

**Chemistry Is All Around Network
Workshop on "Successful Experience"
Prague, Czech Republic, 29th January 2014**

Minutes

Participants

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Eva Chundelová	SZŠ Ruská
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Ing. Lucie Sedláčková	ICT Prague (a student of pedagogy)
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Minutes

Czech team, as well as the other national teams of Chemistry Is All Around Network project, organized a workshop related to Successful Experience for teachers and experts. It was held on 29th January 2014 at ICT Prague. There took part secondary school teachers and one student of pedagogy as well. The CIAAN project was introduced to the participants and each section of the portal was discussed.

At the beginning of the workshop, the programme of the day was presented. It was composed of four parts. The first part was focused on different views of chemistry teaching. The second part was dedicated to the CIAAN Network, presented by Zdeněk Hrdlička. The third part was an excursion at the Department of Physics and Measurements of ICT Prague. The last part was reserved for discussion of participants. The teachers discussed their successful experience and also obstacles in their practise.

The first part of the workshop was focused on different views of chemistry teaching. There were presented two lectures on successful experience in chemistry education. The first of them was held by Dr. Květoslava Stejskalová from the Academy of Sciences of the Czech Republic. Dr. Stejskalová presented projects organized by Academy of Sciences designed to support popularization of science. She focused on project named Three instruments. This project was designed for pre-schoolers, primary and secondary school pupils as well as for high school students. Prenatal age has not been involved to science popularization yet. Organizers of the Three instruments project cooperate with schools, students and offer them many attractive activities, for example chemistry theatre for kindergartens (the main characters of the show are princess Pipette and her sister Burette). They offer also interactive lectures and individual activities for students



interested in science. The teachers discussed their opinion on this topic after the lecture. They focused on role of school science experiments and barriers for their implementation.

The second lecture was organized by Mrs. Lada Macháčová who is a teacher at a high school in Přerov. This high school has a very good reputation in chemistry teaching. Mrs. Macháčová presented examples of successful experiences, for example students who took part at national Chemistry Olympiad, students who attend activities focused on chemistry after school. Chemistry teachers of the school organize meetings for their colleagues from other schools periodically. This teacher and the school are really successful and their students know that chemistry is all around us very well.

The second part of the workshop was devoted to presentation of the CIAA NET project - Chemistry Is All Around Network. Zdeněk Hrdlička, an assistant professor at ICT Prague, presented what is the aim of the project – to stimulate students in studying chemistry. He also showed that this project is international with lots of partners from eleven countries of Europe. During his speech he talked about the database of educational materials in the areas of chemistry, about networking and sharing of knowledge between experts, teachers, and also about removing existing barriers in chemistry area. He pointed out the importance of organization of transnational conferences to share information and experience. A part of his presentation was dedicated to the way of funding. He informed that the project is financed by European Commission as a part of Lifelong Learning Programme and it lasts 36 months. Very interesting information was the amount of money provided for it. The European Commission provided the amount € 445,706 of the total budget of € 594,275. The Czech Republic was allocated the amount of € 25,545 and the remaining money € 8,515 will be provided by the Institute of Chemistry Technology Prague.

The end of the workshop was saved for discussion of participants, questions and answers and for a short questionnaire. Teachers discussed their problems very actively. Especially the topic of decreasing science experiments at schools. They also discussed successful experience a lot. They praised successful projects focused on science popularization like CIAAN. These projects help them to motivate students in their classes. Projects help them to find good resources for teaching and many more. There were discussed four main topics:

1. What made you most pleased during your teaching practise?

Students who have succeeded in science competitions, Chemistry Olympiad and who study chemistry at universities. Students still like science and some of them are still motivated to study and do experiments. Good relationships with pupils/students, appreciation.

Successful projects for students.

One successful experience is really remarkable-students wrote a song for their chemistry teacher. You can find it here: <http://www.youtube.com/watch?v=XLJKJEmJ6qM>. It is about the periodic table of the elements.

2. Interesting experience from practice

Cooperation with science centres like the Academy of Sciences, the Charles University, ICT Prague. Students can take an excursion there, or take part in some projects (for example students` internships). They can see what the real science is and get contacts with experts. The students can try to take a part in some science competitions.

3. Barriers to get new successful experiences

Lack of interest and poor relationships with parents.

Students are afraid from failure.

Too much ICT (for example smart phones, MP3...)

Legislation and lack of funds for laboratory equipment.



4. What could help them to overcome the barriers?

Greater support from the state and better communication with parents (more understanding).

More science experiments, less ICT presentations.

Text book for beginning chemistry teachers.

CIAAN project as a useful source of inspiration.

16 secondary school teachers and also one student - prospective teacher participated in the workshop. New, very interesting and actual topics were discussed, new ideas also arose to improve this area.