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Research on the Teaching Staff Construction in Applied Undergraduate Colleges

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Abstract: The construction of faculty is of great significance to applied undergraduate colleges. Having a high-level faculty with theoretical teaching skills and practical professional skills can improve the training level of applied undergraduate colleges. Analyzed the status quo of the construction of the teaching staff of applied undergraduate colleges, and put forward the corresponding teaching staff construction strategies from the perspectives of teachers and schools, including broadening the channels of teacher introduction and strengthening the training of in-service teachers.

Keywords: Applied undergraduate colleges; Teaching staff construction; Construction strategy; On-the-job training

1. Introduction

The Ministry of Education, the National Development and Reform Commission, and the Ministry of Finance jointly issued a document [1] to further promote the accelerated transformation and development of local universities. With social development and economic needs, the implementation of transformational development is the requirement of the external development environment of undergraduate colleges and universities, as well as the need of the transformation of internal management mode, and is an inevitable trend for the development of local undergraduate colleges [2]. The construction of the teaching staff directly affects the quality of education and teaching of colleges and universities, and is the only way to develop applied undergraduate colleges. At present, there are still several problems in the construction of the teaching staff of newly-built applied undergraduate colleges. Research on this work is of great significance for the construction and development of applied undergraduate colleges.

The paper analyzes the problems in the construction of the staff, and gives development strategies for building a high-quality teaching staff, aiming to build a high-quality teaching staff for the application-oriented colleges and universities. The organization of this paper is as follows. The first part explains the development significance of building a high-quality teaching staff to applied undergraduate colleges. The second part studies the quality requirements of applied undergraduate colleges for college teachers and the status quo of the construction of the analyst team. The third part proposes relevant strategies for the construction of the teaching staff of applied undergraduate colleges. The fourth part gives conclusions.

2. The current situation of teaching staff construction

In the development process of application-oriented universities, the quality requirements for university teachers should be reflected in the application, locality and sharing of teachers [3]. If you want to cultivate applied technical skills

talents that can meet the needs of social development, you need to have a high-level team of teachers with theoretical teaching skills and practical vocational skills. Applied undergraduate colleges and universities require college teachers to have application in two aspects [4]: (1) Compared with traditional college teachers, there should be a high proportion of "dual-teacher dual-ability" teachers in the teaching team of applied colleges to improve students' practical ability and professional skills. (2) Applied technical and skilled talents must serve the local social and economic development and needs, and graduates can invest in the local social and economic construction.

In the traditional faculty, most teachers are mainly teaching professional theoretical knowledge, and there are few teachers who instruct students to participate in enterprise practice, and they can only guide related course experiments or internships. Through these experimental activities and internships, students cannot learn real corporate practical knowledge, nor can they apply theoretical knowledge to practice and innovation. Therefore, in the process of teacher construction in applied undergraduate colleges, the primary problem is the extreme lack of "dual-teacher dual-ability" teachers [5].

For example, in the construction of a college in Xi'an, teachers with practical guidance ability are lacking. Table 1 shows the proportion of teachers with practical guidance ability in five majors. It can be seen from the table that, with the exception of communications engineering, the proportion of "dual-teacher dual-ability" teachers in other majors is around 60%. On the whole, theoretical teachers of various majors still account for the majority, unable to guide students to complete practical courses, and it is difficult to meet the needs of newly-built applied undergraduate colleges.

Before the transformation of applied undergraduate colleges and universities, the development of the faculty has been stagnant. Most teachers have a bachelor's degree, and a few have a master's degree or a doctoral degree. Table 2 shows the proportion of teachers with high academic qualifications and senior titles in five majors. It can be seen from the table that, with the exception of electrical engineering and automation,

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the proportion of teachers with senior titles in other majors is relatively low, which cannot meet the long-term development of colleges and universities.

Table 1: The proportion of "dual-teacher dual-ability" teachers in five majors

professional title	total teachers	"dual-teacher dual-ability" teachers	proportion
Measurement and Control Technology and Instruments	19	11	58%
Automation	12	8	66%
Electrical Engineering and Automation	16	12	75%
Electronic Information Engineering	15	9	60%
Communications Engineering	12	5	42%

Table 2: The proportion of teachers with high academic qualifications and senior professional titles in five majors

professional title	Number of Master	Proportion of master	Number of	Proportion of
	degree or above	degree or above	senior titles	senior titles
Measurement and Control Technology and Instruments	15	79%	5	26%
Automation	12	100%	7	58%
Electrical Engineering and Automation	14	88%	12	75%
Electronic Information Engineering	12	80%	8	53%
Communications Engineering	12	100%	4	33%

3. Strategies for the teaching staff construction

In view of the current status of the teaching staff of applied undergraduate colleges, it is necessary to start at the same time from the introduction of teachers and the personal training of teachers in order to build a high-quality and high-level teaching staff.

When building a "dual-teacher dual-ability" teaching team, the channels for introducing teachers should be broadened, and people with good professional foundation, rich practical experience, and basic teacher qualifications can be introduced from enterprises to improve the structure of the teaching team in colleges and universities. To strengthen the "dual teacher dual ability" teacher team, it is also possible to hire technical personnel from government agencies or enterprises as part-time teachers through school-enterprise cooperation or research and development of industry-university-research bases to provide regular training to students, improve students' practical ability, and cultivate applied talents.

When introducing teachers in schools, not only should they introduce fresh graduates from universities, but also high-level talents from other institutions of higher learning or research institutes, and with the help of their high academic qualifications or senior titles, improve the structure of the faculty of colleges and universities [6]. At the same time, with the help of high-level talents to take the lead, improve the enthusiasm of the original teachers, let the teachers work hard for the senior professional title, while improve the professional ability of the teacher.

Schools need to formulate a training plan for in-service teachers to improve their professional skills and practical ability. Technical personnel with rich practical experience in the industry can be invited to conduct technical exchanges with in-service college teachers on a regular basis to make up for the lack of practical opportunities for in-service teachers. At the same time, teachers are required to actively participate in teacher professional skills training organized by the state or the Ministry of Education [7] to improve professional skills,

keep up with social and economic development, and meet the country's local development needs under the new situation.

Teachers can also be encouraged to take industry qualification examinations and participate in corresponding vocational skills competitions to test their professional skills. Through various methods of training, improve the professional guidance and practical ability of in-service teachers and improve the structure of the teaching team.

4. Conclusions

The paper analyzes the status quo of the teaching staff construction of applied undergraduate colleges, and puts forward the construction strategy, including broadening the introduction of teachers and strengthening the teacher training, to improve the speed and quality of the teaching staff construction.

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References

- [1] Ministry of Education, National Development and Reform Commission, Ministry of Finance. Guiding Opinions on Guiding Some Local Ordinary Undergraduate Universities to Transform to Application-oriented [EB/OL]. October 2015 June 23, http://www.moe. edu.cn /srcsite /A03/moe_ 1892 /moe 630 /201511 /t20151113 218942.html.
- [2] He Zhe, Zhang Yidan. Research on the construction path of "dual teacher" faculty in applied undergraduate colleges [J]. China Collective Economy, 2016, 1(34): 116-117.

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- [3] Tian Jinying. Analysis on the construction of the teaching staff of applied colleges and universities—Establishing a "dual teacher and dual ability" teacher team [J]. Science, Education and Culture, 2016, 1(11): 16-17.
- [4] Huang Fengshan. Analysis on the Construction and Development of Applied Teachers [J]. Education Modernization, 2018, 5(16): 116-117.
- [5] Li Yaqi, Li Feng, Wang Tao, et al. Research on the Construction of Diversified and Compound Teaching Staff of University Innovation and Entrepreneurship Education[J]. Journal of Weinan Normal University, 2018, 33(14): 5-12.
- [6] Ding Bing. Research on the construction path of dual-qualified teachers in applied undergraduate colleges [J]. Education: Higher Education Research, 2017, 1(3): 134-135.
- [7] Fang Fang, Peng Daiyin, Sun Mei. Practice, experience and thinking on the teaching ability training of young teachers in colleges and universities [J]. Journal of Weinan Teachers College, 2017, 32(6): 5-9.

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