Dissemination of a TEL Network
Strategies of dissemination and implementation of the ProLearn research network

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Short Abstract:

ProLearn is a network of excellence in professional learning encompassing research groups across Europe and beyond. Its mission is to bring together the most important research groups in the area of professional learning and training, as well as other key organisations and industrial partners, thus bridging the currently existing gap between research and education at higher education institutions and professional training at the workplace. The dissemination and implementation strategy of ProLearn is based on several premises: the integration of target groups, the adaptation of user needs and preferences regarding the end product, the need for communication and the outlining of the benefits gained.

ProLearn created two new instruments to support the implementation strategy concerning specific areas and target groups: The ProLearn Virtual Competence Centre is embedded in a market place for communicating demands of industry and solutions from research while the ProLearn Academy builds on disseminating and integrating the results of ProLearn in training seminars for students and young researchers. The paper will discuss some principle strategies for successful dissemination and implementation in technology enhanced learning and will showcase theses aspects on concrete examples of successful dissemination strategies from ProLearn practice.

1. Introduction

ProLearn is a network of excellence in professional learning encompassing research groups across Europe and beyond. With financial support from the European Commission ProLearn contributes to the general concept of structuring and strengthening the European Research Area. Its mission is to bring together the most important research groups in the area of professional learning and training, as well as other key organisations and industrial partners, thus bridging the currently existing gap between research and education at higher education institutions and professional training at the workplace. The dissemination and implementation strategy of ProLearn is based on several premises: the integration of target groups, the adaptation of user needs and preferences regarding the end product, the need for communication and the outlining of the benefits gained.

As offers of e-Learning technologies and applications increase continuously, developers and researchers are confronted with high personnel efforts for effective dissemination and implementation of their findings and products. Dissemination of scientific results shall not be limited to the research community, but should also find implementation in the real world and in future business scenarios. However, disseminating research results successfully to stakeholders in business and industry is still a difficult task for most researchers.

A second big challenge for the dissemination of e-Learning technologies and application results is the awareness raising amongst the academic community itself. The recent developments in technology and specifically in the application area of technology enhanced learning have changed higher education teaching. More and more content, curses and entire curricula are offered by universities online. The reasons for this change are linked to globalisation, the new knowledge society, the changing needs of the workforce as well as the rapid developments in technology (Bates, 2003). While instructors in higher education are still struggling to assess the value of technology for their teaching (Meister, Hrsg, 2004) and apply it in ways that lead to better learning, universities have started intensive dissemination campaigns and students are attracted to this new form of learning.

2. ProLearn Dissemination Strategies

In the following we will present some of the main ProLearn strategies for covering both of these dissemination challenges:

1. transferring research results to industry

2. creating awareness and involvement amongst students and faculty members regarding the advantages of technology enhanced learning in higher education

The transfer from theory into practice of technology enhanced learning has to face the general challenges of any product marketing, namely large investments in terms of budget and time. In addition, one essential factor for successful dissemination and implementation of research results is the relationship between research and the target/user groups. As such, a general involvement of the target groups and the stage in which the target groups are drawn into the research work are crucial. The early integration of needs and requirements is a key success factor for the dissemination and implementation of technology enhanced learning technologies. Ideally, research on technology enhanced learning starts to build on the basis of the early integration of user needs with the focus on an user-friendly end product. The considerations of the learner and his/her situation have to be complied with a hole range of the surrounding environmental factors: the technical hardware equipment, the organisational

structure of the company, the financial resources and possible cultural differences. Successful dissemination and implementation is also taking into account the knowledge of user habits and preferences, working style and attitude, as well as the willingness to explore different or new systems. At this stage researchers and developers face the challenge of combining an easy to use application with the high demand of functions and features, applicable in many different learning situations, adaptable to the individual needs of learners. The complexity regarding conditions for a product, service or application expands proportional with the homogeneity of the target group. A clear understanding of the target group, it's needs and preferences integrated in the research leads to a high success rate for dissemination and implementation.

To base research work from the beginning on real user needs requires an intensive dialogue between academy and industry. Targeted dissemination strategies address the issue via communication and information and bridge the gap between the solutions research provides and the solutions industry is looking for. On the one hand research tries to find application possibilities, on the other hand companies are urged to find solutions for their needs. Derived from this problem, dissemination defines it's goals and tasks: the circulation of information, the raise of awareness of products and applications, the distribution of results and the spreading of knowledge and possible potentials for companies. A continuous knowledge flow and knowledge exchange with experts and stakeholders from industry and industry associations, such as chambers of commerce, etc. is crucial for research dissemination.

3. The Creation of a Virtual Competence Centre

The ProLearn Virtual Competence Centre (VCC) tackles this problem by building up a virtual market place, taking key issues into account:

- *User needs and requirements*: How can research results in technology enhanced learning be effectively and efficiently disseminated to industry and trade? How can research results be applied to different national and cultural contexts?

- *Communication of needs and demands*: How can industry and trade communicate their requirements on access to research results from academia?

- *Adaptation of research results to target groups*: How can research topics be compiled out of concrete requirements?

The strategy of the ProLearn Virtual Competence Centre is therefore very simple: The VCC will involve industry participants and technology transfer organisations and implement a durable structure for ProLearn activities related to research - industry co-operations and consulting. The final network will involve company driven competence centres, chambers of commerce, employment centres and competence centres of trade and industry associations (Fig.1). The involvement and communication of both target groups, research and industry, is secured within one common internet platform, acting as a virtual market place for offers of research and demands from industry. The benefit is twofold: all joint activities of ProLearn will be offered on the platform and disseminated to the target groups. At the same time requirements and needs from industry are gathered and will be transferred into action for (applied) research.
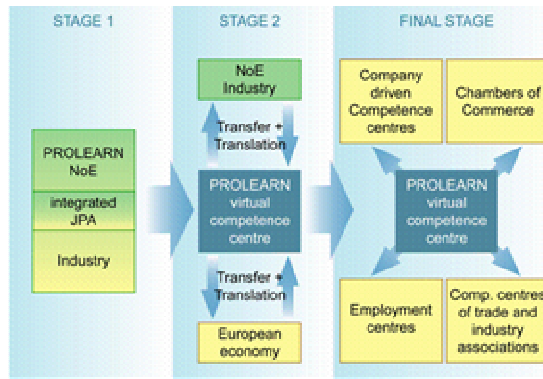
Fig.1: Virtual Competence Centre Evolution and Sustainability

The dissemination strategy of the VCC supports the early integration of the target groups by getting the demands of industry communicated while promoting offers and hot topics from research. In addition, this virtual market place will secure the implementation of research results and solutions for the communicated demands and issues. An important aspect for dissemination is the up-to-date knowledge transfer, which allows the continuous transfer of current issues for research and industry but also represents a strategy which provides the users with most relevant data.

The platform of the ProLearn Virtual Competence Centre is based on an Open Source LAMP infrastructure platform and follows the example of successful topic channels such as DL2100.de. This topic channel has been public since the beginning of 2000 with a financial support from the German ministry of education and research and has since then counted more than 3.300 registered members from economy, research, politics and intermediary institutions. In principle, a topic channel supports online communities. One of the main advantages of this community tool from a dissemination perspective is the fact that it can be used in an internetworked cooperation with other and future channels. Currently, it is e.g. internetworked with the Fit4Service Benchmarking channel, focusing on International Benchmarking of the Service Economy in Germany. The DL2100.de platform currently counts around 240 visits per day, and out of the 210 projects and 580 publications 71% of all content comes from the community members themselves.

The ProLearn Virtual Competence Centre is internetworked with both, the DL2100.de as well as the Fit4Service, which allows a broader target audience to become aware of ProLearn results. The idea is to use an open interactive service platform in the internet, which enables experts of the service industry and research, to publish and use newest knowledge about innovative ideas, products and results form research and practice and the construction of network relationships ("research meets industry", "industry meets research") and support the transfer of knowledge.

The technology is not the main focus of the conception. It is the intention to realize innovative service models in the real world and the internet through the use of new media and technology. The aim of the VCC is to spread excellence to company driven competence centres, chambers of commerce, employment centres and competence centres of trade and industry associations, creating alliances between these and network members, in form of different European-wide competence centres dealing with professional learning tasks.

In order to increase the knowledge exchange with industry even further ProLearn also includes an Industrial Advisory Board that functions as a feedback and review committee for the activities of the network. Acting as a review panel the board expresses its opinions on research related decisions, reports and any issue on demand by ProLearn partners. The board members consist of representatives from industrial user groups, possibly political stakeholders and national funding bodies.

4. The Prolearn Academy: Dissemination for Students and Academic Staff

A different dissemination and implementation strategy is conducted by the ProLearn Academy. It is responding to the clear change that has been noticed in higher education teaching. Academic institutions have started in the last years very successfully in offering more and more content, courses and full curricula online (Rinn Hrsg, 2004). The ProLearn Academy is responsible for the implementation of the ProLearn research results in training programmes and further education seminars for young academics: a graduate degree programme, a doctoral programme, a junior faculty programme as well as an entrepreneurship programme will integrate research results and topics of ProLearn within (virtual) seminars. This way research results are not only embedded in the network of already renowned researchers but are addressing also the 'next generation' of researchers or academics joining the industry. Thus ProLearn ties the results of it's work also to future research and work.

Another key focus of the Academy is to create an institutional culture, bonding distributed researchers across Europe into one virtual entity and cultivating a spirit of membership. This contributes to embedding the future research work on technology enhanced learning in the results gained in the ProLearn network. For this purpose the Academy will implement a service portal which provides access to knowledge communities, brokering amongst knowledge/training providers and consumers and collaborative educational activities. To realize this dissemination challenge, the Academy will be based on the successful example of the EducaNext platform for cooperation and content exchange for academic staff members. The primary mission of EducaNext is to serve and support all individuals in the academic community, who are dedicated to increasing the excellence of higher education and research through distributed collaboration by providing wide access to its academic exchange portal. EducaNext is a knowledge community service, which aims to foster collaboration among knowledge producers in order to produce high quality resources and collaborative activities. The community creates, shares, and continuously updates a state of the art knowledge base. Given the important time investment required for producing high quality electronic knowledge and learning resources, and the fast pace at which they become obsolete, knowledge bases require a huge amount of human resources to guarantee pertinence and quality. EducaNext, which fosters collaboration among a wide and distributed community of experts over the Internet, can bring together the resources and expertise needed for this task.

5. How to Reach Additional Target Groups

Apart from these main target groups, the dissemination strategy of ProLearn also targets at complementary future user groups. In cooperation with another network of excellence in the area of technology enhanced learning, called Kaleidoscope, and science shops in various countries ProLearn aims at complementing its dissemination activities with additional pilot participatory communication activities. The intended activities are complementary in several respects: Their reach is local and regional and aim at additional target groups: non-profit organisations, which are potential providers (for example, because they are active in education and training) or users of e-learning (because they are interested in making use of e-learning for internal training purposes). The strategy offers a unique opportunity to

communicate in a dialogue-oriented manner activities and findings from both e-Learning networks together by making innovative use of the multiplicatory function of NPOs and NGOs. The intended activities are interdependent feedback rounds and roundtables. On the one hand, these activities aim at reaching additional target groups, on the other hand, they stimulate the further development of e-learning tools by giving valuable hints how the usability of e-learning tools can be improved. Hence the success of the communication activities translates into improved marketability and public participation in development processes alike. The needs and aspirations of citizens from science and technology will be met to a greater extent than at present.

6. Summary

Both dissemination instruments, the VCC as well as the Academy, build on the core premise of emphasising the benefits of participation and implementation: the VCC platform offers research to gain input on requirements while the industry has the possibility to find solutions for their demands and animate research studies on specific issues. The academy is enabled through the embedding in the network of excellence to support virtual knowledge communities amongst academics and to provide students and young researchers with high level research courses, tutorials, early networking, mentorship and entrepreneurship. The implementation is conducted in different user groups, but relies on the principle of emphasising the benefits gained.

The communication activities targeting at NPOs and NGOs are conceived as pilot activities. When successful, they offer good practice for similar network dissemination and implementation. Future joint communication activities at a much larger scale with partners, which are active in bringing research closer to society, could build upon lessons learned. The final report will contain a detailed presentation of lessons learned from the proposed activities and, if appropriate, policy recommendations to the European Commission.

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