

**FRAMEWORK FOR AGREEMENT BETWEEN THE  
OBERSTUFEN KOLLEG (UNIVERSITÄT BIELEFELD),  
GERMANY AND THE SCHOOL FOR ENVIRONMENT SCIENCE  
(UNIVERSIDAD DE VIÑA DEL MAR), CHILE**

1. Both institutions, the Oberstufen-Kolleg, of the Universität Bielefeld (OS – UB), and the School for Environmental Science of the Universidad de Viña del Mar (SES – UVM), are committed to the quality of and innovation in education and the learning processes of their students, with especial attention to their relevance to sustainable development in their own societies.

2. The OS - UB provides education for that group of students that is in the equivalent level of „Secondary II“ (Gymnasiale Oberstufe), and the first few semesters of the University (Grundstudium). The OS – UB and the SES – UVM have devoted especial efforts to accept students with a less than perfect secondary education and to develop dedicated remedial programmes for University freshmen/women, with the aim of providing them with equal opportunities for further development.

3. At this stage the OS is committed, among other efforts, to the following specific actions related to education innovation:

- Improved process of selection and admission of new students with the aim of equal opportunities;
- Revision of the curriculum and teaching methods for the first year, including diagnoses of their abilities, and special courses for the improvement of their basic skills;
- Systematizing and development of learning methods (Lernmethoden) and practical applications (Arbeitstechniken);
- Scientifically based education.

4. The SES – UVM is committed to the steady improvement of its syllabus for education and training of environment engineers, with special emphasis on three aspects:

5. Quality of science education, especially mathematics, biology and chemistry, and related disciplines,

6. Training dedicated to environmental sciences, its techniques and methods, including field and project work, involving intense team work, reporting and formal presentations;
7. Relating the above field and project work to realistic environmental issues in the city of Viña del Mar and its regional environment.

8. In these circumstances the OS – UB and SES - UVM have identified areas and practical tools that are suitable for a steady cooperation programme between the two institutions and that should include, at a pace to be determined through joint analysis and agreement, the following subjects or aspects:

- Exchange of experiences on course and workshop design for the improvement of learning and meta-learning abilities of freshmen/women students. This exchange of experiences will include the secondment of OS - UB teachers at Viña del Mar and, reciprocally, the secondment of SES – UVM professors and instructors at the OS in Bielefeld for periods that will not exceed one working semester per instructor;
- Exchange of experience and joint cooperation in the implementation of mathematics and science courses, and their associated laboratory and simulation workshops;
- Exchange of experiences, teaching methods and practical applications for courses that include intensive project development and team or group work by students;
- Exchange of experiences, teaching methods and practical applications for the teaching of foreign languages, with first priority assigned to the English language. The use of English as a tool for communication between teachers and students at both ends will be emphasized;
- Exchange of experiences, including practical tools for selection and comparative statistical analysis of the selection and admission methods used by both institutions;
- Exploration for opportunities of joint research by members of OS -.UB and SES - UVM on teaching methods and learning processes.

6. It is also understood that other units or departments of the Universität Bielefeld and Universidad de Viña del Mar will participate in this cooperation whenever suitable, especially in relationship to issues of science education, and transition of students from the secondary school to the university and associated measures of guidance and support for freshmen/women (students in the first year of their university programme).

7. Although each institution will be responsible for the cost of participation of their corresponding teachers and/or students, both institutions will cooperate to make the best possible use of financial sources available through the cooperation programmes of the German and Chilean governments and from other international sources.

Signatures

.....  
Prof. Dr. Ludwig Huber  
Director  
Oberstufen Kolleg,  
University of Bielefeld  
Bielefeld, Germany

.....  
Prof. Osvaldo Pacheco  
Director  
School of Environmental Science  
Universidad de Viña del Mar  
Viña del Mar, Chile