The results of scientific researches show in many countries declining levels of motor development of children and youth, their fitness and coordination abilities (Sedliecek, Antala et al. 2008; Zapletalova, 2011), decreasing interest of children and youth to physical and sport activities, expanding sedentary lifestyle (Simonek 2010, Antala, 2010, 2012), resulting to decreasing quality of health of children and youth, increasing obesity and overweight and other health problems. They also point to the problems with quality of physical education (PE), especially in primary schools (Antala, 2009). This period is considered by most of PE and sports professionals and educators as key in shaping children’s positive attitude to lifelong physical activity and to the subject. In many countries, in primary school PE is taught by general teachers (Klein - Hardman 2009). They lack a sufficient new knowledge; their skills are often older character. Surveys of teachers indicate the need for lifelong learning in relationship with school practice.

Lifelong education of teachers has to be oriented to innovations of methods and contents in PE. PE in primary and secondary schools and its influence on the pupils and young people have critical importance in building healthy lifestyle customs. In this view is increasing of teaching skills of PE teachers through lifelong education very important.

Universities prepared PE teachers have responsibility to take care about this type of teachers training regularly. In this case is Comenius University created, organized or participated of more lifelong learning programs in Slovakia.

Objective

New national project „Enhancement of Qualification of PE Teachers“ was created in Slovakia with aim to develop knowledge and practical skills of teachers in PE oriented to integration of all educational aims in teaching process and development of attitudes of children and youth to regular physical and sport activities. The national project started in Slovakia on 2013. The project is co-funded by the European Union in the framework „Education“. The project is realized by the National Sport Centre in cooperation with the Faculty of Physical Education and Sports, Comenius University in Bratislava.

Design

The principal aim of the project is to enhance the quality of PE at schools by means of lifelong education of teachers. General teachers teaching PE at primary schools are the target population.

In our paper, we would like to present this project and to find out feedback which has lifelong learning program to PE teachers participated in national project. We analyzed four groups of factors and expected their influence on the effectiveness of education. We expected that chosen factors of quality of education will have high impact to the positive feedback from teachers.

Methods

3 400 teachers will participate in this education program in 3 years (2013–2015). There were two principal groups of teachers included in the project: PE teachers from secondary schools as lectors and general teachers teaching PE at primary schools as target group. In this study, we analyzed opinions of PE teachers from secondary and grammar schools (n=136).

Project was separated in two parts. First part was preparation of lectors. PE teachers as lectors were prepared for this work in Faculty of Physical Education and Sports, Comenius University in Bratislava. This educational program of PE teachers was led by University teachers (n=35). Second part of project was oriented to education of general teachers teaching PE at primary schools. Program for participants consisted from 110 hours (70 presents, 40 distances).

Content of lector’s education was divided in two parts – practical and theoretical courses. In practical courses where teachers became familiar with new content, methods, and forms of education of basic physical activities, traditional and non-traditional sport games, creative sport activities and outdoor sports activities. In theoretical courses, they extended their knowledge on current worldwide trends in PE, motivation of children and youth toward physical and sport activities, use of novel means and technologies in PE and in diagnostics of physical development and motor performance of pupils (table 1).

To receive information and feedback of education we used questionnaire with questions represented four groups of factors forcing on the effectiveness of educational program. Four groups of factors were oriented to:

- Management of educational program - timeliness of sending information; completeness of information; communication facilities; tools, widgets using in educational program - didactics tools; didactics technology; equipment and materials; literature and others sources
- Content of educational program - content’s actuality; content’s continuity; content’s innovativeness; applicability of acquired knowledge and skills
- Quality of lectors - average evaluation of lectors
- For evaluation of each factor quality PE teachers used evaluation scale: 1 – Excellent, 2 – Good, 3 – Medium, 4 Bad and 5 – Wrong. 

For evaluation of differences in frequency of evaluations (1-5) we used chi-square test of goodness of fit. Acquired results we evaluated on 0.05 (*) and 0.01 (**) significance levels.

Table 1 Contents modules of educational program

<table>
<thead>
<tr>
<th>Modules</th>
<th>Topics</th>
<th>% total number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Modern PE and increasing of quality of education</td>
<td>New approaches, social aspects, education in PE and increasing of quality of education - motivation of children, preparation of educational process, design of educational process, new trends worldwide in PE - application foreign knowledge and experience in PE, PE international organizations and documents, traditional and non-traditional sport games, creative sport activities and outdoor sports activities,</td>
<td>12%</td>
</tr>
<tr>
<td>2. Theoretical base of PE programs; overview of novel means and PE technology - theoretical module</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>3. Structure of physical education of pupils - theoretical module</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>4. Lifelong education of PE teachers</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>5. Group of educational programs: overview novel means and modern technologies, additional and non-traditional sport games, individual sport activities, educational programs, organization sport competitions; modern methods of evaluation motor performance</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>6. Evaluation of PE teaching and development and motor performance of pupils - theoretical and practical module</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>7. Lifelong education of PE teachers</td>
<td></td>
<td>12%</td>
</tr>
</tbody>
</table>

For identification of differences in frequency of evaluations (1-5) we used chi-square test of goodness of fit. Acquired results we evaluated on 0.05 (*) and 0.01 (**) significance levels.
Results

In first group related to management of educational program highest positive feedback had communication with project team (picture 1). Teachers see some reserves in timelines of sending information and completeness of received information and instructions before education.

Picture 1. PE teacher’s evaluation of educational program management

In second group of factors oriented to the quality of facilities, tools, widgets using in educational program highest positive feedback had using especially quality of didactics tools and equipment (picture 2). Biggest reserves they see in opportunities use new literature and other sources. This problem was resolved during preparation of second part of project. 4 textbooks were prepared and gave to disposition of lectors and target group.

In third group of factors focused on quality of content of educational program we found positive feedback in all selected topics – contents’ actuality, contents’ continuity, contents’ innovativeness and applicability of acquired knowledge and skills (picture 3). The most positive feedback we received from teachers on content’s actuality. PE teachers see the reserves in applicability of acquired knowledge and skills in practice. They are teaching in schools with big differences in quality of facilities and equipment, in attitudes of pupils in physical activities and adaptation of acquired knowledge and skills to real practice is sometime problem.

Picture 2. PE teacher’s evaluation of quality of used didactics tools, didactics technology, equipment, materials and literature

Picture 3. PE teacher’s evaluation of contents’ actuality, continuity, innovativeness and applicability

In fourth group of factors focused on quality of lectors we analyzed point of view of PE teachers on quality of all 31 university lectors and their average value was very high. Percentage of average value is in picture 4. Answers of PE teachers on this question showed us that selection of university teachers as lectors was good.

Picture 4. PE teacher’s evaluation of quality of lectors

Picture 5. PE teacher’s evaluation of quality of educational program

Total evaluation of quality of educational program is in picture 5. Teachers evaluated positively educational program and appreciated actuality of presented content of education, quality of lectors and using methods and tools. We evaluated feedback from teachers very carefully and we tried to use all this info for increasing of quality of education of target group. Evaluating meetings with PE teachers after their education were also very good source of information.

In conclusion, we can say that the results showed us positive impact and feedback of PE teachers and adequate quality
of their education as future lectors in all four groups of evaluated factors.

Conclusion
In the end of first part of national project, preparation of lectors for education of target group, we received very positive feedback from PE teachers participated on this education. These results give us chance to continue the project with adequate quality in education of target group. Further activities of the project are to design the electronic portal, with didactic teaching materials, videos and examples of good practices are available for them.

Main outputs of project will be: each participant will receive for free education of 110 hours oriented to PE, 28 credits included in system of evaluation of teachers in Slovak schools, a set of 14 educational didactic materials, 4 textbooks, USB with textbooks in electronic version and didactic video materials. New website “www.telesnavychova.sk” with all necessary info, texts and video materials was created also. This website will be place of change of ideas, experiences and best practices of teachers.

The project is unique in Slovakia and in European Union. The authors believe that it will contribute to the enhancement of the quality of PE at primary schools, and increase the interest of children in PE and regular physical activities.

References


