

THE CONNECTION BETWEEN SCIENCE EDUCATION RESEARCH AND TEACHING

Milan Kubiатko

Masaryk University in Brno, Czech Republic

E-mail: mkubiатko@gmail.com

Dear readers, with the big pleasure I intercede to you. It is honor for me to get this chance. In the next few lines I would like to bring to your minds some ideas on the thinking about still so valid and actual problem, how to get the results from science education research into schools, where the science subjects are taught. Maybe in some countries it is not a problem; the investigators are also teachers in the primary, lower secondary and high schools. But in many cases this problem exists. Whether we want it or not, we have to accept it (I know it is very hard in some cases). The relationship between teaching and research is often assumed and just as often ignored. Research should and does influence the teaching (and vice versa), but the gap between the two can at times seem large. Many of us are talking about very narrow connection between research and teaching. These voices are too often heard from colleges. But many academicians have got naive ideas about the work of a teacher; their ideas are often too far from the reality. The academicians often hold the concepts about an ideal class, where all the pupils are engaged in the teaching content; they do not consider the discipline sustaining. So, we can ask questions, if science education research is important for teachers and why it is realized? Some researchers give a positive answer to the first question, for example Luft (2010) states, that teachers are interested in talking to colleagues about emerging issues in science education, and participate in science education researches. While, there are science education researchers and teachers who bridge the gap in research-practice. Few projects have significant collaboration in order to produce a shared product. This is true mainly for the western European countries, USA, Canada, Australia, etc. where the connection between teaching and research is evident. But in many countries the universities are strictly separated from the teaching process in the primary, lower secondary and high schools. However, there are some attempts of penetration into schools with some journals, but many times, the manuscripts published in the journals are too technical and complicated, that teachers have a small chance to incorporate facts from these manuscripts in the teaching class. Of course, it is impossible to apply previous ideas to all academicians. Many of us are trying to create the material or write some kind of text, which could be suitable for the teachers in schools, but there is lying in the problem. The policy of financial support for universities says that only the manuscripts accepted in the prestige indexed journals will be financially rated and only the texts of a very high level are possible to be published in these journals, which are in many cases used for practical things. For the teachers, this kind of journals is not available and many of them do not see the importance of the professional texts in their practice. On the other hand, the teachers do not write texts in the journals (only the minority of them do). They have not got a motivation to do something like that. So, there is very hard to find a solution, what we should do for to make a science research more interesting for a teacher. Maybe to write it in the more comprehensible form with practical suggestions in the journals commonly accessible for teachers or every academic should teach minimally 4 hours a week. Maybe the outputs of the academicians would be slightly different.

References

Luft, J. A. (2010). Building a bridge between research and practice. *Journal of Research in Science Teaching*, 47 (7), 765-767.

Received: *December 05, 2012*

Accepted: *December 10, 2012*

Milan Kubiátko

PhD., Assistant Professor, Institute for Research in School Education at Faculty of Education, Masaryk University in Brno, Czech Republic.
E-mail: mkubiátko@gmail.com
Website: <http://www.kubiátko.eu/>