A Model of Holistic Support to the Schools Implementing Change and Evaluation of Distributed Leadership Effects

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This paper describes an innovative approach to change implementation into school communities developed by The National Education Institute (NEI) in Slovenia from 2005 to 2006. The model of holistic support focuses on supporting organizational learning and improvement of practice through distributed leadership. With the help of leadership team plan the principals provide direction and monitor the work teachers do with their students. The authors conducted a study (semi-interviews) on what strategies of distributed leadership are used by principals to support the change process, and how members of school teams experience some aspects of team dynamics (survey). The results show that with this approach principals can influence school climate and enhance the quality of teachers' work with students. Quality of communication and cooperation in the leadership teams were good due to systematic teambuilding activities, which were focused on group dynamics.

Keywords: distributed leadership, leadership teams, change process, holistic model

Introduction

A Model of Holistic Support to Schools Implementing Change represents a multi-dimensional and systemic way to support schools in exploring their own practice. In the project of didactic reform 10 schools at general secondary level were involved. The project focuses on supporting organizational learning and improvement of practice by applying new theoretical paradigms to ensure high quality education. One of the basic strategies used for working with teachers was action research. In the process of doing action research, teachers systematically explored their own beliefs, feelings, and behaviour in the classroom, and their influence on their students' thinking, feelings, and behaviour. They also tested alternative approaches and explored their effects. After two years of cooperation with the schools the NEI evaluated some effects of the project: the meaning of the action research for the teachers and their subjective assessment of the effects on their everyday practice. The results show that two thirds of teachers experienced action research as an opportunity and stimulation of their creativity and progress in their practice. They experienced it as a profit and a support to their cooperation with colleagues.

In this paper we present the leadership style used by principals and the role of the leadership team. The analysis of semistructured interviews with principals shows that systematic change affecting the core processes in school is impossible without distributing the responsibilities among members of the community.

General Goals of Implementation of Change and Didactic Reform

Teachers Explore Their Instruction Methodology to Ensure That it Provides High Quality of Learning Opportunities for Students

In a series of general training workshops organized for school communities teachers explored patterns of their own thinking and behaviour in the classroom to find out if their prevailing approaches to teaching and the strategies that they were using really provided opportunities for their students' optimal development and personal growth, i. e., for their in-depth understanding of the subject matter, development of complex and critical thinking, information processing skills, self-reflection skills, and collaboration skills.

Teachers Develop Professionally and Personally

The workshops organized by the NEI's advisors for school communities and for subject specific teams of teachers, as well as the action research collaborative work and other forms of collaboration used by individual schools, encouraged teachers to develop awareness of their own preconceptions, beliefs, and attitudes that shaped their instructional decisions, and to compare their current understanding with relevant theoretical conceptions to identify similarities and differences, and to find out their weaknesses. The aim was to support teachers to build new knowledge on the basis of understanding their existent knowledge. By experiencing the process they became more competent, more efficient, and more satisfied with their work.

Schools Develop into Learning Communities

Senge (2001) defines learning schools as the communities characterized by (a) personal excellence and clear vision of its employees; (b) shared vision; (c) individual awareness of one's own mental models; (d) collaborative learning, and (e) systems thinking or understanding of the interdependency between the elements of the system. In the Holistic Model that we implemented special attention was given to the development of the above five dimensions of organizational learning. Building awareness about basic conceptions and values helped to build awareness about the school culture (Schein 2004), which in turn led to its transformation.

Theoretical Foundations and Basic Assumptions Behind the Holistic Model

Our thinking about how people learn and change and how organizations learn and change was based on various theories, the strongest being the current cognitive theories of learning and individual development (Senge 2001; Basile, Olson, and Nathenson-Mejia 2003, Caluve and Vermaak 2002; Frost et al. 2000; Haregraves and Hopkins 2001). The following is a short description of the basic principles that served as the theoretical background of the model.

Cognitive - Constructivist Theory of Learning and Development

Our understanding of the nature of learning and individual professional development that shaped the strategies of our work with schools was predominantly grounded in the current sociocognitive-constructivist conception of learning, development, and knowledge. The basic assumptions of varied social-cognitiveconstructivist conceptions about the nature of the individuals and their learning that have important influence on teachers' instructional decisions could be summarized as: (1) cognition (thinking processes and thinking structures) influences individual feelings and behaviour; (2) mental capabilities (problem solving, decision making, memory, etc.) can be improved (Tavris and Wade 1997), and (3) knowledge is an individual construction, and as such it is a relative category that does not exist independently from the

Tanja Rupnik Vec and Brigita Rupar

individual that constructs it. Children are viewed as 'naive scientists' (Fulgosi 1985) that continuously strive to make sense of the events: in this process they form hypotheses and test them to either refuse or accept them based on the evidence. The process of learning and development is never finished.

The goal of schooling is to provide opportunities for students to develop deep understanding of the world in accordance with the current scientific concepts. Effective instruction should help students effectively 'loosen' their inaccurate and naïve beliefs that they may bring into the classroom, and direct them toward the construction of a more accurate understanding. The above can be realized only when students are actively involved with the content, i.e., when they solve problems, explore their current beliefs, seek for alternative interpretations, form hypotheses and either confirm or refuse them, etc.

The learning principles used in the projects Didactic Reform and Implementation of Change were aligned with the principles that we expected the teachers to use in their instructional delivery: while we provided opportunities for the teachers to acquire new knowledge and skills, we also challenged their current naïve conceptions about knowledge, teaching, and learning, and thus supported their 'replacing' of inaccurate conceptions with more accurate understanding that was in compliance with the current state of pedagogical-psychological science.

The Concept and Model of Action Research

One of the basic strategies used for working with teachers in the Holistic Model was action research. In the process of doing action research, teachers systematically explored their own beliefs, feelings, and behaviour in the classroom, and their influence on their students' thinking, feelings, and behaviour. They also tested alternative approaches and explored their effects. Action research as a method of intensive professional development and growth (Carro Bruce 2000; McKernan 1991; Holen 2000) focuses on critical reflection to develop teachers' awareness of their systems of beliefs and values that shape their behaviour in the classroom, which enables them to assess their value and gain better insight into their own practice. In this way teachers can develop more effective strategies for problem solving, and at the same time systematically monitor the effects of the changes they are implementing, which provides a firm foundation for sustained improvement of instruction.

The Concept of a Learning Organization

The project design and our work with schools were based on the concept of a school as a learning organization (Senge 2001). The learning organization is characterized by its ability to elicit information from its environment, and transform it into useful organizational knowledge internalized by its members. Such an organization supports the learning of all its members and continuously transforms itself in the process. The vision of such an organization is based on mutual values that are at the core of organizational culture.

Change is implemented in schools in different ways ranging from 'bottom up' to 'top down' implementation (Fullan 1993). The majority of research states that the most effective way is combining the two approaches. However, implementation of change cannot be successful if it does not entail changing the organizational culture represented on the most basic level by the preconceptions and beliefs of all the members in an organization.

Role of Leadership Teams

Initially, members of leadership teams helped each other with the new terminology and new concepts presented to them during professional development, and discussed how to put all that they learned in the NEI's seminars and workshops into practice. Some teams were more sensitive to the needs of their teachers than the others, and different team leaders had different agendas. Some teams saw their primary role in helping teachers implement new approaches to teaching. They described themselves as 'the engine' of the instructional reform. They tried to simplify the material from the NEI and adapt it to make it more suited to their teachers' needs. The opportunity to discuss innovation in leadership teams before going in front of teachers gave them confidence, and helped them stand firmly behind their decision to continue on the path toward instructional change. In all the schools teachers had doubts about more active methods of teaching because they believed that direct teaching was more efficient. They were afraid that they were wasting time by giving students time to work in groups and discuss the material, and that they would not be able to prepare them for final exams. Some leadership teams soon realized that they had to work on changing teachers' mental models, and going through the vision building process with the NEI's experts equipped them to implement the same process with their faculties. By creating the space for teachers to voice their concerns, ask tough questions and discuss advantages and possible traps of innovation helped challenge established practices and reframe individual and collective mindset. Those teams that did not invest in building climate, but rushed teachers to produce results for the NEI experienced a lot of resistance and a status quo.

Some leadership teams felt the need to discuss their role and define individual responsibilities from the start. These teams were more effective than those that failed to do so. Without clear understanding of the team's and individual members' roles and responsibilities nobody was responsible. While at the beginning leadership teams relied heavily on the NEI, they gradually became more selective, tailoring the NEI's incentives to the needs of their faculties. The teams that felt that they were successful saw their role at the end of the third year of the project in just 'enabling teachers to put their ideas in practice and making sure that the school stays on course.' In these schools, 'the reform was taking care of itself.'

Presentation of the Model

The Model of Holistic Support to Schools Implementing Change (Rupar and Rupnik Vec 2006; Rupnik Vec 2005; Rutar IIc 2005) addresses all the levels of school functioning: (a) the level of school principal, b) the level of entire school community, (b) the level of leadership teams. The following is the presentation of the activities at each level from the perspective of the NEI.

The Level of Work With School Principals

When working with the principals, we followed the recommendations by Marzano (2005) who specifies the following steps for the efficient organizational leadership:

- develop a strong leadership development team,
- · delegate the responsibility among the team members,
- select the right work,
- identify the scope of change required by the selected work,
- adapt the leadership style to the scope of change.

We advised the principals to select members of the leadership team according to whether they were open to learning and welcomed the change, were willing to invest additional energy in their work, and possessed the capacity to be good team leaders.

It is important that the team members are prepared to work constructively and help the school leader to provide direction to the school community. The development team meets regularly to plan and evaluate the work in the project. In order to be a driving force of the leadership team, the principal has to know the curriculum very well, be committed to change, encourage teachers' inquisitive attitude and exploration of their practice, carefully evaluate the effects of innovation, and be flexible in leading the school. Above all, the principals have to be ready to vouch for the success of the project. In addition, they have to take into account the opinion of the team members and teachers, and look for the sources of support in the wider community. The principals have a key role in encouraging and directing the change in school. They are responsible for transforming the school into a learning community that enables teachers to broaden their horizon and develop a better understanding of the complexity of change, as well as develop a common vision and improve their work. Successful principals know how to think strategically, they follow school values and vision, and are consistent in their school practices, as well as open to a life-long learning (Sentočnik 2005).

The Level of Work With Leadership Teams

Leadership teams play a key role in the implementation of change. Their main responsibility is to provide encouragement and direction to the processes that are connected with change, and in particular to create the conditions for teachers' critical reflection (Rupnik Vec 2006).

In our model, we decided to invite teachers to undertake action research carried out in relation to a specific context. Teachers were encouraged to identify the topics related to teaching and learning that they wanted to explore, e.g., how can I motivate my students? How can I make students write homework? How can I implement interdisciplinary connections? How can I encourage the development of responsibility in students? After the topics were defined, teachers of individual schools were grouped into action research teams based on the similarity of the topic that they had identified. Leadership of the teams was entrusted to the members of the leadership teams. Regular monthly meetings of the action research teams were an opportunity for thinking together about their action research discoveries and for exchanging experience, as well as for offering each other support and crit-

Tanja Rupnik Vec and Brigita Rupar

ical friendship. The goal of action research teamwork was to develop teachers' problem solving skills and establish networks of critical friends to facilitate their learning with each other. In order to make action research work as efficient as possible, we organized a training of leadership teams to achieve the following goals:

- Equip leadership teams with the knowledge and skills to create conditions and incentives for the implementation of didactic reform changes in their schools: through their effective leadership of action research (AR) teams; through the evaluation of the effectiveness of project goal achievement.
- · Enable experiential learning of the teams.

The training was on-going and organized for the teams from each circle of schools regularly at the end of the year; the work of the leadership teams was concluded with a two-day workshop introducing the participants' complex methods of building school vision presented below. The workshop gave them an opportunity to experience each step, with the aim of enabling them to implement a similar process with their school communities on their own or with the help of an expert from the NEI, thus forging a vision of school development.

In the second year of the project we provided a two-day workshop on evaluation and self-evaluation for the members of the leadership teams from each year project schools, where we introduced different models of evaluation and self-evaluation to them, and provided opportunities for them to develop the skills of planning different methods of self-evaluation.

Between the meetings, leadership teams were provided with a support in a form of consulting that they themselves had to initiate, or in a form of an on-going supervision support provided by an external expert assigned to the school at the beginning of the project, and who played the role of a liaison between the school and the NEI.

Evaluation of two Aspects of the Holistic Model

In evaluation we focused on two things: firstly what the changes that have been introduced through the project in the schools were and which strategies principals used to support this process. Beside these we wanted to get an insight in team processes within members of leadership teams.

We articulated two research questions:

- 1. What are the main findings of the project from the perspective of the principal? What leadership style did they find as most appropriate?
- 2. How do members of leadership teams experience and evaluate some aspects of team dynamics?

Evaluation of Leadership Style

Principals are invited to join the teaching reform project perceived as an opportunity to modernize the school, the introduction of new, different and more learner-centred methods of teaching. Principals did not know how to implement change; they did not have enough knowledge and time to introduce changes by themselves. Working on this project has been a complex and multiform job, and principals soon began to share their work with the members of leadership teams. At the beginning principals did not know what to expect from the leadership team and how to include them in the project. They realized that the team can be very relieved, it is more efficient and the work is done faster. The team members have established a more personal and confidential relationship with colleagues than the principals did. Eventually, principals realized that team members performed some tasks better than them. Principals got critical feedback on their proposals from the members and their decisions have been considered more carefully and appropriately.

Some principals stressed that their most important role was at the start of the project in setting the tone and getting teachers' engagement. They invested a lot of energy into making people see that they did not join the project from any other reason but to improve the opportunities for their students to have better access to knowledge. Some principals felt that it took a lot of skill to persuade people, and the majority saw their most important role in opening the channels of communication and letting people voice their concerns.

While before principals were responsible for observing each teacher's instruction at least once a year, they began to share this task with leadership team. They particularly valued the opportunity to discuss their observations and compare notes with their leadership team members. They felt that under the influence of working in the team they changed personally and professionally:

While I have always supported team work, I have never been part of a team. I learned how to listen and be open to suggestions from other team members, which I did not practice before. I've become more democratic while previously my style was more authoritarian.

Before the project, I was doing what was expected of me, primarily organisation, budget, human resources management, and classroom observations. I didn't do much for my own development and growth. For me, the project was an opportunity to develop professionally. It helped me strengthen the pedagogical part of my role. Now it is much easier for me to observe teachers and discuss instructions.

Principals became more opened and tolerant in the communication with colleagues. It was found that this way of communication increases the quality of the tasks teachers do. They also highlighted new findings in the area of teaching methods, which help them to have a wider range of expertise in monitoring and observing lessons. There have been reports of an increased level of active forms of work with students on a large number of object-derivative hours of new organizational forms of work such as block periods, project weeks and others. Principals have also greatly increased the number of classroom observations compared to previous years.

At the level of climate and culture an encouraging change occurred. Teachers have begun to cooperate more with each other, classroom observations became more frequent. Principals reported a more relaxed relationship between teachers and students. Some schools have introduced consultation hours for students, which they did not have before.

The weakest point of the project was the evaluation of the effects. Each school has tried to somehow evaluate their work at the end of the school year. Teachers, students and parents replied the questionnaires and results were presented at the final conference. Only one school has carried out continuous evaluation in the middle of the year. We estimate that the principals and teachers did not have enough knowledge to carry it out professionally.

Evaluation of Group Dynamics in the Leadership Teams

We developed a survey about different aspects of group dynamic (Rupnik Vec 2009) with 47 items, grouped on eight dimensions: aims, tasks, rules, time, criterion of efficiency, communication, leading and decision making, circumstances. 170 respondents

TABLE 1	Average Scores and Standard Deviations on Survey Ite	ems
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Scale	М	S D
Goals		
Our goals are clear.	4.1	0.72
Our goals are realistic.	4.3	0.71
We have a vision.	4.0	0.74
Tasks		
Motivate us.	3.8	0.80
Are clearly defined.	4.0	0.85
Responsibilities are shared.	3.9	0.95
We have all skills we need for work in SDT.	4.0	0.78
Rules		
Are defined.	3.7	1.22
We discuss if rules are violated.	3.3	1.28
Time		
Our meetings are regular.	4,-1	0.96
We use our time effectively.	4.2	0.83
We have enough time.	3.8	0.93
We also take time for building the group dynamic.	3.6	1.01
Criteria of effectiveness		
I grow in this team, personally and professionally.	4.0	0.94
We realize all the decisions.		0.74
Our results are impressive and visible.	4.2	0.79
We have evidence of effects on students.	3.8	0.93
Our activities are based on theory.	4.1	0.83
Communication		
We discuss the content of our work.		0.67
We discuss the processes of our work.		0.85
We have high level of trust in the team	4.3	0.80
Comm. is open and relaxed.		0.77
We exchange all relevant information.		0.74
We exchange feedback.		0.87
We are respectful and empathetic with each other.		0.72
We influence positively each other.		0.88
We manage conflicts effectively.	4.0	0.92

Continued on the following page

answered the survey. The majority of average grades are approximately 4.00 and that tells us that the prevailing experience of team members is positive. The grades on communication and leadership items are even higher, for example: 'We communicated openly and in relaxed way' (M = 4.5, SD = 0.77) or 'We are

Scale	М	SD
Leading and decision making		
The leader is sensitive to ideas of group members.		0.73
All group members cooperate in the process of decision making spontaneously.		0.82
The leader invites all members to express their opinions and ideas.		1.00
All who are influenced by decision cooperate.		0.84
We use systematic methods of problem solving		0.94
If results are negative we feel a new impulse to deal with the issue.		0.88
Members are devoted to decisions.	4.2	0.80
Circumstances of team work		
We have clear organization vision.		0.98
We have all resources for task completion.		0.92
We confront with resistance.		0.85
We have knowledge about the theory of implementing change.		0.81
Our planning is based on theory of implementing changes.		0.83
We regularly reflect on our work in team.		0.93
We defined criteria of team effectiveness.		1.09
We systematically evaluate our work regarding these criteria.		1.09
We have a plan of team development.		1.19
SDT is accepted in organization.		0.94
A lot of people want to be members of SDT.		0.96
I'm proud of my membership in sdt.		1.08

TABLE 1 Continued from the previous page

respectful and empathic toward each other' (M = 4.5, SD = 0.72), 'The leader is attentive to ideas of team members' (M = 4.5, SD = 0.73). We conclude from these evaluations that the quality of communication, cooperation and leadership in team were quite high in the project, which is probably partially due also to some of our training activities, focused on group dynamics.

A little bit lower were the average grades on these items: 'There is no time for group building activities' (M = 3.6, DS = 1.01), 'We use systematic methods to solve problems' (M = 3.8, SD = 0.4), 'We set the criterions of team effectiveness' (M = 3.3, SD = 1.09), 'We systematically evaluate our work along these criterions' (M = 3.4, SD = 1.09). The results on these items, even though still on the positive side of the dimension, suggest that we should focus our interventions on team self-evaluation, teambuilding activities and methods of systematic problem solving and support them with new knowledge and skills on those fields.

There were also some open-ended questions at the end of the survey:

- What did you personally benefit from the cooperation in the school development team?
- How important is for you personally the membership in the school development team?
- What did you expect from National education institute in the future? What are your learning needs?

The most frequent answer to the first question ('What did you personally benefit from the cooperation in the school development team?') was the cooperation and socialising with colleagues (n = 65) and the second regarding frequency was new knowledge about change implementation. (n = 57). For members the membership is quite important (n = 87) or extremely important (n = 22), because it enables them to work in a team and to gain new knowledge and skills. In the last question we wanted to test their wishes and expectations about further cooperation with the NEI. The most frequent answer (n = 51) was that we, as an institution, should provide more training and consultations for leadership teams.

Conclusion

In the model of holistic support to the schools implementing change principals have used some strategies of distributed leadership style that caused a new dynamic in the schools. With distributed leadership style they influenced school climate, relationships between teachers and students have become more frequent and friendly. Principals support teachers to introduce new didactic strategies in their work with students. Leadership teams provide conditions for teachers' critical reflection and help principals to direct the changes. The evaluation study shows that changed work conditions require a new leadership style. The NEI should provide more training for leadership teams on self-evaluation, teambuilding activities and problem solving methods.

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