Informatics and ICT in Polish Education System

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History of informatics in Polish schools

- ➔ late 60th & 70th – first experiments, elective lessons without computers
- ➔ 1985 – decision of Ministry of Education, introduction of the subject called „Elements of Informatics" to secondary schools
- ➔ 1990-1999 – different programmes, different instruction time in primary and secondary schools

Reform of education system

Since 1999/2000

- ➔ Primary school (6 years)
- ➔ Middle school (*gimnazjum*, 3 years)
- ➔ High school (3 years)

New shape of informatics education

Informatics education

- ➔ Preparing students to use ICT in their learning and other activities
- ➔ Introducing students to informatics as a discipline of knowledge
- ➔ Using ICT in other subjects

National Curriculum

School and teachers duty:

Students should learn how to:

search, sort and make use of information from different sources and effectively use ICT

Applies – to all subjects
– to all education levels (stages)

Subjects in National Curriculum

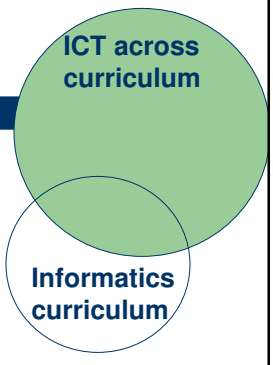
- Primary schools (students age: 11- 13)
  ICT lessons (called informatics)
- Middle schools (students age: 14 –16)
  ICT lessons (called informatics)
- High schools (students age: 17 – 19)
  IT lessons – obligatory for all students
  Computer science (Informatics)
  – elective subject, maturity exam

Project *Meetings and Learning with Computers*

- Curricula for subjects and ICT across curriculum
- Educational packages (textbooks for students, additional materials in electronic form)
- Teacher's manuals
- In-service training courses for teachers
- Internet service: http://www.wsipnet.pl/kluby/informatyka.html

WYDAWNICTWA SZKOLNE I PEDAGOGICZNE

ICT in other subjects



- ICT across curriculum for whole school
- Connections between curricular guidelines of all subjects and ICT across curriculum
- Integration activities with ICT used in other school subjects - textbook for students in middle schools

Learning with computers – textbook

- Few units in each subject – to illustrate that computers can enhance learning
- Mainly working with information
- Use of ICT knowledge and skills learnt in classes on ICT

Informatics in middle schools

- Mainly further development of ICT skills
- But also:
  - solving of simple problems,
  - examples of algorithmic strategies,
  - programming skills (Logo language)

Informatics in high schools

- ➔ Distinction between IT and informatics
- ➔ Informatics deals with „new product”:
  - defining problem and designing a solution: specification, choice of a method (algorithm)
  - computer implementation: using existing solutions or creating a new one
  - testing and evaluation of the solution

Informatics maturity exam

Examination standards cover basic concepts, methods and processes connected with informatics

- ➔ Two parts of the exam:
  - theory without computer
  - practice with computer
- ➔ Writing documentation in both cases
- ➔ Student’s work externally evaluated

Teacher's preparation

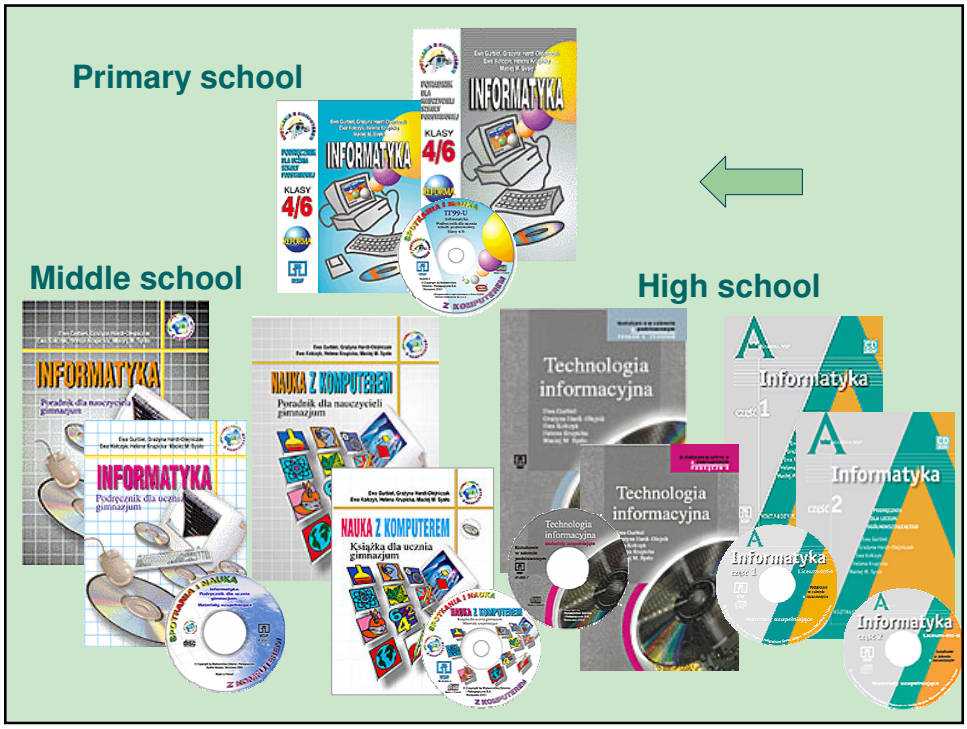
- ICT teacher as a „second specialisation"
- Informatics teachers – graduate from computer science department
  - didactics of informatics
  - examples of good practice

Further remarks & more examples

- Today: Panel Discussion
- Tomorrow:

Maciej M. Sysło, Anna Beata Kwiatkowska

„Informatics Versus Information Technology – How Much Informatics Is Needed to Use Information Technology – A School Perspective"


Primary school
INFORMATYKA
KLASY 4/6
Middle school
INFORMATYKA
Poradnik dla nauczyciela gimnazjum
INFORMATYKA
Podręcznik dla ucznia gimnazjum
NAUKA Z KOMPUTEREM
Poradnik dla nauczycieli gimnazjum
NAUKA Z KOMPUTEREM
Książka dla ucznia gimnazjum
High school
Technologia informacyjna
Technologia informacyjna
Informatyka
część 1
Informatyka
część 2