

# Research on the Improvement of Local Colleges' Talent Team Construction from the Perspective of "Double First-Class"

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(Received 22 June 2020, accepted 30 August 2020)

**Abstract:** "Double First-Class" construction includes the construction of first-class universities and disciplines, which requires local colleges to adjust their talent training modes based on the latest ideas and teaching thoughts. This paper analyzes the current situation of local colleges and recognizes the opportunities and challenges of the college education. Then, the necessity of applying the "Double First-Class" initiative to colleges' talent training is described. Considering the current troubles, such as inadequate talent teams, imbalanced ration and insufficient training and management systems, this paper focuses on the teaching strategies, providing necessary guarantee for colleges to finish "Double First-Class" construction.

**Keywords:** Local colleges; Double First-Class; Talent team

#### 1 Introduction

In order to construct talent teams, local colleges are required to improve their teaching level and take advanced ideas into practice. In the context of "Double First-Class" construction, local colleges should analyze the current situation of college teaching in a comprehensive way and then find out the main trouble. In the whole work, the key aspect is colleges' talent team construction. Such construction is also a significant method for colleges to deepen their reforms, which calls for a teaching model beneficial for students' self-development and improved talent teams. In general, talent team construction lays a solid foundation for colleges' innovative development. Additionally, in terms of teaching practices, the improvement of talent teams is focused on the application of training programs which can both improve the comprehensive quality of local colleges and take their talent management into full play [1].

It is well known that local colleges are administered by local governments and the main support of their development comes from local financial systems. Therefore, these colleges are unable to enjoy redundant resources which are available to other Chinese colleges. Studies have shown that local colleges' inability to attract plenty of talents can be attributed to insufficient devices, geographical restraints and inadequate disciplinary development. What's worse, the key barrier for strengthening teaching competence is the shortage of talents. Local colleges account for 1/2 in the system of higher education. However, they have serious disadvantages, such as failure to make clear future plans and limited knowledge of the opportunities brought out by the "Double First-Class" construction. Fundamentally speaking, it is teachers' inability to keep abreast with times and their incorrect conception of the "Double First-Class" construction that cause all the problems mentioned above [2]. So, the study on appropriate methods of talent team construction based on local colleges' features from the perspective of the "Double First-Class" construction is meaningful.

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"Double First-Class" construction refers to construction of first-class colleges and disciplines. For a long time, first-class colleges and disciplines have been monopolized by strong universities while local colleges have been rather weak. Thanks to "Double First-Class" construction, outstanding local colleges are entitled to construct their first-class disciplines and are even possible to be ranked as first-class colleges. Thus, the opportunities brought out by the "Double First-Class" construction are solution-oriented, supporting local colleges to develop in an open and just way. There is no doubt that local colleges' development should be based on their individual features, if they want to firmly capture these chances. In other words, changed external environment becomes fundamental for local colleges to use their geographical advantages, which should be taken into account seriously [3].

### 2 Methodology

#### 2.1 Necessity of Applying the "Double First-Class" Initiative

All the institutions, including universities and colleges, depend on the construction and management of talent teams. For local colleges, the value of constructing talent teams not only lies in teaching level, but also affects levels of organization. In this case, local colleges are focused on their "Double First-Class" construction. In other words, only with powerful faculty, local colleges are able to transform themselves and then thrive.

Faculty is not only indispensable in school education, but also responsible for cultivating talents. construction of talent teams is beneficial for fully stimulating faculty's initiative, which can help local colleges invigorate themselves. As is shown in studies, introduction and training of talents are both vital. On one hand, importing talents can increase the current team's qualification. On the other hand, training talents is meaningful since it can expand the scale of a talent team [4]. What's more, rewarding mechanisms such as promotion increase local colleges' strength of attracting talents. So, when recruiting talents, relevant staff should comprehensively test a teacher's teaching competence to make sure he or she can contribute to their "Double First-Class" construction, based on their colleges' talent training goal.

#### 2.2 Model Construction

Index

Since talents' implicit ability is not superficial, it is hard to adopt quantitative evaluation quickly. Additionally, the tools and methods to evaluate talent team construction's quality needs improvement. The following texts analyze the construction and application of the model, taking explicit abilities such as teaching competence and academic research as indexes.

Implication

Table 1: Index and Implication

Basic Condition research fields, degrees
Teaching Competence Academic research
Academic research
Trail teaching, students' evaluation, results and quality of teaching national meetings, domestic and abroad journalscrosswise and vertical projects

Since fuzzy comprehensive evaluation emphasizes on integrating objective and subjective comments, experts give scores rather subjectively. So, in order to prevent experts from subjective scores, people under evaluation need to provide information quantity of index [5]. To reduce operational difficulty, relevant staffs decide to use fuzzy comprehensive evaluation to calculate the weight value of second-grade indexes and then define comprehensive evaluation value during the evaluation process of talent team construction's quality. To be more detailed,

First, construct corresponding judgement matrix of first-grade and second-grade indexes via Analytical Hierarchy Process (AHP), figuring out weight coefficients of these indexes respectively.

Second, calculate the weight values of second-grade indexes and check their consistency ratios based on the structure ability index chart and Aphtha formula used by this thesis to calculate second-grade indexes' weight values is as follows:

$$T_{ij} = W_i * Y_{ij} \tag{1}$$

In this formula,  $T_{ij}$  refers to total weight value;  $W_i$  refers to weight coefficients of first-grade indexes;  $Y_{ij}$  refers to weight of second-grade indexes to first-grade indexes.

Third, set the weight index as Wi, the general index of the index set corresponding to second-grade indexes as  $CI_i$ , the average index as  $RI_i$ . Then, calculate the ratio of random consistency based on the following formula:

$$CR = \frac{\sum_{i=1}^{4} W_i CI_i}{\sum_{i=1}^{4} W_i RI_i}$$

$$(2)$$

If CR < 0.1, this model is consistent with consistency requirements.

## 3 Scenario Analysis

The supposed scenario is that E is an evaluation system for the quality index of talent teams in well-established universities administrated by ministries, while e is that of talent teams in local colleges and universities. By comparing the importance of relevant factors, a comparative judgment matrix at each level is constructed. When constructing the matrix, with a reference to Satty's proposal, we contrast between all the indexes their importance as to the factors at the previous level. "1" indicates that the two indexes are of the same importance; "3" indicates that index I is slightly more important than index II; "5" indicates that index I is normally more important than index II; "7" indicates that index I is much more important than index II; "9" indicates that index one is significantly more important than index two; "2", "4", "6" and "8" indicate that index I is more important than index II, and such disparity of their importance is between the intensity of the upper two; "1, 1/2,..., 1/9" indicates the ratio of their intensity is quite the opposite to two former ones. According to the above model, the index weights are as follows. (The data used to construct the matrix are obtained with a reference to opinions of experts)

#### 3.1 Analysis of First-grade Index Model

From the table 2, the overall quality evaluation model of the talented teams of well-established universities under ministries is:

$$E = 0.075B_1 + 0.333B_2 + 0.592B_3 \tag{3}$$

The overall quality evaluation model of local colleges is:

$$e = 0.113b_1 + 0.179b_2 + 0.709b_3 \tag{4}$$

Ministry affiliated	Basic	Teaching	Academic		Local	Basic	Teaching	Academic	
Universities	Condition	Competence	Research	$W_{i}$	Colleges	Condition	Competence	Research	$W_{i}$
E	$\mathbf{B}_1$	$\mathrm{B}_2$	$B_3$		e	$b_1$	$b_2$	b <sub>3</sub>	
Basic Condition B <sub>1</sub>	1	1/5	1/7	0.075	Basic Condition b <sub>1</sub>	1	1/2	1/5	0.11
Teaching  Competence $B_2$	5	1	1/2	0.333	Teaching Competence b <sub>2</sub>	2	1	1/5	0.17 9
Academic Research	7	2	1	0.592	Academic Research b <sub>3</sub>	5	5	1	0.70 9
λmax = 3.014	CR=0.012				λmax = 3.054	CR=0.047			

Table 2: Judgment and Weighting for the First-grade Indexes in Quality Index Evaluation System as for the two categories of universities mentioned above

#### 3.2 Comparative Analysis

According to (3) (4), the weights of ministry-affiliated universities are relatively balanced in the aspect of basic condition, teaching competence, and academic research. In contrast, the weights of the local colleges are relatively higher than those of those famous affiliated universities as in the indexes of basic conditions and academic research, but lower in teaching competence.

This is mainly because local colleges and universities are comparatively more dependent on government investment. Furthermore, the results of academic research are usually more obvious than teaching competence and more likely to be favored by the government. Therefore, local colleges tend to prefer academic research achievements, such as journals, projects, etc., in exchange for more government investment. In the same way, the basic conditions, e.g. the academic degree of the talents, are usually positively correlated with their scientific research achievements, so that local colleges pay more attention to this index than those affiliated to ministries.

The following figure vividly reflects the comparison between ministry-affiliated universities and local colleges in terms of their weights of the first-grade indexes.

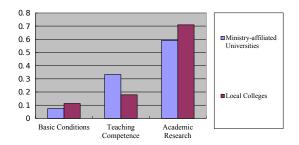


Figure 1: Contrast between First-grade Index Weights of Ministry-affiliated Universities and Local Colleges

# 3.3 Optimizing the Building of Local College Talent Team from the Perspective of "Double Frist-Class" Construction

First of all, it can be concluded from the above analysis that the difference between famous ministry-affiliated universities and local colleges is mainly because local colleges are dependent on tuition and government investment. If the introduction of talents is to be supported, the efforts devoted into capital construc-

tion and talent training will be reduced. How to maintain the balance between these has naturally become the first problem to be solved by local colleges. As nowadays "Double First-Class" construction is put much emphasis on, local colleges should increase investment in talent introduction and complete the construction of relevant mechanisms through an integration of scientific research platforms, talent introduction and discipline construction. Besides, it is also advised to work with the government and enterprises to formulate a practical integrated development strategy and optimize the existing talent introduction mechanism [6].

Secondly, it can be deduced from the above charts that compared with local colleges and universities, the weights of the various indexes of ministry-affiliated universities are more balanced. Therefore, local colleges should strive to achieve a balanced development of academic talents and applied talents, so as to pave the way for the construction of dual-teacher teams. On one hand, the "Double First-Class" construction requires local colleges to pay attention to the training of faculty. A practical training plan is supposed to be drawn up based on the teaching competence and knowledge system. This act is to ensure that each teacher can obtain a systematic and effective training, so that the level of teachers will naturally be improved. On the other hand, local colleges should encourage teachers to participate in practical activities, and to make use of the opportunities brought by "Double First-Class" construction. In this way, they can improve their practical ability and professional skills. Thus, a combined method of both theories and practices will be ensured in daily teaching, so that students' interests can be effectively stimulated [7].

Thirdly, a rational view should be given on the above-mentioned differences between the indexes of ministry-affiliated universities and local colleges. The construction of talent-team system in local colleges should be adapted to their specific conditions, and there is no need for them to totally follow the pattern of ministry-affiliated universities. Local colleges should not only pay attention to the introduction of foreign teachers, but also strengthen the training of faculty. It is suggested to comprehensively use existing methods in order to stimulate teachers' initiative. The integration of training objects and content will be helpful to ensure that teachers have ideal work efficiency and competence. Furthermore, the mechanism for training talented faculty should be improved. Innovative capabilities and practical skills should also be included in the training, as well as professional knowledge, professional ethics and ideological status. With the help of overseas exchanges and course training, it should be ensured that the work carried out for the construction of the system will achieve the desired results [8].

Lastly, measures should be taken to cope with the problem that the talent evaluation indexes of local colleges emphasize much on qualifications and scientific research more on capabilities and teaching competence. Local colleges may build a hierarchy incentive system to enact proper and resentful rewards and punishments according to different posts and career stages. Both moral encouragements and material rewards should be offered for leading figures, so as to guarantee the unique constraints and incentives of this system. In addition, local colleges should also reinforce the evaluation of teacher performance. Classified guiding principles should be integrated into hierarchical assessment. The evaluation of teaching competence should be completed based on career stage and work contents. It should be focused on teaching competence, scientific research and professional ethics, in an effort to ensure that the conclusions of the evaluation are of due value[9].

#### 4 Conclusions

As can be concluded from the above, guided by "Double First-Class" construction, local colleges should avoid putting the cart before the horse. They should make clear their principle of running the college based on their own needs. Meanwhile, local colleges should also consider featured majors and faculty to be the focus of their development, and increase the proportion of first-class disciplines. To achieve above-mentioned goals, the key is to regard the leading scholars of dominant disciplines and featured majors as the focus of talent training. Studies have shown that young talents often have a more scientific teaching model, more advanced teaching concepts, and a broader teaching horizon. Therefore, they can contribute to the "Double

First-Class" construction.

In addition, in order to significantly enhance their own capabilities, local colleges should also recognize the current plight of building talent teams. They are supposed to comprehensively analyze the factors that affect the level of talent team building. Then measures should be taken, such as focusing on the introduction of professional talents, cultivating existing talent teams, building a talent team system, and improving management systems of talent training, etc. These measures will help guarantee indispensable talents for the "Double First-Class" construction, in an effort to continuously strengthen the competitiveness and talent attraction of local colleges.

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