Polskie Stowarzyszenie Nauczycieli Przedmiotów Przyrodniczych Uniwersytet Mikołaja Kopernika w Toruniu

Zakład Dydaktyki Fizyki Wydziału Fizyki, Astronomii i Informatyki Stosowanej
Pracownia Dydaktyki Wydziału Biologii i Nauk o Ziemi







XV Ogólnopolski Zjazd Polskiego Stowarzyszenia Nauczycieli Przedmiotów Przyrodniczych¹ nt.

"Przedmioty przyrodnicze a Technologia Informacyjna i Komunikacyjna"

STRESZCZENIA PREZENTACJI Pod redakcją dr Józefiny Turło



Toruń, 13 – 14 września 2008

_

¹ Dofinansowane przez Urząd Marszałkowski Województwa Kujawsko - Pomorskiego

P5. FOR WHAT, WHEN AND HOW ICT SHOULD BE USED IN PHYSICS TEACHING?

Józefina Turło, Andrzej Karbowski, Krzysztof Służewski, Grzegorz Osiński Instytut Fizyki, UMK w Toruniu

Recently, together with Partners from EU countries we collaborate within an EU SOCRATES COMENIUS Project on: *Effective use of ICT in Science Education*. The main objectives of this project are: to identify the best practice of using different methods and tools of ICT in science education across Europe, propose a system for benchmarking this area, design and test new teacher training courses. Thus, we elaborated the comprehensive questionnaire aimed at investigation of means in which ICT is actually used in science teaching.

We discovered in Poland, that the lack of good quality educational software and laboratory equipment and low level of teachers' competencies in the effective use of ICT has resulted in no improvement the quality of education. As the number of studying physics recently decreased, we created a team of Polish Universities working on improvements in the use of ICT in science teaching and especially physics. *Computer aided science minilaboratories* project started. Each university collaborated with the teachers network, elaborating the examples of MBL methods and tools. The results were discussed during the meetings of teachers. Since 2006 our "Torun network" has taken a part in the mentioned above EU Project.

In this poster the most interesting effects of national and international Projects are described and we are trying to answer the question: For what, when and how ICT should be used in physics teaching?