

Problems and Countermeasures in the Operation of "dual tutorial system" -- Taking full-time Engineering Students as an Example

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Keywords: Double tutors, Full-time engineering majors, Problems, Countermeasures.

Abstract. At present, the dual tutorial system has become a common situation in full-time professional degree education, and so does the engineering profession. The introduction of the dual tutorial system has solved the limitations of the previous single tutor system, and has been able to adapt to the training needs of full-time engineering students. It is of great importance to improve the quality of teaching. Although the dual mentoring system has originality, it is still in the stage of exploration and experience accumulation, and there are many problems in practice. Taking full-time engineering students as an example, this paper analyzes the problems existing in the implementation of the dual mentoring system and gives some solutions to promote the dual mentoring system to give full play to its advantages.

At present, the education resources in our country is still in a relatively short period, in order to make full use of the existing teachers, further improve the quality of teaching, training to achieve more complex social needs and practical talents, more and more colleges and universities have introduced the double tutor system, is the school teacher and mentor common enterprise training and guidance. In recent years, with the popularity of double tutor system, at present in certain areas have been gradually showing results, effectively promote the teaching activities and improve the comprehensive quality of the students, but there are obvious problems need to be solved as soon as possible.

The dual tutorial system can effectively guarantee the training quality and comprehensive quality of full-time engineering students

First of all, from the teaching position, professional degree is full-time training more interdisciplinary and applied to social technology and management of high level talents, the application characteristics of professional is in specific engineering. So, training for full-time science major students, unable to carry out education from the academic perspective alone, they need more practice and exercise in the specific work, two instructors at this time can play an important role in the practice of docking with the school units should be selected with the corresponding abilities and qualifications of the senior technical and engineering talent, jointly assume the task of guiding. Through internal and external linkage, we can better achieve the teaching objectives and train more professional talents.

Secondly, from the point of view of training process, the practice link outside campus has always been an important part of ensuring full-time engineering students' ability to improve. Although different engineering majors have different requirements on practice, on the whole, practice is still necessary and irreplaceable. Practice can help students adapt to social work as soon as possible, and can effectively prevent the phenomenon of "labor output" and so on.

Finally, from the engineering students' occupation career planning, full-time engineering professional teaching to co-ordinate the subject characteristics and social needs of the industry, not

only to master the theoretical knowledge and professional knowledge, but also pay more attention to the practice ability and enhance the comprehensive quality. Specifically, the link of engineering students through learning, listening to the academic report and attend professional seminars and other ways to accept professional knowledge; practice, students can from the business mentor intuitive understanding of strengthening engineering, for students to improve the ability of solving problems, it plays an important role deepen the occupation identity. After the practice outside the school, some enterprises mentor will be targeted, according to the characteristics of students recommended employment, which to some extent alleviate the current widespread employment difficulties and other issues in Colleges and universities.

The existing problems in the operation of the dual tutorial system

In recent years, with full-time professional engineering enrollment continues to expand, Double Tutorial System in the concrete implementation process also exposed many problems worthy of attention, mainly reflected in the following aspects:

First, there are problems with the dual tutor screening mechanism. The teaching quality of the school teacher directly affects the selection of tutor training level full-time students majoring in engineering, but the current school tutor in the selection process often focus only on scientific research articles and other aspects, ignoring the practice ability, leading to "only on" phenomenon; school mentors in the selection process, many schools only only fuzzy rules, no specific requirements and quantitative criteria, resulting in part-time, in the specific operation process such as the occurrence of nominal posts.

Secondly, the division of teachers in the division of labor and coordination needs to be improved. First, many college students off campus tutor to determine the time relatively late, can not make a comprehensive understanding of the students; second students practice in the school, the school teacher often appear "Kite" phenomenon, the lack of understanding of practice of students, little communication with the school teacher, have an adverse impact on the promotion for students practice.

Finally, there are some problems in the content and mode of students' practice outside school. The enthusiasm of the enterprises for the training of engineering students will directly affect the development of students' out of school practice. At present, many enterprises and the participation of school teacher is not high, some enterprises in the process of joint training will be short-term benefits in the first place, played for students "education" function; some teachers only nominal, was not involved in the real practice of guiding links; some enterprises will become temporary workers, students as a unit for odd jobs; some enterprises for their own interests and to let students practice contact project etc.. In short, there is a serious dislocation between the extracurricular practice and its training objectives.

The countermeasures and suggestions for improving the quality of the dual mentoring system

(1)Continuously improve the construction of tutors in engineering majors at full-time colleges and universities

The full-time supervisor of engineering students should be a high level of talents with academic and applied knowledge and skills. For the school teacher, encourage them to go out, the actual project in more of them, and accumulated experience; the school tutor selection and promotion, should be included in the assessment of practical engineering experience, to experience strong tutors should give corresponding policy and funding support; actively encourage school tutor in industry academic discussion and communication, keep pace with the times; relying on the advantages of discipline, good communication and cohesion, strengthen the practical ability of young teacher.

(2) standardize the existing dual mentoring system, and actively cultivate the students' training model

For the double tutorial system, still need to improve the system of the above from two aspects:

firstly, the school teacher and school teacher specific responsibilities are clear, the implementation of specific documents, the procedures and details; actively promote and build the tutor communication platform, so that it can concerned about students' learning, life and work to do their work at the same time, the quality and performance of the common practice of students responsible for schools and enterprises shall strengthen the management on campus and off campus tutor; secondly, for the enterprises and the extracurricular tutor should establish a clear set of assessment and incentive mechanism. As everyone knows, school teacher from outside the school belongs to the practice of the enterprise, no management authority on it, how to effectively motivate and mobilize their initiative and enthusiasm to clear institutional support, through the development of school teacher salaries, incentives, subsidies, professional practice project cooperation and other ways to tilt the concrete realization, in addition, also schools and enterprises to fully communicate, to strengthen school teacher assessment, avoid part-time tutor lifetime exemption, free trial, etc., concrete can take every two or three years for the qualification recognition of the way, to ensure that the enterprise supervisor team effectiveness and liquidity.

(3) strengthen the integration of all parties, and form a resultant force conducive to the operation of the two instructors

Cultivation of full-time engineering students is a systematic project, a single subject can not achieve the goal of teaching is very good, fusion requires a variety of resources and linkage, only schools, practice unit, social environment and other aspects together can really promote the progress of education, to cultivate talents of high level the.

Colleges and universities should constantly strengthen the sense of cooperation between schools and enterprises, so that both sides can clearly realize that cooperation is mutually beneficial. The school, need to continue to increase investment, to send to the enterprise internal management supervisor, make full use of the resources of teacher training, case base construction work; enterprises should also be based on long-term, fully excavate the intellectual resources, solve the problems of enterprises, promote the coordinated development of the three industry. In addition, plan the relevant government departments and industry associations should also reflect the policy advantages of global development, combing industry continuous coordination, build school enterprise communication platform, provide preferential policies and financial support etc.

Conclusion

Full-time engineering students education has become an important part of school education in Colleges and universities, and the dual tutor system has continuously strengthened the teaching level. It is of great significance to promote practical ability. At present, the problems arising in the operation of the dual mentoring system need to be improved in the future school enterprise cooperation.

Acknowledgements

This paper was supported by Scientific and Technological Planning Project of Beihua University.

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