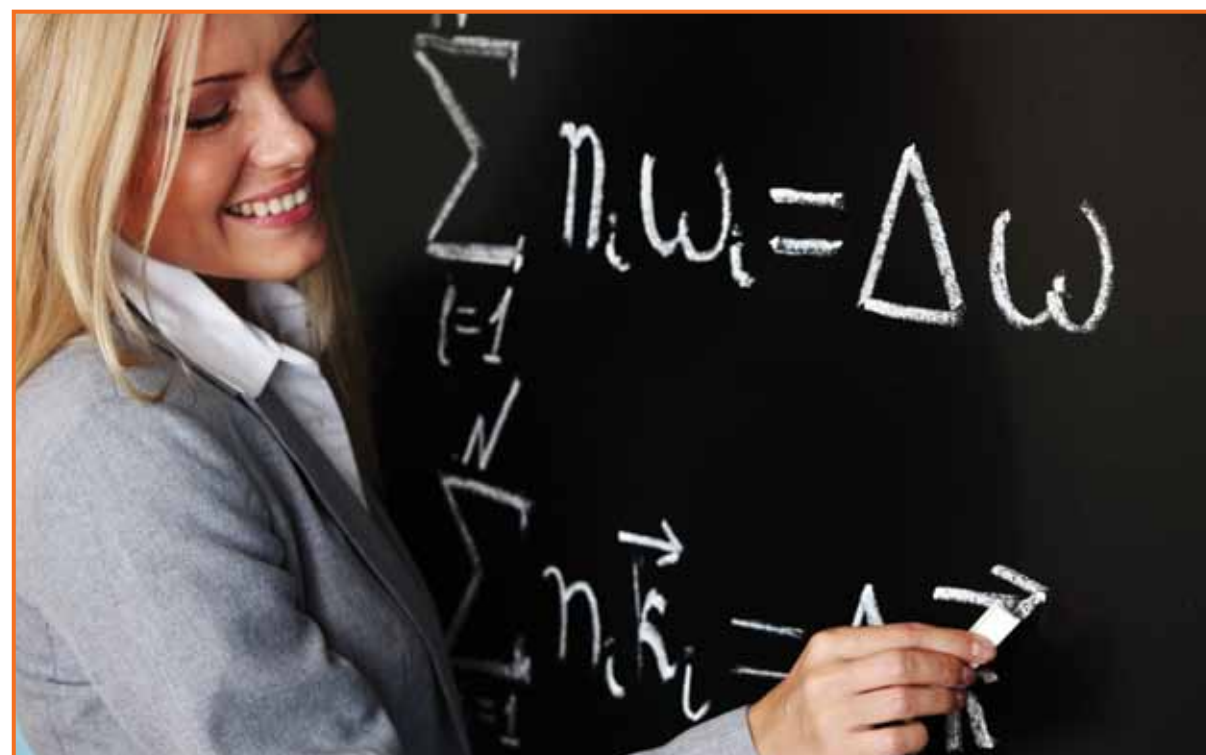


# “Inquiry Based Science Education” in-service training program



## Summary:

The training program “Inquiry Based Science Education” will be accredited by the National Ministry of Education in Romania, with science teachers as target group.

The training program will promote teaching innovation, good practice exchanges in science education and inquiry based learning. By focussing the teaching on inquiry competencies, the students will better understand the scientific concepts and will be empowered with practical skills needed in their everyday life.

## Aims:

The aim of the in-service training program is to develop integrated competencies for teachers in science teaching.

The objectives of the program are:

- Promoting a new pedagogical approach in

science education

- Developing the science teacher’s competencies in designing and managing scientific investigation in class
- Exchanging good practice experiences in IBSE

## Main activities:

The main activities to develop and deliver the in-service training program are as follows:

- Need analysis based on questionnaires applied during the visionary workshops
- Designing the curriculum of the training program
- Applying to get the accreditation
- Selecting the target group
- Delivery of the training program
- Final report on the impact of training program
- Collecting the good practice examples

### Methods of learning/training:

The methods envisaged to be used are:

- Case study
- Focus group
- Lecture
- Experiments
- Demonstrations

### End user:

The target group will consist of Physics, Biology and Chemistry teachers.

### Involved actors:

The involved actors are: the curriculum developers, the teacher trainers and the experts in in-service training programs delivery.

### Location:

The in-service program will be organized in 3 schools in Cluj county:

- “IuliuHatieganu” Cluj-Napoca
- “Avram Iancu”Turda
- “MihaiEminescu” Dej

The idea is to give the teachers the opportunity to attend the courses near their school or home. That is why the in-service locations are in 3 towns in Cluj county.

### Languages available:

The course will be provided in Romanian and the materials created by the curriculum developers and the teachers will be also in Romanian.

### Where to find the application:

The information concerning the in-service program will be available on the website of the institution: [www.ccdcluj.ro](http://www.ccdcluj.ro)

### Duration:

The in-service program will be developed during 10 weeks, with 4-5 hours/week.

### Optimum number of participants:

The training program will be delivered to 8 groups of science teachers (25 teachers/ group). During 2012 – 2013, 200 participants will be trained through this program, as follows:

- 50 participants from Turda and Câmpia Turzii
- 100 participants from Cluj-Napoca
- 50 participants from Dej and Gherla

## Teachers' Competencies

1	subject matter/content knowledge	x
2	nature of science	
3	Multidisciplinary	x
4	knowledge of contemporary science	x
5	variety of (especially student-centred) instructional strategies	x
6	lifelong learning	x
7	self-reflection	x
8	teaching/ learning processes within the domain	x
9	using laboratories, experiments, projects	x
10	common sense knowledge and learning difficulties	x
11	use of ICTs	x
12	knowledge, planning and use of curricular materials	x
13	Information and Communication Technologies with Technological Pedagogical Content Knowledge	x