

MARIA KAJDASZ-AOUIL  
WSP w Bydgoszczy

### TECHNOLOGICAL EDUCATION IN THE NEW SCHOOL SYSTEM IN POLAND

*...No serious changes will be successfully introduced  
in Poland without the overall educational reform...*

**M. Handke**

The reality of modern society suggests that traditional education of children in primary schools is not very effective as a result of continual technological innovations. The syllabus in primary schools should not only address the needs of schoolchildren, but be in accordance with economic and social development of the country.

The planned educational reforms in Poland involve ceasing encyclopaedic forms of teaching and overloading children with information and syllabuses created according to academic subjects. It puts emphasis on teaching skills and preparing children for effective life in the society. The reform concerns all levels of education, from kindergartens to post-graduate studies. Under the ministerial project one year of pre-school education (at the age of 6) becomes compulsory, followed by six years of primary school education. School is expected not only to provide children with certain skills, but to bring them up with the parents' co-operation. The authors of the project assume the school of the future should be autonomous, and the influence of the parents should be substantial at the lowest level of education and decrease as the child's education progresses to reach the level of higher education. The pupils will not study separate traditional subjects. Related subjects will be combined in the so-called thematic blocks. Primary school will finish with a final exam, which will give a picture of the pupils' achievements and shortcomings.

The next stage will be 3 years of compulsory education at gymnasium, i.e. secondary school providing general education. There will be separate subjects, but they will be taught at elementary level. The final exam at gymnasium will aim at defining the pupils abilities and inclinations and will help them to choose the right school: a 3-year grammar school or a 2-year trade school.

Some grammar schools will provide general education, others will put special emphasis on art, economics or technology, i.e. give specialised training for specific jobs. Grammar schools will have a set of compulsory core subjects taught at an advanced level

in which students will take their compulsory final exams – ‘matura’. The remaining subjects for the final exams will be chosen by the students.

The other alternative will be trade schools offering a wide choice of courses (replacing the traditional system of trade schools and technical secondary schools). The main objective of these schools will be to help the students adjust to the changing demand in the job market by providing specialised one-semester courses. To enable those who chose trade schools to continue their education, special 2-year schools will probably be created. They will provide complementary education and prepare students to pass the exams equivalent to the final exams at grammar schools.

There will be no more entrance exams into university, students will be accepted according to the results of their final exams at grammar schools. Universities and colleges will have the right to test the applicants’ musical or artistic skills and abilities. There will be two main types of schools at the tertiary level: university-type institutions awarding MA degrees and institutions which will not have the authority to award MA degrees but will award their graduates ‘licencjat’(roughly equivalent to BA). This is the outline of the planned school reforms in Poland.

The principal objective of the new educational system, according to the government document of 15.05.1997 ‘The basic syllabus of compulsory, general subjects’ is the acquisition of the main skills and abilities (the ability to learn, think, also think creatively, search, improve, communicate, co-operate and act).

As far as technological education is concerned, it will be combined with computer studies in primary school and gymnasium, and in the first grades of primary education with art classes. Combining technological education with computer studies in one thematic block will give an excellent opportunity to teach the skills and abilities mentioned above. Unlike other kinds of education, technological education has always offered enormous possibilities for teaching how to solve problems, co-operate, think creatively as well as other skills important in the contemporary world. In these classes children will learn about technology in the broader sense of the word, and about the technological products of contemporary industry, which will stimulate their interest to use those products creatively both in social life and in individual development.

The ability to understand modern technological products, e. g. computers, the Internet, fax machines, necessitated by their presence in every day school life, will improve the pupils’ intellectual activity and enrich their technological imagination. Using only concepts or imagination, though a good principle of the pupils’ active class participation, is not always enough to educate good specialists in future life and work.

The level of mental development of children in the early and middle school forms, being usually of a visual and a conceptual nature, gives an opportunity to teach them to understand, transform and master a variety of schemes and patterns, because children at this stage usually think in terms of pictures, patterns and models.

Considering the wide scope of visual thinking and its role in developing both conceptual and creative thinking, we can put forward a hypothesis that technological education in the new school system will be more productive and will form the basis for the development of technological and practical thinking, not to mention its positive impact on the children's personality development and their individual form of active social involvement.

However, in order to successfully carry out the reforms, it is essential to ensure that the following conditions are satisfied:

- structural changes and changes of the syllabuses,
- providing technological equipment and teaching aids to schools,
- appropriate teacher training.

Up till now we have seen some structural changes and changes in the syllabus, giving teachers greater possibilities to create their own syllabuses and apply innovative, creative methods of teaching. The second and the third condition of the successful implementation have not yet been fulfilled and it is hard to say to what extent this will be achieved in the future. There exists a danger, though, that all the money and energy will concentrate on formal changes, and not on equipment for schools and teacher training.

The above statement implies the need to re-evaluate the role of the school and school syllabuses. So, have the previous syllabuses been so inadequate? It would be an exaggeration to claim that no attention has been given to creative thinking. The ideas such as 'the development of creative thinking, the development of creative abilities, and the like' can be found in almost all course books and other books on methodology of teaching, in the syllabuses and instructions for the teachers. The discrepancy between the assumed objectives and the actual teaching has been visible at almost every level and sphere of educational system, which has not done much to develop the children's creative potential. We fear the same discrepancy will continue to exist in the new school system.

The authors of the project dream of introducing the American career education in Poland. The goal of the education is not only success at school, but also outside school. The emphasis is on the development of a well-balanced, healthy personality, courage, creativity and willingness to meet challenges in all situations. Similar objectives were behind the creation of a school for exceptionally gifted children in Toruń this year. The school provides courses adapted to individual needs of the pupils and employs the best teachers, including university teachers.

The project of the changes is quite good, let us hope it will be more successful than its predecessors.

działanie.

Powodzenie reformy zależy nie tylko od jakości nowych programów i dokumentów programowych, ale przede wszystkim od nauczycieli. To właśnie nauczyciele powinni przjąć strategię reformy stawia nowe wymagania, od których spełnienia w dużej mierze zależy będzie prawidłowa realizacja ambitnie opracowanych nowych pod-

## EDUKACJA OGÓLNOTECHNICZNA W ZREFORMOWANEJ POLSKIEJ SZKOLE

### Streszczenie

W artykule zaprezentowano ogólny zarys reformy polskich szkół, który planuje się przeprowadzić do roku 2004 poprzez wprowadzenie dwustopniowych szkół średnich – wzorem szkół z krajów zachodniej Europy – opartych na sześcioletniej szkole podstawowej i trzyletnim gimnazjum. Na tle tak zarysowanej reformy starano się ukazać miejsce edukacji ogólnotechnicznej w nowym systemie.