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NON FORMAL ACTIVITIES USED IN PHYSICS EDUCATION

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1. Introduction

„It is difficult to make a clear distinction between formal and informal learning as there is often a crossover between the two."(McGivney, V., 1999).

Non formal learning is a kind of a voluntary learning, takes place in a diverse range of environments.

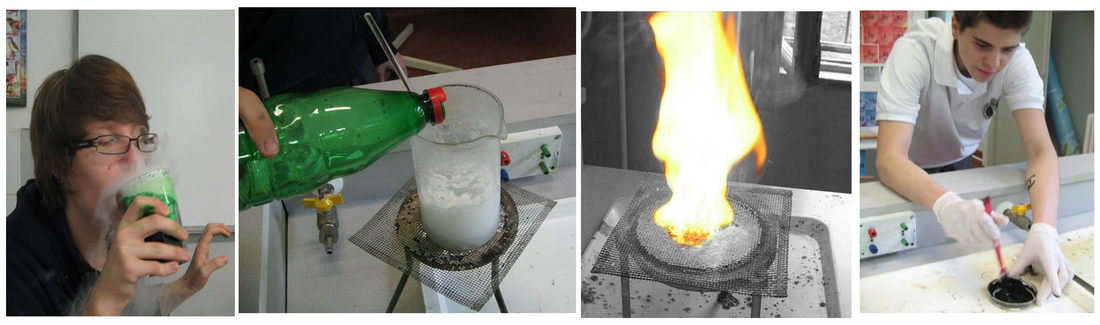
See some good examples of non-formal learning below. Measuring the success: counting the number of participants !

2. Stage performance: Alice in Chemistryland. Sucess

AIM to combine acting and learning to make teaching of Physics more attractive **AGE:** 14-16

„There is a place. Like no place on Earth. A land full of wonder, mystery, and danger!„ Chemistryland! Mad Hatter

Preparation of experiments



On Stage

Alice in Chemistryland aims to explore the **relation between science, performance, and audience in a theater production.** The performance is inspired by Tim Burton's movie Alice in Wonderland.

From the experiments to the script and direction of the play, everything is fully designed by students.

Alice, White Queen, Red Queen, Crazy Rabbit and the Knave of Hearts are all accidentally "involved in this affair" , Mad Hatter's Tea Party.

"I gave her one, they gave him two,
You gave us three or more;
They all returned from him to you,
Though they were mine before.

The charming performance shows interesting, even breathtaking experiments. Despite keeping the "chemistry" atmosphere the play takes the audience into the bizarre world of Chemistryland presenting the well known characters on a new way. This play is the living proof that **science can be entertaining.** The experiments show an amazing eruption of oxygen filled foam, compared to the classical volcano science experiment, where carbon dioxide is released, and much, much more…

Finally, the little golden key unlocks the door that leads us into the fascinating world of pyrotechnics. Behind the door a beautiful garden full of fantastic chemical reactions awaits to be discovered.

3. Unique activities organised for the Researchers' Night in Hungary

- initiative started in Europe in 2005.
- launched first by the European Commission
- repeated annually on the last Friday of September

Since 2006 Hungary has also joined the initiative.

This unique event, organized on behalf of **Roland Eötvös Physical Society** in cooperation with the company Ericsson Hungary, is called "Follow Professor's Öveges' path", and it has a target audience from age 6 to 100

4. Conclusions

Motivated students can make: interactive lecture shows, on-stage performances based on physics or chemistry experiments. Use of ICT and multimedia effects can also contribute to explain the physics and chemistry concepts.

Öveges' path event has a huge impact on the teachers and students, while audience is involved and both subjects are explained in a much more attractive way.

5. References

See more at: http://blog.scientix.eu/2015/03/unique-activities-organised-for-the-researchers-night-in-hungary