USERS AS PARTICIPANTS IN RESEARCH: CASE STUDY OF A RURAL SCHOOL PROJECT IN SPAIN FOR KALEIDOSCOPE STAKEHOLDERS WEBSITE

Introduction

This case study is based on the analysis of the experience obtained in the development of rural teacher communities under the umbrella of the project NEtwork Multigrade Education (NEMED) in Spain. During the past three years, a group of Spanish rural schools spread throughout different regions and isolated areas have been participating in the European network, together with the University of Barcelona.

This project created a virtual learning community of teachers spread throughout several isolated rural areas in Spain. This Virtual Rural School has become a virtual community of practice linking together many teachers and students who have begun a new dimension of their school lives by doing many activities together and creating and sharing resources via the internet.

What makes this project interesting vis-à-vis the concept of users as participants in research is the way in which the teachers in the project spontaneously got involved in the research itself.

Short description of the NEMED project in Spain

The list of the Rural Schools active in the NEMED Local Network in Spain included 15 schools and more than 30 primary school teachers in six different regions of the country. The number of schools involved has steadily increased and NEMED activities will continue under the umbrella of the project RURAL WINGS (European Commission, VI Framework Programme).

Within NEMED, an Educational Platform called Virtual Rural School has been created (http://www.futurelearning.org/exchange/course/view.php?id=3 in both Spanish and English versions. In this space are the training activities designed for the module, as well as some spaces designed for exchanging opinions and ideas among the students (multigrade teachers), the teachers and the tutors. These spaces are discussion forums, chats, distribution lists, spaces to share documents, etc. The method used is e-learning, understood

as distance learning based on the use of computer and telecommunications and within a Virtual Learning Environment.

The Virtual Rural School has been designed using the free, Open Source software package *Moodle*. This software is a Learning Management System designed to help educators manage effective online learning communities. This system allows an easy interaction between teachers and students, as well as among students. The design and the development of *Moodle* are based on a "social constructionist pedagogy", which asserts that learning occurs particularly well in a collaborative environment that everyone builds together. This Virtual Learning Environment includes characteristics that support role sharing, such as permission-based options that allow each participant to be a teacher as well as a learner. Furthermore, the role of the 'teacher' can change from being 'the source of knowledge' to being an influence, connecting with students in a personal way that addresses their own learning needs, and moderating discussions and activities in a way that collectively leads students towards the learning goals of the class.

Besides this space, a project website has been created with the theoretical contents visually organized and shown in three languages (Spanish, Catalan and English) (http://www.ub.es/euelearning/nemed/localNEMED/). This website facilitates the implementation and development of the activities suggested in the Virtual Rural School.

Other communication tools have been used on a daily basis; among them, *Skype* has been always available in the classroom, so children from different regions could communicate at any time, especially during the recess period. Productivity software and video, produced by the teachers and the children, were also part of the resources used. This has allowed the teachers of the Virtual Rural School to exchange audiovisual materials among the multigrade schools. The exchange of the material has been carried out through the *Moodle* platform.

A four month training module was created for the Virtual Rural School, with the intention that the teachers participating in NEMED learn to design a collaborative telematic project for subsequent creation and application among the schools. The activities that configured the training module were created to be carried out individually; however, the teachers were asked, specifically, to upload their exercises and resources in the educational platform with the aim of sharing them with their colleagues.

Conclusions regarding the role of user as research participant in the NEMED Spain project

Throughout the project, it was surprising that the community of teachers, when following the calendar of the training, were able to create their own communication dynamics and their own learning initiatives, beyond what was initially planned. One example is that, whereas the learning activities were initially planned to be made at design level, the teachers were applying immediately what they were learning in the classroom: teachers, together with their children were preparing digital resources to exchange among peers at the different participating schools.

It was obvious that, beyond training, teachers were eager to and felt the need to communicate with other colleagues, even more than learning new things and tools. This dynamic favoured teachers designing collaborative activities for and with the children, so the students and the teachers benefited from the teachers' training right away. This is a symptom of the need for exchange among teachers of rural areas alienated from the regular professional training circuits, but also a good example of the added value of the telecommunication and collaboration tools for facilitating the networking and the motivation of teachers.

Since this eagerness and ability to quickly begin designing and using resources ahead of the schedule prepared by the researchers was unexpected, the researchers found it necessary to rethink the training schedule. In addition to being surprised by the teachers' (and the students') independence in leaping ahead of schedule, the researchers were delighted and more than happy to alter their research plan. This is an excellent example of user/researcher cooperation and interaction that ultimately benefits both the research project's potential usefulness and the teachers and students involved in the project. It is also a good example of the need of researchers to closely involve users and to be flexible and responsive to the users as they implement their research plan.

Rural school teachers need to be active in their rural environment, and are used to solve many and different type of problems in close collaboration with the local community. This has been an advantage for the project more than an issue. On the other hand, the experience shows that it is necessary to keep an eye on the changing needs and conditions of the participating teachers throughout the training, circumstances related to the socio-cultural reality of the rural environment: researchers cannot expect to implement a formal training course without respecting the time limitations of teachers,

the specific calendar of the school, the local events, the attention to other needs that come up on the spot, and other situations that may be different from other research environments, in this case, urban schools.

As a way to build sustainable rural communities of practice that last and expand, it is hoped that this project will contribute to the improvement of the Rural School teacher profession in Spain, since this pilot experience could be applied to a larger number of schools and rural populations, and, to some extent, to school teachers in metropolitan areas.

The teachers' attitudes were very satisfactory, for they have managed to create a relationship that is only possible if are really engaged and committed. On different occasions, the teachers in the Virtual Rural School have expressed their wide satisfaction and gratitude for being offered the opportunity to be connected and to generate a collaborative work that fills them with new ideas and stimulating experiences (exchange of photographs, videos, opinions, experiments, beliefs, etc.).

The teachers were able to create collaborative activities using their own initiatives, as an example of applying ICT to the rural context, and they got involved in the design through ICT of educational materials adapted to their schools' real needs and wishes. This has been possible mostly thanks to the extraordinary personal relationships developed at distance; only very recently have they been able to meet personally. Within a community of practice, as important as sharing goals and doing thing together, is the emotional aspect of sharing interests and concerns, which are very much common in the profession and in the context of being a rural school teacher.

This is one of the characteristics of the virtual learning community: the fact that the children are very aware of their participation together with the teachers. The fact of the schools being so small facilitates this familiarity with the project life.

It is important to say that the results of this project must be communicated to education administrators, policy makers and educators in order to show them how productive it can be to create a network of rural teachers at the national, or even the European, level. Rural teachers usually don't want to participate in educational experiments, because they hear about projects that haven't been based on their needs and interests, but on the needs of the researchers—that is to say, the theoretical vision researchers have of how rural teachers should act, be, and teach. But it is a fallacy that teachers are reluctant to incorporate ICT into their classrooms. We have shown that in

fact teachers can be very enthusiastic about projects that allow them to address their concerns and needs, and to take part in the research plan. This is the way to build sustainable communities of practice that will last and expand.

Lessons learned for the Kaleidoscope Stakeholders' Club User as Participant project

From the case study of the role of participant in research played by the users in the NEMED Spain project, it can be seen that users can be eager and enthusiastic about contributing to the research plan. This study shows that it is a mistake to entertain biases about the users, such as the assumption that the users are hesitant or even afraid to use ICT and will, therefore, need extensive encouragement and guidance after a long period of training in ICT technologies. In this study, the researchers were caught off-guard by how fast the teacher/users adapted to using ICT technologies and took the initiative to begin creating their own materials and resources with their students. In this case, the researchers were flexible enough to allow the teachers to jump ahead of their schedule, but perhaps if they had been freer of biases about their teachers in the first place, they could have constructed a more flexible project plan that anticipated and allowed for this likelihood. Moreover, they might have planned ways in which the teachers' ideas and input could be solicited early on, rather than totally leaving it up to the independent resourcefulness of the teachers. Perhaps, when planning a research project, it would be wise to always give the users the benefit of the doubt and assume that they may be quite capable of making and eager to make creative contributions to the research plan that will enrich the research outcomes and potential usefulness.