The aim of research was to answer whether training conducted in Regional E-learning Training Centres in Information and Telecommunication Technologies application in a classroom, focused on cooperation and peer learning of participants, will result in increased social capital. 160 teachers participated in the study, out of which 100 filled the questionnaires twice. The questions dealt both with “hard” competences that the training was about, i.e. application of Information and Telecommunication Technologies (at work and at home), and with psychological variables not directly related to the training: job satisfaction and various aspects of social capital. Data analysis shows that training which encourages contact between participants is related to increased mutual trust and support and higher tolerance for failures.

Key words: professional teachers’ training, social capital, Information and Telecommunication Technologies in teacher training

INTRODUCTION

One of the most prominent civilizational trends in today’s world is rapid growth in information, caused mainly by the development of Information and Telecommunication Technologies (ICT). The pace of knowledge development requires from people who convey the knowledge constant improvement of their qualifications and competences, which is the reason why it is so important for teachers to participate in various forms of professional development. Researching the effectiveness of these forms is of special importance both for teachers, who can choose the forms of professional development that they want to participate in, and for institutions, which can make decisions about the forms of professional development which are worth developing. Another basic source of information for people who conduct training is evaluation, because it gives information on how to modify the training in order to increase its effectiveness. The question of how to conduct evaluation and how to measure effects of training is another challenge that needs to be taken into account in educational activities. This article is an attempt to partially answer this question.

One of the main challenges of professional education is not only to teach people who receive training, but to translate this new knowledge into actions. Ordinary training, even if it culminates in
an exam, only poorly translates into what people who receive the training actually do. Cognitive psychology explains this difficulty by the fact that during training, it is declarative knowledge that is usually conveyed, which can only later be transformed into procedural knowledge on which an action can be based (cf. Anderson, 2005). It is challenging for teachers to create such forms of professional development which will let them apply the new knowledge in the teaching process. It is difficult because very often even big professional development initiatives, based on excellent subject materials, produce marginal practical effects. What features should teacher training be characterized by, apart from a high substantive level, so that the conveyed knowledge can be used in the teaching practice?

The almost 10-year-old initiative of Regional E-learning Training Centres (ROSE) is an attempt to answer the question. The aim of the initiative is to improve teachers’ competences with regard to the application of ICT tools. ROSE is based on two main assumptions. The first one is conveying knowledge and competences related to the application of ICT tools, and not only teaching how to talk about these tools. For people who are proficient in this technology, the tools are “transparent”, they are just means to meet their goals. Under ROSE, teachers learn not about ICT, but how to actually meet various practical goals by using it. The second assumption of the ROSE initiative is that a substantial change in education entails social change, not only broadened knowledge.

The target group of the training must be teachers’ community, not individual teachers. The aim of the training is to convey new competences to teachers. If teachers learn how to use the methods which they cannot use in their environment, in their school, the only effect will be another frustrated teacher. A social change entails not only a change of specific members of the group, but a change of relations between them. Implementing new technologies requires cooperation. The teacher can effectively work using ICT if they can find missing information or ask for advice. Preparing new lessons with the application of ICT is much easier if you do it with others or if you can rely on experience of other team members – for example teachers from your school.

Social capital determines the potential of an individual to meet their goals thanks to their social contacts (Bourdieu, 2003). Thus, professional development goals under ROSE encompass not only improving competences relating to ICT and skills applied in the teaching process, but also growth in social capital. It is an interesting question: can properly conducted training in ICT tools increase social capital? And is growth in social capital related to the benefits which are the result of developing ICT competences? The article attempts to take a broader view at evaluation of professional development. How do you evaluate the results of training in a way that measures not only their direct effects with regard to conveying knowledge and competences, but also indirect results which contribute to the ability to apply the acquired competences in practice? The article presents only a few elements of the evaluation of ROSE initiative effects, as the results of other evaluation studies are currently being developed.

**Professional Development of Teachers in Poland**

In Poland, it is not obligatory to participate in various forms of professional development for teachers, but it is directly related to promotion and salary increase. Therefore, many teachers use various forms of qualifications improvement. According to the data from the Educational Information System (System Informacji Oświatowej), in the academic year 2008/2009, around 2.6 per cent of all teachers participated in various forms of training. A substantial bulk of commune budgets is devoted to training (around 0.5-1.0 per cent of the budget for education).

The offered courses vary with regard to their length, participants’ engagement as well as content quality, and they encompass such subjects like: assessment, new teaching methods, working with...
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A talented student, working with a student with special educational needs, working with difficult teenagers, handling violence or stress, cooperation with parents, assertiveness, etc. There also is training on the application of unique educational aids and new Information and Telecommunication Technologies during subject lessons.

Training offered by various institutions and organisations varies with regard to how it is conducted: as individual lectures, during one or two day workshop organised jointly with regularly undertaken meetings, or postgraduate studies. Recently, Internet training in the form of e-learning courses or blended courses (partially e-learning, partially stationary meetings) has been gaining in importance in teacher education.

Practically all offered training is subject to evaluation. However, evaluation refers to such things as the quality of the training, staff, organisation, usefulness of presented material for teachers' work, as well as not substantive elements (e.g.: quality of the meal or the venue). It is relatively rare to undertake research on whether the conducted courses impact on the actual improvement of competences and how lasting their development is. And it is very rare to pay attention to participants' psychological features which could change as a result of the conducted training. Joint participation in the course, engagement in the same topic and projects, solving problems together could result in changes which would not have happened without the training.

The article presents the results of an unusual approach applied to evaluate training, an approach based not only on knowledge growth and satisfaction, but on social capital and psychological changes which can take place after finishing the training.

Unusual approach towards training – ROSE initiative

The aim of the conducted training was to introduce a permanent positive social change, directly related to the field of education. It was supposed to stimulate the occurrence of a learning community of teachers who are willing to cooperate.

The aim of the initiative was to integrate the local community, which will use the tools of broadly understood information technology to cooperate and communicate nationally. Another aim was to create a learning community, willing to cooperate, able to apply the newest ICT accomplishments and implement them in subject curricula. The initiative aimed at teaching teachers how to apply ICT in a classroom and how to use various methods of working with students, so that they could teach children and the youth in a similar way. Teachers' community was supposed to be a community able to learn and teach by conducting projects, in order to prepare students for team work in a modern society. Indirectly, the aim of the training was to help local communities to overcome a digital barrier (i.e. facilitate access to information society achievements), increase their social capital – trust and ability to cooperate, boost their subjectivity and ability to effectively conduct projects.

Regional E-learning Training Centres came into existence after two years of training conducted by the University of Social Sciences and Humanities and Telekomunikacja Polska on the application of the Internet and information technologies in subject teaching in schools in 10 provinces. In the third year of the programme implementation, ROSE teachers underwent training to become instructors. The training encompasses the ability to teach in an e-learning mode, uniqueness of educational work with adults, team work, communication, ability to harness Internet potential for the purposes of joint didactic initiatives. ROSE centres have created a network – a learning community, where teachers could not only improve their competences with regard to using the Internet and information technologies and teaching using the method of projects. They have become training centres for other schools and the source of spreading these competences in local communities.

The developed training model was unusual in comparison to what could be found on the market. It assumed intensive training of a selected group of teachers, who were to become vehicles of change.
in their environment. Schools which could delegate at least three teachers, including one IT teacher, were qualified to participate in the programme. The reason why an IT teacher was needed was that technical support was necessary for the realisation of the project. The reason for the specific number of teachers delegated from one establishment was the need to develop the mini community already at the very beginning. It was easier for a group of teachers to overcome the unwillingness to introduce changes in their home school. This approach is consistent with the knowledge about introducing social changes (cf. Nowak, 1996).

The training model provided for at least two stationary meetings (at the beginning and at the end of the training). Their aim was for teachers to get to know each other and to establish cooperation between them. Personal contact was incredibly important. Establishing personal contacts was a prerequisite for good cooperation between the teachers via the Internet on joint projects. In addition, after the initiating meeting, each teachers’ team received substantive aid for their own projects and at the same time provided support for new programme participants. The cooperation catered for the feeling of support at each stage of projects realisation and working with students. E-learning became a platform of exchanging practices (teachers shared their successes and difficulties), sharing didactic materials, acquiring knowledge and advice, and consequently, it became a natural, every day tool.

Financial support in the form of grants for technical infrastructure, software, costs of Internet access and maintenance of Internet services, further educational activity and teachers’ activation, was an important aspect of the realisation of school projects. This approach, on the one hand, helped overcome infrastructural obstacles, and on the other hand, reinforced positive attitude of decision makers (headmasters) towards the application of new working methods with students by teachers.

To sum it up, the training was unusual, because it provided its participants with the tools which enabled free communication, encouraged contacts and cooperation through jointly conducted projects, rewarded even the smallest achievements, encouraged to share didactic materials, experience, mutual learning and helping each other. The training creators assumed that the way of communication and being a member of the group which has a similar aim and acquires new competences would foster psychological development of participants. Even more so, they assumed that teachers who participated in the training would bring about a change in their schools, so that a modern way of thinking about teaching, conveyed during the course, is instructive also for teachers who did not take part in the training. This expectation stemmed from the fact that the teachers who had taken part in earlier editions of the training created a network of mutually supporting schools, which now constitute the basis of a learning community and which created the ROSE community. The network expands after each training edition.

The conducted training was supposed to be an experience which will improve teachers’ self-esteem and job satisfaction, and which will show the benefits of cooperation during the realisation of educational projects, which was expected to boost social capital. The key for understanding the social change taking place in teachers as a result of participation in training seems to lie in the growth of social capital understood, after Fukuyama (1995, 1999), Coleman (1990, 2003), or Putnam (1993, 1995, 1996, 2000), as a number of connections and a social network – a network of mutual trust and support, with high level of communication and cooperation between its members.

**Why is social capital important?**

Social capital is the basic fabric of civil society and needs to be strengthened in order to build democracy (Bullen and Onyx, 1998). It significantly impacts on economic results (Maskell, 2000) and, apart from spontaneous sociability, has profound economic consequences (Fukuyama, 1995). Societies with high social capital develop more easily economically, by creating more efficient self-gov-
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The notion of social capital is very broad and heterogeneously defined. It was introduced in the 1980s by Pierre Bourdieu and James Coleman (Bullen and Onyx, 1998). Another forerunner of the concept was Robert Putnam (Schuller, Baron and Field, 2000). Each of them understands social capital in a different way. According to Bourdieu (1997, as cited in Zarycki 2004), except for social capital, two other kinds of capital can be distinguished: economic and cultural capital. Social capital itself is an aggregate of actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships (mutual acquaintance and recognition). This network is jointly possessed capital and provides support for each of its members.

Coleman (1990) treats social capital individually, as a kind of “wealth” of an individual. He identifies mutual trust with social capital (p. 306-310). Putnam and Gross (2002) point out that social capital can have individual and social value at the same time, and Putnam (1996) perceives it from a group (at the level of collectiveness) and not from an individual perspective. Additionally, he says that it is an expression of social life, such as networks, norms and trust, which make it possible for their participants to act together in a more effective way, in order to achieve common aims. Zarycki (2004) pinpoints that both Coleman and Putnam treat “social capital as a ‘value’ which is unambiguously positive. There is no doubt that the bigger its resources, irrespective of its form, the better for all, always. People live more comfortable lives; they become better and wealthier, institutions start working more efficiently, the level of trust of all people towards all people increases – civil society improves itself.” Additionally, they claim that social capital facilitates spontaneous cooperation (Putnam 1995; as cited in: Zarycki, 2004).

The concept of trust is inseparably related to social capital. Trust makes it possible for people to work and live without generating constant, useless conflicts and endless negotiations, and it becomes even more important in case of a conflict (Fukuyama, 1995). Thanks to trust, further elements of social capital can be developed – mutual understanding, common values and behaviours which connect community members and enable activities based on cooperation. Trust and cooperation between friends and relatives expand and generate trust between strangers, institutions and, finally, the whole community, which makes it possible to create social capital (Beem, 1999). Trust is a link in a community, team of people and relations, as well as economic activity (Kuper, 2006); it stimulates social activity and favours successful lives. Trust is also related to the feeling of social support. Research shows (Sheridan and Radmacher, 1998; Knoll and Schwarzer, 2004) that participation in the network and social contacts is positive experience, which reinforces the feeling of security and the feeling that life is predictable and stable (Şek, 2001), which translates into further engagement in new undertakings.

As cited in literature, it was therefore assumed that one of the measures of social capital will be the number of social contacts, which is inseparably connected with the size of the social network (Lin, 2001; Coleman, 2003; Putnam and Gross, 2002); other features include trust, (Fukuyama; 1997, 1999; Beem, 1999; Putnam, 1995, 2000; Kuper, 2006; Marody, 1996; Skarżyńska, 2002), cooperation (Hardin, 2001) and feeling of support (Sheridan and Radmacher, 1998; Knoll and Schwarzer, 2004).

Additionally, there are other variables, which are not so strongly linked with social capital, but are important from the perspective of exhibiting innovative behaviours, including undertaking entrepreneurial activities (introducing new methods is one such behaviour). These variables cover confidence in one’s activities and in the capacity to change people and the world (Chiu, Dweck, Tong and Fu, 1997; Levy, Stroessner and Dweck, 1998; Dweck, 2000; Dweck, 2006), optimism, which is inseparably linked with that (Bańka 2000, Seligman
1995; Kozielecki, 1977; Glenc, 2004), risk-taking (Drucker, 1992; Adamczyk, 1995; Furnham 1995, Grzybowski, 1995; Carland and Carland, 1997; Virtanen, 1997; Dobrołowicz, 1998; Gartner, 1988, Tyszka, 2000; Zaleśkiewicz, 2006), or the ability to deal with difficult situations and tolerance for failure (Palich and Bagby, 1995; as cited in: Kołodziej and Goszczyńska, 2006). These features can contribute to well-being at an individual, social and economic level. Teachers, people who educate new generations, should first of all be aware of how important these features are, and secondly, they should be able to work with children and the youth in a way which shapes and/or strengthens these qualities. It will be difficult for them to convey them, if they do not possess them themselves. This is why it is important to conduct training in a way in which apart from “hard” skills, competences are taught and consolidated in people (especially teachers), which are key on the labour market and in civil society.

The aim of the conducted research was to check whether the methods applied in the training by the ROSE team are effective both with regard to improving “hard” skills that the training is about – increasing the ability to use ICT tools in a classroom and in private life and applying the method of an educational project in the work with students, and in the field of “soft” skills, i.e. qualities linked with social capital and innovativeness/entrepreneurship. The study also aimed at checking whether the conducted training will boost job satisfaction and self-esteem of the teachers.

PARTICIPANTS

The tested group was made of teachers who participated in one training edition entitled: “Educational project method with ICT applied in a subject lesson” conducted by the ROSE team. The training lasted four months. It started and finished with stationary workshop blocks, between which participants were moderated via the Internet. 160 teachers participated in the study, out of which 100 filled the survey twice. Altogether, 151 women and 9 men were researched, from 9 towns (Jaworzno, Koszalin, Kowalew, Ostrowiec Świętokrzyski, Poznań, Reda, Węgrow, Żmigród, Žnin) (from N=6 in Koszalin to N=27 in Kowalew). The tested teachers worked mainly in primary schools and in middle schools (a three-year secondary school for children between the ages of 13 and 16); most teachers taught mathematics (N=29), Polish (N=25), foreign language (N=26) and integrated education (N=24). At the time of the study, the tested teachers had worked in education from between 1 year to 32 years (M=13.96; SD=8.04). In the school where they worked at the time of the study, the teachers had worked between 1 year and 31 years (M=9.74; SD=6.9).

MATERIALS

In the study, standard diagnostic tools were applied: the one developed by Rosenberg, adapted by Laguna, Lachowicz-Tabaczek and Dzwonkowa (2007) and the Questionnaire of Social Entrepreneurship (Kwestionariusz Przedsiebiorczości Społecznej) (Praszkier, Nowak and Zablocka-Bursa, 2009).

1. The Questionnaire of Social Entrepreneurship (Praszkier, Zablocka-Bursa and Nowak, 2007) consists of 52 questions, creating 7 scales which are related to social capital (trust, feeling of support, cooperation) and social entrepreneurship (optimism, confidence in the capacity to change people and the world, tolerance for failure, inclination to take risk). The questionnaire has adequate psychometric features. Reliability measured with Cronbach’s coefficient of internal consistency, α, was between 0.62 (inclination to take risk scale) and 0.83 (tolerance for failure scale). In no scale, α dropped below 0.60. The standardisation study was conducted by TNS OBOP in April 2006. A representative group of 1002 adult Poles (482 men and 520 women) took
part in the study, between 16 and 90 years of age ($M=48.35; SD=18$). The most important results of the validation study of the tool were described in *Psychologia Społeczna* (Praszkier, Nowak and Zablocka-Bursa, 2009); detailed results of the study are contained in a not published Ph.D. dissertation (Zablocka-Bursa, 2012).

2. Personal information with questions regarding demographic variables and 16 questions pertaining to the application of ICT and project method at work and in private life, where respondents answered the questions on a five-point Likert scale. Exemplary questions: How often do you use ICT (e.g. computer, Internet, projector) in a classroom? Do you think that an educational project method is needed to conduct lessons?

3. Survey about the number of social contacts, made of 8 questions, 2 out of which were taken from Diagnoza Społeczna 2005 (Czapiński and Panek). The task was to write the number of teachers from the school in which the tested people teach with whom they have any kind of relations. The aim of the survey was to research individual social capital, understood as the number of contacts. Exemplary questions: With how many teachers from your school do you talk about new educational ideas that you would like to introduce?

4. The Questionnaire of Working with Groups of People (Praca z Grupami Ludzi) (Praszkier, Zablocka-Bursa and Nowak, 2007). The questionnaire consists of 20 questions, which make up two scales: Building social capital when working with groups of people and Application of direct techniques. The questionnaire has satisfying psychometric features. The reliability coefficient, Cronbach’s $\alpha$, is respectively: 0.78 and 0.83. Detailed results of the validation study of the tool were described in a not published Ph.D. dissertation (Zablocka-Bursa, 2012). The respondents were to assume an attitude towards each question on a five-point Likert scale, where 1 means *Strongly disagree*, and 5 – *Strongly agree*.

Exemplary question on the scale application of techniques to build social capital: *When working with groups of people, I think it is good to encourage people to undertake joint actions.* Exemplary question on the scale application of direct techniques: *When working with groups of people, I think it is good to teach people management methods.*

5. Scale of Job Satisfaction (Zablocka-Bursa, Zdrodowska and Strawińska, 2009). The survey consists of 14 questions regarding teachers’ job satisfaction. In the survey, questions from “A survey questionnaire on job satisfaction” ("Kwestionariusz ankietowy dotyczący badania zadowolenia pracownika z wykonywanej pracy") were used, made by Urszula Kozłowska and Małgorzata Kwiatkowska (2008). The participants were to assume an attitude towards the questions on a five-point Likert scale, where 1 means *Strongly disagree*, and 5 – *Strongly agree*.

Exemplary questions: I feel that I have an influence on the school’s success.

**PROCEDURE**

The research was conducted by using questionnaire questions and consisted in testing participants with the same set of tests twice. The first study took place at the beginning of the first training meeting; the last one (post-test) at the end of the second training meeting. The time between the two tests was around 4 months.

**RESULTS**

**Does training of the ROSA team improve ICT competences?**

One of the aims of the conducted research was to check whether the methods applied in the training by the ROSE team improve skills with regard to
the use of ICT tools in a classroom and in private life and application of the method of an educational project in the work with students. For this purpose, an analysis with a t-Student test for dependent samples was conducted on the collected data, which has shown an increase of ICT application at school as a result of conducted training \( t(99) = 5.27; p < 0.001 \); from \( M = 3.62; SD = 0.72 \) to \( M = 3.89; SD = 0.62 \), as well as in private life \( t(99) = 2.65; p < 0.01 \); from \( M = 4; SD = 0.59 \) to \( M = 4.2; SD = 0.53 \); additionally, project method was more often used when working with students \( t(99) = 4.36; p < 0.001 \); from \( M = 3.1; SD = 0.57 \) to \( M = 3.38; SD = 0.59 \). A more positive attitude of teachers towards ICT in general has been noted, both in private and professional life \( t(99) = 5.39; p < 0.001 \); from \( M = 3.82; SD = 0.6 \) to \( M = 4.07; SD = 0.58 \), and a more positive attitude towards educational projects working methods with students \( t(99) = 5.05; p < 0.001 \); from \( M = 2.87; SD = 0.63 \) to \( M = 3.23; SD = 0.62 \).

The results suggest that the training has resulted in increased competences with regard to Information and Telecommunication Technologies and educational project method.

**Does training of the ROSE team improve “soft” skills of its participants?**

The overriding scientific aim of the study was to check whether the training conducted by the ROSE team will strengthen the qualities linked with social capital, such as trust, ability to cooperate, feeling of support and the measures of social capital, in the form of the number of social contacts. It was also analysed whether other qualities, related to entrepreneurship, will be strengthened: confidence in the capacity to change people and the world, optimism, tolerance for failure, inclination to take risk, as well as qualities related to well-being of teachers, i.e. job satisfaction and self-esteem. For this purpose, an analysis with a t-Student test for dependent samples was conducted on the collected data, which has shown that the tested people have higher levels of trust towards their co-workers \( t(96) = 2.18; p < 0.05 \); from \( M = 21.35; SD = 4.69 \) to \( M = 22.35; SD = 3.63 \), feeling of support \( t(96) = 1.97; p = 0.051 \); from \( M = 28.16; SD = 5.45 \) to \( M = 29.29; SD = 5.01 \) and tolerance for failure \( t(98) = 3.17; p < 0.05 \); from \( M = 35.78; SD = 7.29 \) to \( M = 37.58; SD = 5.9 \). No significant differences on the scales of cooperation, confidence in the capacity to change people and the world, inclination to take risk and optimism were noted, also at the level of the application of direct techniques (lectures, seminars, advice, etc.) and aimed at building social capital when working with people (the aim of these techniques is to improve the ability to cooperate, increase trust levels, etc.), as well as in the number of contacts at home and at work. In a few centres, except for the above mentioned effects, different changes have been noted. For example in Jaworzno and Koszalin, increased self-esteem has been noted \( t(9) = 2.19; p = 0.056 \) measured by the self-esteem scale of Rosenberg, and in Znin increased cooperation \( t(7) = 2.48; p < 0.05 \) and more contacts outside of work have been noted \( t(7) = 2.57; p < 0.05 \).

The results suggest that the conducted training contributes to increased trust towards co-workers and increased feeling of support, as well as improves tolerance for failure.

Participants of previous training editions said that thanks to the participation in the projects they derive more satisfaction from their job and they have higher self-esteem. The conducted analysis did not produce results which would confirm this thesis. However, further analysis has shown that depending on the attitude towards ICT and educational project methods, after the training participants have varied levels of job satisfaction.

An analysis of variance (ANOVA) was conducted, where the independent variable was a three-categorical variable *attitude towards ICT* created from a numerous variable (the 33th and 66th percentile as the cut-off points; 3.86 and 4.43 respectively), and the dependent variable was job satisfaction. The analysis has shown that job satisfaction of the participants after the training varies depending on their attitude towards ICT after the training – result
on the scale attitude towards ICT: low vs average vs high \[F(2,100) = 11.4; p < 0.001\]. A post-hoc analysis with the Bonferroni correction has found that people with high results on the scale attitude towards ICT have indeed higher job satisfaction levels than people who have low and average results on the scale of attitudes towards ICT. Detailed results are presented at the figure.

**Fig. 1.** Level of job satisfaction in relation to the result on the scale of attitude towards ICT and the result on the scale of attitude towards the project method

![Graph showing job satisfaction levels](image)

A similar set of results was observed in the second ANOVA analysis, where the factor was attitude towards the educational project method, created on the basis of the numerous variable (the 33th and 66th percentile as the cut-off points; 3 and 3.4 respectively) and the dependent variable of job satisfaction. The analysis turned out to be statistically significant \[F(2,100) = 3.79; p < 0.05\], and a post-hoc analysis with the Bonferroni correction has found that people with high results on the scale attitude towards the project method have significantly higher job satisfaction levels than people who have low results on the scale of attitude towards the educational project method. Detailed results are presented at figure 1.

**Summary and comments on the results**

The conducted research shows that training which includes mutual communication between participants (and not only communication between the instructor and the participant) improves competences related to the skills that they teach, as well as changes the attitude of participants towards the subject of the training to more positive (in this case it is an attitude towards ICT and educational project method). The most important result of the research is increased trust which can be observed, as well as increased feeling of support and tolerance for failure. These are the qualities related to social capital, which is, as stated by Bullen and Onyx (1998), Grootart, Narayan, Jones and Woolcock...
(2004) and Woolcock and Narayan (2000), the key to solving social problems and to economic growth of societies. The enumerated qualities make up competences which are essential on the labour market and which should be practiced all the time and conveyed to the children and the youth, especially at school, by teachers of various subjects.

The ROSE team offered a special form of training, which covered the following key elements: 1) ongoing communication with the instructor and between participants via ICT tools; 2) improving competences with regard to ICT tools and showing “how to learn them”, in order to make them transparent and to use them for various purposes; 3) strong social dimension, the aim of which is to create a group which will be supportive; 4) prizes even for the smallest achievements; 5) support (social and financial and/or material) for the schools where the trained teachers work. In the light of the presented research, it seems that this approach does lead to a social change in the group of trained teachers, who can contribute to “transferring” the change to schools (sharing with students and other teachers) where they work. Apparently, if you add a few elements mentioned above to traditional training, the level of taught competences will significantly improve, and you will observe other benefits: educational, psychological and social.

This effect can be attributed to a few factors. Firstly, training which focuses on transferring and consolidating procedural rather than declarative knowledge has greater chances of bringing benefits in the longer term. Teaching skills, as opposed to conveying knowledge, makes it possible to use the skills acquired before, whereas newly acquired knowledge can easily be forgotten (especially, if you do not put it into practice). For participants, the training has become not only a way to acquire new knowledge, but first of all a way to obtain new skills or develop already existing ones with regard to the application of ICT. Information and Telecommunication Technologies have thus become a natural tool to fulfil ongoing tasks, which has helped save time and resources, and consequently, made it possible to engage in other social, professional or private activities. Additionally, on the basis of acquired skills, it is easier to learn new things which are related to the field already known, especially if new tasks require the application of the procedural knowledge acquired before. This makes the attitude towards ICT more positive (if I can do something, I was not able to do before, and I do it right, I like it more... So I am doing that again... etc.).

Secondly, the offered training focused on communication. It was offered in various forms: synchronic (e.g. Skype, video conferences) and asynchronous communication (e.g. e-mail), individual (e.g. communicators) and group (forum). Consequently, participants a) were “forced” to constantly interact, b) have learned to communicate and cooperate with each other and with instructors, c) were “not afraid” to ask questions and share their doubts. This made it possible for participants to smoothly move to next training stages, which has reduced the effect of “dropping out”, typical of training and courses conducted in an e-learning mode.

Focus on communication also makes it possible to bridge the gap between participants, which is important especially at the first stage of learning, where people with various competences and skills meet in one group. Sharing experience and solving problems together makes it possible, on the one hand, for “the better ones” to share their competences, and on the other hand, for “the weaker ones” to acquire new knowledge and use experience of more advanced colleagues. The “better ones” can systematise their knowledge and skills. According to andragogy, sharing experience is the key to teaching adults.

Thirdly, training focused on communication and enabling free interaction (e.g. by encouraging informal meetings, spending free time together during meetings) serves the purpose of establishing deeper and more lasting social relations, which result in social capital growth. This fosters engage-
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In other words, training (in this case training in ICT in a classroom, but these can be various professional development thematic courses) in which social relations and communication are the most important, can become a starting point for introducing a social change which consists in social capital growth of its members. The aim of evaluation of all kinds of educational and training activities should be, apart from checking participants’ satisfaction, the verification of long-term effects in the form of not only application of acquired skills and knowledge, but also monitoring “soft” skills, which are developed thanks to such activities.

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