



Cross-Border Classroom as a Resource for Social Transformation

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Quotation information

NIEMI, Esa; POSNOVA, Galina; PYZHNIKOV, Denis (2008), "Cross-Border Classroom as a Resource for Social Transformation". *Proceedings of the 4th International Barcelona Conference on Higher Education, Vol. 2. Knowledge technologies for social transformation*. Barcelona: GUNI. Available at <http://www.guni-rmies.net>.

Abstract

In recent years, educational policy makers, researchers and practitioners have been investigating effective models of collaboration between the universities and schools aiming to develop the skills that today's students require for a changing world.

Although, there are many good examples of collaboration between the

universities and schools, collaborations that focus only on the technical aspects of education-teaching have turned out to be not very productive over the long term. Those which make connections to critical social and intellectual issues, linking more effectively school and university resources with community needs have more potential.

Nowadays in an effort to cope with the new educational challenges the municipalities and schools have been searching for new solutions based upon the networking and co-operation with the Higher Education Institutions (HEI). The networking, manoeuvring, building of partnerships with the with relevant stakeholders, including the local higher education institutions, making alliances with foreign counterparts, introduction of new technologies, also the interpersonal and institutional ties can maintain the vitality of schools and villages, keeping educational quality, and helping the rural youth achieve the highest-possible level of education.

The school/university networks / partnerships offer big advantages to teachers and students, but this powerful tool comes with a price tag. To create and utilize those networks effectively the efforts should be undertaken to make the teachers, students, relevant decision-makers, and other stakeholders understand that a school could no longer be seen as a separate/individual institution. Apart from that, in a near future the networks linking up the small and remote schools would become the key actors in the educational market.

This paper describes the Cross-Borders Classroom project which offers a promising model for bringing together the higher education, school sector and remote communities to support implementation of sustainable school reform.

School sector in the European North – Background

Rural and small town schools are a vital part of the public education system both in Finland and Russia. Traditionally those schools have played a central role in their communities. Besides providing for basic education, they often have served as a cultural center in the community. Athletics, drama programs, library services, music, and other social activities conducted at schools have played an important part in community life and identity formation dating back to the 20th century.

Many small and rural communities now face a decline in their quality of life due to the economic downturn and the globalization of the marketplace. Businesses have

closed and many young and well-educated citizens have left for urban areas. Additionally, social services, including schools, have been regionalized or consolidated as cost-cutting measures. These trends have led to high levels of unemployment and the deterioration of rural economic, social, and educational well-being.

The demographic situation in many small / remote communities also leaves much to be desired. The population is getting older, and the birth rates are rather low, which automatically leads to low number of new pupils / students coming to the schools of Finland and Russia every year.

While rural and small town schools have many of the same needs as other schools, they often face different challenges based on their unique characteristics. Funding deficiencies, lack of programs targeted to students with special needs, difficulties in recruitment and retention of teachers, and inadequate facilities are among the challenges facing rural schools. As a result for the last decade a significant amount of the schools in sparsely populated areas has been closed down.

The problem described above applies to the schools and municipalities situated in the remote areas of the Northern Finland and the Republic of Karelia (Russia). According to the latest reports by the Statistics Finland among 3180 active comprehensive schools operating in Finland in 2006, 348 comprehensive schools can be found in Oulu province (North Ostrobothnia). In 2006 a total of 186 comprehensive schools or schools providing special education at the comprehensive school level were closed down or merged with another educational institution in Finland. The number of closures, totaling 17 comprehensive schools, was the highest in the Region of North Ostrobothnia.

In the neighboring territory, namely the Republic of Karelia (Russia), the situation with the school sector also seems to be unstable and recent trend unfavorable. The latest figures reported by the Ministry of Education of the Republic of Karelia demonstrate that for over 3-year period 33 of 189 comprehensive schools in the Republic of Karelia have been closed down.

Case study: Cross-Border Classroom

The Cross-Border Classroom (CBC) project is initiated in 2006 in order to create a permanent network linking the Finnish and Russian schools supported by HEIs and to

enhance the vitality of schools and villages by developing and testing new models to maintain the operation of the schools in a cost-efficient and high-quality manner.

The CBC project is a joint Tacis/Interreg project funded by the European Union's Euregio Karelia Neighbourhood Programme and coordinated by the University of Oulu, Learning and Research Services (Finland) in cooperation with the Karelian State Pedagogical University (KSPU, Russia). Among the partners taking part in this project are 8 Finnish and 10 Russian schools situated in the remote areas and also the Institute of Teacher Training of the Republic of Karelia.

The CBC project is designed to develop networks between schools, which in turn would have in many ways a positive effect on the factors influencing the vitality of small villages. Models of cooperation are built from the level of the decision-makers all the way to the university faculty, school teachers and young schoolchildren. Making use of the IT infrastructure, common teaching contents, learning materials and other network resources have been produced to support the teachers' work.

The CBC project is also undertaken to promote the quality and competitiveness of rural education by creating, testing and introducing the innovative models of operation. As the University of Oulu and KSPU play an active role in training and re-training of teachers and updating the school curricula, their and other HEI's increasing orientation towards the school sector may influence the whole system of basic education, thereby having a much greater impact on sustainable development of small and remote communities in the long term.

The educational quality in the small and rural schools is being continuously increased by addressing the problem both with people-intensive and technology-intensive solutions. The cross-border pedagogical cooperation, in-service training programmes, introduction of new information and communication technologies in education are expected to contribute to quality and equality of educational opportunity for the students living in the remote areas of Karelia and Finland.

Conclusion

The Cross-Border Classroom project seems likely to have contributed to maintain the school system and also support the small and remote communities in the Russian Karelia and Finnish Northern Ostrobothnia. Yet, the promising results are not

necessarily sustainable. Making school as the centre / resource for the community development, establishing new university/school alliances, manoeuvring, teacher / pedagogical cooperation are all elements of strategies, in which local and international collaboration is essentially required. More active cooperation between the relevant stakeholders, including the authorities, higher education institutions, business community is also needed.

Preface

In recent years, educational policy makers, researchers and practitioners have been investigating effective models of collaboration between the universities and schools aiming to develop the skills that today's students require for a changing world.

Although, there are many good examples of collaboration between the universities and schools, collaborations that focus only on the technical aspects of education-teaching have turned out to be not very productive over the long term. Those which make connections to critical social and intellectual issues, linking more effectively school and university resources with community needs have more potential.

Nowadays in an effort to cope with the new challenges the schools and communities have been searching for new solutions based upon the maneuvering and networking with relevant actors, including with the higher education institutions.

The room for manoeuvre the schools have can be presented as follows:

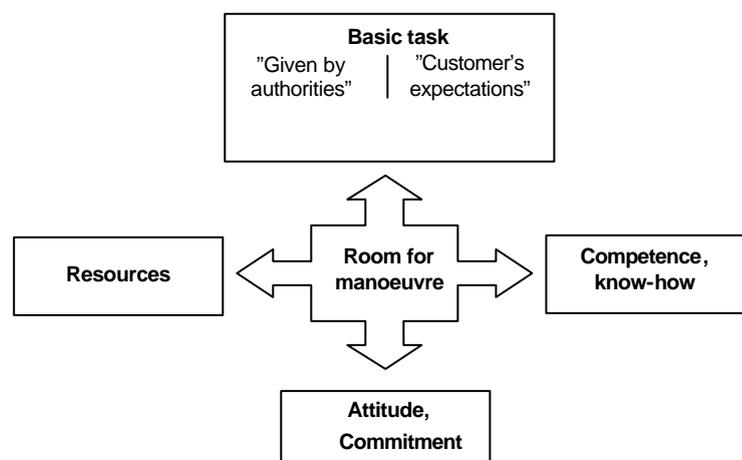


Figure 1. Strategic room for manoeuvre (adapt from Määttä & Ojala: 2000: 36).

There are a few major factors which determine the framework of strategic room for manoeuvre. The schools are obliged to fulfil their basic task / mission and jurisdiction which are, on one hand, given by authorities and set by laws and regulations. On the other hand, there are customers' expectations towards educational institutions on what they should and should not do. The students, their parents, the surrounding society and other stakeholders who could be regarded as the customers in this situation.

Nowadays many schools especially in rural areas have noticed their room for manoeuvre was significantly diminished. To overcome this challenge the schools and local communities have been testing new operational models based upon the networking and co-operation. It was confirmed that by networking and joint (sharing) teaching the schools could better fulfill, and sometimes, even enlarge their basic task / mission. Sharing resources, competence and know-how could allow the schools have more room for manoeuvre as well.

It was also revealed that the networking, maneuvering, building of partnerships with the local higher education institutions (HEIs), making alliances with foreign counterparts, introduction of new information technologies, also the interpersonal and institutional ties can maintain the vitality of schools and villages, keeping educational quality, and helping the rural youth achieve the highest-possible level of education.

Schools benefit as partnerships help them develop curricula and offer technical assistance, provide role models by offering expertise not available in the school, meet needs not met through school resources, offer opportunities to apply learning to real work situations, and raise morale through the help they offer. There are innumerable outstanding examples of this rapidly growing assistance to schools.

Apparently the school/university networks / partnerships offer big advantages to teachers and students, but this powerful tool comes with a price tag. To create and utilize those networks effectively the efforts should be undertaken to make the teachers, students, relevant decision-makers, and other stakeholders understand that a school could no longer be seen as a separate/individual institution. Apart from that, in a near future the networks linking up the small and remote schools would become the key actors in the educational market.

School sector in Finland and Russia – Background

Rural and small town schools are a vital part of the public education system both in Finland and Russia. Traditionally those schools have played a central role in their communities. Besides providing for basic education, they often have served as a cultural center in the community. Athletics, drama programs, library services, music, and other social activities conducted at schools have played an important part in community life and identity formation dating back to the 20th century.

Many small and rural communities now face a decline in their quality of life due to the economic downturn and the globalization of the marketplace. Businesses have closed and many young and well-educated citizens have left for urban areas. Additionally, social services, including schools, have been regionalized or consolidated as cost-cutting measures. These trends have led to high levels of unemployment and the deterioration of rural economic, social, and educational well-being.

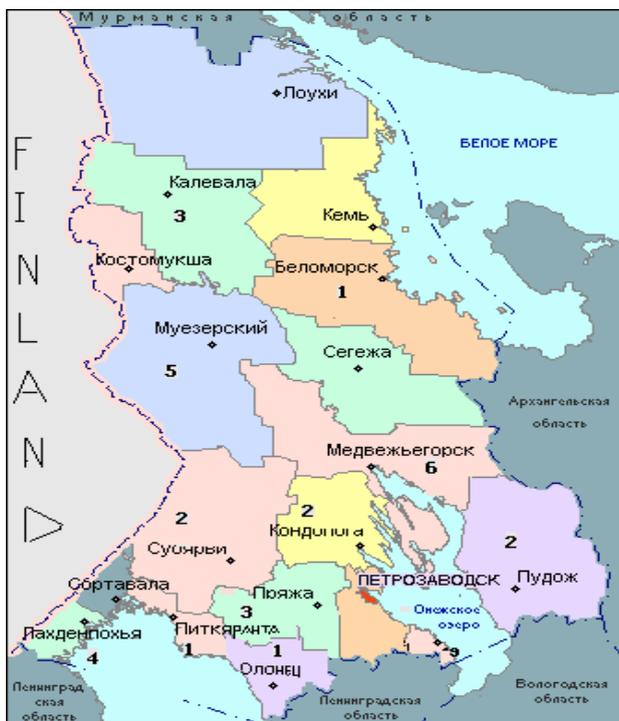
The demographic situation in many small / remote communities also leaves much to be desired. The population is getting older, and the birth rates are rather low, which automatically leads to low number of new pupils / students coming to the schools of Finland and Russia every year.

While rural and small town schools have many of the same needs as other schools, they often face different challenges based on their unique characteristics. Funding deficiencies, lack of programs targeted to students with special needs, difficulties in recruitment and retention of teachers, and inadequate facilities are among the challenges facing rural schools. As a result for the last decade a significant amount of the schools in sparsely populated areas has been closed down.

According to Statistics Finland's Register of Educational Institutions, in 2007, there were 3,067 active comprehensive schools which had 547,500 pupils. Special education schools at the comprehensive school level numbered 159 and they had 8,300 pupils. A total of 121 comprehensive schools or comprehensive school level special education schools were closed down or merged with another educational institution. Of these, 24 were educational institutions with under 20 pupils, 65 had between 20 and 49 pupils while 32 had at least 50 pupils. The number of closures was the highest in the regions of North Ostrobothnia and Pirkanmaa.

Type of educational institution	Number	Change from previous year	Students
11 Comprehensive schools	3,067	-113	547,500
12 Comprehensive school level special education schools	159	-17	8,300
15 Upper secondary general schools	406	-12	122,600
19 Comprehensive and upper secondary general level schools	37	0	24,400
21 Vocational institutes	161	-12	164,900
22 Special needs vocational institutes	12	-1	4,900
23 Specialised vocational institutes	37	-1	28,900
24 Vocational adult education centres	32	-2	42,700

Source: Education Statistics 2007. Statistics Finland.



The problem described above applies to the schools and municipalities functioning in the neighbouring territory situated across the Finnish-Russian border, namely the Republic of Karelia (Russia). The latest figures reported by the Ministry of Education of the Republic of Karelia demonstrate that for the period of 2005-2007 33 of 276 schools in the Republic of Karelia have been reorganised or/and closed down.

Picture 1. The number of schools closed

Nationally and regionally there has been much concern over the closing of schools. New forms of school functioning, building new school networks and partnerships with the local community and relevant stakeholders have been constantly

debated. In this respect the local universities have been always regarded as the resource centres that can support the small schools by utilizing university intellectual capital, their extensive experience in preparing educators and education researchers, and their ability to introduce new teaching / learning methods based on ICT to support the schools.

This paper describes the Cross-Borders Classroom project which offers a promising model for bringing together the higher education, school sector and remote communities to support implementation of sustainable school reform.

ICT as a Tool for School Networking

ICT has been heralded as a tool that will change the face of society, not only educationally but also socially. Education has been caught up in this maelstrom of change with much debate about the positive and negative impact of ICT on the role of the teacher, the learning style of students and the institution of school itself.

The integration of ICT into teaching and learning activities has been a mainstream which has led to the notion that where the formal education process is no longer viewed as something that happens only within the solid walls of formal educational institutions.

New models of learning environments are emerging: community based learning centres; home based education delivered through high speed cable connection to an interactive digital TV screen; WAP mobile information services; wireless environments which permit the use of portable devices literally anywhere. These together with the phenomenal growth of the Internet means that teaching and learning tasks are being broadened in ways unimagined twenty, ten or even five years ago. The use of new technology is now seen as a means of encouraging a more personal style of learning. Side by side with the individualisation of the student's learning environment is the disparate area of the development of collaborative learning environments.

There have been many initiatives undertaken against this emerging background of increased interest in collaborative educational activities between partners geographically removed. The general idea behind them was to take advantage of the growth of computer availability and increasing Internet bandwidth to promote productive and meaningful partnerships between schools in Europe. Central to the

practice of such partnerships must be collaborative pedagogical activities and in order to do this teachers must have access to collaborative learning tools.

As it was described above, the schools located in the remote areas of the Russian Karelia and Northern Finland face the similar problems resulted in low teacher quality and low levels of educational attainment. Since a lot of small schools have been and still are to be closed down and the school network is therefore becoming sparser in both countries, new ways to organise school system are needed. By creating of networks of the Finnish and Russian schools supported by the local HEIs it makes it possible to utilize the experiences and resources accumulated in both regions, thereby providing a more comprehensive basis for the development of small schools in this area.

In order to maintain the quality of teaching and a proper educational attainment in the remote areas of the North Ostrobothnia and Russian Karelia in the future, the remaining small schools should be incorporated in the regional, national and international school networks, where ICT itself and especially ICT in education play an important role. In this respect the teachers working in the school networks should be willing and capable to use ICT in education. To make it possible some more in-service training and purchase of new equipment may be needed. It is also important that the used technique would be as simple and easy to use as possible. Rapid e-learning is one solution for that.

Particularly, a new school system based upon network solutions would require the small school teachers to teach several subjects and be multitalented. Thus, the teachers would have to develop and update their professional skills continuously. In addition to that, the schools would have to be developed continuously as a flexible and learning network-organisation. Normally, such organisation, effectively using ICT as a major tool in its operations, is characterised by the project-oriented kind of activities, teamwork and flexibility in division of work share, working hours and educational service production.

A new school network would challenge know-how and attitude of teachers. In the years to come the teaching process would be understood as not a traditional teaching in one / single class but teaching networks / teams of students which could be

scattered locally, nationally and internationally. In the future the term «classroom» would have different meaning than what it has now.

The school network would especially challenge the teacher's know-how in co-operation and communication as well as in ICT. ICT is expected to continue playing a significant role in the school system, being the main tool for communication with students and other teachers. That is why the teachers' skills for communication, cooperation and teamwork would be crucial for successful school networking. The practicing teachers should be able to use ICT both in synchronous and asynchronous communication, ensuring, on one hand, open and transparent contacts between the teachers cooperating with each other, and, on the other hand, helping to avoid stigma and other challenges associated with a teamwork, and external professional influence and intervention.

As it was mentioned earlier, obviously ICT and related technologies in education would constitute an important part in the school networks. In this respect it is essential that the technologies which are going to be used would be much more user-friendly than they are nowadays. The technologies should be easily integrated in the school activities, and the teachers would be required to make technology as a natural part of the school.

In the school network the learning material would be presented more in electronic format. But instead of initiating a massive electronic learning material production, rapid e-learning tools that are quick, easy and powerful, and also focusing on creating content, not complicated programming, would be introduced.

The next case study discusses the important support role that schools networks based upon the recent developments in ICT and supported by the local universities can play in the implementation of the sustainable school reform.

Case study: Cross-Border Classroom

The Cross-Border Classroom (CBC) project is initiated in 2006 in order to create a permanent network linking the Finnish and Russian schools supported by the local Higher Education Institutions (HEIs) and to enhance the vitality of schools and villages by developing and testing new models to maintain the operation of the schools in a cost-efficient and high-quality manner.

The CBC project is a joint Tacis/Interreg project funded by the European Union's Euregio Karelia Neighbourhood Programme and coordinated by the University of Oulu, Learning and Research Services (Finland) in cooperation with the Karelian State Pedagogical University (KSPU, Russia). Among the partners taking part in this project are 8 Finnish schools representing the Oulu province (North Ostrobothnia) and 10 Russian schools situated in the remote areas of the Republic of Karelia (Russia) and also the Institute of Teacher Training of the Republic of Karelia.

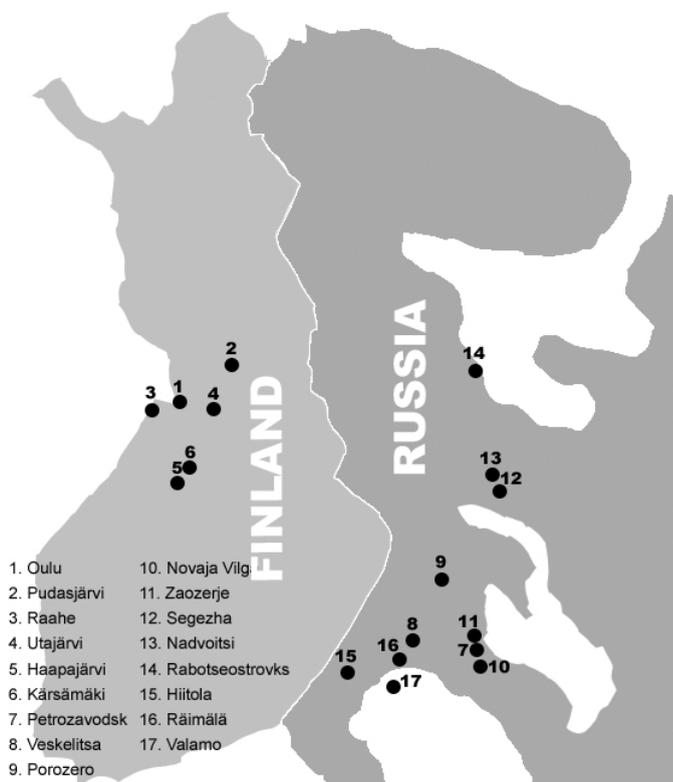


Figure 2. The Finnish and Russian schools participating in the Cross-Border Classroom project.

The CBC project is designed to develop networks between schools, which in turn would have in many ways a positive effect on the factors influencing the vitality of small villages. Models of cooperation are built from the level of the decision-makers all the way to the university faculty, school teachers and young schoolchildren. Making use of the IT infrastructure, common

teaching contents, learning materials and other network resources have been produced to support the teachers' work.

The schools participating in the CBC project have been carefully selected in cooperation with the local communities, district educational departments and other relevant actors. In the process of school selection their size and location, and future perspectives have been taken into consideration.

To explain the motives for cross-border co-operation the Russian and Finnish schools have is somewhat difficult. On the one hand, it is natural that after the fall of

the Iron Curtain the Russian and Finnish school teachers and, especially pupils, are simply eager to know more about their foreign partners. At the same time the schools have specific and target-oriented goals / interests that could be pursued in cooperation with the foreign partners.

In most of cases, it has been underlined that the cooperation between the Finnish and Russian schools could increase the motivation to study Finnish / Karelian / English as a foreign language at school. Obviously, the interaction and communication between the project partners are expected to contribute to easy / enhanced learning of languages.

Situated nearby the Finnish-Russian border, the schools are also keen to develop courses promoting intercultural skills and competencies for students and faculty. The pupils are taught to demonstrate awareness of one's own cultural attitude, values, beliefs and assumptions; demonstrate awareness and respect for cultural diversity. It is also hoped that this project would contribute to the studies in this field.

It was also demonstrated that the school pupils are also willing to cooperate with their counterparts in Finland. It is expected that the project would contribute to the cross-border contacts between the youngsters in the Republic of Karelia and Finland.

In all the cases the teachers were very enthusiastic about being involved in cooperation with the colleagues from abroad. The CBC project has been regarded as a great chance to know more about the each others educational systems, also compare the teaching practice and enrich the educational resources available in the «Cross-border classroom» network.

The CBC project is also undertaken to promote the quality and competitiveness of rural education by creating, testing and introducing the innovative models of operation. As the University of Oulu and KSPU play an active role in training and re-training of teachers and updating the school curricula, their and other HE I's increasing orientation towards the school sector may influence the whole system of basic education, thereby having a much greater impact on sustainable development of small and remote communities in the long term.

The educational quality in the small and rural schools is being continuously increased by addressing the problem both with people-intensive and technology-intensive solutions. The cross-border pedagogical cooperation, in-service training

programmes, introduction of new information and communication technologies in education supported by the University of Oulu and KSPU made a substantial contribution to quality and equality of educational opportunity for the students living in the remote areas of Karelia and Finland.

As a prerequisite for the cross-border pedagogical cooperation one might consider that there are a number of areas in the content of teaching on the schools that can benefit from co-operation across the border. They include teaching of Russian and Finnish languages, teaching of the first foreign language, studying of history, folklore and the local traditions. Ultimately, interaction between Finnish and Russian schools and their schoolchildren adds to the understanding of language, culture and society between the two countries, which will be even more important in the future.

The CBC project is organised in the way that every project school, working in the groups consisting of Finnish and Russian teachers, carries out a small-scale development sub-projects related to its own educational needs. The sub-projects, focusing on language training and multicultural communication, folklore and folklore-related things, local way of living, traditions, and local games, are run to develop the local curriculum and promote the access, quality and competitiveness of rural education. The cooperation between the teachers and pupils are of crucial importance in all the development projects.

By exchanging of curricula and learning content, also by introducing new pedagogical approach and creative classroom techniques based upon the recent developments in ICT, the present project is expected to increase the educational quality, replace a lack of local educational services, also diversify and enrich the teaching in the remote schools. The rural teachers also benefit from the in-service training programme organized within the project; also the methodological support and professional counselling is made available via the Web-based Virtual Pedagogical Clinic.

The CBC project is also designed to establish a permanent “network classroom” between Finnish and Russian schools, offering small schools an opportunity to expand their own teaching activities. The implementation of this network classroom makes use of the possibilities offered by the information and communication technologies, although technology is not at the centre of the activities, as it is only one tool to

implement the desired operational model of the network classroom. The elements for the operational model of the network classroom are based on the above-mentioned small-scale development projects carried out within the present project.

The future activities of the network classroom are also linked to the schools' regional centres and companies offering various technical and consulting services. The present project is also to investigate the situation with the services provided by the regional service centres for the schools and also cooperation with companies. The investigation focuses on which services connected with the operation of the schools could be implemented centrally through regional service centres. The production costs of such services through decentralised vs. centralised means are calculated on the basis of different models of organisation for the service centres. It is also investigated how companies could contribute to the production of services. Special attention is paid to the cooperation between ICT developers and schools / other educational institutions.

The teachers working in the small schools are facing a number of various challenges. It is rather often that the staff in rural schools has cited isolation from new curricula, in-service training and methodological materials, and support mechanisms, such as communications with peers and official guidance. They are more likely to have to teach out of the field in which they are certified. The classroom technique and the pedagogical methods may also be rather outdated. It is also linked to the "brain drain" of talented teachers to urban areas.

To overcome this challenge the CBC project offers in-service training programme for the teachers participating in the project. The training programme is planned and implemented in such a way that it is genuinely accessible to the staff in small schools. The major goal of the training programme is to develop the teachers' knowledge and professional skills and, on the other hand, to promote the exchange of experience by offering the participants collegial support, which is often very limited among teachers in small schools.



Conclusion

Collaboration and partnership are key issues in nowadays education. It is important that schools recognize the value of collaboration between teachers of different schools. Engaging the university in this collaboration between teachers can reflect the potential for possible collaborative work between universities and schools.

The Cross-Border Classroom project, coordinated by the Learning and Research Services of the University of Oulu and the Karelian State Pedagogical University, seems likely to have contributed to maintain the school system and also support the quality of education in the small and remote communities in the Russian Karelia and Finnish Northern Ostrobothnia.

Positive results have been accomplished such as technical capacity building, infrastructure support, professional knowledge, networks, and co-operation between the educational institutions, universities and local authorities. The actions used in the project have ranged from professional training, introduction of new teaching techniques, and exchange of experiences to development of information services and educational resources for teachers working in the remote schools of the Republic of Karelia.

Yet, the promising results are not necessarily sustainable. Making new school partnerships supported by the community, establishing new university/school alliances, manoeuvring, teacher / pedagogical cooperation are all elements of strategies, in which local and international collaboration is essentially required. More active cooperation between the relevant stakeholders, including the authorities, higher education institutions, business community is also needed.



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