INSPIRING DROPOUTS AND THEIR TEACHERS TO CONNECT TO LIFELONG LEARNING PRACTICES

Pieter de Vries[1], Anabela dos Santos[2] and Thieme Hennis[1]
[1]*Systems Engineering Department, Delft University of Technology, Jaffalaan 5, Delft, The Netherlands*
[2]*Centro Novas Oportunidades D. Inês de Castro, Alcobaça, Portugal*

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Abstract: This paper describes the reAct project in which an innovative learning approach is developed and used to re-motivate the disengaged from education and learning to connect to lifelong learning practices. These youngsters constitute a considerable social problem in Europe and the aim of the project is to find ways to recover the intrinsic motivation to learn and thereby improve the opportunities for participation. Essential is the development of an innovative learning strategy in which the learner is in control of the learning process. The paper starts with an introduction on the challenge these dropouts pose to the society at large and the learning strategy developed to cope with this matter. ICT plays a key role in the methodology and links to a virtual environment similar to social networks, which is user-configurable and based on the concept of the Personal Learning Environment (PLE). The main research issues are: can reAct change the attitude, what are the benefits and drawbacks of this self-organized learning approach and do the ICT tools support these processes. This paper covers the first half of the project and reflects on the first experiences.

1 INTRODUCTION

One of the key challenges in education is learner motivation. The disconnect between official curricula and learners' perceptions and expectations of what they learn in school is a problem for all, but affects particularly those who lack motivation. Together with other factors, this means that these youngsters do not finish secondary education and might even lose their skill to learn.

The main remedy to prevent school dropout has been to develop training programs that address the problems of this group focusing on practical skills and some kind of certification. However when the motivation to learn is not addressed, the effect of these programs has shown to be rather limited (EC, 2011, p. 16).

The urgency of the problem of early dropouts is revealed by the individual, social and economic consequences (EC, 2011). These students are more likely to be unemployed in the short and long term, they work in jobs with less employment security, earn less, face a higher risk of poverty, participate less in re-training, rely more on social support throughout their lives and tend to participate less in elections or other democratic processes. From an economic perspective the share of jobs available for low skilled people will decrease from 20% to less than 15% up to 2020. This means that early school leavers create long-term costs for societies, and the social consequences go beyond that with lacking social cohesion and civic participation.

At presence the percentage of young people that do not complete compulsory education is especially high in the South where in Portugal 35,4%, Spain 31%, Italy 19,7%, and Greece 14,8% of the students drop out of school. But also countries like Holland 11,4% and Austria 10,1% (Eurostat 2008) are faced with young people leaving school without a certificate posing considerable challenges to teachers and trainers, not at least because they are simply not motivated to learn.

Research suggests that flexible education and training systems with a variety of recognized learning pathways and combined with individual and school-level support offer more educational opportunities and therefore better chances of diminishing the risk of early school leave (EC, 2008, p. 32; Kendall & Kinder, 2005, p. 9; IRIS, 2009, p. 67). It is difficult though in traditional classroom and training contexts to include the basic meta-cognitive and critical skills that would allow these learners to

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function autonomously in the current society and the labour market.

The reAct project, an abbreviation for reactivating teachers and learners, is an attempt to develop a learning approach using new technologies in order to improve the prospects and the employability of these learners, and to develop the skills of their teachers and trainers, in an area which is key to the success namely motivation. In each of the participating countries comparable pilot projects will be executed and collaboration between the partners is of utmost importance considering the strive to develop a sustainable strategy with a leverage throughout Europe.

2 THE REACT PROJECT

ReAct is a multilateral project within the KA3 ICT action of the EU Leonardo program. The relevance of the project is in the KA3 objective "To support the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning". The focus of reAct is on the Leonardo and Grundtvig contexts. Leonardo involves young and adult learners who have not completed their compulsory education. Gruntvig focuses on adults who are the trainers teaching these learners. The trainers involved are frequently people who have come to training after a career in a particular trade, and they come to the programs to teach the skills of this trade.

The project work is situated within lifelong learning contexts and focuses on the use of ICT to develop an innovative methodological approach that will motivate learners, and at the same time, help them to develop their lifelong learning skills. New technologies offer a potential for other, new approaches and different elements into the training context that stimulate the development of changes in the intrinsic motivation of these learners (Veen, i.e., 2010).

Implementing a new approach requires attention on the learners needs but also, vitally, to those of the teachers who implement the methodology, and the integration of the approach into existing contexts, to the extent that the teachers themselves constitute a prime target group.

2.1 The Goals of the Project

The fundamental goal of the reAct Project is to pilot and experiment changes in pedagogical approaches of non-formal education. It aims at reducing the number of dropouts through leveraging motivation and agency of learners, in particular the development of skills that allow them to carry on learning throughout their lives. Developing ways to facilitate these is vital for lifelong learning practice in Europe (De Vries, 2009).

In more detail, the project methodology that is developed and piloted aims to achieve the following.

a. A change of attitude. The aim is for the learners to change from being passive subjects, an attitude instilled by the educational system throughout their childhood and youth, to being active. To effect this change students participate in creative activities, self-defined and self-directed and relevant and close to their lives.
b. Open minds. It would help to broaden their perspectives and let them discover other experiences and points of view of people living in other environments. European mobility initiatives have shown the benefits of this kind of activity. This should not be limited to a distant abstract knowledge, it is necessary to promote close relations between people of different backgrounds through joint cooperation.
c. Teach them to learn. This includes developing cognitive skills and critical thinking skills that enable them to cope independently and autonomously with social and labour demands.

2.2 The Methodological Approach

The reAct project develops and pilots a methodological approach that focuses on collaboration, creativity and learner autonomy as potential keys to the reactivation of the interest of learners who have not completed their education. It is based on investigation and consolidated processes, taken from informal learning, in which students "discover" by doing what motivates them, and through this process take a number of cognitive skills that allow them to act autonomously, tackling and understanding the learning situations as new opportunities (Veen, i.e., 2010).

To configure the methodological approach in line with the objectives and contexts a three-step procedure has been followed.

a. Needs analysis. There was an initial study profile of students in the institutions participating in the project, in order to adapt the activities and tools that are proposed in each environment to their abilities and needs. This initial study includes interviews with the various actors in each context, in order to ensure the

relevance of the action. This study will be completed by an on-line survey, aimed at a wider sample of people in this educational context to provide useful background to contrast with the result of the interviews.

b. Design of the methodological approach. This included a general learning concept (next section) and specific activities on the basis of the needs analysis and the experience of the partners in the context of learning and motivation.
c. Creation of a toolset. Once the study was done, a collection of social tools (Web 2.0) was put together, based on the concept of Personal Learning Environment (PLE) which should be understood as the collection of online and offline tools that an individual uses to learn (Wilson, 2009).

2.3 Evaluation

The particular constellation of the project within an international field of different locations and institutions requires a layered research approach that depends on an active involvement of all the partners. An evaluation framework has been developed to allow for a collaborative research action using an array of procedures. The researching partner, the Delft University of Technology, does not have direct access to participating teachers or students, and in addition language is a significant barrier for conducting qualitative research. The involvement of the reAct partners concerns therefore specific responsibilities:

a. Interviews with teachers: The reAct partners are carrying out pre-structured interviews with the teachers involved. The researching partner will provide the necessary interview formats and questions
b. Surveys amongst students: The reAct partners will also distribute survey instruments provided by the researching partner to the teachers and students.
c. Regular interviews with the researching partner: The reAct partners will have regular online interviews in which the progress of activities will be evaluated.

The project comprises of two pilot studies, the first pilot finished in March 2012, the second pilot ends in July 2012. Both pilot studies deliver six country based evaluation reports. The first pilot country report includes results of three questionnaires among 164 students (avg. # respondents per questionnaire 135 – 82%), and several log books and interviews with teachers, and two final group interviews with teachers and students. The reports also include content produced by students and teachers (online and offline) and personal experiences and testimonials from teachers and students. A short appraisal of the first experiences is given in chapter four, focusing on a selection of overall data and specific know-hows from Portugal.

2.4 The Project Partners

The consortium comprises seven partners from six countries with extensive experience in education and training in Europe and detailed knowledge of the issues the project seeks to address. The project partners are national and regional public administrations (SERVEF, CNO ESDICA), institutions related to the educational system (Delft University of Technology) and vocational training centers (KEK KRONOS, TR2000, TIBS, BFI TIROL), focusing on the training of young and adult unemployed and especially the use of new technologies in the field of education and training.

3 THE LEARNING CONCEPT

ReAct is about developing and evaluating an innovative and learner-centred approach that makes use of the learners' creativity in autonomous collaborative activity to motivate and engage them, and help them learn to learn.

Based on earlier work on dropouts, extensive literature research, and several interviews with experts and innovators in the field, gave rise to new insights and led to the following seven principles for the reAct learning strategy (Hennis, i.e., 2011).

1. Trust: students and teachers must become confident that their ideas, contributions, and comments are treated with respect, online as well as offline. Fostering trust will engender self-esteem of the students who have most of the time a poor image of oneself as far as learning is concerned.
2. Challenging: students and teachers get motivated to learn when they experience or are faced with challenging, but manageable assignments. Teachers must ensure learning environments that offer the context in which students can adopt personal or group challenges. Teachers should address topics to study they consider relevant to research. Hence, assignments teacher suggest should be negotiable, or assignments should come from students themselves and teachers should enable

students to define the relevance related to the learning goals set out at the beginning of the course.

3. Self-guidance: we must put more trust in the hands of students to guide their own learning. Within the boundaries and restrictions of each individual pilot, teachers must try to allow as much self-guidance and self-directed learning as possible. This requires not only a different way of thinking, but most important: patience. Sometimes, it takes some time before students get motivated to do 'something'. Asking questions usually is a better approach than providing assignments.

4. Collaboration: Students take great interest in working with others. Teachers support collaboration through group-based work and regular feedback moments.

5. Ownership: If students (as well as teachers) have the impression that they are in control of the learning they do, there is a sense of ownership. This is an essential ingredient for motivation and self-guided learning.

6. Creativity: in creativity one can be honest and you are able to develop an identity. Through creative expressions one is able to have an idea about his or her capabilities and interests, which is fundamental for maintaining motivation and discovering one's talents.

7. Relevance: ownership of learning also means defining those topics that the learner finds relevant in life, even though this is not part of the official curriculum. Teachers should, as far is possible, allow students to define the topics they want to learn, research, do. This means that they are allowed to do a project about anything they are passionate about, whether it is Cristiano Ronaldo, learning Spanish, or bio-informatics. The main objective for teacher is to add relevance and to foster curiosity about the topics they want to be covered. Sugata Mitra proved that with no or only limited guidance, students can learn (Mitra, 2010).

8. ICT enabled: The role of ICT is critical but not an aim in itself. Using ICT is not about using tools, but about a different, and better way of learning. Students can find a huge amount of valuable learning resources online, they can find and use free tools to create and share content, and they can use free environments to communicate in order to learn collaboratively. The reAct Project is going to provide a dynamic list of tools that teachers and students can use and complement. It is available on Diigo (groups.diigo.com/group/react-project) and will function as a shared resource to which participants can contribute.

4 THE PILOTS

During the timespan of the project there are two pilots. The first focuses on the way the approach works with the first group, the learners, and the difficulties and advantages of the approach from their point of view, and the second pilot will focus on teachers, and their needs and reactions with regard to the approach. The second pilot will incorporate improvements suggested by the first. The specific groups to be used for the pilots were selected by the partners a few months previous to the pilots, as the annual nature of this kind of training precludes a decision about this at the current time (18 months before the first pilot). Each pilot involved a cohort of roughly 15-25 learners and 2-7 trainers, in each country. The total numbers over both pilots are therefore around 180 learners and 24 trainers.

One of the principal difficulties involved in pilot projects is that they run the risk of failing to integrate into the context they arise from, and become interesting experiments, rather than being adopted into everyday practice. For this reason another fundamental objective of the project is to integrate the methodology for recovering the motivation to learn into current initiatives. The activity proposed is intended to function as a launch platform at the start of an action, with aim of changing perceptions of learning and hence of the action.

a. Getting acquainted: In the first stage of understanding and accepting the proposed methodological design, a series of activities is designed to develop familiarity with the environment, both in its technological and social aspects. Also, there is a focus on the development of community among the students and teachers of the different institutions participating in the project.
b. Collaborative creative project: In this phase, participants form teams. They carry out a project of their own jointly with pupils from other schools, using the available toolbox (or their own tools). The goal is to collaborate and create something unique. The students themselves who will define what they want to do, with the only requirement to do so in collaboration with person (s) from another center. This process of creative collaboration will be carried out using the tools selected by the students with support of the facilitation team when they so request.
c. Support and reflection: Support will be available throughout the process, both during

projects and afterwards. The team of tutors will intervene whenever it seems appropriate and timely in order to promote reflection, together with the students about the process. This will develop critical thinking skills and metacognition. As was mentioned earlier this process works on all three objectives (creation / empowerment, collaboration, and goal cognition / thinking).

d. Collaborative project integration: This phase begins the process of integrating the project with the main training activity. The process is similar to that of the first project, but this time the requirement is that the project loosely fits the subject area of the training programme. This can be negotiated between students and teachers. These projects will be conducted within each center, but the final product will be presented to other centers.
e. Final integration process: At this stage the activity returns to the objectives and curriculum of the original training program. The idea however is that the learners have experienced other ways of learning and the teachers observing throughout will have seen the value of this, and incorporate other approaches in their teaching (the project team may suggest these) The new approaches are likely to involve creative and collaborative activities and development of meta cognitive skills and critical thinking.

Pilot 2: The second pilot repeats the first pilot but while the first focuses on the effects on learners, the attention in the second pilot is focused on the teachers involved. Also, based on good and bad experiences from the first pilot, the approach has been improved for the second pilot.

5 THE FIRST EXPERIENCES

This section comprises a short reflection on the experiences half way through the project with some general data and a review of the know-hows in Portugal as an example on the national level.

The first pilot had 134 student participants and 20 teachers. There was an equal number of men and female involved of which 30% were actual dropouts. Reasons mentioned for dropping out: it was too difficult (21%), uninteresting (19%), problems with teachers (11%), with students (8%), problems at home (8%). Their preferred ways of learning: using my computer or phone (35%), listening to someone (34%), reading something (24%), discussing in a group (19%). Of all 84% believes that a trustworthy relationship with the teacher and the peer-student is relevant for better performance, but also the challenge (71%) and the self-determination (74%) of what and how to learn and collaboration (83%) play a decisive role. The relevance of the learning equally shows to be meaningful (73%) for the respondents and most (76%) are convinced that the use of computers will lead to better performance.

Looking at the outcome after finishing the projects in Pilot 1, 58% of the students believed they were actively involved and the rest not. Reasons mentioned were: uninteresting, the relationship with peers and difficulties with ICT. Most felt they had a good relationship with their teachers (65%) and their peers (70%). 40% Felt sufficiently challenged and 58% not, 56% felt self-determined, 42% not. Collaboration was good (61%) and a majority felt that things learned were relevant (72%) to them. 84% Considered the use of computers very relevant. Most of the respondents (54%) though did not feel that the project helped them well to prepare for an internship or job. On the other hand they felt that (66%) the pilot had improved their capacity to connect and communicate with others, but not necessarily improved their confidence (40%). Not unimportant was the fact that the overall appreciation of the course was rather positive (69%).

The experiences in Portugal are used as an example of how the world looks like behind the numbers. This information is based on the national report, which is developed by each participating country, summarizing the experiences and together with the other resources part of the knowledge pool for further evaluation.

The first Pilot in Portugal took place at a Secondary School in collaboration with a Centre for New Opportunities. The context for the pilot was a course of adult education and training. The target group was composed of eleven young adults (18-25 years), all drop outs from secondary education. The pilot started with the familiarization of the seven participating teachers with the reAct concept while using this concept as the organising principle for this warming up. This was needed to create an atmosphere of trust among the teachers and increase their acknowledgement of the concept.

In the end nine students completed the course. During the familiarization phase it became clear that students could handle the main tools quite easily, that they liked the idea of international collaboration and discovered with enthusiasm that the social network used (Facebook) provided them with the means to create a project community. Students were less successful in their collaboration efforts than

anticipated due to language issues, but were pleased by the fact that they were self-directive in their project work. One of them discovered during this phase his affection for photography which led to a very positive change in attitude. Overall, autonomy seemed to be an important motivating factor and students appear to be more confident about their present and future success. The reAct concept is not yet an accepted way of moving forward or completely ready to be integrated in the regular learning processes, the teachers though are very much aware of this innovative way of teaching as a mode to promote lifelong learning skills.

6 CONCLUSIONS

It is still too early in the project to define the ultimate conclusions, but some assumptions can be made. It is clear that the reAct learning concept changed the attitude of the learners and teachers with regard to learning. Learners are positive about the approach and feel that it opens up opportunities for further personal growth. Teachers get a better feel for and see more possibilities for promoting learning. The time period and the intensity of the reAct pilot does not yet allow to say something about particular benefits or drawbacks of self-organized learning, but the results show that students appreciate the confidence this approach mitigates and value the opportunity to experience autonomy. It is clear that ICT is considered an important carrier for the execution of the reAct learning approach. Not just as a tool, but as an instrument to attain goals set by yourself in collaboration with others, allowing you to communicate freely and deliver products that arose from your own motivation.

So far the results are promising, but not yet enough apparent to draw vital conclusions.

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