightforward given that the questionnaire was to be completed by a number of students whose first language wasn't English. These questionnaires were completed by 89 learners throughout the participating organisations in the network. A full discussion of the findings is given in chapter 6. A copy of the questionnaire is shown in Figure 4.1.

Let's do it CREATIVELY

Lets Do it Creatively For the Benefit of Adult Learners

LET's Questionnaire for Adult Learners

This short questionnaire is designed to identify some of the key concerns and difficulties that you, as an adult learner, may have. It should take no more than 5 minutes to complete.

Questions (Please only tick one box per question)	Very Good	Good	Neither Good Nor Bad	Bad	Very Bad	This does not apply to me
1. How good was the help staff gave you in the first few weeks of your course						
2. How good is the help staff give now on your course?						
3. How good was the information you were given when you were choosing your course?						
4. How good is the respect you receive from learning staff?						
5. How good is the advice you have been given about what you can do after this course?						

6. How good is the support you get on this course?						
7. How good is your course provider at listening to the views of learners?						
8. How good is your course provider at acting on these views?						
9. Overall, how good do you think your course is?						
10.How good do you rate the methods of teaching/learning on this course?						

What are the greatest difficulties you have as an adult learner? (Please tick all that apply?)

Poor teaching methods.	Bad experience previously at school.	Difficult to balance course and life commitments.	The teacher doesn't make the subject matter interesting.	The content of the course is not what I expected.	Other (Please state)

In your experience, which of the following is the most effective way of teaching adults?:

Lecture-based teaching	
Role playing	
Project work	
Group discussion	
Case Studies	
Question and Answer type classes	
Audio visual materials (CD ROM, video tapes, etc)	

Do you have any other comments/suggestions as to how your learning experience can be improved?

Figure 4.1: The questionnaire for learners

The Questionnaire for Teachers of Adult Learners

Since the main objective of the network was to develop creative and innovative ways of teaching the core competences in a supportive and joyful atmosphere, it was felt necessary to determine the views of teachers, both in terms of current practice and also to see if they had views on developing creative and innovative teaching techniques.

The first question that was asked was whether the teachers felt there was a difference between teaching adults and younger students. If teachers believed there was a difference, they were then asked their views on what these differences may be. Teachers were also asked what they felt were the main challenges in teaching adults. It was felt that the answers to these questions could be an important determinant in developing the Framework of Best Practice.

The next part of the questionnaire asked the teacher to rate different teaching methodologies in order to determine which they felt was most effective in teaching adults.

As a complementary question to this, the teachers were asked what advice/ guidance would they give to a teacher who was starting to teach adults. The final question asked them to describe some effective ways of teaching adults that they have used in the past.

A full analysis of the results of this questionnaire will be given in chapter 7 as part of the discussion in developing the Framework of Best Practice.

A copy of this questionnaire is given in Figure 4.2.

Let's do it CREATIVELY

Lets Do it Creatively For the Benefit of Adult Learners

LET's Questionnaire for Teachers of Adult Learners:

This questionnaire is designed to identify good practice in teaching adult learners. It should take no longer than 5 minutes to complete.

1. Do you think there is a difference between teaching Adult learners and younger students?

Yes ☐ No ☐ If Yes, what do you think these differences are?:

2. What are the main challenges you face teaching adults?

3. Please rate the following teaching methods in terms of how effective they are in Adult Learning:

	Excellent	Good	Neither Good Nor Bad	Poor	Very Poor
Lectures					
Reading from Text Book					
Group Work					
Question and Answers					
Projects					

4. What advice/guidance would you give to a teacher who was starting to teach adults?

5. Can you describe some effective ways of teaching adults you used?

Figure 4.2: The questionnnaire for teachers of Adult Learners

Activity 1
The overall co-ordination and 'driving' of the project

While networks by their nature are collaborative, it is important that a co-ordinator is agreed upon at the outset who will help the network to work effectively; will be a channel for communications; and will be responsible for the overall co-ordination and 'driving' of the project.

The co-ordinating organisation for this project was the Irish partner, County Dublin Vocational Education Committee. A single point of contact, Kevin Harrington, was appointed to lead the development of the project on behalf of the co-ordinating organisation. A working group was also formed in the organisation to help him steer the project throughout the two years of its existence.

The membership of this working group included a representative from the organisation's senior management team, as well as teacher representatives and other management representatives from throughout the co-ordinating organisation. This approach was felt to be necessary in order to ensure 'buy in' to the project by individuals throughout the organisation.

The active involvement of all the other partner organisations was ensured through the development of clear communication channels and through agreeing a clear schedule of tasks and responsibilities for the project at the outset. This agreed schedule of tasks and responsibilities was made available to all project members via e-mail as well as being posted on the project website. Partners were therefore clear at the outset of the project as to roles and responsibilities. The project co-ordinator was also involved in co-ordinating the allocation of additional tasks on a fair and agreed basis throughout the lifetime of the task.

The role of the co-ordinator in such a project is of paramount importance to ensure its success. Clear communications need to be maintained with all partners throughout the lifetime of the network. It is also vitally important that the schedule of agreed tasks is clear, equitable and adhered to.

Activity 2
The organisation of the workshops

Central to the idea of Grundtvig Learning Partnerships is that the participants, both teachers and learners, will partake in transnational activities or 'mobilities'. The idea is that those involved in the project will travel to different countries to experience different cultures, and to share best practice related to the project's area of focus. During the course of the project, five transnational workshops were organised. Each workshop had their own focus as shown in Table 4.1.

Table 4.1: An overview of the workships

Venue	Date	Focus
Portugal	6 – 7 November 2009	Team building and fine-tuning the project. Review the activity plan. Discuss budgetary issues and the allocation of tasks. Setting targets: determine milestones for the project and agreement on the time-line. Quality control: devising an evaluation and monitoring plan for the project.
Malta	16—17 April 2010	Digital Skills Entrepreneurship
Czech Republic	22—23 October 2010	Competences in maths, science & technology
Romania	1 – 2 April 2011	Digital Skills Learning to Learn Foreign Languages
Ireland	30 June – 1 July 2011	Interpersonal, intercultural and social competences, and civic competence Communication in the mother tongue

Since these workshops were central to the activities of the network, a fuller description of each of them is warranted.

Workshop 1: Portugal

The first meeting of the project took place in the beautiful town of Lousã in the Coimbra region of Portugal from the 5th to the 8th November, 2009. This first meeting was very much about putting the project on a firm footing and to build relationships among the partners to ensure a successful project.

In order to achieve this, the work-shop had four key objectives:

1. Team building
2. Fine-tuning the project: review the activity plan; discuss budgetary issues and the allocation of tasks.
3. Setting targets – determine milestones for the project and agree on the timeline.
4. Quality control – think about an evaluation and monitoring plan for the project.

This first workshop in Portugal achieved its objectives and more. Good relationships were built and clear and achievable objectives were agreed. Some of the other outcomes from the initial meeting included:

» A Gantt chart setting out the objectives and key milestones of the project was agreed

» Agreement was reached on effective communications strategies

» Strong relationships and a sense of collegiality was developed among the partners

» The basis of the project's website was agreed

» A logo and other promotional tools for the project were agreed

Such a meeting is crucial to the success of networks such as this and the time invested in planning at this initial meeting proved invaluable to the overall success of the project.

Participants getting artistic in Portugal

Workshop 2: Malta

The project's second meeting took place in the beautiful Mediterranean island of Malta in April 2011. The focus of the workshops was sharing good practice in teaching Information Technology and Entrepreneurship to Adult Learners.

This was the first transnational meeting where the participants explored best practice in teaching the key competences.

This meeting commenced on the first day with three parallel workshops devoted to: e-Twinning; video making; and blogging in education. These workshops were led by subject experts from Malta. Best practice presentations were then delivered by different partners. Presentations were delivered on:

» Dealing with Web 2.0 and its educational potential

» Voting Systems in Teaching and Pedagogy

» Supporting Entrepreneurship Through Creativity & Innovation

» A study of methodology in teaching Entrepreneurism

The workshops required participants to engage in group work which led to more communication, discussion and sharing of ideas. Overall, the meeting was very successful, despite the fact that, due to the eruption of the Icelandic volcano and the ensuing disruption to European airspace, the partners from Ireland, the coordinating country, were unable to attend.

However, the workshop itself was an outstanding success and many creative and innovative ways of teaching the competences involved were shared. Friendships were strengthened and the partners left Malta with renewed enthusiasm for the purpose and ideals of the project.

Brainstorming workshop in Malta

Workshop 3: Czech Republic

The topic for this workshop was: 'creativity and motivation in teaching maths, science and technology'. Following on from the successful format of the Maltese workshop, the session opened with three parallel workshops on: Team Building, Video Analysis and Data Logging. The following presentations on best practice were also delivered by the partners:

- Working creatively in a project – older unemployed academics work for local enterprises
- Adult Training on 1 : 1 Classroom Technology
- Search to Learn
- Workshop on Solar Panels
- Workshop on numeracy which included basic numeracy revision for everyone and calculating ratios in cooking (material was prepared in both English and Spanish)
- Teaching binary numbers
- Helping parents to learn again … some mathematics
- Finally, a learner at the workshop Aidan Cooper (Great Britain) presented his ideas, experiences and video on gardening.

Teaching maths creatively in the Czech Republic

Workshop 4: Romania

The focus of this workshop was on Digital Skills, Learning to Learn and Teaching Foreign Languages. Again, three practical workshops were delivered. These workshops were:

» One letter – Ten sounds – One world

» Creating interactive presentations

» Teaching Speaking

These practical workshops proved to be very beneficial over the life to the project. Not only did they develop the skills of the partners involved, but they also helped in exploring different didactic styles.

Presentations were also delivered that shared good practice in teaching the key competences that were the focus for this workshop. The presentations delivered were:

» Virtual and augmented reality in education

» Stephen Wolfram and Mathematica

» Teaching Digital Skills to Adult Learners: A Case Study

» Reading Don Quixote

» Cultural Studies and Italian Language Teaching

» Learning to Learn: A German Case Study

Joyful cultural learning in Romania

Workshop 5: Ireland

The final workshop of the project was held in Ireland.

The focus of this workshop was:

» Interpersonal, intercultural and social competences

» Civic competences

» Communications in the mother tongue

This workshop also focussed on finalising the network's outcomes such as the website and other publications.

Full details of all the workshops, are available on the project's website. This website also contains more interactive materials that give a fuller flavour of all the outcomes of the workshops. The project's website is:

www.letsdoit.upol.cz

Activity 3
The evaluation and documenting of these workshops

And

Activity 4
The ongoing evaluation of the project

Since there are a lot of similarities between these two activities, it is appropriate that they are discussed together.

As has been previously stated, the five workshops were central to the success of the network. It was therefore vitally important that they operated effectively. It was also equally important that the outcomes of these workshops were fully documented in order to allow for discussion and analysis. The lessons learnt during these workshops were also to be used to develop the framework of joyful

learning experiences, further underlining the importance of having workshops that were fully documented.

In terms of evaluation of the workshop there were three strands to this. Firstly, at the end of each workshop the participants were asked to complete a simple questionnaire looking for their views on the success of the workshop and how it could be improved upon for the next one.

These questionnaires were then collated in a short report that was made available to all the partners. The feedback from these questionnaires was used to improve the design and delivery of the next workshop.

Secondly, as part of each workshop, time was set aside for management meetings whereby the co-ordinators from each of the participating organisations were able to discuss the on-going development of the project and in particular the workshops. Again this discussion was used to help improve the way the workshops were delivered and managed.

Finally, there was constant discussion between the partners in the intervals between the workshops. This was mainly done by e-mail and this allowed agreement to be reached in terms of the content and balance of each of the workshops.

The documenting of these workshops was equally important and again there was a three-stranded approach to how this was carried out. The main mechanism was through the project's website.

A second strand was through the video recording of the workshops and the uploading of the videos on to the project's website. Both of these are described in more detail in the next few pages. The third strand was that clear minutes were written following each management meeting. These were circulated shortly after the workshops and were also uploaded on to the project's website.

This constant evaluation and the documenting of the outcomes of the workshop proved invaluable in achieving the objectives of the project.

Activity 5

The development and maintenance of the project website

A project website was always considered as an important tool of communication, sharing ideas and outputs of the project. Therefore one session of the first project meeting in Lousã (Portugal) in November 2009 was devoted to the design of the website and its functions.

Following the conclusions of that debate, the Czech and Romanian partners agreed to be responsible for the realisation of this task with the help of all the other partners. In general we decided to make use of the free hosting provided by the Palacký University in Olomouc and freeware tools.

The reason for this is obvious - it both saves the project money for the other activities and might serve as an inspiration for other education project or non-profit organisations for whom it may not be possible to pay for professional web design. The site is running since the beginning of the December 2009 and it is constantly kept updated. In this section we summarise the main parts of the website and their function and role for our project.

One of the Maltese partners (MECB) is also running a supporting project website:

http://www.mecb.com.mt/letscreate.html

The DokuWiki Engine

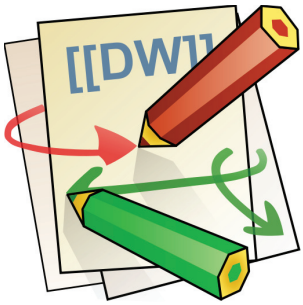

Figure 4.3:
DokuWiki's logo - created by Esther Brunner

The website may be run in two basic regimes. In the first variant there is one competent person (or a small group) who is fully responsible for the website and has all the necessary rights to add any content to the web. If anybody wants to make any update or change, it is necessary to contact the webmaster. In our project we have chosen a group-work variant, so that all the partners and their staff can – at least in principle – have a website account and modify the text, add files, pictures, etc. On the other hand we

intended to keep the website and its maintenance as simple as possible. Therefore we have established the pages on the DokuWiki engine (see references for more information). By a Wiki we mean a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified mark-up language or a WYSIWYG text editor. Wikis are typically powered by wiki software and are often used collaboratively by multiple users. Examples include community websites, corporate intranets, knowledge management systems, and note services. The software can also be used for personal note taking. It is possible to give different permissions to users who have control over different functions (levels of access). For example editing rights may permit changing, adding or removing material. Others may permit access without enforcing access control.

According to its developers, DokuWiki is a standard compliant, simple to use Wiki, mainly aimed at creating documentation of any kind. It is targeted at developer teams, workgroups and small companies. It has a simple but powerful syntax which makes sure the data files remain readable outside the Wiki and eases the creation of structured texts. DokuWiki is licensed under GPL 2 and written in the programming language PHP. It works on plain text files and thus needs no database. Its syntax is similar to the one used by MediaWiki, the engine behind the widely used and popular Wikipedia. The Monobook template of the website was also chosen to be similar to the free encyclopaedia design.

Parts of the Website and Plugins

The main parts, or sections, of the website follow the agreement from the first project meeting. They include key pieces of information about the project and its objectives; introductions to the partnership institutions; media files including the outputs; interesting links connected with the project activities and goals; and two sections oriented towards the internal communication – one collecting the meetings' agenda, pictures and minutes and the second non-public (accessible for registered users only) that includes the blog interface and detailed contact information. All sections are accessible from the left menu as shown in Figure 4.4.

Figure 4.4: The introduction page of the website

The DokuWiki system provides not only ready-to-use templates for various website layouts, but also a lot of plugins enhancing its functionality. Within our project we make use especially of these: Blog, Filelist, Flowplayer, Gallery and Dlcount plugins. The Flowplayer plugin enables the user to include videos from the project activities that can be viewed right from the website (Fig. 4.5).

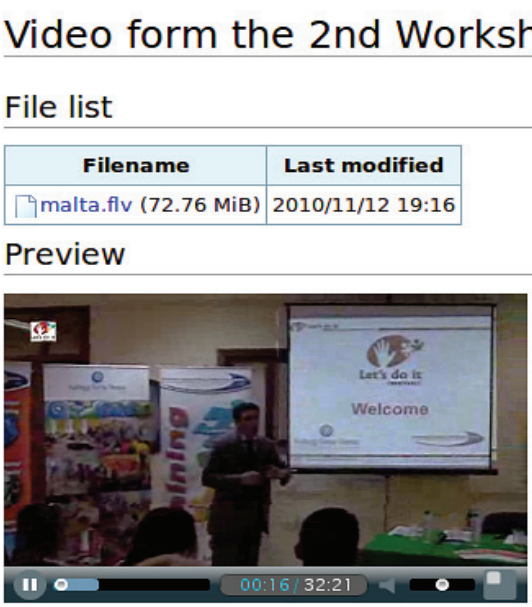

Figure 4.5: The flowplayer plugin in action

To save uploading time and server disc space all the videos were converted into flash-video format. This is a widely used format e.g. by YouTube. Also, the pixel resolution of the media was reduced.

The Filelist and Gallery plugins are very useful for generating lists of image thumbnails and files in directories (eventually filtered by name strings) linking them with the corresponding media. The Blog plugin enables the website to run a blog system. Our experience with the DokiWiki in regards to this is rather mixed, as the blog has been attacked by many spam robots and therefore it was necessary to move it into to password protected part of the website. On the other hand, the participants of the project are not typical bloggers and do not insist on the full functionality of this feature.

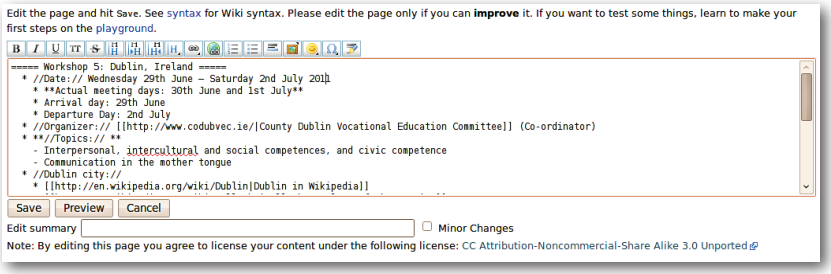

Figure 4.6:
An example of page editing with DokuWiki

Another important question for an international project website is whether and how to include the national languages of the participants. The main problem with this is that it is not practical to keep several versions in various languages, because it usually results in noticeable differences after several updates and because the main communication language within the project is English, we decided to keep and maintain the English version only. An automatic connection to the Google translator is provided by the ConveyThis button which enables the non-English speaking user to get the main sense of the content.

Website Statistics

With every website an important piece of information is its popularity among potential visitors - how often it is used and how effectively it supports the propagation of the project. To monitor the website traffic we employed a free variant of the GoStats service. During the existence of the website the quite satisfactory number of 10,270 hits was recorded (status as of 4th June 2011). The basic performance data is summarised in Table 4.2.

Table 4.2: Details of visitors to the website (as of 4th June 2011)

	Today	Estimate	Yesterday	7 Days	Week avg	30 Days	12 Months	Total
Page views	10	13	20	105	15	478	6074	10271
IP hosts	2	2	6	23	3	98	796	1007
Unique visitors	3	3	7	28	4	103	907	1162
Unique sessions	4	5	11	39	5	166	1840	2692
Page views per visitor	3.3	4.3	2.9	3.8	4.3	4.6	6.7	8.8.
Sessions per visitor	1.3	1.7	1.6	1.4	1.4	1.6	1.2	2.3
Visitors per IP host	1.5	1.5	1.2	1.2	1.2	1.1	1.1	1.2

As the development of a website is a continuing process, during the second year of the project (since June 2010) we are also monitoring the geographical location of our visitors by the means of two other free instruments –Flag Counter (Figure 4.7) and ClustrMaps (Figure 4.8). There was no surprise that most of them came from the countries involved in the project, but others are spread all around the world.

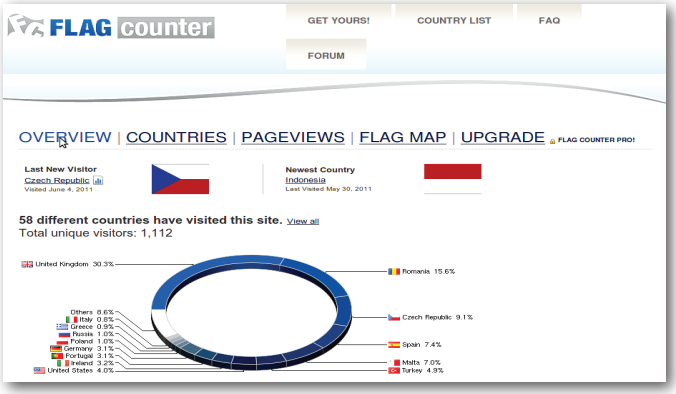

Figure 4.7: A FlagCounter statistics output of visitors to the website by nationality(as of 4th June 2011)

Figure 4.8:
A ClustrMaps statistics output of visitors to the website by country (status as of 4th June 2011)

Through the GoStats statistics it is also possible to monitor the referring websites from which the visitors to the website came (most of the GoStats enhanced functions are available either for a limited period of about 3 months or within the paid extension). As expected, most visitors connected with the project came straight to the website, having its address in their bookmarks or favourite site lists. We are very glad that the popularity of the website ensures it is now recognised by the Google search engine. (Figure 4.9)

letsdoit.upol.cz	1150		81.39%
google.pt	49		3.47%
mecb.com.mt	45		3.18%
jpetutors.com	21		1.49%
en.wikipedia.org	20		1.42%
google.es	19		1.34%
google.ie	12		0.85%
translate.googleusercontent.com	10		0.71%
google.com	11		0.78%
infoidploiesti.ro	16		1.13%
cnmv.ploiesti.roedu.net	8		0.57%
google.com.tr	9		0.64%
google.ro	7		0.5%
cepacaceres.juntaextremadura.net	4		0.28%
observatorulph.ro	4		0.28%
facebook.com	3		0.21%
google.co.uk	4		0.28%
search.yahoo.com	3		0.21%
google.cz	3		0.21%

Figure 4.9:
A list of the main pages from which the visitors of the website came during April and May 2011

As an example of other possible site monitoring tools we have included a survey of the web browsers (Figure 4.10) and operating systems (Figure 4.11) used by the visitors within two months.

2011/04/01 — 2011/06/04

Browser	Count	
Firefox	782	51.62%
MSIE	563	37.16%
Google	138	9.11%
Safari	18	1.19%
Netscape	12	0.79%
Googlebot-Image	2	0.13%

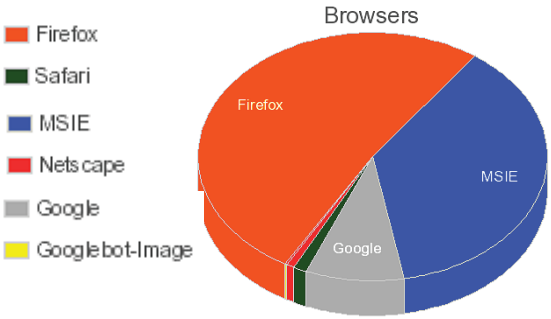

Figure 4.10: Visitors by browsers from 1st April to 4th June 2011 as recorded by GoStats

2011/04/01 — 2011/06/04

OS	Count	
Windows	1004	66.27%
Linux	489	32.28%
Unknown	14	0.92%
Macintosh	8	0.53%

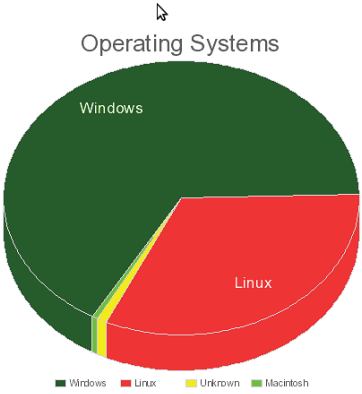

Figure 4.11: Visitors' operating systems from 1st April to 4th June 2011 as recorded by GoStats

Other Tools

It is no wonder that in the time of increasing Facebook popularity some of the participants involved in the project activities suggested to make use of this social network to support our project community.

The UK partner (JPE) has started with the Facebook group 'Let's so it creatively … for the Benefit of Adult Learners'. The project meetings are also announced as Facebook events (Figure 4.12). It also enables the sharing of meeting photos.

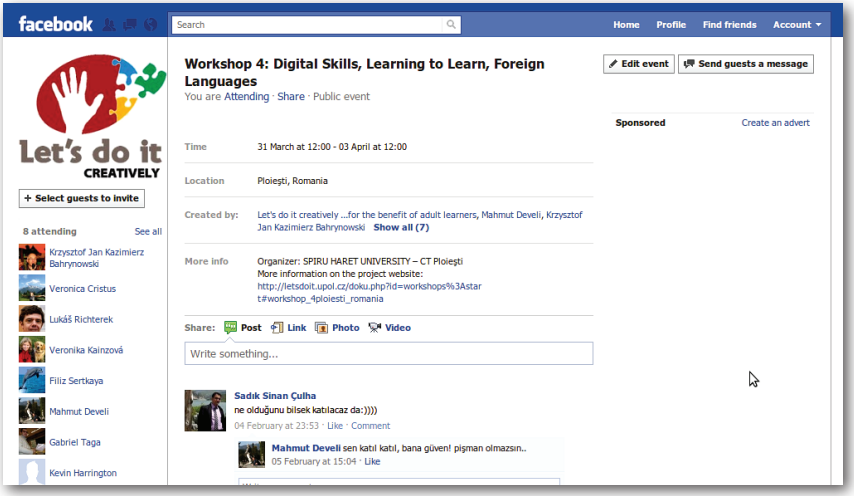

Figure 4.12:
A Facebook event for the project's fourth meeting in Romania

Activity 6
The video recording of the workshops

Videos of all the workshops were taken and edited by the Czech partner. Different aspects of the meeting were recorded including introductory speeches, workshops, management meetings, excursions and closing ceremonies. All videos have small resolution (320x180px) FLASH VIDEO format, which can be uploaded on to the

project website. Higher quality movies were distributed to all partners on DVD. The DVDs were formatted to play on home DVD players. They contain video converted to the file format for DVD, as well as menus and chapters. (Figure 4.13) All the videos are available from the project's website: *www.letsdoit.upol.cz*

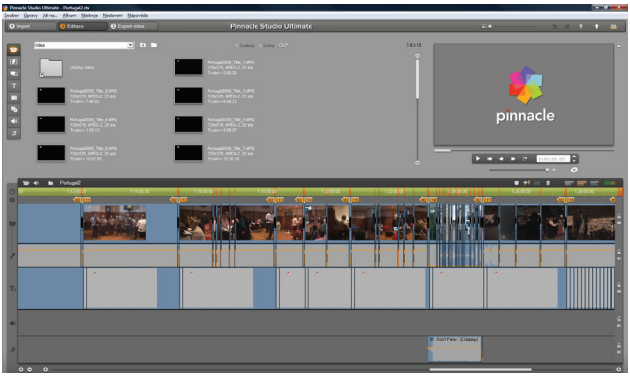

Figure 4.13: Screengrab of the video recording of a workshop being edited

Activity 7

The publication of Guide to Best Practice

This activity was to be the culmination of the network's activities in that it was the distillation of all the experiences and knowledge gained over the course of the two-year lifetime of the project. Initially, it was envisaged that this would be a simple leaflet or, at most, a booklet. However, as the project progressed it was felt by the partners that a more substantial publication may be warranted as this would not only contain the guide to best practice, but it would also document the richness of the project as well as serving as a case study on how such networks can work in practice. The result is the publication that you now have in your hands.

This book was a collaborative exercise, but its co-ordination was done by the Irish partner who also served as one of the editors, together with one of the Maltese partners. The workload in preparing this publication was divided between the partners and the final publication was printed in time for the final workshop in Dublin. It is intended that this publication will be circulated to staff and other interested parties.

An Additional Activity

The Case Studies

As one knows, key competences for lifelong learning are a combination of knowledge, skills and attitudes appropriate to the context. The European Parliament had outlined in its 2006 communication (2006/962/EC) eight competences which EU citizens should have, namely

1) Communication in the mother tongue;

2) Communication in foreign languages;

3) Mathematical competence and basic competences in science and technology;

4) Digital competence;

5) Learning to learn;

6) Social and civic competences;

7) Sense of initiative and entrepreneurship; and

8) Cultural awareness and expression.

During the LETS DO IT project, a number of workshops were specifically held to target the knowledge transfer to adults on the above key competences. However, in addition to these workshops, the project consortium felt the need to introduce the use of case studies. This need was felt because, in order to make knowledge transfer about competences effective, joyful and motivational, adults need to be convinced on how competences are practically used in real life i.e. the time they are investing in acquiring a competence will reap benefits in the longer term.

To give an example, one can provide background knowledge on the competence concerned with initiative and entrepreneurship.

However, this knowledge transfer becomes much more effective once the adult learners are also given case studies of successful entrepreneurs and how with the right initiatives, they managed to develop interesting and rewarding businesses. Similarly, to motivate learners 'digital competence' case studies, such as the

'Technology in Business' one, were generated as part of the LETS DO IT project.

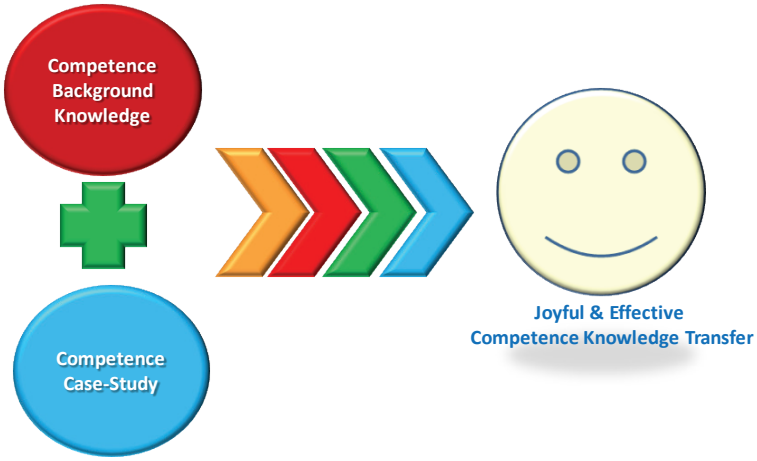

Figure 4.14: The importance of case studies

How the Case-Studies Were Generated

Given that the LETS DO IT project had partners with expertise in different competences, agreement was reached in one of the project partner meetings on different case studies that needed to be generated by the partners.

To help establish a common approach to the case studies, a project template was generated and distributed to the partners for the generation of their case studies. The aim was to have focused, yet short and easy to read case-studies. Case studies were generated and an internal peer review mechanism was used to check content.

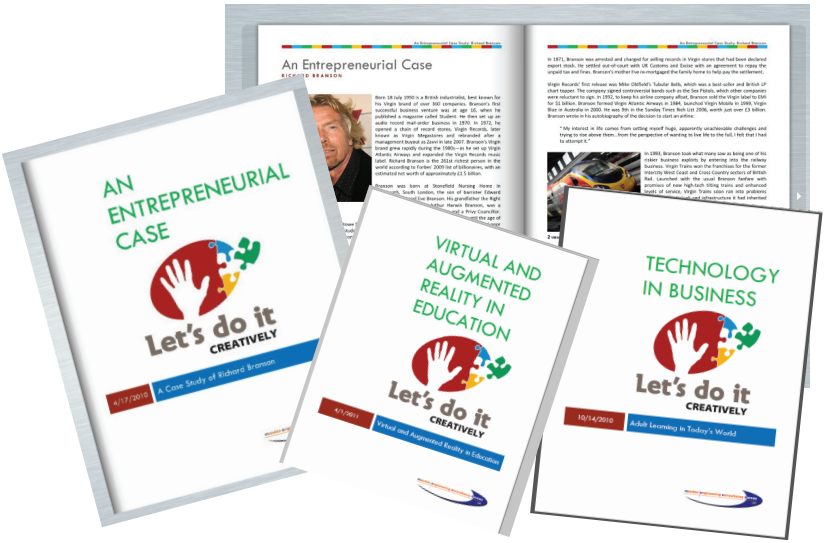

Figure 4.15: A selection of the Case Studies produced during the project

The case studies were distributed to both the LETS DO IT project partners and event participants. The case studies are available in PDF and online. Samples of case studies generated during the LETS DO IT project are illustrated above and can be downloaded from:

www.mecb.com.mt/create.

Chapter 5
Evaluation of the Network

Introduction

The members of the 'Let's do it creatively: for the Benefit of Adult Learners' partnership were aware of the purposes of networks and for networking. It is acknowledged by the partnership that through networks, educational institutions can provide a learning programme that is closer to each learner's needs. Networks have the potential for promoting different forms of collaboration, linkages and multi-functional partnerships, thus enhancing local support and generating synergistic activity around common local priorities.

Another purpose of networks is the acceleration of improvement and the stimulation of innovation. Networks support innovation by permitting schools to foster curriculum diversity, extended services and professional support. The sharing and rapid transfer of good practice amongst teachers is another purpose for networks. A fourth purpose for networks is the empowerment of teachers and learners, which is achieved through their creative production of knowledge whilst working in networks.

The success of any network must surely be judged on the impact it has both on its immediate members and also the wider public that the network interacts with. The members of the "Let's do it Creatively: for the Benefit of Adult Learners" partnership identified three target groups that they believed it was important to share their experiences with the view of raising awareness of the project's aims, objectives and outcomes. These three groups were:

- The teachers in the partner organisations
- The learners in the partner organisations
- The wider public – both at a domestic level and also at a wider European level.

This chapter will examine how successful the network was in achieving its objective of sharing its experiences with these three target groups. But while trying to reach these target groups, the partners were also keenly aware that underpinning this was the importance of raising awareness of the benefits of European co-operation to all those who were aware of the project. This 'European Added Value' will be discussed briefly before we examine how we engaged with our three target groups. As we examine each of these groups in turn, it should become apparent that promoting the benefits of European co-operation was a guiding philosophy that shaped the work of the network.

European Added Value

An important guiding philosophy of the partnership was to encourage the learners and teachers involved to embrace common European values and practices, especially those that are promoted and supported financially by the European Community. The experience of taking part in this kind of partnership helped develop in the participants an awareness of European ideals and facilitated economic, cultural and educational exchanges. United in diversity – the motto of the European Union was our guiding light and we aimed to encourage the real values and the civic responsibilities central to the European idea.

Figure 5.1: Raising cultural awareness at the Portuguese workshop

Participating in this European educational project enabled different institutions across Europe to make lasting connections. The skills and knowledge learned from other European colleagues helped develop the skill base in all institutions involved. The project also paid particular attention to the learners' interest in studying foreign languages, in order to establish efficient communications and to facilitate intercultural links with other European countries.

Through the workshops and cultural visits that were an integral part of the project, there was also an increased awareness, appreciation and understanding of the cultures, traditions and values of the member countries. Indeed, by working through this project the partners developed a sense that the challenges we share as adult education practitioners are not unique to our institutions or countries, but are trans-European challenges and by working together on a European-wide basis we can develop common strategies and approaches in overcoming these challenges to the benefit of all adult learners throughout Europe.

Impact on Teachers

One of the main aims of this project was to encourage adult education practitioners to reflect on and develop best practice in the field of adult education. This professional development opportunity, enriched by its intercultural dimension, aimed to promote understanding and skills in using creative and innovative pedagogical approaches. It was also hoped that by sharing ideas and approaches that have proved effective in the partners' institutions, the motivation of the teaching staff would increase.

There can be little doubt that the project was successful in achieving this aim. Over the course of the two years of the project more than 200 teachers directly participated in the five workshops that were held. These workshops encouraged these educational practitioners to reflect on their existing pedagogical approach and to consider adapting creative and innovative methodologies in the future. Perhaps how successful the project was in achieving this may best be encapsulated in the words of Francisco Javier Barragán Torres and Joji Johan. Their experiences are presented in the following testimonials.

Testimonial from teacher Javier Torres about the Ploiesti workshop, 30th March to 1st April 2011

At this time last year, I applied for a Grundtvig Assistant grant to take part in a European Programme. One month later, the education Ministry awarded me a Grundtvig Assistant grant to become a Spanish language teacher in Arte-Via (Portugal). At the beginning, I did not know anything about what was involved in European projects. But Ana Filomena Amaral, the director of Arte-Via, explained to me that we were participating in a programme called "Let´s do it, creatively". Later, she offered me the possibility of travelling to Romania on behalf of Arte-Via and my students.

In my opinion, this kind of project helps people to develop personally; learn different teaching methodologies; and also to see different countries. We spent three days in Ploiesti (Romania) where I met people from different countries and cultures. I think that it was an experience very enriching for me and my partners because we were working on new ways of learning. As teachers, the challenge that we have to face in the next few years in adult education means that methodology and creativity are very important. We have to research new and creative study techniques to improve the quality of adult education and we should share knowledge and experiences to develop a creative way of learning. Finally, I could say that this coexistence helped me to acquire new teaching techniques to be applied in my classroom.

Francisco Javier Barragán Torres

Testimonial from teacher Joji John about the Portuguese workshop - 5th to 8th November 2009

I was given the opportunity by Joanna Pinewood Education to attend an Adult Learning workshop in Lousã, Portugal for a Grundtvig project 'Let's Do it Creatively... for the benefit of adult learners.'. This was the first workshop of five over the next two years. Representatives from 9 different European countries came to Lousã for a team building workshop. I had accompanied Mr. Krzysztof Bahrynowski, headmaster of Joanna Pinewood Education; an adult tuition centre. Our journey was interesting as we travelled from Uxbridge to Lousã via Porto. We met and interacted with a few Portuguese people during the journey and I learnt about Portugal's culture and some of the language.

We reached Lousã around 8pm after an exciting 12 hour journey. We attended a European cultural evening. All participants brought special foods from their respective regions. I brought a sweet: an Indian semolina dish that I had prepared the day before and that everybody enjoyed. Krzysztof brought a tin of Mango juice and mixed this with some local yogurt to make an Indian Lassi. He also brought a jar of gherkins from the JPE's garden picked and naturally fermented by one of the centre's adult learners. He also brought liquor that is his great grandfather's recipe that originates from the Ukraine. It was a huge feast laid out over 4 large tables and at least two hundred people must have been present. Portuguese adult learners danced traditional dances and entertained us with their singing through the evening. A narrator explained in Portuguese and this was translated into English. Some of us danced with them. We took videos with a Sony handycam bought with Grundtvig funds. We produced hours of video which we need to upload onto you tube. It was very relaxing after a long day.

During the following two days we attended various workshops to plan the various project objectives of the Grundtvig project and together developed a Gantt chart to allocate tasks for ten European partners of the project. We recorded this on video.

Figure 5.2: Krzysztof Bahrynowski and Joji John at the Portuguese workshop

Then Ana Amaral of Arte-Via centre arranged bus trips to visit Coimbra University City and Lousã castle. It was great to learn about the Portuguese culture and history in these two days. On the second night, 10 years of Arte-Via was celebrated with a

brilliant performance by Fado singers. On 6th, we and hundreds of Portugese Learners and their families watched a free musical show arranged by Arte Via at Lousã castle which was filmed for local TV. It was really cold but we kept ourselves warm by burning wood and corn stalks in a brazier. As an Indian teacher working in the UK I found this European experience extremely refreshing. I enjoyed talking "shop" to the Spaniards and Portuguese teachers and other adult learners. Many asked me questions about India. I was lucky that most understood English. I gained much information through networking with representatives of Czech, Romanian, and Maltese Universities and Dublin Colleges. This showed me that that Europe has much to offer young professionals in the UK with their career development.

Joji John

Apart from teachers directly involved in the network, the participating organisations were keen to use the Grundtvig project to promote awareness of sharing creative and innovative ideas in their own organisations. There have been many instances of this over the course of the year, but two concrete examples come from Malta and Ireland.

In Malta, staff from Saint Theresa College have met a number of times and have actively embraced the goals of the project. They have even created their own blog based on the project.

The project has also been the catalyst for a major initiative in the Irish organisation County Dublin Vocational Education Committee. The Irish partners in this project represent six Further Education colleges dispersed throughout the city of Dublin. The project has resulted in staff from these colleges meeting on a more regular basis and a formal network of Further Education teachers has been established. A series of annual conferences has resulted with the aim of sharing good practice. All this has resulted directly from the Grundtvig project and has really helped in creating a sense of collegiality amongst the staff in these colleges.

Impact on Learners

This project was all about education. Obviously, the central focus of any activity related to education has to be on the learners. The final success of this network has to be judged on the impact it has on learners. There were both direct and indirect impacts on learners as a result of this project. We will consider the indirect impact first.

As has been already mentioned in chapter 2, a common problem that the partners share is that adult learners may have negative experiences of education. The project aimed to overcome these barriers, thereby increasing the motivation and self-esteem of the learners. A direct objective of the project was also to develop innovative and creative methods of developing key competences in learners. The sharing of best practice and the development of new pedagogical approaches to the teaching of these key competences will be of direct benefit to the learners. This is an on-going process, but the partners on the project are confident that the shared

skills and innovative and creative teaching methodologies developed as a result of the partnership will continue to have a positive impact on the learners in the participating organisations for many years to come.

But there were also learners who benefited directly from the project. These were learners who travelled abroad to participate in the five workshops carried out during the two years of the project. These learners participated fully in all the workshop activities and they gained immensely from the experience, both in terms of their knowledge, but also in terms of their own self-development. How successful the project was in doing this can best be gauged by the learners' own words as given in the following two testimonials .

Testimonial from student Raquel Rodrigues about the Malta workshop - 16th to 17th April, 2010

It was late night when we arrived at Malta; we were well received by the Maltese delegation in the hotel Dolmen. This hotel also treated us well during our stay - from the food to the accommodation.

The first day started with several workshops about movie making, blogs and other themes that talked about technology. Afterwards we went to a restaurant near the sea and had lunch while we enjoyed the fabulous view of the harbour. We then continued with more workshops but this time they talked about the Web 2.0, Andirin Public Education Centre and a new type of voting system that, even though it was still in the process of development, it proved to be quite promising. We then visited the astonishing Catholic Church Rotunda of St Marija Assunta. Its dome and interior left me quite impressed and in awe. Another thing that also marvelled me was the city Mdina that at that time of the year was covered with colourful flowers. We travelled between its closed-in but amazing streets and countless doors (each one had a different kind of handle), ones that keep so many stories yet to reveal.

The second day was also filled with workshops, especially about Entrepreneurism. We also had quite a lot of fun with a group exercise where the persons from the different delegations mixed up and tried to create and develop a project about different sectors (like education). After lunch we went to the island of Gozo by ferry and we spent our

time visiting its streets and looking at the natural beauties that existed here, like the famous breathtaking Azure Window. With yet another marvelous dinner in a restaurant near the sea we returned to Malta again by ferry where we rested and prepared ourselves for the trip back to Portugal the following day.

I personally loved Malta, the people there were very funny, friendly and quite organised. It was such a shame that I wasn't able to enjoy a little bit more of the delicious airs of Malta.

Raquel Rodrigues

Figure 5.3: The Portuguese participants at the Maltese workshop

Testimonial from students Ester Amaral Simões and Tiago Norberto Béco de Almeida about the Czech Republic workshop - 22nd to 23rd October, 2010

As students of physics, we are always interested in thinking about how its basic concepts can be explained. It is difficult – so when we were invited to participate in a workshop in the Czech Republic that looked at ways in which we can teach sciences, we were very excited. We especially were excited because we were asked to lead a workshop about physics.

Physics is one of the most important sciences. Every piece of technology we possess is based on physics - it is everywhere. From the radio to high-tech mobile phones, from nuclear or hydro plants to the biggest buildings, one couldn't do them without physics. Moreover, it is the systematic work made by thousands of physicists in the last 400 years that made us understand the universe that surround us, from the smallest particles, to the stars and the Universe as a whole.

Yet, physics is one of the least understood sciences by the general public. The reasons for the distance between people and physics are many. People aren't sometimes able to acknowledge the relevance of physics in their lives. The mathematics involved is difficult and the scales of some problems are not always intuitive.

So, before going to Olomouc, Czech Republic, we took all this into account. Then, we set our objective: to make people understand a little more about the Universe. First we solved the problem of scale and perspective. For people to understand particles better, we decided that the people at the workshop would be the particles themselves. So, our workshop began with this primordial cosmic soup of people that assumed the role of particles and were led through space and time across the history of the Universe. After 40 minutes of movement, sound and fun, we felt that the experience was mutual: we taught and we learnt. In the end, the gap was overcome.

We thank everyone for letting us share our world – your world – by creating space and time!

Ester Amaral Simões and Tiago Norberto Béco de Almeida

Figure 5.4: An interactive way to teach physics

Impact on the Wider Public

It is important for a network such as this to disseminate its activities and outcomes, not just to the immediate organisations involved, but also to the general public. Much effort was spent during the course of the two years in promoting the project to the wider public and disseminating the work done to date. A major part of this publicity drive was the production of a leaflet by the partners. The production of this leaflet was coordinated by Saint Theresa College, Malta. This leaflet (Fgure 5.5) was actively distributed to raise awareness of the project. Many of the other partners have also produced similar publicity material at a local level. An example of this is this leaflet produced by the UK partner, Joanna Pinewood Education (Figure 5.6).

Figure 5.5: The project leaflet

Figure 5.6: Promotional leaflet produced by JPE

As well as producing leaflets, the partners were very active in promoting the project in the media. Numerous articles were published about the project in local newspapers and it was also discussed on local radio programmes. A full listing of these activities is available on the project's website www.letsdoit.upol.cz, but in order to give a flavour of these activities the promotional work of the Spanish and Portuguese organisations will be highlighted.

The Spanish partner was particularly active in promoting the project. During the course of the two years articles about the project appeared in the following Spanish publications:

- La Gaceta extremeña de la educación
- Hoy.ES
- El Periódico Extremadura

An interview about the project was also broadcast on the Spanish radio station Punto Radio.

The Portuguese partner, Arte-Via Co-operative also viewed the dissemination of the project as an essential part of the process. At the commencement of the process they held a press conference to inform the Portuguese media of the project. They also submitted many press releases to local newspapers and were successful in having some of them printed. (Figure 5.7) A journalist also accompanied them to the workshop in Dublin who wrote a very informative report about the proceedings.

Universidade de Olomouc realizou encontro europeu

Delegação da Arte-Via na República Checa

Uma delegação da cooperativa Arte-Via, da Lousã, esteve na República Checa, entre 21 e 24 de outubro, no âmbito do projeto europeu "Let's do it", destinado a desenvolver o programa Grundtvig, que visa a aprendizagem dos adultos ao longo da vida

A representação portuguesa, liderada pelas presidentes da direção e da assembleia geral da cooperativa, Ana Filomena Amaral e Maria Assumpta Coimbra, respetivamente, apresentou na Universidade de Olomouc o trabalho "Criar Espaço e Tempo", teatralizando a teoria do "Big Bang" sobre a criação do universo. O Departamento de Física Olomouc vai adotar a metodologia apresentada pela cooperativa da Lousã para transmitir conhecimentos científicos às crianças que visitam aquela universidade.

O "workshop" da responsabilidade da Arte-Via envolveu os mais de 50 participantes do projeto "Let's do it", oriundos do Reino Unido, Roménia, Espanha, Irlanda, Malta, Turquia, República Checa e Portugal.

Coordenado pela Irlanda, o projeto "Let's do it" teve o primeiro encontro dos parceiros na Lousã, em novembro de 2009, coincidindo com a comemoração do 10.º aniversário da Arte-Via.

Além dos trabalhos na Faculdade de Ciências e Tecnologia de Olomouc, o programa incluiu um roteiro social e cultural de que se destaca uma visita à central hidroelétrica de Dlouhé Stráne, nas montanhas Hrubý Jesenik, que tem uma potência instalada de 2x325 MW e a maior turbina de reversão da Europa. Banhada pelo rio Morava e com cerca de 100 mil habitantes, Olomouc situa-se na região da Morávia, a quase 300 quilómetros de Praga, capital do país. Em 1063, tornou-se a cidade dos bispos, sendo atualmente a segunda cidade da República Checa em termos de importância histórica, após Praga.

O Pilar Barroco, construído no século XVIII, está classificado como Património Mundial pela UNESCO.

A área urbana de Olomouc dispõe de uma linha de elétricos moderna e funcional, que assegura frequentes ligações, incluindo durante a noite.

A República Checa tem uma das mais densas redes ferroviárias da Europa, cobrindo todo o país, quase toda ela administrada pela CD, a empresa nacional dos caminhos de ferro.

DR

Filomena Amaral com parceiras da Irlanda, Espanha e Alemanha

Figure 5.7: Report about the project in the newspaper Trevim

Conclusion

The theory of learning networks, as outlined in Chapter 1, emphasises the need to move away from an individual-centric view of education to an approach that highlights the social purpose of education. In order for learning networks, such as this one, to be successful in adapting to this new approach to adult education, it is necessary therefore, that they engage with not just individual learners but they also need to include family, peers and the wider society.

During the course of the project the partners were successful in achieving this aim. As can be seen from the examples outlined in this chapter, not only the individual learner, but also the educational institutions involved and the learner's wider community were all engaged in reflecting on the nature of adult education. It has addressed the key aim of learning networks: to highlight the social purpose of education and to act in supporting lifelong learning in the wider community.

Chapter 6
Towards a Framework of Enjoyable Learning Approaches

Introduction

One of the key objectives of the "Let's Do it Creatively: For the Benefit of Adult Learners" lifelong learning partnership was to encourage the development of a 'joyful' learning atmosphere. We wished to foster a welcoming and supportive environment that sees learning as a positive, fulfilling and life-enriching experience. By encouraging such an environment, the project partners believe that this will lead Adult Learners to engage more readily in the process of learning and developing key competences. Often this means the learner is developing key competences without realising it, e.g. by fostering an environment where the learner is willing to engage in discussion and debate with other members of the group, the learner is developing the key competence of communication in the mother tongue, as well as developing interpersonal and social competence. The desired outcome is that learners develop a more positive attitude to education and will be therefore, more motivated to continue on the path of life-long learning.

In order to help develop and foster such an environment, the network set as one of the outcomes of the project the development of a **'Framework of Enjoyable Learning Approaches'**. This framework would serve as a distillation of all that we have learned during the course of the two year life span of the project. The idea is that the framework would be used as a template of how a teacher can create an enjoyable and welcoming learning environment in order to foster adult learning in general, and the teaching of the key competences specifically.

In developing this framework we drew upon the general literature on adult education, but more particularly we drew upon on our experiences and the expertise that was developed over the course of the project. In order to help inform the development of this framework, two questionnaires were developed and distributed. One

questionnaire was completed by Adult Learners and the second was completed by teachers of Adult Learners. The findings of these questionnaires were combined with the experiences gained by sharing best practices over the course of the two years. The development of the framework was also informed by current academic research in the area.

Before discussing the framework, it will be necessary to examine in some detail the findings of the two questionnaires that informed and shaped the development of this framework. We will now analyse each in turn.

The Questionnaire for Adult Learners

In total, 89 questionnaires were completed by adult learners from all the participating organisations. The numbers from each country varied, but an average of nine learners completed the questionnaire from each member organisation in the network.

What was particularly interesting in the analysis of the questionnaires was that there was no statistically significant variation in the responses from across the participating countries. The difficulties and challenges that adult learners face are clearly the same throughout Europe. Given that there were little or no variations on a transnational basis, this analysis is based on all 89 questionnaires received.

The questionnaire had four sections and each will now be discussed in turn.

Section 1:

The first section lists 10 statements about the learners' experiences in adult education. They were asked to indicate their experience on a 5 rank scale from Very Good to Very Bad. They were also presented with the option 'This does not apply to me'. For the purpose of analysis, points were allocated to each option: Very Good being 5, Good being 4 and through to 1 for Very Bad. This allowed for easier statistical analysis. The findings from this section are given in Figure 6.1.

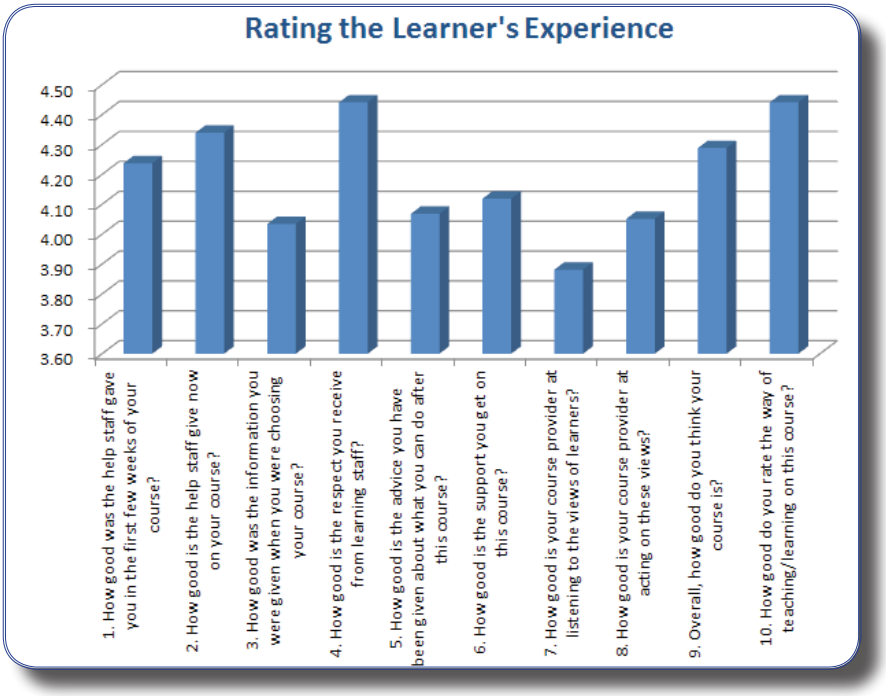

Figure 6.1: Chart of how learners rated their learning experiences

As can be seen from this chart, students were generally happy with the teaching and learning on the course. However, there was one area of the learning experience that learners were clearly less satisfied with. The learners felt that their course provider wasn't particularly good at listening to their views. This is something that will have to be included in the development of the framework.

Section 2:

This section asked learners about the greatest difficulties they have as an adult learner. They were provided with five options, as well as having the space to provide another option. The learners were allowed to choose more than one option. The results of this question are outlined in Figure 6.2.

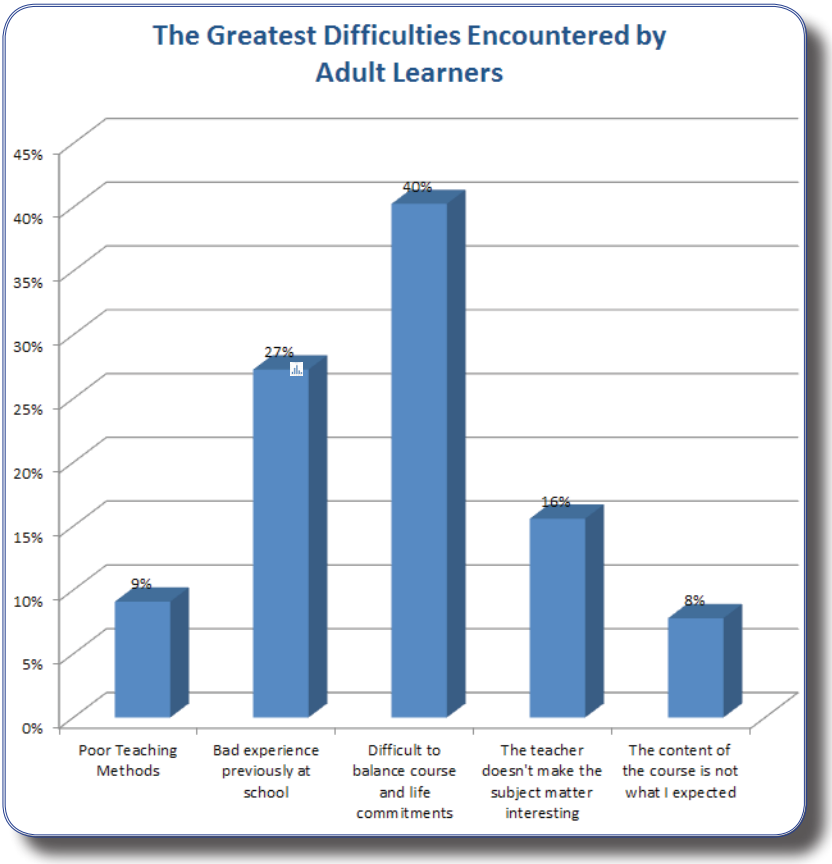

Figure 6.2: Chart of the greatest difficulties learners face

There is a clear indication here that learners find it particularly difficult to balance course and life commitments. It is also evident that a lot of learners had a bad experience previously at school. 16% of respondents also felt the teacher didn't make the subject matter interesting. All of these factors will have to feed into the development of the Framework of Enjoyable Learning Approaches.

Section 3:

This question asked the learners to indicate what they believed was the most effective method of teaching adults. They were presented with seven options and were asked to express a clear preference for only one of them. The results of this question are presented in Figure 6.3.

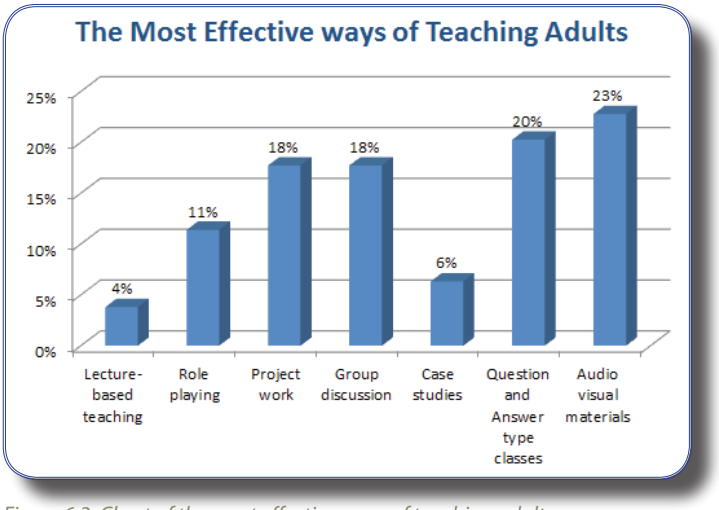

Figure 6.3: Chart of the most effective ways of teaching adults

There was a clear indication that lecture-based teaching was not the most effective way of teaching. Interestingly, case studies didn't rank very high either. This was surprising, but in follow-up discussions with learners, they stated that they were unfamiliar with case studies as a teaching tool. Those who had experience of them rated them quite favourably.

But perhaps the most striking aspect of this question is the variety of responses given for this question. This echoes academic work by the likes of Kolb (1984) and Honey and Mumford (1992) who have identified the existence of different preferred learning styles. Therefore, in order for learning to be effective for all, a variety of teaching styles will need to be employed. Clearly the fact that students have a range of preferred learning styles will need to be borne in mind when developing the Framework.

Section 4:

This section of the questionnaire asked the learners if they have any other comments/suggestions as to how their learning experience can be improved. The level of response to this question was quite low. This may possibly be due to the fact that a lot of the learners who completed the questionnaire were not native speakers of English. The complete list of responses to this question is given here:

» "As an adult I don't want to do homework. I want to talk in the class and play in the drama. *[sic]* They are more effective to me."

» "I should read more books and watch foreign channels for listening skills."

» "Self-determination is important."

» "I should do more exercises and practice speaking. I must go abroad and live there for a while."

» "Tutors seem unable to adapt to alternative teaching styles when presented with students who require a different teaching style due their needs. Tutors are still able to encourage and motivate regardless of this."

» "The teaching process is very well organised."

» "All teachers should teach in the same way."

» "There should be educational visits to museums and exhibitions."

» "Classes should be more fun."

» "There should be more *'learning to learn'*".

While there is clearly a variety of responses here; these statements echo the responses from the earlier questions. In particular, it is evident that students prefer a variety of teaching styles that involve class interaction in a safe and joyful environment.

Questionnaire for Teachers

Having ascertained the views of adult learners on creating an effective learning environment, it was also deemed necessary to canvass the views of teachers of adult learners in order to identity their views on creating an effective learning environment. Again, a short questionnaire was devised and completed by 26 teachers from across all the member organisations in the network. A total of five questions were asked and the results of each question will now be analysed.

Question 1:

This question was a straightforward Yes/No question to determine whether teachers felt there was a difference between teaching Adult Learners and younger students. It was felt important to include this question as this would have a bearing on the philosophy of any framework.

There was a very clear outcome to this question. Of the 26 teachers who completed it only 1 said that there was no difference. This teacher expanded the answer by stating: *"Actually they are both the same. Just learners are different."*

So clearly the teachers involved in the network believe that there is a definite difference between teaching Adult Learners and younger students. This will obviously have to be borne in mind when developing the framework.

Question 2:

This was an open-ended question that simply asked: what were the main challenges they faced as teachers of adults. The responses given are listed here:

- "Adults sometimes don't want to take responsibility and they may not be eager to participate in the activities."
- "Adult learners find it hard to concentrate on the activities."
- "To motivate them and to make them participate in activities."
- "They always want to learn grammar – they prefer this to speaking activities."

- "Retention."
- "They sometimes talk and distract the class more than children."
- "The fact that they left school too long ago."
- "Difficult to motivate them."
- "Overcoming their immaturity."
- "Making good citizens out of them."
- "Overcoming their learning complexes."
- "Having to do all the work in class."
- "Making them aware of the importance of studying."
- "Convincing them that anybody can get the certificate with patience and some work."
- "Preventing them from feeling frustrated."
- "Teaching is a challenge."

What is interesting from these responses is the contrast they present to the similar question asked of students. The students were very keen on active methods of learning such as discussion and role-plays. However, the teachers felt that quite often it was difficult to get them to engage in such activities and also to keep them focussed. Trying to 'square this circle' will be a particular challenge in developing the framework of joyful learning experiences.

However, a second interesting aspect to the answers to this question was the language the teachers used in their responses. Words and phrases like '*making them*'; '*preventing them*'; '*convincing them*'; '*overcoming their*' etc. are all phrases that are very teacher-centred.

The focus of the learning environment seems to be still the teacher who is in charge of the learning environment and feels it is incumbent upon him or herself to 'make' the class 'do' things. This is an attitude that is prevalent when teaching younger students, but whether it is an attitude that should be present when teaching adults is clearly very questionable given the findings of the questionnaire on Adult Learners.

Given that the same teachers who made these statements have already agreed that there is a difference between teaching Adult Learners and younger students, it seems that teachers of Adult Learners need to change their views of their role in the classroom. Perhaps rather than trying to 'teach' a subject in the traditional sense, they will need to learn how to become 'facilitators' of learning.

We have seen already from the questionnaire completed by Adult Learners that a large grievance they have is that course providers aren't good at listening to their views. It seems therefore, that the key to a successful learning environment for Adult Learners lies in the concept of a **partnership** between the teacher and learners.

Question 3:

This question asked the teachers to rate a number of different teaching methods in terms of how effective they are in Adult Learning. They were asked to rate each of the teaching methods on a five point scale from 'Excellent' down to 'Very Poor'. To facilitate the analysis of the questionnaire each item on this scale was allocated a mark from 1 to 5, with 5 being excellent.

The responses to this question are shown in the following chart. The closer a methodology is to 5, the higher the teacher rated it as a teaching technique. The responses to this question are presented in Figure 6.4.

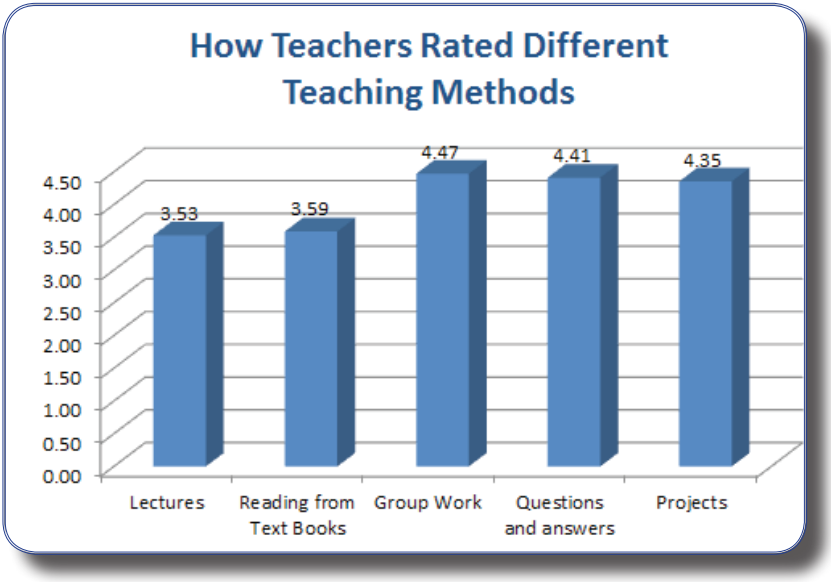

Figure 6.4: Chart of how teachers rated different teaching methods

The responses to this question are quite surprising. It is clear that teachers believe that Group Work; Question and Answer sessions; and Projects are very effective teaching techniques, and this reflects the techniques that Adults Learners stated were the most effective. What is most surprising however, is the mark given both to Lectures and Reading from Text Books. They both scored over 3.5 – this is between the option 'Neither Good nor Bad' to 'Good', but heading towards a 'Good' mark.

Given that only 4% of learners stated that they believed that lectures are an effective way of teaching adults, it seems that there is a clear division between the viewpoints of Adult Learners and teachers.

Again, lectures and reading from text books are very traditional didactic methodologies that clearly do not engage and stimulate Adult Learners. There obviously needs to be a 'mind-shift' in the way in which many teachers approach teaching adults in order to match their preferred learning style. This is another factor that needs to be considered in the development of the framework.

Question 4:

This was an open-ended question that simply asked the respondents what advice/ guidance they would give to a new teacher of Adult Learners. The responses received are listed here:

- "Teachers must be decisive and tell students how they can achieve. Self-confidence is important."
- "They should create new activities that will attract the students' attention."
- "They should take their learners' age into account."
- "Be patient and adjust your teaching according to their levels; try to adopt new teaching methods."
- "Focus on the relevance and connection between learning and job preparation and satisfaction."
- "To be creative and not afraid to introduce new methods."
- "Patience!"
- "Start from the very basics."
- "Bear in mind that it is completely different from teaching other students."
- "Look for Education – not only knowledge."
- "Forget about homework."
- "Relate learning to real life."
- "Give immediate feedback."
- "Make your students feel confident."
- "Encourage them to ask questions."

» "Use short explanations."

» "Use interactive methods."

» "Adapt the curriculum to the group level and needs."

» "Forget about the established curriculum."

» "Nurture the students' self-esteem."

What is noticeable from these responses is that teachers see that success in teaching Adult Learners comes from being **supportive** and creating an environment that is **flexible**, **dynamic** and **student-centred**. These factors will also need to be considered when developing the framework of enjoyable learning.

Question 5:

Similar to question 4, this was an open-ended question that asked these experienced teachers to describe some effective ways of teaching adults that they have used in the past. The purpose behind this question was to draw upon the rich store of knowledge and expertise that these teachers have in developing the framework. Again, the responses indicate that a learner-centred approach that is interactive and stimulating is most effective. The responses received to this question are listed below:

» "Theatres, discussions, debates and writing skills can be used while teaching adult learners. Real-life techniques, dialogue and storytelling can be other means used in classes."

» "Warm-up activities should be used effectively to get them involved in the practical activities."

» "Teachers should apply more practical activities instead of only lecturing and facilitate their learners to be active in the class."

» "Role-plays and drama can be effective. Sometimes, they don't want to be so active – in that time you can use whole-class discussion."

- "Workshops – short, but frequent tasks."
- "Using a 'mix' of tools/methods/approaches including:
  Face-to-face lectures
  e-Learning
  Group projects
  Where appropriate, a technical/industrial visit."
- "Literature, music, movies and role-plays."
- "Setting objectives that stimulate students' self-esteem and help them keep trying."
- "Doing lots of exercises after each explanation."
- "Showing personal interest in the students."
- "Adapting to their starting point."
- "Helping them discover culture, reading and arts."
- "Developing collaborative work."
- "Encouraging creativity."
- "Encouraging self-evaluation."
- "Taking advantage of their background (and mine)."
- "Making them read materials again and again, trying to understand."
- "Using Information and Communication Technologies."
- "Ignoring social groups in class."
- "Being very patient."

Discussion of Findings

When analysing both questionnaires some clear messages emerge from both the learners' and teachers' perspective. By identifying these messages, it is the hope of the project team to incorporate them into the Framework of Enjoyable Learning Approaches. The key points that came across from the questionnaire for Adult Learners were:

» *Course providers are not particularly good at listening to the views of learners.*

» *It is difficult to balance course and life commitments.*

» *Bad experiences previously at school can feed into present negative attitudes to education.*

» *The teacher needs to make the subject matter interesting.*

» *Lectures are not good for teaching adults.*

» *A variety of teaching methodologies will need to be employed for learning to be effective for all. These teaching methodologies should be learner-centred, not teacher-centred.*

In terms of the findings from the questionnaire completed by teachers, the main conclusions that are to drawn from this can be summarised as follows:

» *There is a clear difference between teaching Adult Learners and younger students.*

» *There is often a divergence of views on the role of the teacher between the learners and the teacher.*

» *To bridge this divergence, teachers need to be more reflective on their role in the classroom.*

» *In order to achieve a more enjoyable learning environment a partnership needs to exist between the teacher and the learner.*

- *Classes need to be learner-centred and not teacher-centred, i.e. teachers should act more as facilitators to the learning process.*
- *There needs to be a move away from teacher-centred methodologies, like lectures, to more participatory activities like group work, role-playing and projects.*
- *Success in teaching Adult Learners comes from being supportive and creating an environment that is learner-centred, interactive and stimulating. It is an environment that is flexible, dynamic but, above all, collaborative.*

Taking all this into account, the network developed a Framework of Enjoyable Learning Approaches and this is presented in Figure 6.5.

This framework doesn't claim to be definitive, nor does it exclude other approaches to creating an enjoyable learning environment for adults. Rather, it is this network's attempt to distil both the experiences they have gained from teaching adults in the past; and what they have learned from participating in this Grundtvig Lifelong Learning Project.

The approach developed in this framework was used during the project when sharing best practice in teaching the key competences already outlined in chapter 3 of this book. A flavour of these best practices is given in Chapter 7. It is this network's firm belief that the approach offered in this framework forms the basis for creating an enjoyable learning environment for Adult Learners.

A FRAMEWORK OF ENJOYABLE LEARNING APPROACHES

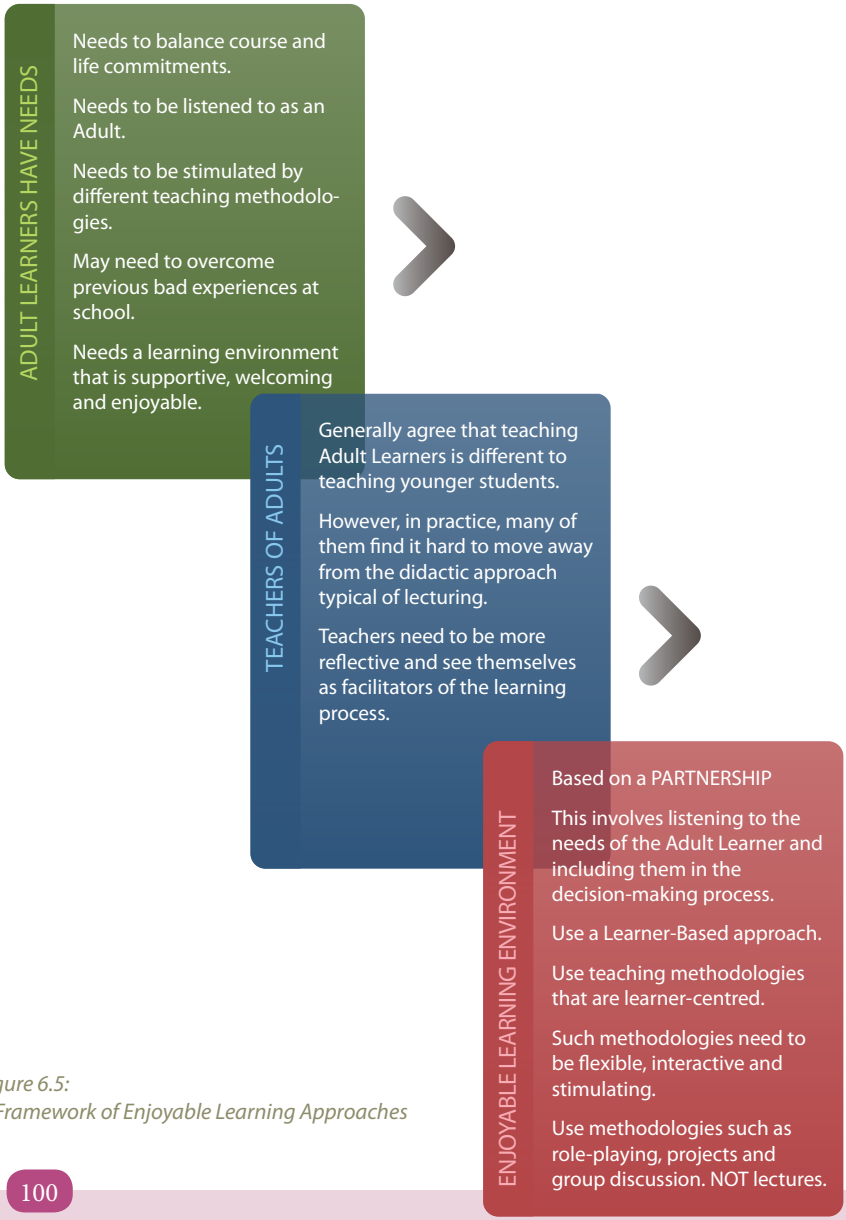

Figure 6.5:
A Framework of Enjoyable Learning Approaches

Chapter 7
Examples of Best Practice in Teaching the Key Competences

Introduction

This chapter presents a number of examples of best practice in teaching the key competences that the organisations in the network developed over the course of the two-year lifespan of the project. These examples of best practice were presented by the partners during the workshops and were shaped by the Framework of Enjoyable Learning Approaches outlined in Chapter 6. Given the limited space available in this publication, it is impossible to describe fully all the best practices. Presented here are examples, or 'vignettes', of some of the creative and innovative ways of teaching the key competences that the partners have developed.

It is our hope that they will serve as an inspiration for other educators of Adult Learners who will use and adapt these examples in order to foster a sense of enjoyment in the teaching of the key competences. A fuller description of the best practices, as well as others that are not presented here, are available on the project's website: *www.letsdoit.upol.cz.*

Vignette 1: Teaching Foreign Languages - A Communicative Approach

Prepared by: Mahmut Develi, Andirin Centre for Education of People, Turkey

Key Competences: Foreign Languages, Interpersonal, Intercultural and Social Competences.

'Communication in foreign languages' is one of the key competences identified by the European Commission and it is also stated that many of the competences in

the Framework cannot be taught in 'traditional' ways, but require new approaches to learning. In order to meet this requirement, Andırın Centre for Education of People adopted new, enjoyable methodologies in order to create an effective learning atmosphere in its language classes with a focus on the generation and sharing of innovative and creative approaches to adult learning.

We believe that communication in foreign languages is the ability to understand, express and interpret thoughts, feelings and facts and therefore, we place more emphasis on speaking skills than the other skills. We aim to create an enjoyable learning atmosphere and communicative language classes where students have real-life communication, authentic activities, and meaningful tasks that promote oral language.

In this regard, in our ESL classes we gave up the grammar-translation method, and in order to help our learners use English unhesitantly and speak it fluently, we adopted a 'Communicative Approach' which makes use of real-life situations that necessitate communication. In this method, the teacher sets up a situation that students are likely to encounter in real life. Unlike the 'audiolingual' and 'grammar translation method' of language teaching, which relies on repetition and drills, the Communicative Approach can leave students in suspense as to the outcome of a class exercise, which will vary according to their reactions and responses. Moreover, the real-life simulations change from day to day and our learners' motivation to learn comes from their desire to communicate in meaningful ways about meaningful topics. Task-based activities are also used to promote students' involvement in classes.

The Cocktail Party Game

We incorporate games in our language classes which promotes a more creative and enjoyable learning environment. In this way we aim to encourage our learners to actively participate in classroom activities. For instance, 'cocktail party' is one of our modified games which encourages interviews between students and help us create a real language class.

For the game, 10-12 large pictures showing different festivals of countries from magazines are selected, enough for 1 picture per two learners according to number of participants. Each picture is cut in half and each half is taped onto a square of

black paper and the picture halves are passed out to learners randomly. Learners are given time to study their assigned picture half, so as to be able to describe the details of their picture. By the way, they shouldn't show their picture half to any other classmate. Then, learners circulate in a Cocktail Party. Each person describes the details of his/her half picture to their partner. The pair decides if they have both halves of the same picture. If not, each person moves on to find another partner. As pairs find their partners, they retrieve their picture halves and sit together and afterwards, a different task like writing a paragraph on the same topic may be given to encourage the use of a more formal style and thus may push learners to use the grammatical resources associated with this style.

All in all, it is very obvious that these kinds of games contribute much to an enjoyable and positive classroom atmosphere and we believe that, rather than leading students to pure memorisation, providing a rich environment where meaningful communication takes place is much more desirable and learners should be more active in the learning process by means of interactive activities.

Figure 7.1:
King of the Cocktail Party – The winner of the cocktail party game in Romania

Vignette 2: The Use of New Technologies

Prepared by: Claudine Slater, Office of the College Principal, Saint Theresa College, Malta

Key Competences: Digital Skills, Learning to Learn

The Office of the College Principal, Saint Theresa College (Malta), in collaboration with the Directorate for Quality and Standards in Education (Ministry of Education, Employment and the Family, Malta) conducted a pilot project in a primary school class of seven year old pupils. This consists of each child having a netbook to work on, take home and use to its full capabilities.

Taking it home was a major part of the process, sending homework by emails, accessing software from home and creating work on the netbook is essential. In order for this to be successful the class teacher, had to have a 'good talk' with the parents.

A lot of the parents of her pupils have never touched a computer. Very few of them had a computer in their teenage years. Nearly all of them have a computer now, which was bought for the children. Having this netbook though, was slightly different from the home computer. The netbook itself has features that are not found in other computers, and certain software licensed to be installed on the netbooks wasn't on the home personal computer either.

A lot of parents were sceptical about the whole project. One could not blame them, it was something never done before in Malta, there was no precedent to look at, no other parents to speak to, nobody to compare with. It was a very dark area, which was going to be ventured into with trepidation.

So the teacher formulated a series of meetings with the parents in early October. Since I didn't know who my new 'students' were, I decided to send home a survey that gave me an idea of the level of education, their computer skills, and their jobs. I also questioned them about their attitudes and feelings towards technology.

A lot of parents were apprehensive, even when just turning the power button 'on'. The teacher showed them a few basics, such as navigating through the most used

platforms and websites. There was a bit of confusion in the first session, but it was expected because some of them had never touched a computer before. After the first session, the teacher evaluated herself and she decided that the ultimate aim of these few training sessions were not to teach parents how to use a computer, but to know what's going on in their child's life.

So from the second session onwards she organised them into smaller groups, with the child showing the parent what is going on. The parents were very proud to see their children mastering the computer in a way that they themselves could never do before.

After the training sessions, the teacher carried on communicating via emails with anybody who had a problem. With time, the problems lessened, because the children were now excellent trouble shooters and problem solvers. The teacher even did videos of how certain things are done, and these video instructions were very much appreciated.

The class children nowadays can upload and download work, they can make use of encyclopaedias and search engines, and they can email and do attachments. They can also author their work on the class blog. They create books, posters, flipcharts, videos, stop-motion animations, comic strips daily.

Figure 7.2: The Maltese netbook project in action

Writing opportunities are much more fun and children do extra work willingly. Their parents are very happy to see them improve in every single subject and also to see them acquire skills that some grown ups do not have.

A lot of parents nowadays feel that their children have a better chance in life, because of this wonderful opportunity we have in our class. This good practice can be followed on *http://claudineslater.blogspot.com*.

Vignette 3: Wolfram|Alpha - Knowledge through Dynamic Computations

Prepared by: Jan Riha, Palacký University in Olomouc, Faculty of Science, Department of Experimental Physics, Czech Republic

Key Competences: Mathematics, Science, Technology

Wolfram|Alpha (www.wolframalpha.com) introduces a fundamentally new way to get knowledge and answers. User obtains knowledge not by searching the web, but by doing dynamic computations based on a vast collection of built-in data, algorithms, and methods. The main goals of Wolfram|Alpha computational knowledge engine are:

» to make all systematic knowledge immediately computable and accessible to everyone.

» to accept completely free-form input, and to serve as a knowledge engine that generates powerful results and presents them with maximum clarity.

» to become long-term intellectual endeavor that we intend will deliver increasing capabilities over the years and decades to come.

» to create something that will stand as a major milestone of 21st century intellectual achievement.

Wolfram|Alpha could be a helpful tool especially in teaching science.

Example 1

The task is to calculate indefinite integral $\int x \cdot \sin x \, dx$. Learners can find the solution procedure simply by clicking on the "Show steps" button in the right upper corner. Wolfram|Alpha returns much more than just a simple solution though, it also represents the answer graphically. (Figure 7.3)

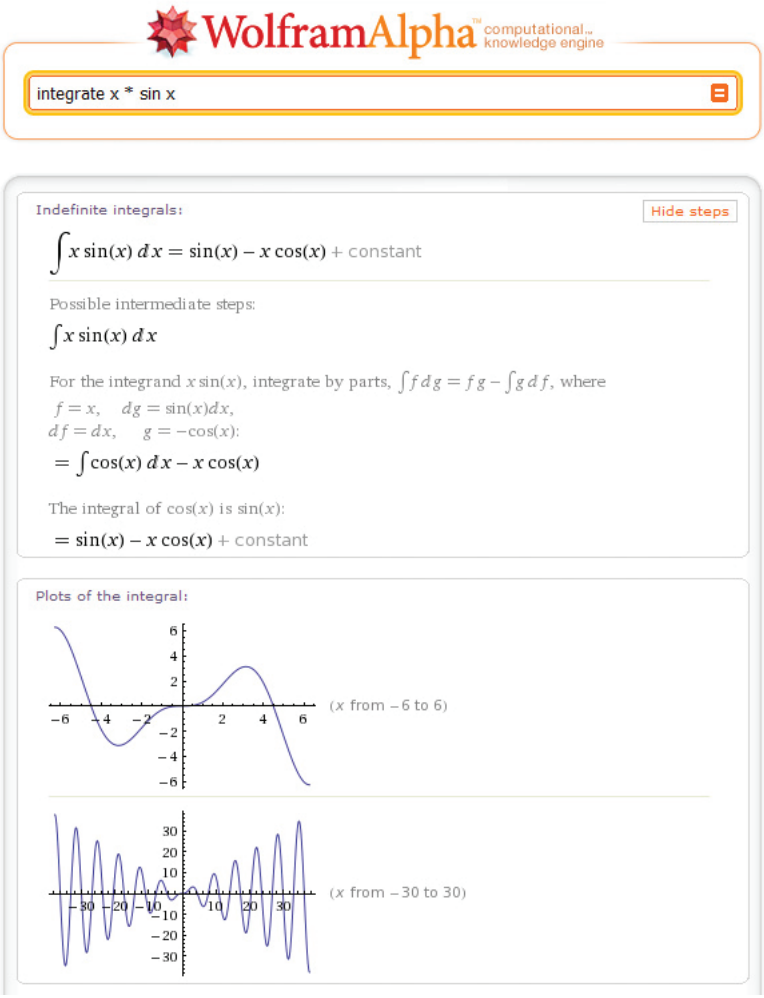

Figure 7.3: Using WoframAlpha to calculate integrals

Example 2

Finding the next solar eclipse was chosen as an example from physics.

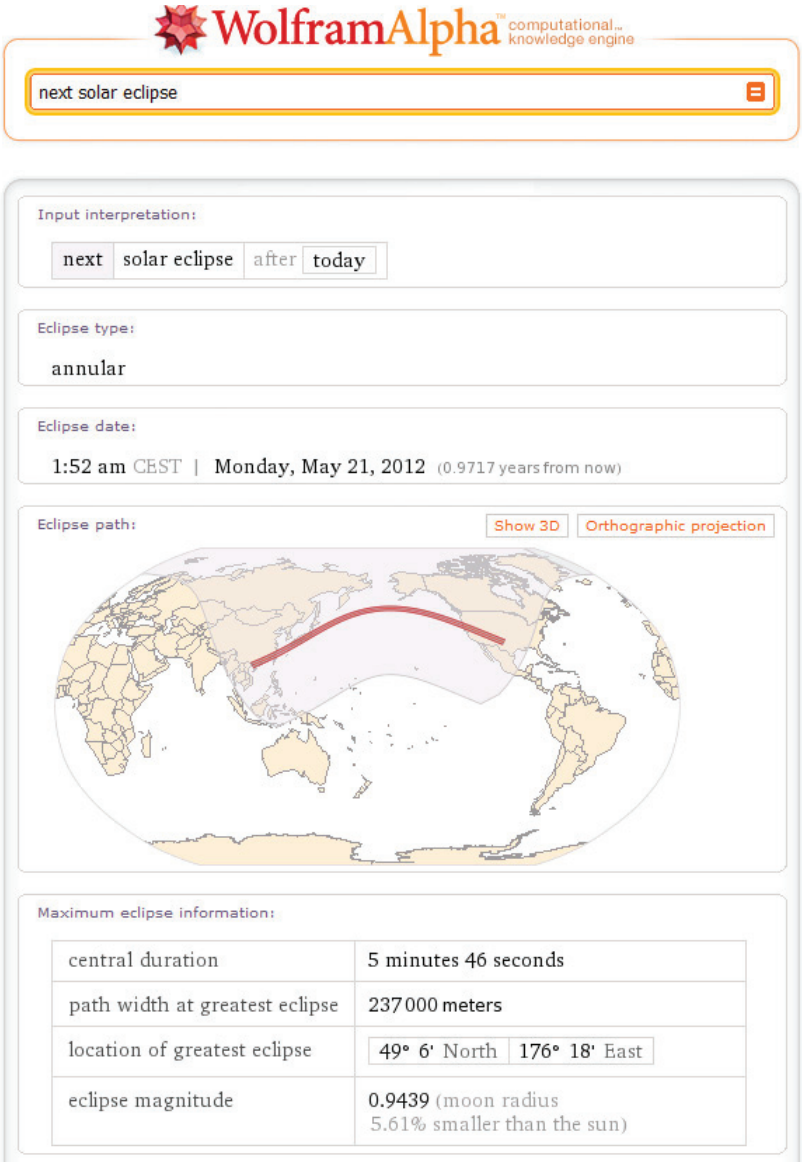

Figure 7.4: WolframAlpha illustrates the next solar eclipse

Example 3

The actual problem of earthquakes in Japan is shown as an example from geography. The user can sort earthquakes by their magnitude.

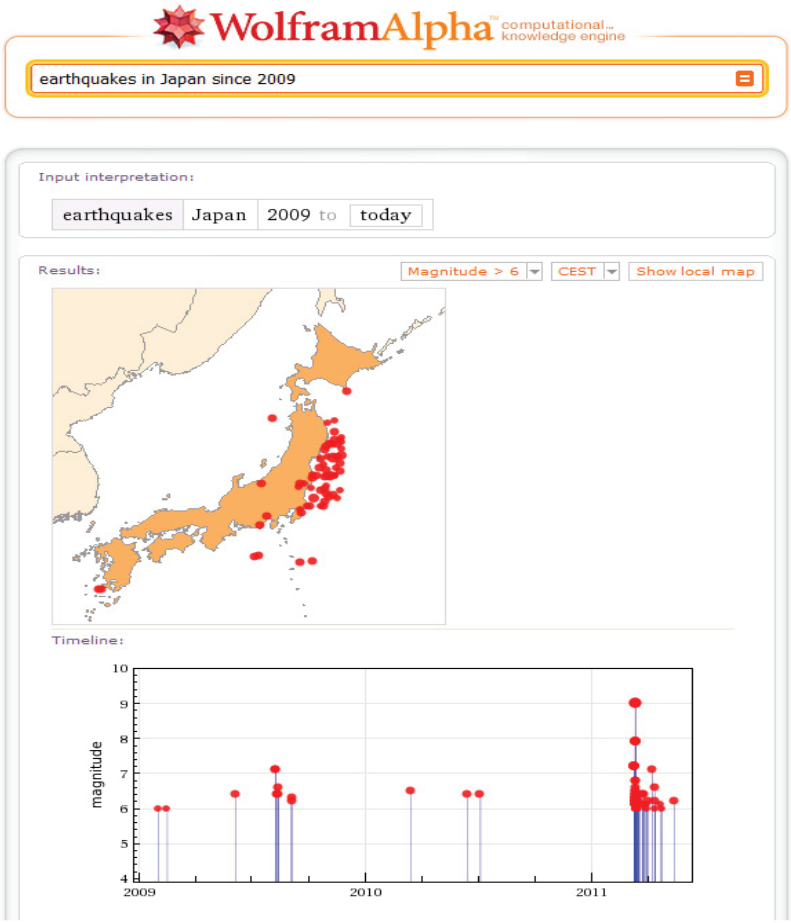

Figure 7.5: Earthquakes in Japan as shown in WolframAlpha

Example 4

Comparing GDP per capita in 3 countries involved to the project (Ireland, Czech Republic and Malta) is displayed as an example how to obtain economic data.

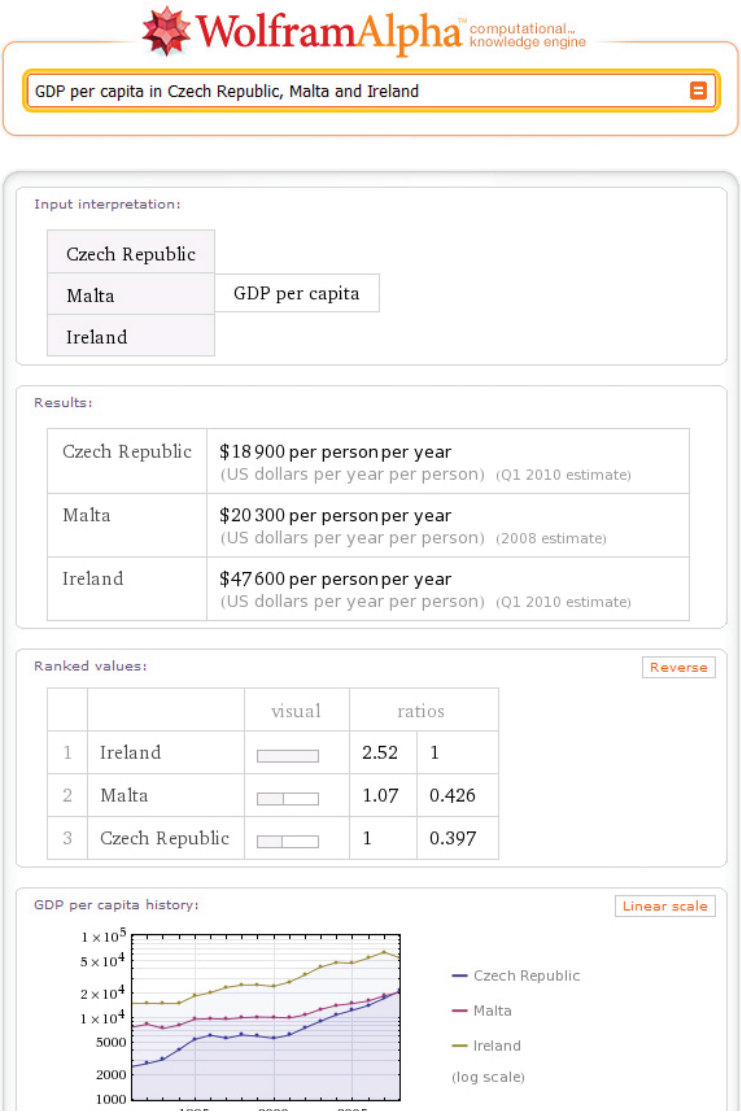

Figure 7.6: Comparative GDP figures illustrated by WolframAlpha

Undoubtedly, there are many benefits of using Wolfram|Alpha in the teaching and learning process. On the other hand, some questions and obscurities with using the Wolfram|Alpha should by explained and improved. What are sources of the data displayed on the webpage? Can we trust the data obtained by Wolfram|Alpha? Our experience from teaching adult learners is that the benefits outweigh any disadvantages.

Vignette 4: Project Learning – Using Creative Project Work

Prepared by: Akademie 2. Lebenshälfte im Land Brandengurg e.V., Germany

Key Competences: Learning to Learn

For well-qualified, older, unemployed people it is sometimes hard to find suitable job offers that match their qualifications. Offers that are challenging, motivating and asking for tried and tested knowledge are rare and often call for learning of new and modern working methods to enhance their chances of employment.

The method of creative project work is one of the more successful methods of learning for older unemployed people with a university education. It is based on 'project learning' meaning that they develop, plan and implement an actual project.

Older people prefer to learn by solving practical work problems. Unemployed people are not involved in solving work problems because they are not involved in working life. The main approach to creative project work is the involvement of participants in solving real, future-oriented problems of and for regional companies. At the end the finished product is given to these companies. The problems worked on are mainly pre-competitive. This way twelve products in the fields of tourism, trade, nutrition, wood industry, health economics, and service could be presented out of which the majority dealt with the future issue of developing products and services for older people.

Focus/Steps

» The education covered a period of six month. At the beginning the participants had a choice of several topics. After forming teams they first talk with the companies to brief the participants, and afterwards the projects started.

» The project work begins with formulating the task done by the teams independently. Creative working and adding new ideas is encouraged. Working methods are studied and implemented. The teams develop ideas and define goals after a 'kick off' meeting with the company.

» During the three months of implementation the subject is worked on according to a self-developed schedule. Questionnaires for example are developed and evaluated to find out the needs or to analyse the market. The results are combined and presented in a PowerPoint presentation. During an official event the participants present their results to the companies and receive a certificate in return.

» A university or a college supervises the project during all stages to guarantee professional input and coaching.

Results

» During this type of further education the motivation strengthened and employability increased. 30% of the participants took up work during the ongoing project or afterwards.

» The method of project learning fits the learning behavior of older people. It is designed to challenge participants and encourages them towards further, high quality education.

» Companies receive results and findings which could lead to new business and employment.

Figure 7.7: Creative project work in Germany

Vignette 5: The Use of Videoconferencing in Adult Education

Prepared by: Arte-Via Cooperativa Artistica e Editorial, Portugal

Key Competences: Learning to Learn, Digital Competences, Foreign Languages

Over the last number of years, the institution of Arte Via has been participating in different projects funded by the European Union. The main focus of these projects is to establish what makes us different and what we have in common as regards culture, language and heritage in order to break stereotyping and to avoid a wrong idea of globalisation. We are different but we have the same basic aims in life. Differences do not set us apart but help us to grow as individuals and as social beings. We intend to explore these differences through the creative use of new technologies.

We use video conferencing to talk to fellow students throughout Europe. The themes covered reflect the interests of the learners, including music, celebrations, food, local languages, art and literature. Learners are encouraged to take an active, participative role in the activities, results, evaluation and dissemination of the results. This encourages and develops teamwork and collaboration between different departments and students of different ages, genders, nationalities, backgrounds and educational needs. All the activities carried out in all the countries throughout the two years are aimed at achieving the objectives, results and relevant products of the various projects we are involved in.

In this type of activity, the students use technological skills to bring the world around them closer. They use the new technologies to put themselves in touch with the rest of the partners. At the beginning, they did not feel confident but now, they develop digital skills easily. Our main focus is on teaching languages, but we also encourage the students to understand how important it is to actively participate in this world of new technologies. The main aim of this is to achieve digital skills so that they can enjoy and learn without realising it.

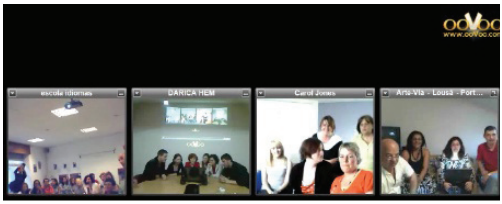

Figure 7.8: Using video technologies to communicate around Europe

Vignette 6: From Oil to Soap – A Practical Project

Prepared by: Centro de Educación de Adultos, Caceres, Spain

Key Competences: Mathematics, Science, Interpersonal Skills

If we take a common element from the real world, such as oil, and we look at it from the environmental point of view, we can open different fields of knowledge to which students can get through discovery.

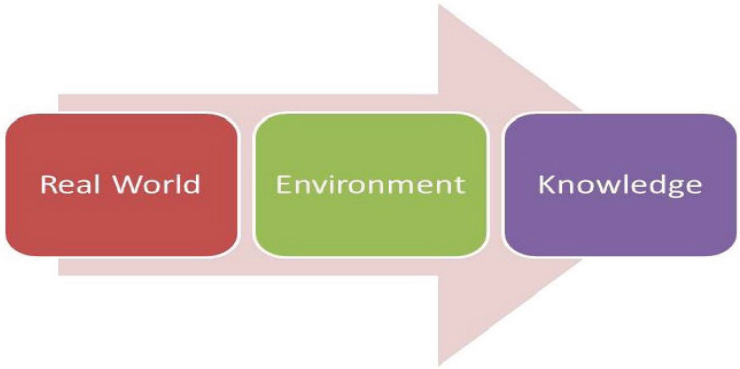

Figure 7.9: The journey to knowledge

This activity consists of making homemade soap with students. The starting point is the fact that oil is a basic ingredient in the Mediterranean diet. As a residue, it is difficult to be destroyed and it pollutes the environment, especially water. To be recycled, it is necessary to collect oil separately in special containers; in this sense, many campaigns have been promoted in order to encourage their use. An easy way of reusing oil is collecting it at home and making soap for different uses such as toilet soap, washing machine, cosmetic and therapeutic.

Figure 7.10: Home oil container

Figure 7.11: Street oil container

We took advantage of the fact that a teacher in our school knows how to do it and has all the necessary utensils. Julia was the activity coordinator and Jose Antonio was the coordinator for making the boxes for the soap, but we all played a little part in making this joyful, cooperative and creative.

The Magic Recipe

If we mix creativity with a spoonful of innovation and a pinch of entrepreneurship, we obtain a good charge of motivation and we can use this to do almost anything: learning by making; introducing real world in the classroom; encouraging participation and emphasising authentic materials in teaching.

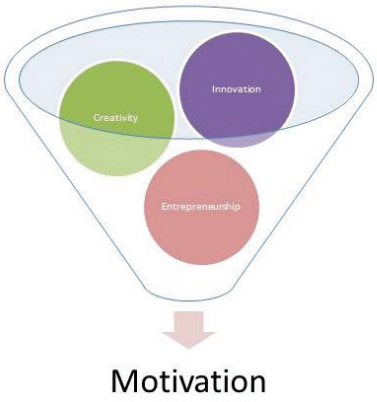

Figure 7.12: The magic recipe for creating motivation in Adult Learners

Integration of Subjects

This activity integrates different subjects such as:

- Mathematics: it is necessary to calculate proportions.
- Chemistry: students can see directly how ingredients interact.
- Science: highlighting a problem such as the negative effect oil has on the environment, and we disseminate the benefits of using homemade soap.
- Arts and design: students can make their own designs, creating forms, colours for the pieces of soap and for the wrapping.
- History: through researching the origins of soap.

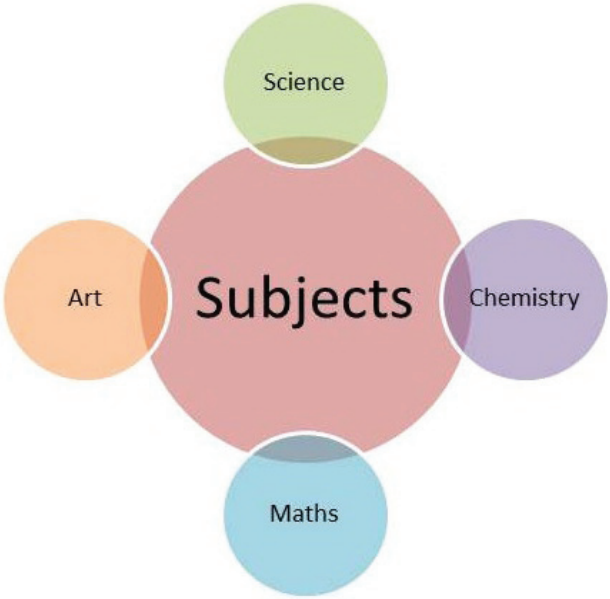

Figure 7.13: The four subjects covered in the soap making activity

Procedure

To motivate the students, we showed them ready-made soap and proposed to them that they make their own soap. They sourced used oil at home and the school supplied the rest of the material.

One day we showed them the process of making soap. Soap is made by chemical reaction. Basically, soap is made from combining an acid (oil/s) and an alkali (sodium hydroxide) in precise proportions (saponification). Saponifiable substances are those that can be converted into soap. In hand-made soap Glycerin is obtained by the saponification procedure and offers superb moisturizing effect. It is a product obtained naturally. The commercial soap manufacturers conveniently eliminate glycerin when manufacturing soap. Handmade soap has an advantage in the sense that glycerin is not removed from the soap and hence it has a moisturising effect.

The process involved a set of step-by-step instructions and we rquired time for the soap to solidify. We spent some weeks waiting for the results. When the soap was ready, it was taken out the moulds and we started to make the packaging.

In order to have instructions and materials easily available, we compiled a simple information leaflet. This leaflet was copied and put into the packets as a nice explanation of the activity. Another group of students was in charge of translating the leaflet into English. The last stage was making the packaging and showing the results to everybody. A copy of the leaflet is shown in Figure 7.14.

Making hand made soap: an easy process

Ingredients

★ 1 l of cold, clean water.

★ 500g of sodium hydroxide (caustic soda) beads or pearls.

★ 3 l olive oil (used oils from the kitchen).

★ Water soluble colorants (if you want to get coloured soaps)

UTENSILS

- Two good sized ***plastic bowls*** and some smaller ones.
- One ***measuring jug*** or 1 l plastic bottle.
  Accurate kitchen ***scale***.
- ***Utensils for stirring*** such as a wooden or stainless steel spoon, electric mixer.
- ***Moulds*** to pour the liquid soap into whilst it sets. A wooden, cardboard or plastic ***tray*** and different shaped plastic or silicone moulds.
- Eye and hand ***protection*** (safety glasses and rubber gloves)
- An ***apron***.

Figure 7.14: Instructions leaflet in PDF (2 pages)

Process

1.- Measure out 1 l of cold clean water into the jug or the bottle.

2.- Weigh (accurately) 500g of sodium hydroxide beads (or pearls).

3.- Carefully add the sodium hydroxide to the water, pouring slowly and stirring with the wooden spoon. Be careful not to breathe the vapour that is initially given off. Stir until all the sodium hydroxide has dissolved and there are no lumps stuck to the bottom of the jug. The solution will heat up and will need to be left to cool.

4.- Place the solution to the open air or in a bowl of cold water.

5.- Meanwhile, measure out exactly 3 l. of your oil in the big bowl.

6.- Mix the colours in a little water.

7.- When the lye has cooled and you can see the liquid is transparent, slowly and carefully pour the lye into the oils, stirring all the time. Once all the lye is poured, concentrate on stirring the solution.

You should stir throughout the mixture fairly briskly. You will notice the solution start to turn more opaque and as the minutes pass it will start to thicken. To fasten the process, use the stick blender, first at a slow speed and then faster.

Julia was the soap activity coordinator; Jose Antonio was the boxes making activity coordinator, but we all make a little part in a joyful cooperative and creative task.

Every little helps.

The stage in the process you have to wait for is known as the 'Trace'. This is when you can drizzle the mixture from the spoon onto the surface of the solution and it leaves a trace before sinking back into the rest.

8.- If adding colour with water soluble powders etc., make them up in a little water and add them now (at the trace).

9.- Once the mixture traces simply pour it into the little bowls and mix them with the different colours with the electric blender and then pour it into the moulds.

10.- When poured, leave the moulds aside for around 24 hours for it to set solid.

11.- After the 24 hours, remove the soap from the moulds and cut the big bar into small pieces.

12.- Now it needs to continue “curing” for somewhere between 4 and 6 weeks to be absolutely ready. During this time it gets progressively harder and looses some of the water that was put into it in the making.

Let's do it CREATIVELY

Cáceres (SPAIN)

Vignette 7: Developing the Key Competence of 'Learning to Learn'

Prepared by: Akademie 2. Lebenshälfte im Land Brandengurg e.V., Germany

Key Competences: Learning to Learn

The Akademie 2. Lebenshälfte is engaged in educational work with adults and it aims to use, develop, and retain the competences of older adults. The main activity is to initiate and organise course options for retirees, volunteers and older adults still at work. A key requirement for these learners is the development of the key competence 'learning to learn'. Generally speaking, this key competence includes the ability to learn and to organise one´s own learning process - whether alone or in a group - according to their own standards, being conscious at the same time of methods and options. Above all, this means forming a learning process according to the age of the participants and taking into account the requirements of the target group.

Older people learn differently. Some important issues are the recognition and introduction of the experience of the older person, the questioning of the significance and benefit of the topic or task, the learning process based on practical subjects, or the learning in a team of like-minded people. The following is an example of how we can achieve this.

Strengthening Mental Fitness with Cognitive Training

The maintenance and promotion of the mental and physical fitness of older people is an important component of the "work ability". Therefore mental fitness, exercise, and healthy nutrition should be part of further education. While mental performance connected with age initially increases, the performance connected to speed and change decreases starting at the age of 30. The working memory and control functions are the functions most affected by aging. Different aspects, such as "working memory", information processing speed, memory span, logical thinking, short-term memory, attention and concentration should be trained selectively to promote the mental ability required for work.

The project 'Academie 50+' – a project directed towards unemployed men and women – integrated cognitive training methods mainly supported by computers into regular education courses and was first introduced on courses teaching the use of computers.

The Training Aimed to:

1. Promote and preserve mental abilities
2. Inform learners about changes in mental abilities particularly the memory's performance with age
3. Look at different kinds of cognitive training
4. Identify one´s own resources
5. Incorporate tips and suggestions into everyday life (minimum daily: 10 minutes)

Steps

- First of all the subject of memory performance and change is introduced and discussed to increase the motivation for the training and to create an incentive to implement the exercises into everyday life.
- This introduction is followed by presenting different kinds of cognitive training. The training spectrum is broad and versatile to ensure that all aspects of competences are trained. Included are modules for concentration, memory, logical thinking etc. The programs Happy Neuron, Fresh-Minder 2 or USM Brain-Trainer were used and proved valuable.
- During the first phase alternating programs are introduced at the beginning of each day. The exercises are demonstrated and followed by guided performance. Each participant can choose his own level of performance and makes the connection to his personal work tasks.
- During the second phase the participant is restricted to the use of only two computer-based programs with different levels to enable the participant to determine the level according to the individual´s daily form. The programs offer a review of the individual performance status and explain the training effect.

- At the end of the course experiences and impressions are evaluated, and tips are given for low cost options in order to allow the participant to continue exercising at home. Permanent success depends on this sustainability.

Overall one can say that the method of cognitive training during further education of older people adds to the understanding of different aspects of "work ability", as well as to motivate them to get and stay active and take over responsibility for their performance abilities.

Figure 7.15 Learning to Learn in Germany

Vignette 8: Let's help parents learn some mathematics

Prepared by: Gabriel Taga, Nicolae Angelescu, Roxana Iordache, Universitatea Spiru Haret Bucuresti – CTID Ploiesti, Romania

Key Competences: Mathematics, Learning to Learn

The educational programme 'Let's Help Parents to learn some Mathematics' designed and developed by the University Spiru Haret - Ploiesti Technological Centre, is directed primarily to parents and adults who are interested in understanding the curriculum, and in modern teaching techniques. The programme also aims to help develop a common vision for schools and parents on how students are helped to learn scientific information.

The main targeted competence, basic skills in math, science and technology, envisaged primarily in relationship with students, can be found here in good harmony with the competence of learning to learn and also digital skills.

Starting from the certainty that a successful education, that will generate real development, is only possible through a close co-operation between parents and teachers, the course was designed to offer to parents the opportunity to learn what children learn. The aim is also to familiarise them with modern, interactive based teaching methods. The course is designed so as to enable a deep debate on the contents covered in class, so as to remove any misunderstanding on the message of the school and also to achieve a compatibility with school educatio.

In the sequences presented during the project 'Let's do it creatively for the benefit of adult learners' we tried to illustrate how the parents can be involved in the promotion of classical themes. We chose the well-known Thales' theorem, presented with a practical justification, framed naturally in the cultural elements of human civilisation. It was a presentation which can generate excitement, curiosity and desire to learn.

Historical concepts allows a deeper understanding of human society at a developmental level. Supporting these concepts through interactive presentations with illustrative images generates a more accurate understanding and helps to transform parents into real partners in educational activities and in the training of young people.

The course contributes to the formation of a strong partnership for a qualitative education. In fact, through mathematics we have a common language, a common vision to support education and to help students become balanced, safe and confident in school. The programme has already been implemented at Ploiesti at Michael the Brave High School. One lesson was presented at the Grundtvig project meeting in Malta.

Basically, our project comprises a set of eight interactive lessons with parents, one a month. This partnership has created enthusiasm among parents and the school succeeded in training staff to respect a system of educational values.

Vignette 9: Teaching Italian – An Interactive Approach

Prepared by: Javier Torres, Arte-Via Cooperativa Artistica e Editorial, Portugal

Key Competences: Foreign Languages, Interpersonal, Intercultural and Social Competences

Knowing perfectly well the challenges that we have to face in adult education over the next few years, it is important to try to find the correct educational methodology to show our students that studying can be fun. As an Italian teacher in Arte-via, I use different teaching techniques and strategies so my students learn and have fun at the same time.

First of all, it is important to establish why they want to study Italian and what their expectations are. When I do this, I find that the majority want to get involved in Italian culture including the linguistic area. I usually go the RAI website where I can download a variety of podcasts related to Italian way of life. The main aim is that the students can participate in the activities in the classroom with a sense of humour and have fun. They choose the podcast that we are going to use in the classroom and I answer any questions they may have. Based on a Spanish talk show from the eighties called "If I were president…" my students listen to the podcast and take notes from it. Then we use role play where I become the interviewer and the students are the guest artist. They have to answer in the opposing role. For example, we were working on a controversial Italian actor called Roberto Benigni. The role play was much better than I had anticipated. This actor has controversial opinions about food, Italian way of live, celebrities…etc.

In the end, the objective was achieved. All the key competences were completed by the students in a relaxed way. Within the linguistic competences, we could say that the strategy competence is used in this activity where the students have to use the ability to compensate for lack of ability in some areas of the language.

Figure 7.16 Students attend an Italian class at Arte Via, Portugal

Vignette 10: Developing Courses for Parents

Prepared by: Pauline Tufigno, Office of the College Principal, Saint Theresa College, Malta

Key Competences: Interpersonal, Intercultural and Social Competences

Parents being the first educators of their children they need to have the necessary educational skills and training in order to do this.

Thus by assisting parents in acquiring new skills and/or upgrading their present skills, one would be indirectly reaching the students outside the parameters of formal learning in schools. Further, continued communication and contact with parents helps to create a better environment and liaison for the benefit of students in the College.

Aims

To assist parents in upgrading or acquiring basic skills with a possibility for employment mobility.

- To assist parents in acquiring increased knowledge in parenting skills.
- To promote the new student services available in the College system.
- To create more cohesion and support amongst parents.
- To help students by providing training for parents, thus improving understanding of the school curriculum being followed by students at school.

Training Sessions

The College Youth Worker, Pauline Tufigno, co-ordinated the following two projects with the seven schools within Saint Theresa College:

1. Basic skills courses.
2. Monthly evening talks for parents.

Basic Skills Course

The College Youth Worker co-ordinated a set of basic skills courses in collaboration with the Employment and Training Corporation (ETC) on the College premises. The aim of the courses was to help parents to upgrade their skills to improve their employability chances, while at the same time reach students through their parents. The courses ran that from November 2010 through to February 2011, were on: Basic sales (9); Customer care (18); Digital literacy (22); Food handling (34); Health and safety (27); Job search (3); Store keeping (8) and Women for employment (13). Parents benefitting from these courses gave positive feedback about the courses' contents and also improved their employability opportunities. They also reported that participating in the said courses in their hometown areas and having the courses during their children's school hours was especially helpful for female participants.

Monthly Parents' Talks on Skills

The College Youth Worker organised a series of talks on skills for parents of the College's three secondary schools. Talks were held on a monthly basis and dealt the topics of: Dealing with stress; Substance misuse; Development – Understanding teen sexuality; Responsible sexuality and Women's health. The College Youth Worker made contacts with the speakers coming from different local institutions including SEDQA and professionals from Saint Theresa College. The talks were well received by those parents present and attendance kept constant and those present requested similar talks for the next scholastic year.

Vignette 11: Determination in the face of New Disability – Some Personal Experiences

Prepared by: Krzysztof Bahrynowski, Joanna Pinewood Education, United Kingdom

Key Competences: Learning to Learn, Interpersonal, Intercultural and Social Competences

Tackling and overcoming learning difficulties has become a frequent subject in the past 15 years. Terms such as "Dyslexia" and "ADHD" are becoming increasingly familiar to children and adult learners alike, with copious amounts of literature and online advice available on how to overcome these obstacles including improvements of diet to prevent forgetfulness with the use of first primrose oil then omega 3 and 6 and then flax oil for vegetarians and non-meat eaters.

However, Joanna Pinewood Education (JPE) wants to draw attention to less publicised learning difficulties of working with adult learners - following accidents or trauma to the head. Brain injury and the recovery from mental illness do affect learning without a doubt.

The first personal contact of such a case was in 1984, when an associate at university, a brilliant international professor of Physics suffered brain injury following an accident and lost all memory of his wife and children. He had to relearn his personal life. When he returned to the university, he could remember nothing

to do with his work and he was unable to lecture or research. He was retired due to "ill health" by his employers. I have since heard that he had been retrained as a landscape gardener.

Anecdote One

In the mid-nineties, I taught a young teenage learner who had severe difficulties in mathematics. He could not remember his math lessons from one week to the next. His father, an engineer hoped his son would follow a similar career and was very upset by his son's lack of interest. However his son was very interested in drama and acting. At school he had talent as a comedian and actor. He showed a selective memory towards drama and English writing. At the time I was reading about memory proteins in the brain and their synthesis and lack of synthesis.

I sat down with the mother and father and discussed the boy's life. He had a very clever younger sister who loved her sums and multiplication and both his parents had successfully gone through college or university in India. Together we talked about the boy and as the mother was Hindu, I delicately asked if she had any difficulties with her son's pregnancy. It was then that they recalled a serious incident in the boy's early years. An uncle had been prescribed a form of barbiturates by a doctor and the baby in its wanderings had unscrewed and played with the tablets and some had gone missing. As a baby he went into shock due to the barbiturate poisoning and an ambulance was called. The baby's heart stopped twice in hospital and was resuscitated on each occasion. Some injury might have been caused to the brain due to lack of oxygen and to memory. Until my discussion the accident had been forgotten by the father and mother. I cannot remember how young he was when his heart stopped but this and his poisoning must have, I believe, affected his cognitive development. I think his cognitive development was interrupted and memory wiped clean and he had to start his cognitive development again.

The boy scored a grade C and his parents were pleased but it took a lot of effort and understanding on my part, his tutor. During the following one to one lesson I reminded the boy of his accident and from then on we began to research his condition and we found strategies to cope with his selective memory loss. I have found it difficult to find research on such matters but believe that such conditions as too early birth i.e. premature birth must have an effect on learning. When a mum

complains about a child's reading ability or educational development I often ask at the assessment interview about their child's delivery at birth. I wonder if there is any research done by doctors and educators about educational achievement of premature babies. I cannot imagine that a 2 or 3 month premature baby in an incubator has the same nerve development as a baby that has its full nine month term. Those two babies, premature and mature, born on the same day cannot reasonably have the same educational advantage.

So when an adult suffers a near death situation which prevents oxygen to the brain or causes a high temperature or injury or trauma to the brain then the proteins or fats involved in memory retention or prevention of forgetfulness of the short and long term memory could be damaged. There is still much research that has to be done in this area. Tutors, and certain teachers and relatives of adult learners are the only ones who are at the forefront to recognise that a learner is having learning difficulties. Too often parents recognise it but classroom school teachers are too busy and hope that the child will grow out of the problem.

There is much written about dyslexia and dyscalculia but the success any of child's education depends on the empathy and motivation it receives from the parents and the teachers. The teacher does not need to be an expert in special needs but needs to show a heart when working with learners on a one to one basis and in the classroom.

Ancecdote Two

JPE have tutored many children with educational needs and worked with them successfully. I worked with a 13 year old girl from one school in Hillingdon for many years until she completed her university entrance exams. She had difficulties with memory and we had to discuss and dissect every sentence that we read together in math, science and literature. We learnt to highlight and colour code everything she read and make numerous notes which she reread and rewrote to stimulate her memory. Her school did not think that she would achieve anything in her life but within a year of one to one tuition with JPE she was put into a more challenging and better behaved class with better teachers and she succeeded in obtaining many A* for her GCSEs. She succeeded in achieving for her Advanced GCE levels two grade A's and one B and went and read law for her first and second degrees.

Somehow I was lucky and taught her topics that put her ahead of her class in experience and knowledge and she was able to explain her learning more clearly and succinctly. We developed numerous strategies for revision. It gave a boost to her confidence to understand a technique in science or math. It pleased her enormously to be able to explain and discuss with her teachers when before she only had questions that exposed her to ridicule in the class.

Anecdote Three

During the spring of 2010, a Dyslexic adult learner, Ahmed, approached JPE for support because he was going to start University in the autumn. He was bad at taking notes. He had started a degree at another university but had dropped out because he could not keep up with the course. He had a BTEC in computer studies with a distinction and the new degree he was about to start was also about computer studies. I had just come back from our project's Malta Video making workshop presentation by Mr. Raymond Bonnici (a tutor from Malta's teacher centre. A video of this presentation is available on the project's website www.letsdoit.upol.cz.) We showed Ahmed how to use his laptop webcam to make a movie, how to use lighting, how to use the microphone in his laptop to record and in this way showed him how to records notes of his classes. Ahmed and I read Raymond Bonnici's study of movie maker. We unsuccessfully tried to edit a video. With Ahmed we learnt about the different lighting and we talked about light meters, and their use in photography and film making. I introduced him to the fun of taking photos and suggested to him the use of the handy-cam in taking notes of the white board or smart board (a practice which I myself use in workshops and meetings, in taking photos. I myself found that I could better recollect a lecture when I used the photos I had made as a prompt). By recording the talk of his lecturer and taking photos we hoped that he would keep up with his course.

Tutoring Parents

As years passed and young learners passed their exams, their parents would ask JPE to tutor them. We began to support elderly care workers, geriatric nurses, administrators, airport engineers, government civil servants, play workers and university undergraduates through their learning at degree level. We found that parents and mature adults who were trying to raise their own standards of educa-

tion often had the knowledge but could not communicate their experience and learning in the written form. JPE tutors found that they had to go back with the adult learner to the basics of drafting and redrafting essays but this took time and the adult learners continuously fell behind with their assignments. Our learners found it difficult to be precise. We had to go back to their secondary school level and rebuild their written communication skills. We found that the pressures of looking after children, a home, a spouse, lack of time and an inflexible course were creating stresses which affected the adult learners' motivation.

Generally, adult learners in the UK find it very difficult to marry home life, work and a desire to develop their profession or change their career. Following the recession caused by the international banking crises, adult learners are short of cash. We find that university administrators and level 5 college course trainers are too often accepting adult learners for payment of fees without fully assessing their basic advanced level skills in literacy or numeracy and science. UK Colleges and universities are quite happy to accept private fees ranging from £3000 to £9000 from adult learners and do little to support them when their assignments are returned covered in red ink and borderline marks. Unlike the nearly free system found in the municipality of Oslo, Norway organised by Oslo Adult Education, Oslo Voksenopplæring (Oslo VO), the legal organisation for adult learning in the Oslo municipality, the UK adult learner has to turn to a private tutors like JPE to obtain a pass mark. Some retraining and upgrading of missing upper secondary skills is often all that a motivated adult learner requires.

Often JPE tutors working with adult learners find that they have less knowledge than other learners in many subjects but the tutors facilitate and act as catalysts through personalised one to one tuition. We have taken adult learners from probable pass grade to a distinction or upper second just by improving their upper secondary school skills. This support prevents the adult learner dropping out of their professional course or degree. JPE tuition regard such close working and counselling of an adult learner as an innovative practice which works because it is flexible, emphatic and creative for the tutor and the adult learner.

The conclusion is that through a focused approach, it makes it much easier to motivate the adult learner and the tutor through the diverse challenges ahead. Through working together, a tutor and the adult learner should follow a strategy to help continue both their personal and professional development:

1. Work as a team.
2. Get the adult learner to offer his, her time as a volunteer
3. Get the adult learner involved – for example, one student of mine has become involved in adult lifelong learning projects as a volunteer. With his help Joanna Pinewood Education is identifying and applying for further EU projects.
4. Keep in contact with the adult learner – The team at JPE are ensuring that they maintain regular contact with former students to ensure that they are-moving in the right direction.

AT JPE we make it a priority to create tailor made learning packages for adult learners, regardless of age or ability. We believe that providing tailor made packages to suit individuals' needs is imperative.

Vignette 12: The Folder Project

Prepared by: Centro de Adultos, Cáceres, Spain

Key Competences: Learning to Learn, Mother Tongue, Interpersonal, Intercultural and Social Competences

The main aim of education is to help students develop basic skills, so that they can succeed in life and become active members of society.

Students in Centro de Educación de Personas Adultas in Cáceres have difficulties in developing such skills, either because they endured a bad experience in regular school, or because they left school too long ago without the necessary intellectual skills.

Even though they are more mature now, using the methods that failed once could lead to a new failure and lower their self-esteem even more.

Given that our Grundtvig project focuses on creativity and enjoying learning, the teachers involved at the beginning decided to create a magazine with the students.

Instead of the usual school magazine we decided that it should be four A4 pages. The idea behind this choice was to make it a folder so that students and other people had the possibility of using it to carry their notes. This way, the life of the paper would extend beyond the making and the reading.

We decided to make it monographic. In the 400th anniversary of the telescope, our choice for the first issue was Galileo Galilei.

With that subject we would be able to cover most key competences, because students would have to look for information on the Internet about his life, time, works and heritage.

Galileo was a scientist, so mathematics would be covered. The students worked on the information gathered, decided on the selection and edited the actual articles for the magazine.

Some teachers and groups of students worked very willingly and creatively in the project.

The results in terms of developing skills were very rewarding; teachers and students felt very proud of their work. A few more magazines were created later.

Figure 7.17: Learners collaborate in producing the folder on Galileo

Figure 7.18: The front page of the final folder on Galileo

Vignette 13: Some thoughts on teaching foreign languages

Prepared by: Javier Torres, Arte-Via Cooperativa Artistica e Editorial, Portugal

Key Competences: Foreign Languages

The challenge facing adult education in the future will be to respond to the constant ageing of the population. Moreover, the effects of globalisation are being felt in every field and adult education is no exception. The main issues that we have to face are the lack of qualified teachers and the budget cuts announced by the different governments.

The institution of Arte-via Cooperative, a voluntary body run by Ana Filomena Amaral, founded ten years ago, carries out commendable work where the local people can participate in each of the activities that Arte-Via offers. As head of languages, I will point out some of the main problems that I have noticed. The majority of adult students finished their studies a long time ago and they do not have a good understanding of grammar. Moreover, they do not have good study habits and it is difficult for them to make up for lost time.

Bearing in mind these and other education problems, I try to create a pleasant atmosphere where the students can feel comfortable whilst they learn. For example, I select different subjects to be discussed and the students have to put into practice the knowledge acquired in the class. In the beginning, I write the topic and the vocabulary that they have to use during the debate on the board. When the debate starts if they use another word that does not appear on the blackboard, they have to go to the board to add it to the list or when a word has been used they go to the board to erase it. In my opinion, this kind of exercise helps students to develop communicative competences, extend their vocabulary and learn to develop their ability in the Spanish language.

As far as key competences are concerned, we could say that the linguistic competence is predominant in this type of exercises. Linguistic competence is the ability to communicate effectively and convey information.

Vignette 14: Data Logging

Prepared by: Prepared by: Lukáš Richterek, Palacký University in Olomouc, Faculty of Science, Department of Experimental Physics, Czech Republic

Key Competences: Digital Skills, Mathematics, Science and Technology

This section deals with a few concrete examples of bringing the teaching of science from the classroom into "the open air" – to the streets, squares, parks or eventually into the natural areas. It is useful not only for motivation, but it also helps to develop some competences and brings the teaching closer to both real life and technical practice.

Data Loggers

According to Wikipedia "data logger (also data logger or data recorder) is an electronic device that records data over time or in relation to location either with a built in instrument or sensor or via external instruments and sensors." In that sense everybody meets in fact data loggers in many situations around himself. Data loggers are typically deployed and left unattended to measure and record information for the duration of the monitoring period, which allows us to get a more comprehensive and more accurate picture of the environmental conditions being monitored – home weather station is a simple example of such a device recording air temperature, pressure, relative humidity, etc. (another practical example being the flight data recorder and cockpit voice recorder on board airplanes).

In the last number of years special data loggers designed and developed for the teaching of sciences have become more and more popular, in the Czech republic the 'big two' of PASCO and Vernier products are particularly popular. The main reasons, from a lecturer's point of view, are:

- Those data loggers represent multi-purpose equipment, one tool that can be used for more tasks, providing a consistency and the same control and manipulation rules for many situations; that is a great difference when compared

with the measurement of various quantities by different apparatuses communicating with different software environments.

- It is possible to employ several sensors simultaneously and thus easily get and see the charts and graphs demonstrating the relationships between measured variables.
- The data can be easily shown to the whole class using the computer and the data projector.
- The user has in his hands a set of built-in analysis tools (statistics, curve-fitting, Fourier analysis, calculation of the area under the graph, etc.).
- One can record very fast processes (lasting a few milliseconds) or also slow and long processes (measurement running all day) and use the results in classroom presentations. One can also develop the students' mini-projects based on the individual or group measurements.
- The devices are supplemented by really interesting sensors (more than 50 is offered by Vernier company) recording e.g. acceleration, pH, concentration of carbon dioxide. If one can afford a larger investment, the devices might be connected also with a spectrophotometer.
- They reduce the time needed for the experiment preparation, especially the data processing, so that both the teacher and the learners can concentrate on the science behind it and enjoy the measurement.
- A community of science teachers has formed who share their ideas and experiences. It is very convenient to be a part of the community.

From the experiences of several teachers we may conclude that it is also a wonderful toy which gives to the lecturers themselves a lot of joy and a wider range of possible classroom and outdoor activities.

Of course, like most technical devices, data loggers are just tools that can get some sense only in connection with good problems and tasks set for the students. To say it simply – they cannot serve as magic boxes - the most important part of the work has to be done by the learners themselves. A possible disadvantage is the initial investment; the loggers and sensors cost money that may not be available – Vernier LabQuest interface, for example, costs $448 at the time of writing.

Key Competences

The data loggers, at least the sophisticated ones (like PASCO or Vernier multi-purpose instruments), are in fact a sort of small computer, providing measured data statistics and analysis. Thus any activity with data loggers helps to increase the digital competence, the results analysis and finding the connections and correlations of the explored quantities is strongly connected with competences in maths, science and technology.

Besides those two topics that represent an important part of our project, the sciences and scientific problems support other generic skills and attitudes (see e.g. EPS's European Physics Bachelor Studies Specifications): problem solving and communication within the cooperating group.

A Few Practical Examples

Some of our project learners have successfully enjoyed a workshop with data logging during the third project meeting in Olomouc (Czech Republic, Palacký University). Small working groups tried five sets of activities: a motion detector (observing oscillations, measuring people's velocity, falls and reflections of the ball study), a dual-range force sensor (observing oscillations, friction measurement), a thermometer (observing the decline of temperature in a pot, the difference between a dry and a wet thermometer, an efficiency of the electric kettle estimate), a photogate (period of the pendulum measurement, responses to sending balls or combs), a gas pressure sensor (a hydrostatic pressure in a PET bottle, the change of the atmospheric pressure with the altitude, Boyle-Marriott's law). During the same project meeting a presentation of the UK partner 'Investigating solar panels for teaching electricity' was supported by the data logger recording the electric current generated by a thermocouple immersed into a hot water.

As it was pointed out, one of the key possibilities and innovations connected with the data loggers is the connection with outdoor activities. We have realised several "cross-country trainings" that were very positively accepted by the learners. In connection with GPS sensor one can record the position, velocity and altitude and later, once connected to the Internet trace the path in the Google maps (Figure 7.21). Outdoors it is possible to study the dependence of the measured characteristics, verify important laws and explore the correlations.

Figure 7.19: A set for exploring the inertial force, acceleration and air pressure in the moving elevator

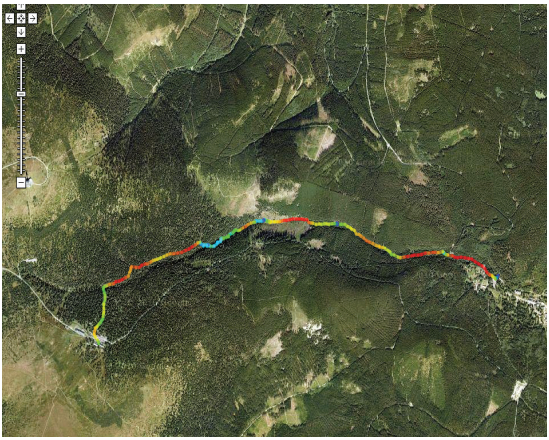

Figure 7.20: Recorded walking path and velocity projected in Google maps (dark blue being the lowest – marking the stop point, red being the highest)

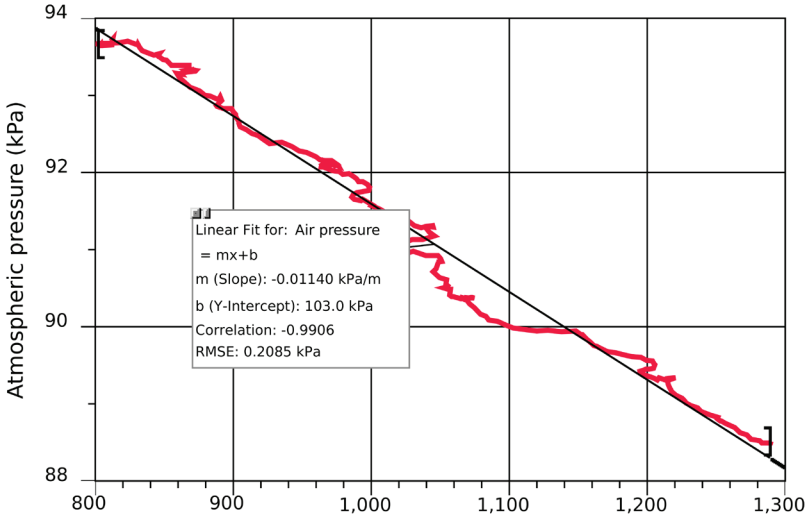

Figure 7.21: A verified linear dependence of atmospheric pressure on the altitude clearly shows that barometer can be used as an altimeter

Figure 7.22: Outdoor activities usually bring a lot of fun... (Masaryk square, Uherské Hradiště, Czech Republic)

Figure 7.23: A mountain stream velocity measurement (White Opava river, Jeseníky Mountains, Czech Republic)

Figure 7.24: The determination of pH acidity of a mineral water might be interesting for young learners as well (Karlova Studánka Spa, Czech Republic)

Appendix 1

Guidelines to Creating Effective Learning Environments

Presented here are some guidelines for creating an effective learning environment.

They are offered as examples of how a supportive, welcoming and joyful learning environment can be created for Adult Learners. These recommendations were developed and presented by members of the network during the course of the project.

Creating Enriching and Effective Project Events

Prepared by: Jonathan C. Borg, Director MECB Ltd, Malta

MECB LTD of Malta (www.mecb.com.mt) has gained several years of first-hand experience in organising events such as partner project meetings and seminars for EU & other International Projects. In this best practice, MECB will share its experience by highlighting the three key stages involved in creating both an enriching and effective project event.

The three key stages to a project event

Before the Event

The overall event depends a lot on the time invested in planning the event before it actually takes place. Based on MECB's best practice experience, this stage involves a number of steps including:

- Setting up a small 'event team' composed of your staff members and if possible a representative of your target audience to get an insight into their needs. You must ensure that team members are committed to the event.
- Design the event Agenda. Points you should consider here include:
  - Choose topics that are of interest to the target audience and not yourself
  - Use coffee and lunch breaks for networking purposes and informal knowledge sharing
  - Do not compress presentations/speaker time
  - Leave slots in the agenda by which the target audience can be actively involved e.g. during discussions or by asking them to work in small groups on some small activity
- Invite relevant speakers and provide them with guidelines with respect to their presentation. If possible, give them a 'presentation template' to ensure that their slides are well designed and with font sizes and colours that can be easily read by the participants sitting towards the back of the event meeting room. Get the contact details of speakers including mobile phone as this will be handy on the day of the event.
- Select a suitable venue that provides a good balance between cost and quality. Try to visit beforehand to check the necessary details. Get a liaison officer appointed for efficient communication. Check the audio and visual equipment you will require. Do also check room lighting, position of windows and shadows to ensure good contrast of digital presentations.
- Decide the date when you plan to announce the event. Make sure you have all details ready for announcing the event such as the agenda, aenue and any cost details. Provide a flyer or a small web page with these details and other important information. If the event involves participants from abroad, provide also other useful information. If possible, setup an event web page with relevant details;
- Prepare any 'pop-up display stands' and 'event backdrops' well in advance as these may sometimes take time to be produced.

Ensure Layout Allows All Participants To See Speaker

Ensure Presentation Fonts Are Visible From the Back

Include a Good and Informative Welcome Package

Include Interactive Activities in the Agenda

During the Event

- Make sure there are sufficient clear signs leading to your event room.
- Setup a small registration table to help participants register for the event.
- Go early because in spite of planning, things can sometimes go wrong!
- Break the ice if possible. Organise a welcome coffee during registration to help participants to gradually network with other participants.

Include Joyful and Enriching Networking Breaks

Participants Remember The Event via a Memento

- Enjoy the event! You have worked hard and made all the necessary preparation, so now relax and do enjoy the event. This might sound odd but it is extremely important because by being motivated, you will transmit your enthusiasm onto others and help create a joyful event environment.
- Remember the formalities … attendance sheet, badges, acknowledgements!

After the Event

- Settle any event-related bills!
- Provide a follow up at the end by requiring the completion of a short questionnaire to help you evaluate the event.
- Email participants to thank them for their input and for attending the event.
- Upload related documentation (e.g. presentations, event photos) and inform the participants accordingly.

The Importance of Information and Communications Technologies(ICT) in Adult Education

Prepared by: Daniela Ionescu, Universitatea Spiru Haret Bucuresti – CTID Ploiesti, Romania

The aim here is to show the importance of information and communication technologies (ICT) in adult education processes. It is obviously a key issue since nowadays the education system is focused on preparing learners for everyday life and dealing with problems in the modern world. Therefore education has to adapt to changing conditions – it has to follow all the changes including rapidly developing modern technology. The increased popularity of ICT changes the way people communicate, obtain information, spend their free time as well as acquire knowledge. Computers, MP3 players, DVDs, radio, television and the Internet which are used to transmit different sort of information including text, graphics, sound or video pictures can support the learner at every stage of their education – including adult education. It has to be stressed that their work is more and more often connected with the use of modern technologies, so everyone is naturally interested in continuous improvement of the required skills. Competent use of ICT allows a change from former education systems, which can only result in the improvement of its quality. Nowadays this process is unavoidable.

Advantages of using ICT in Adult Education

Integration of modern school with ICT is above all carried out by:

- teaching information and communication technology,
- use of information technology in teaching different subjects,
- applying latest technological solutions in school and didactics management,
- building up a virtual school environment.

Changes connected with the development of ICT quickly become civilisation changes, thus the transformation of industrial society into information society can be observed. This process enforces lifelong learning.

The main features of information technology essential for continuing education are:

• flexibility in terms of time and place (learning at one's own pace, use of virtual learning environments (VLE), long distance learning),

• flexibility in terms of content and scope of education (courses created according to the market demand, e.g., for the employees of a certain company),

• easy access to information and other learners,

• easy communication and interaction between people and net resources,

• new learning organisation (individualisation of the education process, better management of the content taught and the education process itself).

By analysing the importance of ICT in education three notable advantages of its use can be distinguished. First of all, ICT based education can be interactive and based on cooperation, thus creating a more diverse and motivating learning environment, both in and out of school. Through the use of ICT tools such as the Internet or e-learning platforms it is possible to create two groups or even societies studying together. The teacher can give an assignment to a group of learners, who will then solve it by means of cooperation and communication.

Secondly, the use of ICT allows also for the adjustment of education to individual needs as far as contents (what we learn) and methods (how and where we are studying) are concerned. We can study whenever we want and with the equipment we have chosen: computer, television or even mobile phone. What is important here, it is adjusting teaching to the learners with special needs (blind, deaf), as well as individualisation of assignments to suit the learners' ability. Because of ICT usage possibilities there is no need to teach everyone at the same time, which consequently gives the opportunity of studying to the employed or those looking after children. Presenting educational contents in a different way provides significant

advantages because it also enables the creation of new markets for the education and training sectors. Interactive education with the application of ICT is a modern and effective form of education. It significantly increases learner's commitment and activity giving him/her the option to choose his/her own ways of cognition and development - one which will be suitable for his/her abilities. By involving all the learner's senses it creates ways of learning similar to scientific research thus improving the effectiveness of teaching. Using electronic information resources requires specific skills in order to operate modern information tools, information and multimedia technology.

Experimental study of the effectiveness of applying IT in the education process during regular lessons at school has proved that the use of these technologies fosters: high effectiveness in providing didactic material and developing skills by combining education with entertainment in one activity, therefore activating a few perception channels at the same time. The education process respects to a large extent individual's pace of work and gives a considerable degree of independence which results in increased motivation as well as the development of cognitive skills of the learner.

How to Prepare Interesting Visual Slides – Some Advice and Examples

Prepared by: Daniela Ionescu, Universitatea Spiru Haret Bucuresti – CTID Ploiesti, Romania

Presentations always enrich the learning process: they enliven your language with visual aspects, focus listeners' attention and allow them to listen to you, whether it is a video conference or an ordinary lecture. Therefore, it is important to prepare them properly so that their content will be understandable not only to you but to all the attendees in the class. Inadequately prepared presentations (overloaded with text, graphic images) will cause the audience to become distracted and inattentive.

Design Factors to be Considered

1. Presentation design should be simple and match the volume of material to be presented.
2. You should avoid copying presentations from several presentations prepared earlier, since the design and style of a previous presentation is usually transferred in the process and it can take much more time to correct it.
3. It is not recommended to alternate colours that are used but to use the same colour and background throughout the entire presentation. It is also recommended to avoid using extra bright colours. When preparing presentations, you should use a light background and dark letters or vice versa (a harmonious contrast will give the best effect). It is recommended to use colour combinations. These are often suggested by the presentation programme you are using.
4. Red and bright letters usually fade in the background.
5. It is never recommended to write all text in UPPERCASE as it becomes difficult to read.
6. At least an 18-point font is recommended for presentations used during video conferences.
7. Presentations may include school or project logo; however, it should not dwarf the information presented in a slide.
8. It is not recommended to use extra-long sentences. Use key words instead. During your presentation, do not read the entire text presented in a slide. It should not be forgotten that slides only complement the presentation/lecture and do not substitute it. If the slides are overloaded with text and long explanations, the audience will be bored and finally may stop listening.
9. More graphic elements than text should be used in slides. However, figures should not be only an element of beauty in the presentation. They should enrich the information included or simply be the source of information. A good illustration can often tell more than hundreds of words in a text.
10. Animations may enrich information included in the presentation. The information should be relevant and coherent. Animations should be short and

easily understood and should not exceed 2-3 minutes.

11. Sometimes it is recommended to print handouts of slides. This is not necessary for video conferencing since most often you will sit in front of the monitor where your slides and other presented material is seen.

12. Make sure that you leave no grammar or spelling mistakes in your slides which would distract your listeners.

Appendix 2

Two Inspirational Learners

As educators our greatest fulfilment must surely be to see our learners achieve their goals in life. The following are two case studies of learners who have achieved their own personal goals in life and excelled in their learning. The case studies were developed by the partners during the course of the project and are presented here as examples of how case studies can be used to inspire both us as educators, and also our own learners.

One of the learners has achieved worlwide fame through his learning, the other is a success story of a more personal nature. Both though serve as inspiration to other learners as they strive to reach their potential.

Case Study 1: Aidan Cooper

Prepared by: Krzysztof Bahrynowski, Joanna Pinewood Education, United Kingdom

For nearly two years, JPE has been working alongside, Aidan Michael Cooper, a young man young who faces many learning difficulties. Mr Cooper kindly agreed to be used as a case study and to share his experiences. JPE accepted the challenge, and continues to work on his social and academic development.

Aidan is 36 and from London. In year 7, aged 12, he was pushed into the carriage of a passing London Underground train, which caused him to spend 17 days in a coma and a further 2 months in hospital. The boy incurred serious head injuries, developing chronic memory loss and epilepsy. Adjusting to life after an accident such as this is extremely difficult and Aidan remembers severe bullying from his school peers and the lack of understanding from his teachers, alongside the struggle to come to terms with his new disabilities so his parents put him into a special boarding school.

Aidan Cooper and Krzysztof Bahrynowski at the workshop in the Czech Republic.

Learning to build one's social and academic skills is extremely testing, especially when one is having to deal simultaneously with a new disability. However, through focusing his energy on a specialist interest, Aidan overcame some of this and became interested in gardening, gaining qualifications and an active lifestyle. He has concentrated on horticulture, gaining a Level 1 Vocational Diploma. As an adult he completed the Royal Horticultural Society level 2 in Horticulture but did not obtain a reasonable score in the exam to achieve a qualification. This failure and later lack of emotional support from his estranged wife de-motivated him and caused him to go into a depression.

We introduced him to the internet of which he was scared because he feared an epileptic attack. It just happened that a special needs advisor from the Malta education advisory centre recommended that he obtain prescription polaroid sunglasses to prevent the glare from the monitor that caused headaches or an epileptic attack.

He came to a workshop in Clapham that had participants from Sweden, Turkey and Italy and he became friends with the Turkish participants. To communicate with them I registered him on Facebook and by chatting he built up a network of old and new friends which forced to write and improve his typing skills.

With the help of another student, Ahmed, Aidan narrated a video of his vegetable allotment which he presented at Olomouc University in the Czech Republic for the workshop "Creativity and motivation in teaching maths, science and technology". Tutoring Microsoft video making and editing is a difficult skill to facilitate and motivate and it was only with Lukas Richterek's kind understanding in Olomouc that we managed at the last minute to edit the video using his Pinnacle. Aidan didn't trust that we would complete this in time so he typed a short presentation on "seed germination" and we guided him to use the internet to find the best photographs of seeds he wanted to show and to cut and paste them into his presentation. Presenting seed germination during the workshop gave Aidan a considerable boost of confidence. He had previously assisted the teaching Asian ladies in ESOL classes. I introduced him to all participants especially the Spanish and Czech and I suggested to him that he apply for a Grundtvig assistantship to one of these countries for a few months of voluntary work. The Spanish teachers from Caceres agreed to the suggestion. His mother wrote a testimonial that Aidan's going to Olomouc had altered his perspectives about his future. The opportunity to volunteer to be a classroom assistant in Spain excited and changed his attitude.

Aidan Cooper delivering his presentation in the Czech Republic.

Case Study 2: Stephen Wolfram

Prepared by: Jan Riha, Veronika Kainzova and Daniela Navratilova, Palacký University in Olomouc, Faculty of Science, Department of Experimental Physics, Czech Republic

Stephen Wolfram is a distinguished scientist, inventor, author, and business leader. He is the creator of Mathematica, the author of A New Kind of Science, the creator of Wolfram|Alpha. Born in London in 1959, Wolfram was educated at Eton, Oxford, and Caltech. He published his first scientific paper at the age of 15, and had received his PhD in theoretical physics from Caltech by the age of 20. Wolfram's early scientific work was mainly in high-energy physics, quantum field theory, and cosmology and included several classic results.

Stephen Wolfram's parents were Jewish refugees who emigrated from Westphalia, Germany, to England in 1933. Wolfram's father Hugo was a textile manufacturer and novelist (Into a Neutral Country), and his mother Sybil was a professor of philosophy at the University of Oxford. He has a younger brother, Conrad.

Wolfram was educated at Eton, where he amazed and frustrated instructors by his brilliance and refusal to be taught, instead doing other students' maths homework for money. Wolfram published an article on particle physics, but claimed to be bored and left Eton in 1976 without graduating. He entered St John's College, Oxford at age 17, but again found lectures "awful"; working independently; Wolfram published a widely cited paper on heavy quark production at age 18 and nine other papers, before leaving in 1978 without graduating. He received a Ph.D. in particle physics from the California Institute of Technology at age 20, joined the faculty there, and received one of the first MacArthur awards in 1981, at age 21.

Wolfram's work with Geoffrey Fox on the theory of the strong interaction is still used today in experimental particle physics. He founded the journal Complex Systems in 1987. Wolfram is married to a mathematician and has four children. In 1986 Wolfram left the Institute for Advanced Study for the University of Il-

linois at Urbana-Champaign where he founded their Centre for Complex Systems Research and started to develop the computer algebra system Mathematica, which was first released in 1988, when he left academia. In 1987 he co-founded a company called Wolfram Research which continues to develop and market the program. Stephen Wolfram is currently the majority shareholder.

Wolfram Mathematica

Mathematica is a computational software program used in scientific, engineering, and mathematical fields and other areas of technical computing. It was conceived by Stephen Wolfram and is developed by Wolfram Research of Champaign, Illinois. Mathematica is known as the world's ultimate application for computations. Furthermore, it is the only development platform fully integrating computation into complete workflows, moving you seamlessly from initial ideas all the way to deployed individual or enterprise solutions.

The first release, Mathematica 1.0, was provided in 1988. Later on, The New York Times wrote that "the importance of the program cannot be overlooked," and Business Week later ranked Mathematica among the 10 most important new products of the year. At first, Mathematica's impact was felt mainly in the physical sciences, engineering, and mathematics.

Mathematica has become important in a remarkably wide range of fields, technical and otherwise. Current release, Mathematica 8.0, is used throughout the sciences - physical, biological, social and others, and counts many of the world's foremost scientists among its enthusiastic supporters. It has played a crucial role in many important discoveries and has been the basis for thousands of technical papers. In engineering, Mathematica has become a standard for both development and production, and by now many of the world's important new products rely at one stage or another on Mathematica in their design. In commerce, Mathematica has played a significant role in the growth of sophisticated financial modeling, and is being widely used in many kinds of general planning and analysis. Mathematica has also emerged as an important tool in computer science and software development: its language component is widely used as a research, prototyping, and interface environment.

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Chapter 1

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PROJECT PARTNERS

The LETS DO IT project involved a number of different partner organizations from across the EU. The different institutions involved were represented by the following personnel.

IRELAND

County Dublin VEC was represented in the LETS DO IT project by Kevin Harrington who also acted as the coordinator for the project.

Kevin holds an Honours degree in Business Studies and a Graduate Diploma in Business Education, both from the University of Limerick.

He also has an M.A. from the Dublin Institute of Technology as well as a Diploma in Computing from the Open University and a Certificate in Adult Education from University College Dublin.

He has over 17 years experience in Adult Education. He is currently Deputy Principal in Stillorgan College of Further Education, Dublin.

County Dublin Vocational Education Committee

www.codubvec.ie

Kevin Harrington

MALTA

Dr Frank Fabri is College Principal at Saint Theresa College (Malta) that includes four primary state schools, two state boys' secondary schools and a state girls secondary school. As College Principal, he is a member of the Educational Leadership Council within the Directorates of Education.

Kulleġġ Santa Tereża
PARVA PARVORUM PULCHRA

Office of the College Principal,
Saint Theresa College

www.kulleggsantatereza.edu.mt

Dr. Frank Fabri

He is a researcher specialising in the areas of school networks, networking in education, and the training and development needs of leaders in networks. His doctorate from the Institute of Education, University of London, examined the training and development needs of Maltese educational leaders under the college reform.

He has a range of experience in education, having been a teacher for 11 years, researcher, part-time lecturer at the Faculty of Education, University of Malta. He is a British Educational Leadership, Management and Administration Society member, member in British Educational Leadership, Management and Administration Society research interest group focusing upon the doctorate in educational policy, leadership and management, and member in the Network of European Active Citizens. He has published in the areas of educational networks and networking. He is a member on the Board of Governors at the Malta College of Arts, Science and Technology.

MALTA

MECB Ltd was represented in the LETS DO IT project by Dr Ing. Jonathan C. Borg who has experience in a number of EU Projects ranging from EUMEDIS, Asia Link to Leonardo and Grundtvig.

MacDAC Engineering Consultancy Bureau Ltd

www.mecb.com.mt.

Of relevance to this project is his several year's experience in providing training on Innovation Techniques to adult learners and he also designs e-Learning courseware for technical subjects reflected in LLP projects such as CECA and euCAD.His expertise concerns creativity and innovation in product development. He lectures on the MA in Creativity and Innovation at the Edward de Bono Institute of the University of Malta.

Jonathan C. Borg

Jonathan has been regularly appointed as independent expert reviewer and evaluator with the European Commission for R&D related projects.

In May 2003, Jonathan was awarded a Medal of Appreciation at a ceremony held in the House of Commons (London) for contributions he made as Malta's Branch Secretary for the UK Institution of Engineering Designers. Jonathan has served as member of the Malta Standards Authority, the National Commission for Sustainable Development, the Malta Government Student Scholarships Board, the Engineering Board, The Malta Government Scholarships Scheme, Malta College for Science, Arts and Technology (MCAST) and the Malta Council for Science and Technology.

TURKEY

Andırın Centre for Education of People (ACEP) was represented in the LETS DO IT **project by Mahmut DEVELİ who is working as a teacher of English both in ACEP and in a boarding primary school.**

LETS DO IT is the first Grundtvig experience both for Mahmut and for ACEP. Mahmut has participated in other EU projects recently, and also has experience in several national projects.

In Andırın, Mahmut coordinates and supervises 'DynEd' (dynamic education), which has the world's most comprehensive line up of award-winning computer-based English Language Teaching (ELT/ ESL) solutions.

DynEd's Teacher Training Course, a new, multimedia professional development course, has been named 'Outstanding Product of 2010' by Technology and Learning magazine, adding yet another award to the most honored line-up of multimedia English language teaching and professional development tools in the world.

ANDIRIN HALK EĞİTİM MERKEZİ

Andirin Centre For Education Of People

http://andirin.meb.gov.tr/

Mahmut DEVELİ

UNITED KINGDOM

Joanna Pinewood Education Limited is represented in the LETS DO IT Grundvtig project by Krzysztof J.K. Bahrynowski B.Sc. (CNAA),M. Sc. (Birkbeck), CACHE Diploma Certificate in Level 3 Playwork, qualified Paediatric First Aider and First Aider at Work.

Joanna Pinewood Education Limited.

www.jpetutors.com
www.fluxclub.com

Krzysztof J.K. Bahrynowski

Krzysztof Jan Bahrynowski, British born, feels at home in Europe. He is the proprietor of 2 successful London businesses: Joanna Pinewood Education limited and Bahrynowski Properties. He is an active educator with over 29 years of experience within the British and Polish education system for adult and children education. An accomplished teacher he is the Headmaster of Joanna Pinewood Education tuition centres which specialise in working with learners of all ages and abilities. He actively encourages a philosophy of `mind friendly´ learning - grouping work by learning styles and ability to optimise and enhance the learning capacity. He employs non-traditional teaching methods and ideas to establish and build relationships with learners with SEN enabling them to learn and communicate more effectively. For many decades he has counselled and facillated adult learners. His current interest is creativity and innovation of sustainable environmental development and learning.

Headhunted by Ofsted and Slough Council, Berkshire, he turned around Beechwood school's failing Math Department. Received thanks from the deputy director of Slough Education Authority and from Ofsted Consultants. He organised Flux Club: a holiday and after school club in 2008 with Stockley Academy in West Drayton. He contributed to a Transversal study visit in Oslo, Norway on the theme of Innovation and Creativity of Adult Education in April 2011. In 1989, he worked

with Wydawnictwo Literackie, in Krakow, a Polish state publisher and introduced desk top publishing from the UK. In 1990 he published a translation from Polish, "Little King Matty …And the Desert Island" originally written by the Polish Psychologist, (Janusz Korczak), Dr Henryk Goldzmit.

Krzysztof Jan Bahrynowski's background is originally in forensic science. He collaborated with Dr Wieslaw Modrakowski's Polish organisation 'Expertus' in the late 90's when Poland became a key to international organised smuggling into Europe.

SPAIN

Centro de Educacion de Personas Adultas in Caceres, Spain was represented in the LETS DO IT project by José María Calvarro Fernández. He has been a French teacher since 1979 and also an English teacher from 1993. He has worked in several secondary schools in various parts of Spain, from Galicia, in the North West to the Canary Islands. He has been involved in student exchange programmes a number of times. In 1977- 1978 he studied English in Edinburgh (Scotland).

He has been teaching at CEPA Cáceres since 1995.

CEPA Centro de Educación de Personas Adultas Cáceres

http://cepacaceres.juntaextremadura.net/

José María Calvarro Fernández

CZECH REPUBLIC

Palacký University, namely its Faculty of Natural Sciences, was represented in the LETS DO IT project by Dr Lukáš Richterek and Dr. Jan Říha.

Palacký University in Olomouc, Faculty of Science,

Department of Experimental Physics

www.upol.cz

Lukáš's fields of interests are pedagogical aspects of relativity theory, astrophysics and cosmology, philosophy and history of science, dynamic modeling and the relation between the science and religion.

He is also involved in some popularisation activities like University of the Third Age and University of the Child Age, summer schools for secondary school students, etc.

He is an active member of the American Association of Physics Teachers, GIREP – International Research Group on Physics Teaching, European Association for Astronomy Education, a member of the central committee of the Union of Czech mathematicians and physicists and sits on the organising board of the Czech Physics Olympiad.

Dr Lukáš Richterek

Palacký University was also represented in the LETS DO IT project by Jan Říha, who has been assistant professor at Palacký University in Olomouc's Department of Experimental Physics since 1999.

The title of Říha's Ph.D. thesis was 'Quantum-Mechanical Theory of Crystalline Optical Activity'.

Dr. Jan Říha.

His work consists of scientific research, training students (especially future physics teachers) and managing projects funded by EU and Ministry of Education, Youth and Sport.

Most significant publications:

- Říha, J., Vyšín, I., Látal, F., Soukupová, J.: Application of Mathematica Software in University Education of Students with Majors in Physics or Optics. Wolfram Technology Conference 2010, Champaign, Illinois, USA.
- Vyšín, I., Říha, J., Vavříková, H.: An alternative method of dispersion relations derivation in the crystalline optical activity in the direction perpendicular to the optic axis. Optik 118 (9), 2007, 407-417.
- Vyšín, I., Říha, J., Sváčková, K.: Note on the coupled oscillator model solutions in crystalline optical activity. Journal of Optics A: Pure and Applied Optics 8, 2006, 584-593.
- Říha, J., Vyšín, I., Lapšanská, H.: Theory, measurement and origin of optical activity in benzil crystal. Molecular Crystals and Liquid Crystals 442, 2005, 181-201.

Lessons at Faculty of Sciences:

Mathematics for Physicists, Electromagnetic Field Theory, Quantum Theory of Molecules, Modern ICT Tools in Teaching Sciences, Computers in Physics Teaching, Mathematical Software in Science, Geometrical and Wave Optics.

Projects:

Training Teachers in Application of Modern ICT Tools in Teaching Physics

Modern ICT Tools in Fields of Science and Economy and Their Presentation

PORTUGAL

Ana Filomena Leite Amaral, master in Contemporary Social and Economic History with the thesis entitled *'Maria de Lourdes Pintasilgo - Years of Youth Catholic University Women - 1952-1956'*, **published by Editora Almedina in April 2009.**

Arte-Via Cooperativa Artística e Editorial, CRL

Lousã – Coimbra - Portugal

Coordinator of the European projects in the Group of Schools of Arganil. Founder and director, as volunteer, of the Arte-Via Cooperative based in Lousã, Portugal.

Ana Filomena Leite Amaral

Translator of the manual of the European project 'The learning eye', from German into English. Coordinator of the European Grundtvig project 'Roots and Wings'.

Author of several novels: 'A Door Opened out with Fire', 'The Secret of the Sea Horse', 'The House of Luck' (whose English translation is on the site: http//tinyurl.com/Houseofluck), 'The Cown of Gois' and 'Bread and Water', that will be published this year in a bilingual edition, Portuguese and English, in the context of a Leonardo project.

ROMANIA

Universitatea Spiru Haret was represented in the LETS DO IT project by Gabriel Taga a director at the University Spiru Haret _ CT Ploiesti.

Universitatea Spiru Haret
– CT Ploiesti

http://www.infoidploiesti.ro/

Also head of Nation College Mihai Viteazul Ploiesti, he has been a teacher of maths for 17 years. He is the author of many school text books and articles in mathematical magazines. He has prepared students who have won awards at national and international contests. He has also been involved in planning and preparing courses and delivering math lessons, assessing and recording the pupils' progress at mathematics.

He is a senior member of National Committee for Bilingual learning. He is also a Member ot theAdmission Committee and Reception Committee.

Education and Training

2008: Master Degree in Educational Management, University of Ploiesti

2010: Licentiate in Languages, Spiru Haret University

1993: Licentiate in Mathematics and Mechanics, Bucharest University.

Universitatea Spiru Haret was also represented in the LETS DO IT project by Daniela Ionescu.

She is a member of the staff of the In-Service Teacher Training Center of Prahova county. She has extensive work experience in the field of informatics and information technology: responsible teacher /consultant for teaching courses ICT and for AEL (e-learning platform, complex /complete training solution, created for the Romanian educational system).

She was involved in the formation of new competences for student-teachers using ICT in the classroom. She aslo acts as an expert for the access of internet educational resources for didactical content.

Daniela Ionescu

Education and Training

2006: Master degree in Management and Strategy for European Administration,
University of Ploiesti

2001: Licentiate in Mathematics and Informatics,
Transilvania University Brasov.

GERMANY

Akademie 2. Lebenshälfte im Land Brandengurg e.V. was represented in the LETS DO IT project by Andrea Callejas Castaneda.

Akademie 2. Lebenshälfte im Land Brandengurg e.V.

www.akademie.whpr.net

Andrea Callejas Castaneda

Learning Through Networks:

Reflections on Creating Joyful Learning Experiences

Collaboration between educators is becoming more and more important as they face up to the challenges of the 21st century. Learning through networks is one way in which this collaboration can be achieved.

This book describes the experiences of one such network. It documents the experiences and lessons learnt during the two years of the Grundtvig Lifelong Learning Partnership *'Let's do it Creatively: for the Benefit of Adult Learners.'*

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ISBN 978-99957-0-058-4

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Lifelong Learning Programme

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