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"The cooperation of researchers in natural sciences and humanities is a characteristic feature of this programme."

Educational Research: Reconstructing the Curriculum

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What conditions of teaching promote learning? How should the school curriculum be restructured in order to work with, rather than against, the way that students understand the world? These are the types of fundamental questions that a novel, interdisciplinary [doctoral programme](#) in educational research at the Carl-von-Ossietzky-University of Oldenburg is trying to answer. Born out of the educational research section of the biology department in Oldenburg in 2001, 10 different study groups (the university's educational programmes for biology, chemistry, mathematics, physics, German language and literature, English language, history, elementary science and social studies, theories of education, and educational research) now participate. The extension of this work to disciplines beyond biology was a response to the need for strong subject-based research on the teaching of school subjects.

The purpose of the programme's research is to lead to better teaching methods. It is sponsored by Lower Saxony's State Ministry of Science and Culture. Currently, a total of 18 PhD students are enrolled in the programme. While 12 participants are grant-supported, six work as scientific assistants or are even still active in school teaching, which allows a close connection to the day-to-day business of teaching. Overall, the programme has a practical approach because for the majority of the students, their research requires them to visit classrooms and to actively participate in teaching. Although no formal

arrangements exist to implement the project's findings into practical teaching, the ministry and other institutions have expressed an interest in the research results.

The research is based on the model of *Educational Reconstruction*. A key assumption of the model is that, by having a more intimate knowledge of the students' ideas, the curriculum developer can create a curriculum content that is more adequate to the student's understanding of the subject. Three areas of research are being addressed within the programme. First, analysis of the content structure and the concepts behind it allow the scientific clarification of the subject matter. Secondly, empirical investigation of the learners' own views and notions concerning any specific fact or subject allows a better comprehension of the students' perspectives. Thirdly, in educational structuring, the structure of the subject matter is gained by relating the student's perspective to the scientific perspective. Thus, subjects can be taught in accordance with the learners' perspectives.

The cooperation of researchers in natural sciences and humanities is a characteristic feature of this programme. Our personal point of view is the one of research in English language education and German language education. The transfer of the ideas of the educational reconstruction model to a linguistic subject matter is one of our specific goals as linguists and researchers in education. A great advantage is the opportunity to work in a group, avoiding the isolation that doctoral candidates in the humanities often face. It is the source of both broad subject-related and personal inspiration.

The international orientation of the programme is guaranteed by the participation of foreign doctoral candidates and by the presence of participants of our group at international conferences. Every group member takes part in a course of PhD studies provided by the participating professors of the University of Oldenburg. In addition, professors and researchers of other universities are invited during the semester to give talks about specific subjects and recent research. Furthermore, one workshop in each semester is provided as a platform for the discussion of current problems and questions in the working process.

Although, as already mentioned, some of our colleagues are still teaching and wish to continue as teachers upon completing their dissertations, the overall structure of the programme prepares the participants for a research career. There is no set career path for the programme's graduates, but we think that the contacts with guest lecturers, for example, will be very helpful with respect to future career prospects.

After a year of work on our projects, we are able to say that the programme has offered us--besides a variety of new scientific perspectives--a number of good professional and personal relationships. Thanks to the community spirit of the doctoral candidates there is a great motivation to continue with the work and to surmount obstacles. The financial support enables us to concentrate on our research, which should reduce our time to graduation. While 12 doctoral candidates are currently supported by the Georg Christoph Lichtenberg Scholarship for 2 years (with the possibility of extension for a further year), three more scholarship-financed PhD positions are [available](#) now. The application deadline is **1 September**.