The Model of Common Research in Education Practice and the Effectiveness of Results

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Abstract
The European Lisbon Strategy places an emphasis on both research and development also in the area of education, and it is targeted at solving problems of education practice and also at the users of the education system. The Slovene national goals in higher education stress a similar need for a greater focus of undergraduate and postgraduate research on solving concrete problems which are encountered in practice. I therefore present a selection of the findings of the Partnership of Faculties and Schools Project, which ended in 2005. The project focuses on designing a model for the research of pedagogical practice and direct use or results. The findings testify to the necessity of expansion and intensification of mutual cooperation which enables a direct transmission of knowledge into practice, and the need for a theoretical reflection of good practice cases. The model of common research in teaching practice and the direct use of results have produced a »market of supply and demand in research topics«, which enables an interaction between researchers at faculties and their partners in practice – schools, kindergartens, nurseries and other education institutions.

Key words: research, mutual cooperation, teaching practice research model, application of knowledge.

1. Introduction
The current social and technological development produces ever new tensions, and calls for changes. While on the one hand changes are the imperative of the present times, on the other societies are becoming increasingly complicated. These tensions are therefore the result of the gap between the necessity to change and the way the society and its individual parts understand and embrace these changes. In the past decade, the necessity to understand and introduce changes has been manifest also in the area of education. We have witnessed an increasing number of reforms of education systems, thousands of innovations and innumerable attempts at solving problems. What do we understand under »changes in education«? Do these changes involve only forecasts, such as: (1) extension of formal education and increase of women in education; (2) increase of the number of the ‘non-traditional’ schoolchildren and pupils, and education outside the formal system; (3) transition
from a ‘factory-mode’ education to a ‘learning organisation’; (4) transition from individual learning to group learning, from transmission of knowledge to creation of knowledge; (5) changes in the evaluation and assessment of education results, and (6) change in the role of the teacher and a greater flexibility of school management (OECD, 2001)?

On the other hand, are under ‘changes in education’ to be understood as not only a rise in the achieved level of knowledge, but also as the tasks arising from the Lisbon Strategy? The latter emphasises research and development in all areas of human activity, which involves also education, and stresses findings of the Tuning project (Tuning Educational Structures in Europe). Tuning began in 2000 when almost 100 universities (today this number has risen to 140) from the European Union decided to accept the ‘Bologna challenge’, whose aim is the development of a common and modern methodology to support a complete renovation of education programmes. Within Tuning, nine study areas and disciplines were formed, among them the area of ‘the science of education’, which involves both the narrower area of the education of educators, and study guidelines from the area of education sciences. Zgaga (2005) states that the Tuning project has a double relevance for the area of education: (1) first because of its specific development guidelines and needs in the area of study programmes which are aimed at the education of teachers, educators and other professionals in education, and (2) because this area involves a great number of experts whose research focuses on various aspects of development and reform of study programmes in education. Project work involves a modern concept of learning outcomes with its closely related categories of generic and subject-specific competences. The project identified and analysed the key competences, which were then examined by specialised questionnaires within each interest group. Among these competences are »qualifications for research in the area of education«.

In the study year of 2003-2004, the Faculty of Education in Ljubljana decided to carry out a similar analysis to determine the assessment of both the desired and the achieved competences and training of the graduates by our key partners, employers (headmasters, ministry, local community etc.), former graduates and teaching staff in higher education. All three groups rated all of these competences as important (neither of them was rejected), at the same time recommending that the desired level of training and competences of the graduates be raised at all levels.

These findings, together with the Lisbon Strategy, national higher education goals (which emphasise that under and postgraduate research, and master’s and doctor’s degree studies should focus more on solving concrete problems encountered in education practice), and the reform of higher education study programmes in the light of the Bologna Declaration have all contributed to the application and implementation of the project Partnership between the Faculty of Education and Schools in 2004 and 2005 (the project was financed by the Ministry of Education and Sport and the European Social Fund).

Within project goals, four models were carried out (Devjak, 2005: 7.):

1. the model of teaching practice as part of the programme of beginner education model for professionals in education at the kindergarten, nursery and school levels,
2. the model of systematic introduction of education trainees and beginners to their work,
3. the model of continuous professional training as a form of lifelong learning of professionals in education, and

Study areas of the Tuning Project are: (1) business and administration sciences, (29) education sciences, (3) geology, (4) history, (5) mathematics, (6) physics, (7) chemistry, (8) European studies, and (9) health care. (Zgaga 2005: 19.)
Building the partnership between the Faculty of Education and schools, kindergartens, nurseries and other education institutions created a »good foundation for the promotion and intensification of mutual cooperation, which allows a direct transfer of knowledge into practice and also the establishment of a culture of reform and improvement by developing an innovative research environment.« (Tancig and Dekleva, 2005b: 291.) This means that users in education contribute to the modernisation and revision of study and research programmes, and also play a role in increasing their usefulness and focus on concrete problems. In this way partnership between the faculty and users becomes an important strategy for a vital simultaneous reform and development. (ibid.) The goal of this partnership, termed »mutual interactive partnership« (Day, in Juriševič, 2005: 67), is to introduce changes into education, whereby the roles of the partners should be complementary, placing at the forefront a culture of partnership, cooperation and common goals. According to Kirk (ibid.), it is important that the formation of the partnership model is based on changes in research and development, relationship of equality, clearly defined roles, integration of theory and practice, encouragement of reciprocity among partners, and avoidance of a one-way communication etc.

2. Research context and problem
The findings presented in the empirical part of this paper are a part of a wider research within the project Partnership between the Faculty and Schools, and fall within its segment D: Model of Common Research of Education Practice and Direct Application of Results (Tancig and Dekleva., 2005). The purpose of this model was: (1) to connect the faculty with users, kindergartens, nurseries, schools and other education institutions with the aim of a common definition of research questions; (2) to establish connections and cooperation between the heads of research projects and their participating researchers, mentors of graduate, master’s degree and doctor’s degree theses, and users in the practice, and (3) to establish information, connection and agreement systems between partner institutions (i.e. between the faculty and other education institutions), which will enable the realisation of development and research needs of the practice and also the transfer of knowledge into practice. The goals of this model were the following:

- to collect a list of research topics proposed by educators of Faculty of Education (including the existing research projects), where they would be willing to mentor postgraduate students in their master’s and doctor’s degree theses;
- to collect a list of research needs and interests of users (i.e. partnership institutions), such as kindergartens, nurseries, schools, and other institutions of primary education. (Tancig and Dekleva, 2005a.)
- an appropriately designed database, which will serve as a foundation of a demand-and-supply market in research projects.

3. Methods
Sample
17 higher education teachers participated in the survey (out of 160 to whom invitations to participate were sent) and 54 education institutions (out of 88 partner institutions within the network). The questionnaires were filled out by the headmasters.

Questionnaire
To collect the research needs of users and define research questions, we used a questionnaire which combined open-type questions with closed-type ones. It contained 13 sections – thematic research areas, which were defined on the basis of research problems where faculty educators cooperate. In the second part of the questionnaire, the respondents wrote down one or more specific areas which they saw as most relevant for their institution.

**Data collection and processing procedure**

The questionnaires were sent to schools and to the faculty educators via e-mail and ordinary mail in December 2004, and the collected data were qualitatively and quantitatively processed in January and February 2005. The first stage involved the selection of research topics and mentors for postgraduate student research. The heads of research assignments, their collaborators and other educators were invited to contribute research topics which they would like mentor. The second stage involved the grouping of the proposed topics into 12 broader research areas. Based on these, we compiled a questionnaire to determine research interests and needs of the practice. The questionnaire was first trial tested on a pilot sample of partner institutions, and then improved on the basis of their comments. In the third stage, the revised questionnaire was sent to the entire network of partner institutions (A and B) via ordinary mail and e-mail.

4. Results and explanation

4.1 *List of collected research topics proposed by the educators of the Faculty of Education (including the existing research projects), where they would want to mentor postgraduate students in their master’s and doctor’s theses.*

13 thematic research areas were included in the questionnaires based on the collected research areas, which had been defined on the basis of research problems where the teachers of the Faculty of Education collaborate and where they would want to mentor postgraduate students in their master’s and doctor’s theses. These areas are:

1. Knowledge assessment and evaluation
2. Teaching approaches and methods for various school subjects
3. Education concepts of the school
4. Integration (inclusion) of children based on their special education needs, social and economic status and sex in kindergartens, nurseries and schools
5. Multiculturalism, education and tolerance for difference in schools in kindergartens
6. Specific learning problems – deficits in individual areas
7. Children’s problems with social integration in kindergartens, nurseries and schools
8. Cooperation and forms of work with parents
9. Collaboration with other institutions
10. Education problems in institutions, houses of residence for pupils, etc.
11. Position of the teacher
12. Planning, implementation and evaluation of prevention programmes
13. Other

The collected data on research projects and topics at the Faculty of Education presents the basis for the partnership research model and for forming a supply-and-demand market in research.
### 4.2 Lists of the collected research needs and interests of the users (i.e. partner institutions)

**Table 1: Number, percentage of institutions, and the most frequent proposed topics in individual research areas**

<table>
<thead>
<tr>
<th>Research Area</th>
<th>No. of institutions interested in this research area</th>
<th>%</th>
<th>No. of proposed topics</th>
<th>Topics proposed most frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 1</td>
<td>47</td>
<td>87</td>
<td>69</td>
<td>Authority, atmosphere, relationships, discipline</td>
</tr>
<tr>
<td>P 2</td>
<td>43</td>
<td>80</td>
<td>55</td>
<td>Autonomy, workload, support, supervision, work valuation</td>
</tr>
<tr>
<td>P 3</td>
<td>41</td>
<td>76</td>
<td>47</td>
<td>Parent motivation and responsibility, teacher-parent meetings, specific forms of integration of parents into school work.</td>
</tr>
<tr>
<td>P 4</td>
<td>39</td>
<td>72</td>
<td>48</td>
<td>Drugs, violence, disrespect of rules, setting boundaries.</td>
</tr>
<tr>
<td>P 5</td>
<td>33</td>
<td>61</td>
<td>40</td>
<td>Forming criteria, standards and assessment methods; objectiveness of knowledge assessment.</td>
</tr>
<tr>
<td>P 6</td>
<td>32</td>
<td>59</td>
<td>32</td>
<td>Special teaching methods, approaches and techniques</td>
</tr>
<tr>
<td>P 7</td>
<td>30</td>
<td>56</td>
<td>45</td>
<td>Relationships, rights and strategies in introducing multiculturalism, work with Romany children.</td>
</tr>
<tr>
<td>P 8</td>
<td>28</td>
<td>52</td>
<td>26</td>
<td>Positive aspects of and obstacles in integration, professional work, evaluation</td>
</tr>
<tr>
<td>P 9</td>
<td>26</td>
<td>48</td>
<td>28</td>
<td>Questions on specific categories of children with special needs.</td>
</tr>
<tr>
<td>P 10</td>
<td>24</td>
<td>44</td>
<td>23</td>
<td>Social Work Centres, guidance centres, police, education, psychiatry</td>
</tr>
<tr>
<td>P 11</td>
<td>17</td>
<td>31</td>
<td>11</td>
<td>Types of programmes and implementation methods.</td>
</tr>
<tr>
<td>P 12</td>
<td>10</td>
<td>19</td>
<td>16</td>
<td>Communication, house rules, respect of rules, work with a group.</td>
</tr>
<tr>
<td>P 13</td>
<td>8</td>
<td>15</td>
<td>13</td>
<td>Motivation of and possibilities for training of staff.</td>
</tr>
</tbody>
</table>

**Source:**

Research results show the vast predominance of primary schools (41%), which are followed by kindergartens (27%), secondary schools (16%), training institutions (7%) and other institutions such as public institutions for education and training, and homes of residence for...
secondary school pupils (10%). The data concerning research needs in practice should be interpreted accordingly. Interests of the responding institutions are highly unevenly distributed among the research areas (table 1). The institutions believe that the most pertinent area on which research should focus are education concepts in school. As much as 87% of institutions in the sample opted for it. In first places follow “position of the teacher” (80%), “cooperation with parents and forms of work with parents” (76%), “children’s problems in social integration” (72%), “assessment and evaluation methods” (61%). A relatively high ranking (from 59% to 44%) was given also to teaching methods and approaches in various subjects; integration (inclusion) of children with respect to special needs; multiculturalism – education for tolerance; cooperation with other institutions, and specific learning problems – deficits in various areas of learning. The least selected areas are planning, implementation and evaluation of prevention programmes, and education problems in institutions, homes of residence for secondary school pupils and similar institutions. Due to their specificity, their unpopularity could be contributed to the structure of the sample, which contained only a very small number of institutions where such problems are encountered more frequently.

A more detailed picture of the research needs of the practice is presented in Table 1, where in the penultimate column we can find the number of the proposed specific topics which the partnership institutions found to be the most pertinent in individual research areas. The ranking of research areas with respect to the number of topics is very similar to the interest in individual research areas. On the basis of the aggregation of research topics proposed by the institutions, a list of the most frequent specific topics in individual research areas was compiled, and it is presented in the last column of Table 1.

Conclusion
The model of common research in education practice and direct application of results stresses the importance of appropriate interactions and collaboration of research potentials at the faculty (research projects, diploma theses, master’s and doctor’s theses) with partners involved in practical work, and vice versa: importance of the influence of the practice on the design and focus of research and development at the faculty. By implementing the common model of research, the predominant “push” research policy would in this way be supplemented by a “pull” system. This would enable a faster development of practice at schools and institutions. Appropriate training for research and development should also be emphasised, being also one of the more important tasks of the Bologna study programmes reform. This will promote an atmosphere where research, innovation and progress, the basic components of a learning organisation and society, are appropriately evaluated, rewarded and supported.

Literature


