

Proposal for a Workshop at WCCE 2009

Bebras International Contest on Informatics and Computer Literacy: A contest for all secondary school students to be more interested in Informatics and ICT concepts

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The workshop leaders are members of the International Bebras Contest Committee and organize Bebras contests in their countries. Valentina Dagiene is the inventor of the Bebras contest and the driving force of all Bebras activities.

The international Bebras contest on informatics is organized similar to the Kangaroo of Mathematics competition. The Bebras contest addresses all secondary school students of age 10-19. The participating students have to solve on PCs 18 to 21 tasks within 45 minutes. All students of a school may participate, also those who had no informatics lessons before. There are at least 3 age groups: Benjamin grade 5-8, Junior grade 9-10, and Senior grade 11-13 [1,2].

The Bebras International Contest on Informatics and Computer Literacy covers a wide area of topics: information comprehension, use of computer systems, algorithmic thinking, structures, patterns, puzzles and ICT and society [3]. The tasks are developed by an international expert team of educators and scientists that ensures a high quality of the presented tasks [4].

The first Bebras contest took place in Lithuania in 2004 and was from the beginning a big success with thousands of participating students in all categories [1]. Bebras is the Lithuanian word for the vivid and intelligent animal beaver that lives in rivers and lakes of many countries in the world. From the very beginning of this contest the Lithuanian organizers had the goal to internationalize this contest. From 2005 also some other countries organized Bebras contests: Poland, The Netherlands, Latvia, Estonia, Slovakia, Germany and Austria.

The main goal of the Bebras contest is to motivate pupils to be more interested in informatics topics. Solving of interesting tasks that need some thinking skills to solve them may support the interest in informatics [5]. The key idea is not to ask for already learned knowledge but to present challenging Informatics problems that need thinking skills and solving strategies to be solved.

Target Groups of the Workshop

- Teachers and educationists that are interested in challenging informatics tasks for students
- Teachers and educationists that are interested in performing a Bebras contest in their classes
- Representatives of country-wide organizations that are interested in organizing educational contests for school students

Contents of the workshop:

- Presentation and discussion of the goals of the Bebras contest
- Presentation of Bebras tasks of various categories, difficulty levels and age groups. Discussion of the presented tasks: educational value, needed skills and knowledge, possible difficulties in solving the tasks. Demonstration of a Bebras contest system
- Discussion of the educational benefit of task oriented contests
- How to organize a Bebras contest

Necessary equipment: a beamer, internet access for presentation PC

Duration: 2-3 hours

Number of participants: not limited, optimal 20-40 persons

References

1. International IT contest "Bebras", Lithuanian Website, www.bebbras.lt

2. Bebras: International Contest on Informatics and Computer Literacy, International Bebras Website, www.bebbras.org
3. Opmanis M., Dagienė V., Truu A. Task Types at "Beaver" Contests Standards. In: V. Dagienė, R. Mittermeir (Eds.), Proc. of the 2nd Int. Conference „Informatics in Secondary Schools: Evolution and Perspectives“, Vilnius, 2006, 509–519.
4. Dagienė V., Futschek G.: Bebras International Contest on Informatics and Computer Literacy: Criteria for Good Tasks. In: R. T. Mittermeir, M. M. Syslo (Eds.), Lect. Notes in Computer Science, vol. 5090. Informatics Education – Supporting Computational Thinking, Springer, Heidelberg, pp. 19–30 (2008).
5. Dagienė, V.: The Bebras Contest on Informatics and Computer Literacy – Students' Drive to Science Education. In Joint Open and Working IFIP Conference. ICT and Learning for the Net Generation, Kuala Lumpur, pp. 214-223 (2008).