

**Overview: Central findings on programme quality  
and labour market success of Bavarian graduates**

**Data situation in Germany**

At present, no representative information is available on the labour market transition of higher education graduates and their further labour market success, neither at state (*Länder*) level nor at the level of higher education institutions. Bavaria is the first of the *Länder* to have established a state-wide longitudinal panel survey of graduates from a broad variety of disciplines: The Bavarian Graduate Panel (BAP).

**Study goals and design**

The BAP is a longitudinal panel survey run by the Bavarian State Institute for Higher Education Research and Planning (IHF) in cooperation with all Bavarian universities and universities of applied sciences (*Fachhochschulen*). It provides information on study conditions and labour market integration of Bavarian graduates in regular intervals. Furthermore, analyses identifying factors for labour market success are carried out.

Data is collected in standardised questionnaires (paper-and-pencil and online). Selected cohorts of graduates are surveyed at two or three points in time: Once shortly upon graduation, and again several years later. Thus, detailed information on graduates' labour market entry becomes available and can be compared across graduation years.

**Successful start of the BAP in November 2005  
with the graduates of the 2003/2004 cohort**

With excellent support from all participating higher education institutions, the first panel wave was conducted in November 2005. All graduates of Bavarian universities with Master-level degrees (*Diplom* or *Magister*) and of Bavarian universities of applied sciences (*Fachhochschulen*) with a *Diplom (FH)* degree in one of 29 disciplines from 2003/04 were sent a questionnaire. Excluded were graduates with the only recently introduced Bachelor and Master degrees, doctoral degrees or graduates from state-regulated disciplines such as law, medicine and pharmacology. Bachelor and Master graduates will be included in later surveys as soon as they have reached sufficient numbers.

Of the 13.200 selected Bavarian graduates, 37 percent participated. This excellent return rate and an equally satisfactory representativity permit precise analyses for single disciplines and universities.

The questionnaire focuses on three areas:

- § Acquisition of subject-specific and overarching competences (i.e. social competence, problem solving) and the contribution of higher education
- § Transition to the labour market, with special emphasis on internships and jobs during studies
- § Factors influencing early labour market success (e.g. professional position, income, adequacy of employment)

## **Labour market entry and professional situation**

### **Different subject - different transitions**

Among graduates of sciences and engineering, the transition into the labour market is generally smooth: Three months upon graduation, more than 60 percent are in employment. Twelve months later, this figure rises to 80 percent. Most chemists, physicists and biologists pursue a doctoral degree and combine this with part-time employment. Graduates of social sciences and arts and humanities experience more extended transition periods: Three months upon graduation, 45 percent are employed, after twelve months about 70 percent. These graduates also frequently accept internships, which seem to serve as an orientation period and are frequently followed by regular employment.

### **Labour market success as multi-faceted phenomenon**

To do justice to the different professional expectations and labour markets for graduates of various disciplines, a multi-dimensional approach is indispensable. Apart from objective, 'hard' indicators (such as income or professional position), subjective or 'soft' indicators must be taken into account. Among those are job satisfaction, adequacy of professional status and correspondence of subject studied and employment taken. When objective indicators are analysed – especially income – labour market success of graduates from the fields of social sciences, arts and humanities is much lower than that of graduates from economics and business administration or engineering. However, when using subjective indicators, the picture looks less bleak: Two thirds of graduates from the social sciences, arts and humanities are satisfied with their first position.

### **Factors for a quick and smooth transition**

Studying fast, finishing with a good degree and gathering ample practical experience during studies - especially from work during studies - are factors for successful and rapid transition into employment.

### **Studying is worth the effort**

Knowledge and skills acquired in higher education have prepared most graduates adequately for the labour market: Overall, more than 70 percent work in a first position that corresponds to their major. Exceptions are graduates from the arts and humanities. Moreover, more than two thirds were satisfied with the job profile of their first employment.

## Evaluation of study conditions and competencies acquired in higher education

### **The majority of graduates recommend their subject and university**

More than 80 percent of graduates from economics and business administration, science and engineering recommend their discipline and their institution to others. Among graduates from the social sciences, arts and humanities, the percentage is somewhat lower and reaches 60 to 80 percent.

### **Strengths and weaknesses of higher education**

Material conditions, organisation and opportunities for meeting and interacting with other students are evaluated very favourably by the large majority of graduates: In some subjects, more than 80 percent are very satisfied with these aspects.

Graduates see possibilities for improvement with regard to practical relevance, support by teachers, opportunities for specialisation and the teaching of generic competences such as foreign languages, self-organisation or teamwork. These aspects received good evaluations only from 15 to 60 percent of graduates (depending on discipline).

In general, graduates of *Fachhochschulen* evaluate practical relevance more positively, while university graduates give better ratings to opportunities for specialisation.

Academic quality is given higher ratings by graduates from the social sciences, arts and humanities. Material conditions are rated best by graduates from mathematics, computer sciences and other sciences.

### **Acquisition of competences: Teaching of generic skills needs improvement**

Among the strengths of higher education graduates are the subject-specific knowledge and skills: Most graduates have acquired a high level of specific expertise, basic knowledge and scientific methodological skills in their respective field.

Room for improvement is seen by most graduates of all subjects in the area of generic or key competences. This holds for personal competences (such as social competence, self organisation or problem solving) as well as for more specific skills (such as presenting, computer skills or foreign languages). Sometimes, the skill level is quite high - especially with regards to self organisation and computer skills. But most graduates have achieved this high level not within higher education but elsewhere and would have welcomed a better support by their institution.

## Amount and influence of practical experience during studies

### **Bavarian graduates' studies were practically relevant**

80 percent of graduates from universities and 90 percent from *Fachhochschulen* have gained practical experience through internships, while two thirds worked in a study-related job. Only five percent had neither done internships nor gained study-related work experience.

### **Internships and study-related jobs increase competences**

About three quarters of graduates report that their study-related jobs and the internships they had towards the end of the studies helped them to acquire both subject-specific and overarching competencies. Especially high was universities' contribution to the competences of graduates from the social sciences, economics and business administration, and the arts and humanities.

### **Internships and study-related jobs are important**

#### **Contact with potential employers**

About 20 percent of graduates get their first employment through contracts from an internship or a study-related job. Graduates from engineering profit most from these contacts, graduates from social sciences, arts and humanities profit least.

### **Not all practical experience is equally useful**

Graduates with study-related jobs during their studies got their first employment faster than those who had had no such jobs. The number of internships had no influence however. This finding points to the fact that internships need to be of good quality to be useful. Internships that are more useful are better supervised, take place towards the end of studies and are closely related to the labour market segment in which the student would like to work.

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