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Czechia-Bavaria and Cross-Border Possibilities of Cooperation at the Faculty of Education in the Technical Field

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Abstract
The article is focused on the cooperation between Czech and Bavarian faculties educating future teachers. The process of studying education in Bavaria is briefly introduced. By comparing the Bavarian way of educating teachers in Bavaria and in the Czech Republic, our view on the cooperation, which was from the geographical point of view suitable for further research cooperation for our faculty, is negative. The way of education is so different and it is not possible to expand our cooperation into a bigger dimension. For the future, the possibility is open just for very specific topics.

Keywords: cooperation by-cz, technical education, teachers in Bavaria

Introduction
Part of the work of a university employee is not only teaching, but also research activities in the field of his profession, which do not have to be created only at the Faculty of Education in Pilsen. Considering the existing possibilities, an international cooperation regarding research issues suggests itself. However, the area of education is partially handicapped, as the education systems of individual countries differ from each other. Yet, the field of education is partially identical and therefore there are possibilities of cooperation. The easiest way then is the cross-border cooperation, when research activities may be more intensive thanks to their near location. The article deals with the cooperation with the Free State of Bavaria, which is geographically near Pilsen. Therefore there are also Bavarian universities near the Pilsen borders, see the list of the nearest ones.

– Universität Bayreuth (www.uni-bayreuth.de)
– Friedrich-Alexander-Universität Erlangen-Nürnberg (www.fau.de)
The possibility of cooperation is significant, although the conditions for its application are not so suitable, as the article stays further.

**Education Study in Bavaria**

The system of German, resp. Bavarian institutes for school education is again slightly more complicated than here. Study conditions in individual federal countries are different. In general to become a teacher, you may study at a university or school for education, where fields for education are marked as “Lehramt” (Teaching profession, Education field). The education is further divided depending on the fact where the teacher-to-be is going to work in the future. Whether he teaches at a grammar school, high school, vocational school and so on. The type of studies then determines the length of it. The study takes about 4 years and includes a practical part or internship (Beničáková).

“Lehramt an beruflichen Schulen” - Teachers at vocational schools

Teachers working at vocational schools in Bavaria usually reach the level 4 of the qualification system “Lehrkräfte der 4. Qualifikationsebene”. Teachers with such a qualification have a broad scope of work field. Except vocational schools in the center of professional educational system, their role is extended from commercial colleges “Wirtschaftsschulen - MittlererSchulabschluss”, through higher apprenticeships school “Berufsfachschulen”, vocational schools “Fachschullen”, vocational academies “Fachakademien” terminated with special qualifications, to the above mentioned FOS and BOS higher schools, which is terminated with a professional or general leaving exam “fachgebundene/allgemeine Hochschulreife”.

Teaching activities of a teacher at a vocational school is based especially on the process where he didactically transforms all knowledge and findings of the field and serve them to pupils in a comprehensive form, taking into account their work experience.

The study includes deep studies of the professional discipline plus studies of the second general education subject, e.g. Mathematics, Physics, Chemistry etc. (“Zweifach” - the second optional subject) or the second professional discipline and studies of education (general education, school education, psychology, social sciences etc.)

Teachers for vocational schools may study in the fields of Metal Engineering, Electro-engineering and Information Technology, Civil Engineering, Nutrition and Economics, Agriculture, Social Sciences, Health Care and Nursing or Business Education (Lehramtsausbildung in Bayern).

The study takes 9 semesters for Bachelor-/ Master 10 semesters + 2 years of preparation service.
During studies, it is necessary to participate in several practical parts such as: “Orientierungspraktikum” indicative internship (3–4 weeks), “schulpädagogisches Blockpraktikum” a block of practicing school education (3 weeks with approximately 50 lessons, “fachdidaktisches Blockpraktikum in einem Unterrichtsfach” a professional block of practicing didactics of the subject resp. of the second subject (3 weeks with approximately 50 lessons) and “studienbegleitendes fachdidaktisches Praktikum” a study accompanying in-service training of the main vocational subject. Before entering the refendariat (see below), it is necessary to pass a 48 weeks internship in the field, which may be omitted in the case that the student has graduated in the field and may prove it with his apprenticeship certificate (Lehramtsausbildung in Bayern).

To teach at vocational schools, you may reach the qualification in the following ways:

1) The two-stage way = Education studies in different vocational fields terminated with the first state exam and followed with two-year in-service training “Vorbereitungsdiensst” so called Refendariat (internship) for the teaching profession at vocational schools, which is terminated with the second state exam.

2) Master studies of teaching vocational subjects with an integrated professional training “Berufliche Bildungintegriert” so called Master.

This Master program is relevant for the fields of Electro-engineering, Information Technologies or Engineering. Technical University in Munich is a model project. They combine the master stage of the education at vocational schools with the in-service training “Vorbereitungsdiensst”. There are the following entry requirements: at least bachelor’s degree achieved in the Master of Science’s studies in the field of engineering, electrical engineering, information technology, automotive industry or comparable study programs at a university or at a technical college “Fachschule” in the given fields and at least 30 weeks of work experience.

Teachers of the 3rd qualification level “Lehrkräfte der 3. Qualifikationsebene” are divided into teachers specialized in industrial and technical professions, teachers specialized in home economics and also teachers specialized in writing techniques. Teachers of the subject are trained in a narrow scale of tasks to provide technical education with a practical part prevailing (Der Weg zum Traumberuf).

In Bavaria as well as here, it is possible to study technology first and then complete pedagogical education and pass the refendariat. As it was mentioned at the very beginning: “All roads lead to the destination”.

Those, who wish to become teachers in Germany, have to take part in so called refendariat after the studies full of theory. This ordeal by fire puts future teachers into an uneasy position. They teach and at the same time they are being taught. They mark and at the same time they are evaluated by marks. After grad-
uation, students take the first state exam and after passing the refendariat the second one. To enter the program, it is necessary to pass pedagogical studies and have at least a year of work experience in the corresponding field or to be apprenticed in the field “Berufsausbildung”.

Refendariat takes two years and serves as a theoretical practical training of teaching profession at vocational schools. The administrative location, where the applicant carries out his internship, is assigned by the Ministry of Culture. They partially take into account applicant’s preferences, whether he has got a family, children etc. (Der Weg zum Traumberuf)

Exchange scholarships and cooperation possibilities

E.g. Erasmus+ enables exchange programs for students. It is the European Union program for education, which supports cooperation and mobility in all the spheres of education, vocational training and in the field of sports, youth and informal education (Školství v ČR).

In the Czech Republic, the possibilities to study only technology at pedagogical schools are very limited. Mostly, the education includes only general technical education for elementary schools, which is not sufficient later. At faculties of education, there are no specific technical studies such as engineering, civil engineering, electrical engineering etc. This is also determined by the different system already on the secondary stage of education.

In the Czech Republic is practically no appropriate study program for teaching specialized technical subjects, unlike in above mentioned Bavaria, therefor the possibilities for cooperation between faculties of education are in this direction almost feasible. On the contrary, students of technical faculties have a significant advantage. Study exchanges are a usual occurrence and recently, they have been taken very often. There is a solution to cooperate with other countries with similar systems of education. However, those are geographically more remote.

Literature


