

## promise

### A project for the promotion of equal opportunities in the scientific education for students with a background of migration

**promise** is an international project in the FP6 of the European Union. Partner countries are Austria, Germany, Bosnia- Herzegovina and Turkey  
Project's duration: October 2005- September 2007

#### Abstract

The objective of the project **PROMISE – Promotion of Migrants in Science Education** - is to provide equal opportunities in science education and to foster the choice of science studies and careers of migrants. The work includes 1) promotion of talented migrant girls at university, 2) work of an interdisciplinary team consisting of science teachers, of experts of science-, intercultural- and language-education developing methods of intercultural science teaching in multilingual/multicultural classes and 3) developing principles for intercultural science teacher trainings. There is an intense cooperation and exchange between countries of origin and countries of residence.

#### Description of objectives and of work

The purpose of PROMISE is to provide equal opportunities in science education. PROMISE is coordinated by the European Training and Research Centre for Human Rights and Democracy, Graz (Austria) and scientifically and substantively implemented by the Physics Education Department, Humboldt-Universität zu Berlin (Germany). Project partners are University of Vienna (Austria), University of Sarajevo (Bosnia and Herzegovina), Yildiz Technical University of Istanbul (Turkey) and the Arbeitgeberverband GESAMTMETALL (Germany). The children of immigrants are selected as target group on economic and political considerations. There is a focus on intense cooperation between countries of origin and countries of residence, in order to harmonise the different methods and standards in science education, as these differences, beneath linguistic and cultural communication problems, are considered to hamper a successful integration of migrants into the host society. The goal is followed by a threefold package of activities:

- 1) Direct promotion of talented migrant girls at universities by establishing Club Lise (named after Lise Meitner), an intercultural girls working group on topics of science, to promote the choice of science studies for migrant girls as they are the most underrepresented group in science. Clubs Lise are established at all partner universities. Considering very well the gender dimension in science as a male-dominated field the girls work together with female scientists and science students with background of migration as role models for their own science careers. Club Lise includes laboratory work, visits of lectures and intense international cooperation of all Clubs Lise on certain topics of science. The idea is that the young students get prepared for work in international working groups as this is common in scientific research groups at university. All Clubs Lise meet once a year at Club Lise international organised by one of the partner universities.
- 2) To effect indirect promotion of migrants in science education, PROMISE-teams consisting of teachers and education scientists are in cooperation with experts of migration, language and intercultural research in order to develop methods and best practices in intercultural science education considering the linguistic and cultural diversity of classes. The focus of PROMISE-teamwork lies on: Investigating the barriers (e.g. language and communication, social and cultural

background) that hamper migrants when learning science. Investigating the teachers' difficulties when teaching science in classes of cultural diversity by interviews and monitoring.

The PROMISE-teamwork includes intense cooperation of countries of origin (Turkey, Bosnia&Herzegovina) and countries of residence (Germany, Austria) by establishing an international network of universities and schools of the four partner countries. Due to nationally diverse methods in science teaching and even differences in the content of the national science education plans it is supposed, that those children who change their country of residence face specific difficulties in learning science. Further it is supposed that a harmonisation of the different science education systems will lower barriers, which hamper the changing into a different education system. The number of female science students is much higher in Turkey and Bosnia-Herzegovina than in Austria and Germany. But obviously this interest is not shared by their country fellows in their new countries of residence like Germany and Austria. Even the number of German and Austrian girls choosing science careers is lower then the number of girls in Turkey or BiH. Some of the reasons for this effect were investigated. However, it is such a wide and multilayered issue that final conclusions can not be drawn yet.

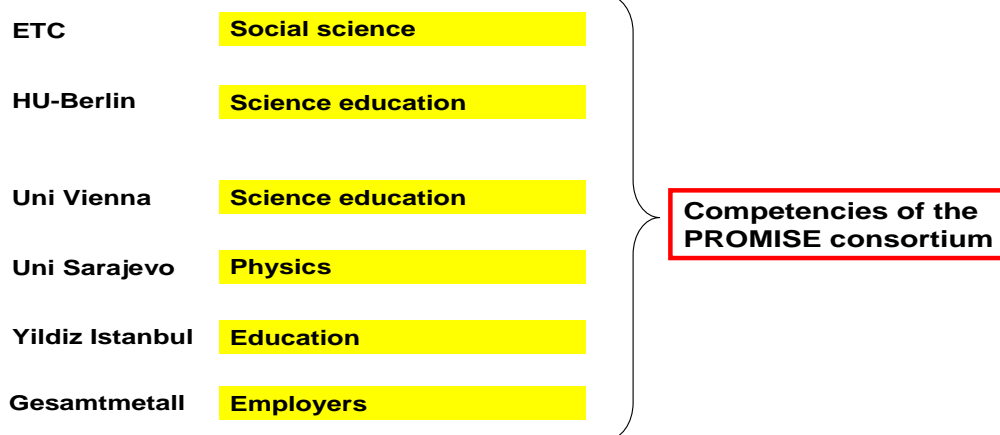
As harmonisation of science education we understand: respecting the cultural diversities; identifying the commonalities; learning from each other the good practices in science teaching; detecting elements which are contra productive to a successful intercultural education and contra productive to motivate girls; and creating together methods for successful intercultural science lessons.

3) To establish a long term promotion of migrants basic principles for intercultural science education are going to be developed. Based on these principles specific teacher trainings shall be institutionalised. Annual PROMISE conferences where all partners present and discuss their work, provide the opportunity to invite and discuss suggestions for science education with school authorities.

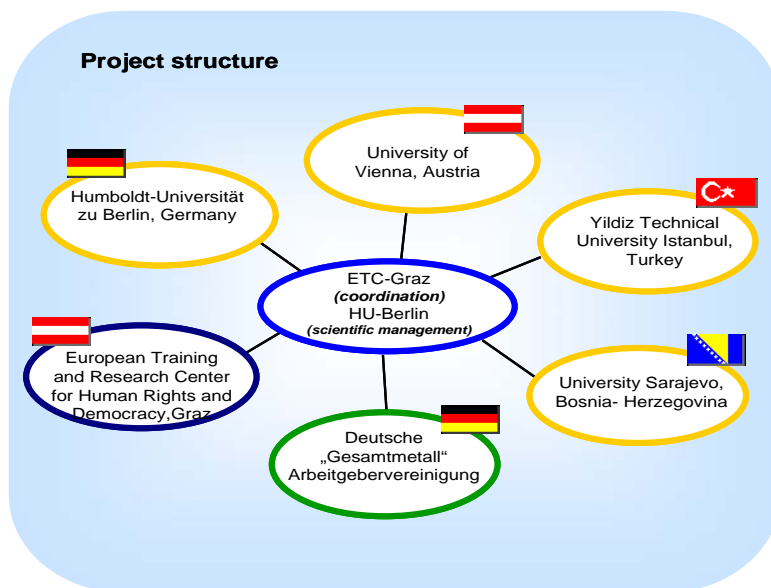
### Work performed

The work was allocated to the project partners according their expertise and competencies. Two types of work can be distinguished: Setting up the necessary infrastructure and implementing the content. Within the first project year all necessary infrastructure was established. That was: Establishing PROMISE Teams and Clubs Lise at all partner universities (Berlin, Vienna, Sarajevo, Istanbul), bringing the meetings to a routine, disseminating the goals and the activities of the project, organising international meetings of all project partners for purpose of exchange and dissemination. In the second project year PROMISE teams focused on content work, which was: barrier analysis, best practices of science lessons in multicultural/multilingual classes, gender- and ethic monitoring and drafting of suggestions for school authorities.

### The competencies of the PROMISE consortium



## Project structure



## Contractors

1. European Training and Research Centre for Human Rights and Democracy, AUSTRIA
2. Humboldt-Universität zu Berlin, Department of Physics Education, GERMANY
3. University of Vienna, Institute for theoretical physics, AUSTRIA
4. University of Sarajevo, Faculty of Science, BOSNIA & HERZEGOVINA
5. Yildiz Technical University Istanbul, Science Education, Faculty of Education, TURKEY
6. Gesamtverband der Arbeitgeberverbände der Metall- und Elektro-Industrie e.V., GERMANY

## Coordinator contact details

Mr Klaus Starl

European Training and Research Centre for Human Rights and Democracy  
Schubertstrasse 29, 8010 Graz, Austria

Tel. +43-316-322 888 22, Fax +43-316-322 888 4, E-mail: klaus.starl@etc-graz.at

## Project logo

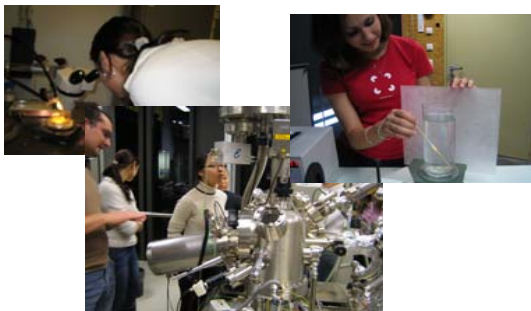
The project logo consists of 4 red circles, which seem to talk to each other, connected by an invisible quadrate. This symbolises the 4 partner countries, doing their work in 4 different languages, but pursuing the same connective goal.



Project website: [www.promise.at](http://www.promise.at)

## Club Lise

**target group:** schoolgirls with a background of migration, interested in natural sciences;  
Levels of education: 10-13  
**goal:** encouragement of talented female migrants  
encouragement of women on the intersection between school and university



Schoolgirls that are going to begin their study at a university in the next 1-3 years, meet students and scientists from the department of natural sciences. The schoolgirls can get a course guidance, attend lectures, visit laboratories and conduct experiments. That aims to support and motivate them to study a subject from the natural sciences.

There are Club Lise in Berlin, Vienna, Sarajevo and Istanbul.

## CL international

**goal:** to encourage the international contacts between schoolgirls, interested in natural sciences



All Clubs Lise meet once per year at Club Lise international. The first CL international took place in April 2006, Berlin. The girls attended workshops at the Humboldt-Universität zu Berlin and at the Technical Fachhochschule. The CL international ended with a Club Lise party.

## promise team

**target group:** teachers in physics, chemistry, biology, mathematics and languages; didactic specialists and experts for languages and intercultural education  
**goal:** sensitisation of the teaching staff, development of lessons for multilingual/multicultural classes



The interdisciplinary promise team discusses the special requirements of the lessons in natural sciences for the multilingual/multicultural classes. They visit and observe some of the lessons, document and analyse the barriers, as well as, develop and test new teaching concepts that will help to overcome the language and sociocultural barriers.  
There are promise teams in Berlin, Vienna, Sarajevo and Istanbul.

## Focal points

**PT Berlin** Development and testing of lessons in physics and languages; a survey of the interests and the career desires of the female immigrants (10-13 school level)

**PT Vienna** Problems of the natural sciences lessons, from the view point of the schoolgirls with a migration background, and that of the teachers

**PT Sarajevo** Infrastructural problems of physics lessons in B.-H.; the largest Club Lise (70 members), many of them are returned refugees

**PT Istanbul** Change of attitude of the teachers and the schoolgirls from Club Lise during the project work

## Conferences

**target group:** teachers, as well as Club Lise's schoolgirls from all partner countries, school authorities, parents clubs, migration representatives  
**goal:** information, presentation, networking and exchange



At the international promise conferences the assisting teachers, from the four project countries, have the chance to exchange their experience and results from the project work. The conferences are public events. The programme contains lectures on migration and education research, poster session and presentation of other encouraging measures for migrants.  
The first international promise conference took place at the Humboldt Universität zu Berlin in April 2006.

## Information

The next promise conference:

May 2007 in Sarajevo

[www.promise.at](http://www.promise.at)



Klaus Starl, [klaus.starl@etc-graz.at](mailto:klaus.starl@etc-graz.at)  
Tanja Tajmel, [tajmel@physik.hu-berlin.de](mailto:tajmel@physik.hu-berlin.de)