

CEPIS Informatics Education Group
Mini-conference – Bratislava – 31.5.2024



Informatics Teachers Education in Poland

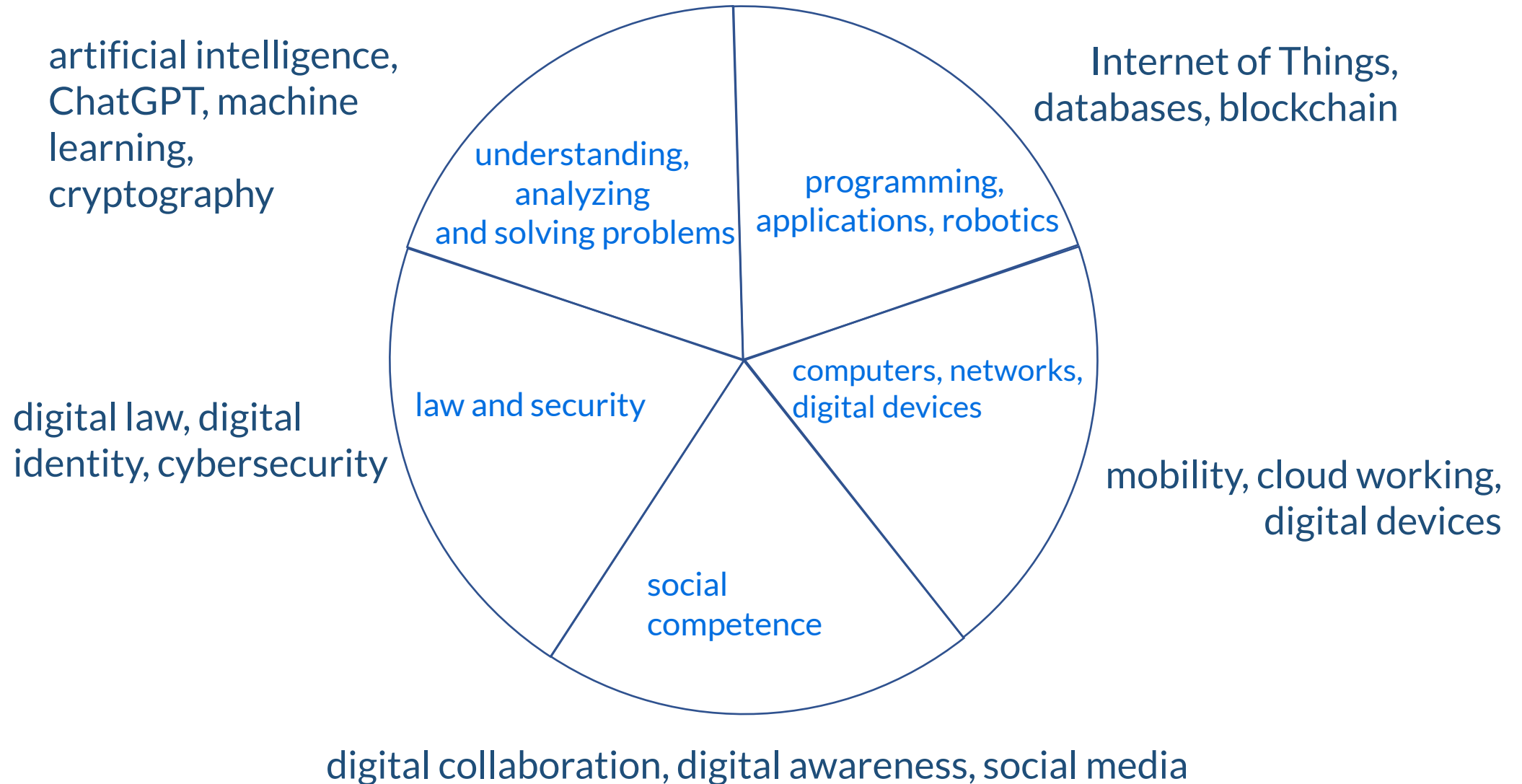
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Council for Computerization of Education in Poland



Computer science core curriculum and skills of the future



CS teachers in Poland - main problems

Polish schools need CS teachers who will be well prepared to properly implement the new CS core curriculum:

1. Active CS teachers need training in the new methodological approach to the computer science subject in schools.
2. Additional teachers are needed because the number of hours of computer science in secondary schools increased by 2 in the education cycle.
3. Due to the shortage of the labor market of CS specialists, many CS teachers leave schools for better earnings.

CS teachers - situation in schools in Poland in 2023

School Type (all schools 20 963)	Number of schools without well-educated CS teachers
primary school	4 841
secondary school	2 667
technical school	1 817
vocational school, stage I	1 975
other schools	107

11 407

Education of computer science teachers at universities

1. According to ministerial regulations, only universities with 5-year CS studies (stages I + II in the Bologna system) can provide education preparing for CS. Only a few universities offer such studies.
2. One edition of postgraduate studies (2020) in the field of:
 - education of future CS teachers, i.e. candidates are teachers of other subjects who will be authorized to teach CS, 360 hours.
 - development and training of CS teachers (certified to teach CS), 120 hours;
 - education and development of primary school teachers (grades 1-3), for 120 hours;

Preparation of IT and CS teachers - projects

1. Many education institutions and regional institutions provide education/development/training for computer science (CS) teachers. Teacher Training Centers are very active in this area.
2. There are nationwide (government) projects (workshops) on development/training in the use of ICT and CS in education, addressed to CS teachers and teachers of other subjects.

Previous financial perspective:

1. Enter lesson (Lekcja „Enter”), 2029-2023, 75 000 teachers
2. Championship in algorithms and programming (Mistrzostwa w Algorytmice i Programowaniu) - 1,960 students, 65 IT teachers, and 81 lecturer assistants who are students

New financial perspective: teachers

1. Training for teachers developing digital competences, 55 000 teachers
2. Training for teachers on the impact of AI on education, 11 000 teachers
3. Training for school coordinators, 21 300 teachers

Conclusions

1. In Poland, a systemic change in teacher education by universities is needed. (Council recommendations)
2. Projects that have proved successful and are carried out outside the formal education system should be continued.
3. When settling projects, it is important to evaluate them qualitatively, not just quantitatively.

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Thank you for your attention!

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