# Teacher training at the level of agricultural schools - new challenges and new conception

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# INTRODUCTION

Changing demands on professional competence of teachers at agricultural vocational schools

Demands on professional competence of farmers and gardeners are changing. Education and training have to react to this fact. As consequence aims, content, methods an conditions of education and training have to be adapted. Teachers have to understand this changing situation. They need a new approach for planning, preparation, realization and evaluation of subject related lessons. They need a new teaching competence as a "manager of learning processes", who is able to plan and to arrange action oriented teaching-and learning arrangements and learning situations with the aim, to develop independence and self responsible learning of the trainees. In this connection methodical competence plays an important role as significant condition for life-long learning. Use of new media becomes more and more important point of teaching and learning process.

Because demands on professional competence of teachers are changing, also the teacher training has to change as a consequence. The present system of teacher training cannot fulfil the new demands. Therefore in Germany a new system was established.

New conception of teacher training as Bachelor- and Master courses of studies

#### Aims and characteristics of the new system

The reform of the teacher training is a change of structure, content and organisation.

The new system of teacher training consists of two steps: Bachelor course and Master course. Both steps have to be finished to become a teacher at vocational school. The Bachelor phase takes 3 years, the Master phase 2 years. It is an integrated study course of a core subject (Agriculture or Horticulture), combined with a second subject (for example mathematics, physics, chemistry, biology, languages and others) and educational sciences. Three practical training periods at school are part of the education. Typical is that the new system provides more time for studies of educational sciences, subject related didactics and practical training periods at school. Based on it there are better possibilities the teacher training to orient by the requirements of the teaching profession.

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# Main aims of the new teacher training system are:

to improve teaching competence of students

to increase the quality of studies

to improve connection between subject related science, educational science and subject related didactics

to find better possibilities for managing and coordinating the studies

to reduce time of studies

to get more international compatibility

The new teacher training system is structured in moduls, 30 moduls in the Bachelor phase, 16 moduls in the Master phase.

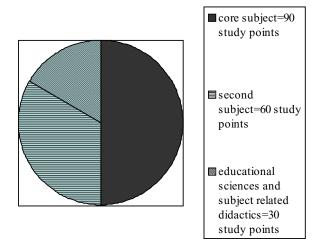
# The Bachelor phase

During the six semesters of the Bachelor study a total of 180 study points may be earned. Typical for this phase is that the core subject (Agriculture or Horticulture) is dominant. The core subject contains 90 study points (included 12 points Bachelor thesis). The second subject contains 60 study points, educational sciences and subject related didactics contain 30 study points.

Integrated in the Bachelor phase is a practical training period at school.

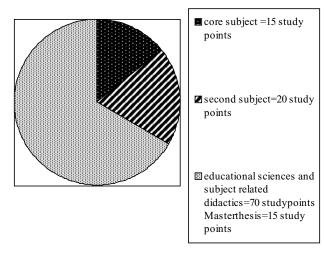
### The Master phase

The following picture shows the *structure of the Bachelor course:* 180 study points = 6 semesters



During the four semesters of Master study 120 study points may be earned. Typical for this phase is that educational sciences and subject related didactics are dominant with 70 study points. The core subject contains only 15 study points and the second subject 20 study points.

# The following picture shows the *structure of the Master* course: 120 study points = 4 semesters



In the middle of the Master phase is the development of students teaching competence. Therefore there are four moduls (= 23 study points) subject related didactics of the core subject and also four moduls and 23 study points for the subject related didactics of the second subject. In these moduls students mainly get the competence to plan, to prepare, to realize and to evaluate subject related lessons at vocational school. They learn, how to manage modern teaching and learning arrangements, how to use new media, how to develop self responsible learning of pupils. There is a very closely relation between didactical lessons at university and subject related lessons at vocational school. Integrated in the Master study are two practical training periods at school. On the other side there is planned a common modul between subject related science and subject related didactics, where students deal with agriculture subject and prepare it for lessons at vocational school. At the university they are adviced from both sides. The results of these projects are presented and discussed at vocational school. On this way possibilities of cooperation between subject related didactics, subject related sciences and vocational school become better.

# **CONCLUSION**

The Bachelor course started in October 2004. In October 2007 we start with the first Master course for teachers. With this reform we finish the very traditional way of teacher training in Germany. The new concept is an international compatible one. We are hopeful that the quality of education will improve and absolvents are more practical oriented.

The new study system will be evaluated continuously with the aim to be accredited.

#### The following table showes the structure of the second year of Master study Agriculture

Semester	Modules				
winter- semester	Subject related science	Subject related didactics	Subject related didactics	educational science	
	Common Module				
	5 study points	7 study points	5 study points	3 study points	
sommer- semester	Second subject	Second subject	Subject related didactics of the second subject		Master thesis
	5 study points	5 study points	12 study points	3 study points	15 study points