Leadership styles in teacher education and industry

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Summary
In this paper a curriculum research project in teacher education which was initiated in 1983 and which is meant to be continued until the middle of the 90s is described. In this project student teachers are prepared for and experience two practice periods in industry. The relevance of such programmes to teacher education is described and case studies of the industrial experience presented.

In the second part of the paper the development of an inter disciplinary course in leadership styles is described. Student reaction to the course are cited.

1. Links between industry and teacher education.
1.1 Starting point and framework of the project
It is the firm conviction of all who are involved in teacher education that the school curriculum should prepare pupils for the environment in which they are going to live and work. It is equally agreed that traditional teacher education does not prepare student teachers for this task. This is not surprising for the student-teacher has no personal experience of the pupil’s later environment and in particular the general world of work. A common slogan, is that the course of teacher training runs ‘out of school-through school — back into school’. The research project ‘world of work — education — industry and commerce’ considers this to be a deficiency in teacher training which should be mitigated. The main measure the Kiel project has taken to mitigate this deficiency are inclusion of two practice periods in the general world of work. The first stage practice period (general practice period) is at the end of the 2nd semester, and the second
stage practice period (project practice period) after the 7th or 8th semester). (Dahncke, 1983, 1984, 1989, 1990)

1.2 Make-up of the field of research
Since 1983 we have obtained external partners from employees' and employers' associations. The number of students has increased progressively since the winter semester of 1984/85, when the first students registered for this new course of study. At present, the programme consists of around 300 students. New emphases were given in the traditional disciplinary courses and new disciplinary and interdisciplinary courses were created.

- The subjects are studied on a broad basis, i.e. although the individual courses are aimed at the student's later needs in school and in the classroom, they are not aimed solely at this. (Examples of courses: experimental physics, chemistry and foreign languages, leading people and chairing discussions...).

- Right at the beginning of their studies, the students can take part in an introductory interdisciplinary course which is designed to confront them with various problems and to offer them the opportunity of meeting partners from the world of work, industry and commerce.

Important components of the new course of study are two periods of practice in the general world of work.

- In the second semester (i.e. very early in their studies,) the students on the new study programme attend an obligatory interdisciplinary course in the Institute of Social Sciences, the aim of which is to prepare them for their first stage of training in industry.

- This training in industry takes place at the end of the second or third semester. It does not necessarily relate to the subjects the student is actually studying.

This training in industry is followed up by
- a written paper of some 20 to 30 type-written pages
- an evaluation and detailed discussion between students and professors or lecturers
- an evaluation from both the persons responsible during inservice training in industry and professors or lecturers.

A second stage of practical work in industry is programmed after the first degree has been passed. This now relates practise in industry and commerce to the subjects studied. The project has to be based both on academic studies and on the company's work, as well as to have a beneficial outcome for further studies and the postgraduate degree (Magister M. Sc. Paed. — Masters degree).

This second stage of training is followed by a further course of studies directed towards the postgraduate degree which could open up a range of professions other than teaching.

The main part of the Master's examination consists of a thesis to be written in co-operation with a company, where possible with the company responsible for the second stage of training in industry. The M. Sc. Paed. thesis should be developed from the practical and written work carried out in the second stage of training in industry, thereby ensuring a continual contact between the student and the company responsible for this training right up to the end of the period of studies.

Methods and present results
We are investigating the programme's effects on the students involved and the interaction between them and those involved in the new course of study. First of all we concentrated on the evaluation of the first stage practice periods in the general world of work. The students had to write a paper, the information of which was completed by discussion in groups. We also interviewed the students as well as the professors and lecturers of