

## E-process in e-learning

Analysis of the present situation in e-learning in partner countries

output 01 of the project

Analysis of the present situation in e-learning in partners' countries (Belgium, Germany, Latvia and Poland) is required for achieving the objectives of the project *E-process in e-learning*

- to implement a 'friendly approach' to e-learning / distance learning / usage of open education resources,
- to improve the quality of it and
- to prepare trainers to conduct the training using ICT.

The present research within the project *E-process in e-learning* is aimed at diagnosis of needs and barriers in

- providing the e-learning that engages the participants,
- ensuring trainers with proper tools and competences
  - o to have the influence on process of education,
  - o to motivate students, and
  - o to give them the opportunities for reflection.

The methods of obtaining data included

- desk research,
- focus group interviews (called Focus Group Interview - FGI),
- individual in-depth interviews (called In-Depth Interview - IDI), and
- survey.

The present English summary includes

- results of analysis of the e-learning situation in each partner country,
- comparison of the e-learning situation in the four partner countries, and
- recommendations for the next step of the project.

## Belgium:

A wrong vision on e-learning could be provided if this vision ignores the psychological backgrounds and different educational models of blended learning. Active learning, collaborative learning & creating knowledge and problem solving learning are basic concepts of a modern e-learning. It's important that these issues would be well developed in the planned TOT ([Training of Trainers](#)) course.

Learning is a cognitive process and, of course, e-learning has the same basic character. Learning is a complex process described with such a definition as "Learning is a constructive, cumulative, self-directed, goal oriented, situated, interactive/cooperative and individually different process of knowledge, meaning and skill development." Roughly speaking, there are four distinct learning theories: **Behaviorism**, **Cognitivism**, **constructivism** and recently **connectivism**. It seems us important that these theories would be presented during the TOT course.

The application of the E-process project is mentioning in some places the learning styles of Kolb. Therefore, we mentioned in our report fairly the comprehensive learning styles of Vermunt (2013) because he is familiar with e-learning in all its facets. Vermunt has identified four learning styles based on his research. Each learning style describes what motives a student to learn, and how the student's learning behavior looks like. It would certainly be interesting to treat these issues also in the course.

In our summary we showed the evolution of the history of the use of ICT in education and training as steps of a staircase. For the partners of the E-Process project it would be crucial not to put steps backwards in this evolution. In the choice of their training model or models they have in our view at least to start at the third "stair step" of this staircase with the hope to end at the fourth step.

Actually the main stream form is e-learning is blended learning although there is no generally accepted definition. Therefore we would advice to use the following working definition during the TOT course: blended learning includes a mix of online and face-to-face teaching methods and learning, where learners actively started with learning contents, individually and in interaction with each other and with the teacher/trainer. Nevertheless the participants of the

course have to be confronted with the different visions on blended learning by famous international specialists. In the evolution towards blended learning as a main stream in the ICT landscape not only learning theories played an important role. For the actual implementation of ICT in the practice of education / training, the role of a series of concrete models in the background all equally important.

In our report we mentioned a number of models: Bonk & Graham (2006) and Collis, Haikkairen (2009), Moderating Model van Salmon (2000), The Moodle Model, Kahn's Octogonal Framework (2007), Garrison en Vaughan (2008), the e-kubus of Raessens, den Brock en Jochems (2009), Smith 'The learner-centered process', Hoskam (2004) Police Training Model in the Netherlands. We think that these models could be important issues in the TOT course because the participants could be inspired by the diversity of the offered models. They have to acquire a theoretical basis for the concept, principles, variants of blended into the bigger picture of 'learning'. Finally blended learning should be approached as a fundamental redesign of the instruction model with the following characteristics:

- A shift of the lesson as a central element in a course to the student as a central element in which students active and interactive learners,
- Increased interaction between student-teacher, student-student, student course content and external sources,
- Integrated formative and summative assessment mechanisms for student and instructor/trainer.

In fact this interaction and collaboration is illustrating the last learning theory, namely Connectivism (Siemens, 2010). This means that the network of the student, the network including external field experts is given a prominent place in the learning process. In this approach to learning networking is getting the clutch between the formal and informal learning via the learning community. This is an important issue for the E-process project because the main goal should be to improve non-formal learning by the use of blended learning. A challenge but thanks to partner collaboration also an achievable goal!

## Germany:

- E-learning is considered as "Adaptive Learning".
- If a learning opportunity is adapted to the needs of the learner, the learner should, however, also play an active role.
- "Blended Learning" as a mix of traditional and computer-based Teaching, considered the most important form of learning.
- Multi-year comparison of relevant learning shows that social media experiences an up and down, not least influenced by the general hype topics such as "Facebook". After a certain disillusionment the sustainability of social networks and communities now increases again. Wikis, however, lose relevance.
- The most important future source of income for e-learning providers next to "blended learning" is the division "Mobile / Apps". Both have similar economic relevance in the near future. Only little commercial success is expected now from learning applications in the context of "Social Networks / Communities".
- Major topics and content for corporate e-learning include the e-learning topics "product training", "compliance" and "IT applications".
- Big companies are the most important target group for commercial e-learning offers. Tailor-made products and services play an important role. Fragmented target groups such as craft or self-employed that rather buy products "off the shelf", currently play only a secondary role as a target group.
- A clear majority of respondents sees the potential of Open Educational Resources (OER) for market opening. Half of the respondents, however, is also thinking about risks to commercial e-learning providers.
- Concerning Adaptive Learning experts welcome such applications where the Learners are involved in the process of individualization of learning content and consciously make decisions. An automatic adjustment "in the background" is likely to be rejected.
- The trend towards internationalization of e - learning industry manifests itself in the recent survey, especially in the great agreement of the experts for the thesis that e-learning providers are set up in the next few years on need to offer their learning content in all major world languages.

**Latvia:**

Summarizing content analysis (Mayring, 2004) of the data demonstrates fragmentarism in non-formal adult education in general and e-learning as well as teacher training in non-formal adult education in Latvia in particular. Summarizing content analysis (Mayring, 2004) of the data allows outlining findings on outcomes of the research and description of good practices (courses that engaged participants, tools for trainers that prepare them to use distance learning and open source. Within the present contribution such research findings have been emphasised as

- Due to ageing European population and workforce, the recent economic downturns and the labour market's increased flexibility, the participation of adult in lifelong learning paths has firmly entered the political agenda of the European Union (Maniscalco, 2013) including Latvia.
- E-learning in non-formal adult education in Latvia is placed into the concept of Latvian lifelong learning that combines the humanistic and economic approach – the development of the personality in connection with raising qualification and requalification combining it with formal, non-formal and informal learning in the integrated perspective of innovations and entrepreneurship (Birzina, 2012).
- The policy in adult education of Latvia is being shaped instead of coordination of activities of individual contributors to adult education.
- The new target of the European Union adult education policy including Latvia has shifted from citizens to workers and the competence development model, borrowed from the corporate sector has been established as the reference for the new policy road maps (Maniscalco, 2013).
- In the light of 'politization' of research (Roger, 2002) including the area of adult education in Latvia rooted-in-the-policy definitions (Kujšs, 2014b, 141) are used.
- Recognition of non-formal and informal education (Organisation for Economic Co-operation and Development, 2010) has started in adult education in Latvia.
- A new concept within adult learning including e-learning which considers an adult as a whole who learns by transforming experience into bodily feeling, soul emotions and ideas of mind (Babajeva, p. 456) is required as the focus of learning theory has shifted from cognitive to holistic approach (Babajeva, 2012, p. 456).
- There is a problem with teaching materials in the national language in non-formal adult education in Latvia. The newest teaching materials are available in foreign international languages for use in non-formal adult education. Teaching materials in the national language have to be updated after some time as these teaching materials get old-fashioned and, therefore, nor usable in non-formal

adult education including e-learning. But due to a number of problems such as timing, financial, etc teaching materials in the national language are not enriched.

- There is no information as well as research on teacher training for teachers who are involved in non-formal adult education in Latvia in general and in e-learning in non-formal adult education in Latvia in particular. It means that teachers enhance their teaching qualification acting in compliance with their own responsibility against their participation in non-formal adult education in Latvia. Assumably, teacher obtain their knowledge and qualification in formal higher education in Latvia and participate in local and international training courses, seminars, etc supported by local or international authorities.

Description of good practices includes courses that engaged participants, tools for trainers that prepare them to use distance learning and open source.

As the more content-specific the course, the more learners will find it useful and be motivated (Jordan, 1997, p. 252), such courses engaged participants as

- o Teaching Theory of Inventive Problem Solving (TRIZ) at schools and industries supported by the European Commission in the framework of the Lifelong Learning Programme.
- o Virtual tours of varied exhibitions as offered by Museums such as the Natural History Museum of Latvia. Virtual learning is associated with participation in learning. The representatives of different age and interests may engage in natural research.

Tools for trainers that prepare teachers to use distance learning:

- During training course, E-learning platforms such as Moodle are well-accepted among training course participants.
- for communication purposes in non-formal adult education such tools are employed as *Skype* and [Google Hangouts](#) that ensure voice, text and video interaction, desktop showing to the conversation partner, file exchange, conference calls, Screen sharing such as [Teamviewer](#), chatting such as *Facebook* or *Google Hangouts*, non-synchronous forums such as *Google Groups*, sms such as *WhatsApp* un *Twitter*, social media such as [Facebook](#) , [Pinterest](#) or [Springpad](#), *Open Education Resources* (OER) where [OER Commons](#) are a starting point, *Creative Commons* that show how to use materials in compliance with copyright law, *Podcasts* that are audio records that can be downloaded into a computer or mobile telephone, *Youtube* that offers video instruction to many question, etc.

Open source used in Latvia comprises

- **the website Time of ICT (ikt.jrpic.lv)** published by Jelgava Regional Adult Education Center aimed to help teachers to find the information, e-resources and teaching materials of teachers, which they can use for improving the quality of teaching and learning process.
- Data base of reports **on the Internet Library Atlants.lv** published by SIA “CDI”.
- **Dabas dati (Data of nature)** published by Latvian Fund for Nature, Latvian Ornithological Society in the homepage “*Dabasdati.lv*”, volunteers can freely share their observations on nature, insert photos taken by them in nature, consult, comment and get information about the species they are interested in. All the information is connected with the coordination system in the map of Latvia. This can be used in scientific researches, as by adding the description of phenomenon observed, all the precise data are manifested. This home page is supported by Latvia, Iceland, Liechtenstein and Norway.
- Socialization is provided by social networks such as
  - Accountants Club – with professional orientation; it offers databases, Club Life, Address Book, links directory. There is an opportunity to receive the opinion of specialist, as well as access and download forms, and get support information on how to operate (Handbook).
  - Cālis.lv – with household orientation, etc.

Examinations in e-learning within non-formal adult education can be carried out via such tests as [Hot Potatoes](#).

For entertainment in e-learning within non-formal adult education, such open resources are widely used in Latvia as games such as [Bunchball](#) and Serious Game Network as well as Simulations such as [OpenSimulator](#) and [Second Life](#).

### **Poland:**

There is plenty of courses provided in Poland by different organizations. There is an increasing trend in business in using e-learning tools in improving employees’ skills. In recent few years also non-governmental organizations are providing more e-learning in their educational activities. The most popular tools are: Moodle platform and webinars. There are also international courses, provided by international teams of experts (e.g. in the field of sustainable development). Their role is reduction of costs, targeting bigger amount of

participants and dividing education process into working on attitudes/behaviours on in the class trainings (face to face trainings) and working on knowledge via e-learning courses.

**The quality of the courses - active method perspective:** The quality of the courses depends on the experts responsible for designing the course. There is not enough training for trainers in Poland preparing to conduct effective e-learning courses. People who are responsible for creating courses are experts in their field but their knowledge and skills about their role in such a distance course are not enough.

### **The role of trainer in e-learning**

- John Nworie (2012), Badrul H. Khan (2012) pointed out changing patterns of communication and interaction between learners and trainers (educators), both in the traditional training and e-learning courses. The traditional concept of a trainer or educator is no longer sufficient, there are new, as **cybereducator**, or the **leader of distance education** (Education distance Leaders - Beaudoin 2003).
- The role of e-learning educator/trainer is changing, as it changes **the behavior of learners**. It should be taken into account in everyday life - **where people go for the knowledge and use the power of social media in the educational process**. True learner community now appears as arranged online environment that promotes critical thinking and learning dares to meditate different perspectives in the topic, which are being explored. Recently it is said a lot about the redesign of e-learning, the trainer should affect the interest of the students, customize the presentation of content to their engagement and interests. That's why we can compare the role of cybereducator or leader of distance education to the director or screenwriter role, each time he or she conducts e-learning.
- R. D. Wright (2014) says that online educator is the facilitator of the change and guide on the Internet rather than the expert only.
- Polish experts in e-learning S.Łajs and M.Hyla claims that there is a change in taking control of educational process in e-learning in comparison to traditional training. Nowadays the learner is taking control rather than the trainer. Educator will create the educational situation (training) but the learner will decide where and when will use it.

### Comparison:

The situation in e-learning in Belgium, Germany, Latvia and Poland is found favourable as partners identified the main issues in their countries to be overcome in e-learning:

- In Belgium, the psychological backgrounds of different educational models of blended learning are to be considered.
- In Germany, e-learning is considered as Adaptive Learning where the Learners are involved in the process of individualization of learning content and consciously make decisions.
- In Latvia, in regard to the European Union (including Latvia) policy on adult education fragmentarism in the implementation of e-learning within non-formal adult education is revealed.
- In Poland, the increase of the quality of the courses from the active method perspective is required.

**Recommendations:** Within the present research recommendations for training teachers who provide e-learning in non-formal adult education have been elaborated. The recommendations refer to such domains of training teachers who provide e-learning in non-formal adult education as training preparation, training content, training methodology, training methods, and training tools.

**Training preparation** should include

- provision of training for teachers acting in non-formal adult education within the unity of formal, non-formal and informal adult education as advocated by the European Union,
- rooted-in-the-policy definitions (Kuļšs, 2014b, 141) in the light of 'politization' of research (Roger, 2002),
- provision of training for teachers in non-formal adult education should ensure the psychological backgrounds of different educational models of blended learning,
- to promote preparation of trainers to act as leaders in distance education, or to be part of a "larger educational machine" - that means cooperation with the methodologists, help desk specialists, etc.,
- to consider how to raise awareness of e-learning and its features among trainers,
- to facilitate the creation of educational scenarios using new technologies,

- to prepare trainers to conduct such educational processes online, moderating the discussion in such a way that the representatives of different cultures can among themselves exchange experiences related to the topic of training and different perspectives in looking at this issue,
- to re-think the way of preparing trainers, and add the methodology of conducting e-learning to schools of trainer but with emphasis on techniques of work with students and engaging them, building up the collaborative learning online,
- to increase the knowledge of preparing courses in proper way to make them available for people with special needs like visually impaired or blind people among providers of the course and trainers,
- provision of descriptions of good practice showing that e-learning course allows interaction between the participants, model work groups of participants, adjust the approach to learning through the experience),
- to ensure present development in e-learning design as a new but useful challenge for trainers with "old habits",
- to prepare a discussion among the trainers on changes in the educational habits of younger generation and their impact on training services.
- certification and qualification of training for teachers acting in non-formal adult education in compliance with the requirements of the European Union.

**Teaching materials in national languages** for training teachers who provide e-learning in non-formal adult education have to be ensured. For the purposes of widening production of teaching materials in national languages, training content should include use of online dictionaries, online translators, online media, and other related tools.

The main focus of **training content** needed in all major world languages should be put on application of e-Business, e-Commerce, Enterprise 2.0 or even 3.0, e-Government for citizens, etc. Major topics and content for corporate e-learning include the e-learning topics "product training", "compliance" and "IT applications".

The potential of Open Educational Resources (OER) for market opening has to be re-evaluated as risks to commercial e-learning providers exist.

Examinations in e-learning within non-formal adult education can be carried out via such tests as [Hot Potatoes](#) or similar.

For educational purposes, such games could be included in teacher training course as [Bunchball](#) and Serious Game Network as well as Simulations such as [OpenSimulator](#) and [Second Life](#).

**Training methodology** should be based on a new concept which considers an adult as a whole who learns by transforming experience into bodily feeling, soul emotions and ideas of mind (Babajeva, p. 456) as the focus of learning theory has shifted from cognitive to holistic approach (Babajeva, 2012, p. 456). Moreover, if a learning opportunity is adapted to the needs of the learner, the learner should, however, also play an active role.

**Training methods** should provide a variety of methods applicable to the competence development model in e-learning such as used by employees in a particular field. It should be noted that method is defined as a way of teaching and learning (Karapetjana, 2008, p. 26). Consequently, methods in training courses for teachers acting in non-formal adult education focus on use of Information and Communication Technologies, web technologies, etc.

**Training tools** have to be in compliance with subject-specific of e-learning that means the e-tools needed for a particular subject, e.g. e-Business, e-Commerce, Enterprise 2.0 or even 3.0, e-Government for citizens, etc. Regarding social media, namely social networks and communities are relevant to learning as well despite their up and down, not least influenced by the general hype topics such as "Facebook". The most important future source for e-learning next to "blended learning" is the division "Mobile / Apps". Both have similar relevance in the near future.