

Investigation and Analysis on Employment of Chinese Undergraduate Graduates

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ABSTRACT

This paper sorts out the data in the employment quality report of colleges and universities, and studies the employment structure, employment choice and reasons of graduates under the first round of "double-first-class" construction policy. It is found that the employment quality of "double-first-class" colleges reflects a higher level, and students' sense of social responsibility is more fully cultivated, which guides graduates to work in key areas and fields.

KEYWORDS

Universities; undergraduate graduates; employment; survey

INTRODUCTION

At present, when higher education has become the most important device of the country, building a world-class university has become an important strategy of China. Over the past 20 years, from the "211 Project" to the "985 Project", China's education has developed rapidly, and many universities have emerged in the world. China has gradually formed a group of excellent universities. In 2015, the State Council issued the "Overall Plan for Promoting the Construction of World-class Universities and First-class Disciplines as a whole", which put forward general ideas for the construction and development of China's higher education in the next stage. From September 2017, the first batch of "double first-class" construction lists were released, and the first round of construction officially ended in 2020. In September 2020, each double first-class construction university completed the cycle summary. In March 2021, the Ministry of Education, together with the Ministry of Finance and the National Development and Reform Commission, issued the notice of "Measures for Evaluating the Effectiveness of Double First-Class Construction (Trial)" to promote the first-round evaluation of the effectiveness of double first-class construction, with a view to providing the main basis for the second-round construction of double first-class. In this document, talent cultivation becomes an important criterion in evaluation (Zhou et al, 2012).

Talent cultivation in colleges and universities is not only an important criterion for world-class universities, but also one of the most important issues of the state and society. College talents are an important human resource of the country (Wang and Tian, 2020). In the documents of "Overall Plan for Promoting the Construction of World-class Universities and First-class Disciplines as a Whole" and "Guiding Opinions on Accelerating the Construction of" Double-class "in Colleges and Universities", the desired talent training goal is mentioned, that is, "doing a good job in students' employment and entrepreneurship, encouraging students to shine at the grass-roots level and show their talents in serving the national development strategy". Then, under the impetus of the "double-first-class" policy, what is the employment status and employment choice of college graduates, what effect will this policy play on the employment choice of college graduates, and what impact will it bring? The discussion on this issue will give suggestions for the second round of "double-first-class" construction, and provide the basis for talent training in Chinese universities.

RESEARCH METHOD

There are many factors that affect the employment choice and satisfaction of college graduates. Based on the literature review, predecessors' analysis and the research theme of this paper, this paper finally designs a questionnaire from the perspective of "double-top" college graduates. The questionnaire is divided into three parts: the first part is the demographic variables of the sample, including gender, type of undergraduate colleges, location of colleges and universities, current grade or status. The second part is a non-scale question, including the reasons for employment choice and the views on the "double-first-class" policy. The third part is the scale question, using the 5-level Likert scale, setting the degree of satisfaction that is very dissatisfied, unsatisfied, general, satisfied and very satisfied, investigating students' satisfaction with the employment and entrepreneurship guidance of undergraduate colleges, that is, education and teaching, and exploring the problems existing in guiding the employment of college graduates by the "double-first-class" policy.

Because the questionnaire contains scales, in order to ensure the smooth implementation of the questionnaire survey, the questionnaire needs to be pre-tested. A total of 53 questionnaires and 50 valid questionnaires were collected in this pre-test.

RESULTS AND DISCUSSION

Reliability and validity test, that is, to test the reliability and validity of the scale part of the questionnaire. Reliability test refers to the reliability test of the questionnaire. The alpha coefficient is analyzed. When the alpha coefficient is higher than 0.9, it shows that the scale has good reliability and high internal consistency. When the α coefficient is between 0.7 and 0.9, the reliability of the scale is good. When the α coefficient is below 0.7, the reliability is poor and the scale needs to be revised.

As can be seen from the table below, the cloned Bach based on standardized items is 0.947, which is greater than 0.9, indicating that the reliability of the scale is good.

Table 1. Reliability analysis of clonal Bach in pre-test questionnaire

Subject	Scaling average after deleting items	Scale variance after deleting items	Correlation between revised item and total	Square multiple correlation	Clone Bach Alpha after deleting item	Cloning Bach Alpha based on standardized terms
1	39.58	70.902	0.767	0.687	0.94	
2	39.76	68.513	0.74	0.661	0.941	
3	39.78	68.175	0.733	0.707	0.941	
4	39.74	70.033	0.706	0.713	0.942	
5	39.66	69.984	0.777	0.835	0.94	
6	39.8	68.327	0.747	0.595	0.94	
7	39.7	68.949	0.772	0.786	0.94	0.947
8	39.88	69.047	0.747	0.765	0.94	
9	39.56	71.394	0.752	0.729	0.941	
10	39.36	69.827	0.763	0.66	0.94	
11	39.38	70.812	0.711	0.666	0.941	
12	39.54	70.049	0.773	0.682	0.94	
13	39.54	71.192	0.59	0.535	0.945	

In order to ensure the validity of the questionnaire, the validity of the questionnaire was analyzed. The closer KMO value is to 1, the stronger the correlation of representative variables, and the significance of Bartlett test should be less than 0.05. As can be seen from the table below, the KMO value of this questionnaire is $0.890 > 0.7$, and the significance is $0.000 < 0.05$, which shows that each index of this questionnaire has a high correlation, and it is suitable to use the factor analysis method.

Table 2. Pre-test questionnaire KMO and bartlett test

KMO sampling suitability quantity.	0.890
Approximate chi-square	477.667
Bartlett sphericity test	seventy-eight
freedom	seventy-eight
significance	0.000

It can be seen that the 13 items in the scale can be divided into two dimensions, and the cumulative variance contribution rate of these two dimensions is $68.136\% > 60\%$, which shows that the dimensions are well divided.

Table 3. Explanation of total variance of pre-test questionnaire

Component part	Initial eigenvalue			Extract the sum of load squares			Square sum of rotating load		
	amount to	Variance percentage	Cumulative%	amount to	Variance percentage	Cumulative%	amount to	Variance percentage	Cumulative%
1	7.94	61.079	61.079	7.94	61.079	61.079	5.078	39.062	39.062
2	0.917	7.057	68.136	0.917	7.057	68.136	3.78	29.073	68.136
3	0.848	6.521	74.657						
4	0.703	5.408	80.065						
5	0.523	4.022	84.087						
6	0.424	3.265	87.351						
7	0.379	2.915	90.267						
8	0.315	2.425	92.692						
9	0.277	2.134	94.826						
10	0.259	1.993	96.819						
11	0.203	1.559	98.378						
12	0.115	0.881	99.258						
13	0.096	0.742	100						

Method: Principal component analysis.

As can be seen from the table below, Q12 failed the validity test, and the load in both dimensions was higher than 0.5, which was an invalid item and was deleted. The rest items, which only have a load higher than 0.5 in a single dimension, are valid items, and have passed the validity test and been retained.

Table 4. Component Matrix of Pre-test Questionnaire after Rotation

Subject	Component part	
	1	2
Q5	0.856	
Q7	0.814	
Q8	0.773	
Q1	0.702	
Q6	0.687	
Q2	0.686	
Q3	0.684	
Q4	0.622	
Q13		0.795
Q9		0.781
Q10		0.753
Q11		0.673
Q12	0.512	0.657
Method: Principal component analysis.		
Method: Caesar normalized maximum variance method.		
A. the rotation has converged after 3 iterations.		

Based on all the above analysis, the eight items Q5, Q7, Q8, Q1, Q6, Q2, Q3 and Q4 belong to dimension 1. According to the investigation contents of these items, we can know that dimension 1 is the satisfaction dimension of employment and entrepreneurship guidance. The four items Q13, Q9, Q10 and Q11 belong to dimension 2. According to the research contents of these items, we know that dimension 2 is the satisfaction of teaching and training.

According to the results of the pre-inspection, the questionnaire is revised and then formally investigated. See the appendix for the final questionnaire.

Questionnaire analysis

Composition of survey data

The research object of this survey involves two groups, namely, freshmen and graduates of double-class universities and non-double-class universities within three years after graduation. This research adopts the form of online questionnaire to investigate.

A total of 483 questionnaires were collected in this survey, and 460 questionnaires were finally valid, with an effective rate of 95.24%. Among them, there are 46 students in first-class universities, accounting for 10.43%; 124 students in first-class disciplines, accounting for 26.96%; 89 students in first-class disciplines, accounting for 19.35%; and 199 students in non-double first-class universities, accounting for 43.26%. According to grades, there are 188 junior students, accounting for 40.87%, 182 fresh graduates (seniors), accounting for 39.57%, and 90 previous graduates, accounting for 19.56%. The key objects of this study are fresh graduates and previous graduates. Fresh graduates can reflect the current situation and the first employment situation more timely, while the employment situation of previous graduates is more stable, and their work experience enables them to know their work situation and their own ideas more accurately.

Table 5. Basic information of survey samples

Variable	Category	Number/ person	Percentage %
Gender	Male	195	42.39
	Woman	265	57.61
Identity category	Junior students at school	188	40.87
	Fresh graduate	182	39.57
	Past graduates	90	19.56
Type of institution	First-class universities build universities.	48	10.43
	First-class disciplines build universities, and the majors studied are first-class disciplines.	124	26.96
	First-class discipline construction universities, majors are not first-class disciplines.	eighty-nine	19.35
	Non-first-class universities	199	43.26

From the geographical distribution of universities, there are 254 undergraduate universities in the eastern region, accounting for 55.22%, 33 universities in the northeast region, accounting for 7.17%, 84 universities in the central region, accounting for 18.26%, and 89 universities in the western region, accounting for 19.35%. Overall, the overall distribution of the survey sample is reasonable and representative.

Reliability and validity test of the scale

1. Questionnaire reliability test.

Firstly, the reliability of the scale part of the questionnaire was tested. By analyzing the α coefficient, it can be seen from the table below that the clonal Bach based on the standardized item is 0.947, which is greater than 0.9, which shows that the scale has good reliability.

Table 6. Reliability Analysis of Table 6 Clone Bach

Sub-ject	Scaling average after deleting items	Scale variance after deleting items	Correlation between revised item and total	Clone Bach Alpha after deleting item	Cloning Bach Alpha based on standardized terms
Q1	39.8	57.963	0.68	0.918	
Q2	39.92	56.291	0.702	0.917	
Q3	39.82	56.584	0.705	0.917	
Q4	39.89	56.2	0.683	0.918	
Q5	39.9	56.803	0.712	0.917	
Q6	39.99	55.874	0.7	0.917	
Q7	40.01	55.573	0.723	0.916	
Q8	40.04	56.003	0.675	0.919	
Q9	39.78	57.717	0.693	0.918	
Q10	39.82	56.683	0.664	0.919	
Q11	39.71	56.927	0.675	0.918	
Q12	39.69	58.529	0.576	0.922	

2. Questionnaire validity test.

The validity of the scale part of the questionnaire was tested. In order to ensure the validity and correctness of the questionnaire data, the validity of the questionnaire was

analyzed. As can be seen from the table below, the KMO value of this questionnaire is $0.945 > 0.7$, and the significance is $0.000 < 0.05$, which shows that each index of this questionnaire has a high correlation, and it is suitable to use the factor analysis method.

Table 7. KMO and Bartlett inspection

	KMO sampling suitability quantity.	0.945
Bartlett sphericity test	Approximate chi-square	2916.808
	freedom	66
	significance	0.000

Descriptive statistics analysis

According to the statistical data of the questionnaire, this paper makes a descriptive analysis of the reasons for college graduates' employment choices and students' views on the "double-first-class" policy.

1. Descriptive analysis of the employment status of college graduates.

In this questionnaire survey, the choices of different types of college students and graduates after graduation were investigated. As for the answer to the question "After you graduate from undergraduate course/plan to graduate from undergraduate course", 164 people choose "further study", accounting for 35.65%, 237 people choose "employment", accounting for 51.52%, and 42 people choose "self-employment", accounting for 9.13%. The statistical data classified according to the types of colleges and universities are shown in Table 8. From the data in Table 11, it can be seen that the proportion of first-class university construction colleges and universities going to higher schools is higher than that of first-class discipline construction colleges and universities, and the proportion of first-class discipline construction colleges and universities going to higher schools is higher than that of non-double first-class construction colleges and universities. The employment ratio of non-first-class universities is much higher than that of second-class universities. However, the non-employment ratio of double-class universities is higher than that of non-double-class universities.

Table 8. Selection statistics after graduation

Types of colleges and universities	Further studies (%)	Employment (%)	Self-employment (%)	Unemployed (%)
First-class universities build universities.	41.67	47.92	4.17	4.17
First-class disciplines build universities, and the majors studied are first-class disciplines.	38.71	41.13	16.13	4.03
First-class discipline construction universities, majors are not first-class disciplines.	38.2	44.94	13.48	3.37
Non-first-class universities	31.16	61.81	4.02	2.01

2. Descriptive analysis of the reasons why college students choose after graduation.

This paper investigates the four reasons for choosing after graduation: further studies, employment, self-employment and non-employment.

First of all, make a statistical analysis of the reasons for choosing to go to school after graduation. From the data, we can see that more than 80% of the students in both "double-top" and non-"double-top" universities choose to further their studies because they want to

"improve their comprehensive quality and ability" and "enhance their employment competitiveness". More "double-class" college students who choose to pursue further studies are "hoping to pursue academic research", while more non-double-class college students choose to pursue further studies are "unwilling to find employment" or "employment pressure is high/there are no satisfactory employment opportunities". The results of this survey are very consistent with the current reality. It can be seen that although students of "double-class" universities all want to improve their own strength and competitiveness and choose to go to higher education, compared with students of "double-class" universities, students of non-"double-class" universities are more inclined to actively or passively evade employment because their undergraduate universities are less competitive in the job market and face greater employment pressure.

Descriptive analysis of the reasons why college students choose employment after graduation. The reasons for choosing employment are quite different between "double-top" college students and non-"double-top" college students. 65.79% of "double-class" college students choose to get employment directly after graduation because of "satisfactory employment opportunities", but only 39.02% of non-"double-class" college students choose employment because of "satisfactory employment opportunities". The reasons why non-double-top-ranking college students choose employment are that the proportion of "unwilling to go to graduate school" and "high pressure for further studies/unwilling to go to graduate school" is 17.48% and 14.46% higher than that of "double-top-ranking" college students. It can be seen that the proportion of non-"double-first-class" college students who can pursue further studies and want to pursue further studies is lower than that of "double-first-class" college students, which is also an important reason why they choose employment. This data is in good agreement with the current employment situation.

Descriptive analysis of the reasons why college students choose to start their own businesses after graduation. As for the reasons for choosing self-employment, both "double-top" college students and non-"double-top" college students mainly choose "hope to realize their personal ideal through entrepreneurship", "be interested in entrepreneurship" and "expect to have higher income". In addition, the proportion of "double-class" college students who choose "expecting higher income", "having good entrepreneurial projects" and "being invited by others to start a business" is 20% to 35% higher. It can be seen that a larger proportion of "double-first-class" college students have better entrepreneurial projects than non-"double-first-class" college students, while a higher proportion of non-"double-first-class" college students hope to realize their personal ideals through entrepreneurship.

Descriptive analysis of the reasons why college students choose not to work after graduation. According to the data, the main reasons why students of "double-class" universities choose not to find jobs after graduation are "preparing to start their own businesses", "preparing for public examinations, textual research, etc." and "preparing to continue the postgraduate entrance examination", instead of "preparing to continue the postgraduate entrance examination". It can be seen that the main reason why most students choose not to work is to make more preparations for future employment to enhance their competitiveness.

3. Descriptive analysis of workplace selection.

The statistics of the choice of employment and entrepreneurship areas for college students after graduation are shown in Tables 9 and 10. As far as all colleges and universities are concerned, 91.16% of college graduates from the eastern region stay in the eastern region for employment, and 82.35% of college graduates from the western region stay in the western region for employment, while only 27.78% of college graduates from

the northeastern region stay in the northeastern region for employment, while 61.11% go to the eastern region for employment.

Table 9. Statistical table of workplace selection in colleges and universities

Category		East	The Northeast area	Midland	Western part of the country
Types of colleges and universities	First-class universities and disciplines of the world	62.16	4.05	10.81	22.97
	Non-double-class	59.54	2.29	15.27	22.90
University area	East	91.16	2.04	2.04	4.76
	The Northeast area	61.11	27.78	11.11	0.00
	Midland	34.78	2.17	60.87	2.17
	Western part of the country	13.24	0.00	4.41	82.35

As far as "double-first-class" universities are concerned, 91.14% of graduates of "double-first-class" universities in the eastern region choose to stay in the eastern region for employment, 69.23% of graduates of "double-first-class" universities in the northeast region choose to go to the eastern region for employment, and 38.10% of students of "double-first-class" universities in the central region also choose to go to the eastern region after graduation.

The overall employment trend is biased towards the eastern region.

Table 10. Statistical Table of Workplace Selection in Double-top Universities

Category		East	The Northeast area	Midland	Western part of the country
Types of colleges and universities	First-class university	52.00	0.00	16.00	32.00
	First-class discipline	64.23	4.88	9.76	21.14
University area	East	91.14	3.80	1.27	3.80
	The Northeast area	69.23	15.38	15.38	0.00
	Midland	38.10	4.76	52.38	4.76
	Western part of the country	8.57	0.00	5.71	85.71

The statistics of the relationship between the choice of employment and entrepreneurship areas and the location of university or hometown after college graduates are shown in Tables 11 and 12. As far as all colleges and universities are concerned, more than half of college students choose to work in their hometowns or universities and their hometowns, and 47.30% of "double-top" college students choose to work in universities or universities and their hometowns, while the proportion of non-"double-top" college students who choose to work in universities is even lower. As far as regions are concerned, 48.23% of students' hometown is not in the eastern region, but they choose to work in the eastern region, which is about 15% to 20% higher than the other three regions.

Table 11. Statistical table of the relationship between the choice of university workplace and the location of university or hometown

Category		University seat	Hometown location	And the hometown of the university	Non-university or hometown
Types of colleges and universities	First-class universities and disciplines of the world	29.73	35.81	17.57	16.89
	Non-double-class	19.85	41.98	20.61	17.56
Regional employment	East	25.29	34.71	17.06	22.94
	The Northeast area	0.00	55.56	11.11	33.33
	Midland	16.67	50.00	22.22	11.11
	Western part of the country	32.81	40.63	23.44	3.13

As far as "double-first-class" universities are concerned, a larger proportion of first-class discipline construction university students choose to work in their hometown or university and their hometown, while the proportion of first-class discipline construction university students working in non-university or hometown (20.00%) is higher than that of first-class discipline construction universities (16.26%). As far as the employment area is concerned, the employment area is not a university or hometown, and the eastern area (21.74%) is higher than the central area (6.25%) and the western area (2.94%).

Table 12. Statistical table of the relationship between workplace selection of double-class universities and the location of universities or hometown

Category		University seat	Hometown location	and the hometown of the university.	Non-university or hometown
Types of colleges and universities	First-class university	32.00	44.00	4.00	20.00
	First-class discipline	29.27	34.15	20.33	16.26
Regional employment	East	26.09	35.87	16.30	21.74
	The Northeast area	0.00	50.00	0.00	50.00
	Midland	31.25	31.25	31.25	6.25
	Western part of the country	44.12	35.29	17.65	2.94

Analysis and statistics on the reasons for choosing the place of employment. Compared with "double-first-class" universities, students in non-"double-first-class" universities pay more attention to "family factors", "work and living environment" and "stability and low pressure" when choosing employment places. While "double-top" college students pay more attention to "development prospects", "policy support" and "social responsibility". All college students pay more attention to family factors, income and treatment, development prospects and working and living environment. The proportion of students in "double-class" universities who choose "stability and low pressure" is the lowest, accounting for 23.65%, while the proportion of students in non-"double-class" universities who choose "social responsibility" is the lowest, accounting for 14.50%. From this statistic, we can see that there are some differences between them in the reasons for choosing the place of employment.

4. Descriptive analysis of the "double first class" policy.

A survey on the influence of the "double-class" policy on employment and entrepreneurship of students in "double-class" universities shows that 85.66% of students in "double-class" universities think that the "double-class" policy has a positive impact on

their employment and entrepreneurship, 10.47% students think it has no impact, and 3.88% students think it has a negative impact.

A survey on the influence of the "double-first-class" policy on employment and entrepreneurship of non-"double-first-class" college students shows that 58.82% of non-"double-first-class" college students think that the "double-first-class" policy has a positive impact on their employment and entrepreneurship, 15.51% of them think it has no impact, and 25.66% of them think it has a negative impact.

According to the investigation and statistics on the positive impact of the "double-first-class" policy on employment and entrepreneurship, it can be seen that a large proportion of "double-first-class" college students and non-"double-first-class" college students think that the policy "promotes the development of scientific research and teaching in undergraduate schools and improves their abilities", while compared with non-"double-first-class" college students think that the policy "makes undergraduate schools more competitive in the job market"

Based on the investigation and statistics of the negative effects of the "double-first-class" policy on the employment and entrepreneurship of college students, 89.58% of the non-double-first-class college students who think that the "double-first-class" policy has negative effects think that the employment competitiveness of non-double-first-class schools is declining. In addition, 40% of the students in "double-first-class" universities who think that the "double-first-class" policy has a negative impact respectively think that "inter-regional guarantee fund investment is unbalanced" and "disadvantaged disciplines are marginalized", while those in non-"double-first-class" universities are 60.42% and 62.50% respectively.

Based on the above analysis, there are some differences between the students of "double-first-class" universities and those of non-"double-first-class" universities in their choices after graduation. Compared with non-"double-first-class" universities, students of "double-first-class" universities are more willing to go to school than to get employment. Non-"double-first-class" college students prefer direct employment, but the proportion of them choosing employment because they get satisfactory job opportunities is much lower than that of "double-first-class" college students. In the choice of employment location, "double-top" college students are more inclined to work in the university location, and the overall flow of graduates is mainly in the eastern region. As for the influence of the "double-first-class" policy on it, most students in "double-first-class" universities think that the policy has a positive impact on it, while a few students think that the policy has a negative impact on it, mainly due to the uneven investment in regional security funds and the marginalization of vulnerable disciplines (Jiang et al, 2018).

The relevant analysis of university policies in guiding the employment of undergraduates in universities

Difference analysis of teaching and employment satisfaction between "double-class" universities and non-"double-class" universities

After analyzing the questionnaire data, it is found that the satisfaction data of the questionnaire does not conform to the normal distribution, so the sub-parameter test method is used to judge the difference. Through the nonparametric test of independent samples, this paper analyzes the relationship between the types of colleges and universities, employment and entrepreneurship guidance, teaching and training satisfaction, and the results are shown in Table 13. Both P values are less than 0.05, so the difference is significant. It can be seen that there are significant differences between "double-class"

universities and "non-double-class" universities in employment and entrepreneurship guidance satisfaction and teaching and training satisfaction.

Table 13. Non-parametric inspection table

		Degree of satisfaction	Z	p
Employment guidance	Double-top universities	3.88 (3.38~4.25)	-7.112	0.000
	Non-first-class universities	3.25 (2.85~3.88)		
Teaching training	Double-top universities	4.00 (3.50~4.25)	-6.285	0.000
	Non-first-class universities	3.75 (3.00~4.00)		

Analysis of the current situation of "double-first-class" policy to guide the employment of undergraduates in colleges and universities

1. Analysis of the current situation of employment guidance in colleges and universities

Evaluate students' satisfaction with employment guidance in colleges and universities through four factors: sufficiency, characteristics, practicality and adequacy of employment resources. As shown in Table 14, as far as the types of universities are concerned, in terms of employment guidance, the overall satisfaction of universities with first-class disciplines is higher than that of universities with first-class universities, especially in terms of characteristics and the adequacy of employment resources. As far as universities are concerned, students in the western region are most satisfied with the enrichment of employment guidance work in universities, reaching 4.04, while the enrichment of universities in the northeast region is lower, reaching 3.29. On the adequacy of employment resources, Northeast China is the lowest compared with the other three regions, which is 3.38.

Through the above data analysis, it can be seen that the satisfaction degree of employment guidance in the first-class discipline-building universities is higher than that in the first-class discipline-building universities, and the satisfaction degree of employment guidance in the universities in Northeast China is more discrete and the average value is lower. As far as different factors are concerned, the satisfaction of employment guidance work is lower than the other three factors.

Table 14. Statistical Table of Satisfaction of Employment Guidance in Double-top Universities

Category	Index	Abundance	Characteristic	Practicability	Adequacy of	
					employment resources	
Types of colleges and universities	First-class university	Average value	3.81	3.65	3.79	3.69
		Standard deviation	0.78	0.95	0.84	0.74
	First-class discipline	Average value	3.92	3.82	3.92	3.87
		Standard deviation	0.74	0.88	0.78	0.83
	East	Average value	3.95	3.80	3.92	3.91
		Standard deviation	0.69	0.86	0.80	0.76
University area	The Northeast area	Average value	3.29	3.71	3.71	3.38
		Standard deviation	0.93	1.12	0.82	1.09
	Midland	Average value	3.85	3.73	3.98	3.90
		Standard deviation	0.79	0.84	0.69	0.86
	Western part of the country	Average value	4.04	3.81	3.87	3.77
		Standard deviation	0.68	0.92	0.83	0.75

2. Analysis of the current situation of entrepreneurship guidance in colleges and universities.

Evaluate students' satisfaction with entrepreneurial guidance in colleges and universities through four factors: richness, characteristics, practicality and sufficiency of entrepreneurial resources. As shown in Table 15, as far as the types of universities are concerned, the satisfaction of entrepreneurial guidance work in first-class discipline-building universities is higher than that in first-class universities. The satisfaction of the fullness of entrepreneurial guidance work in central and western regions is higher, which is 3.90 and 3.85 respectively, while the satisfaction of the sufficiency of entrepreneurial resources in eastern and northeastern regions is higher, which is 3.76 and 3.67 respectively.

Compared with the previous statistics of employment guidance job satisfaction, we can find that the overall employment guidance job satisfaction in the region is particularly reflected in three aspects: sufficiency, practicability and sufficiency of entrepreneurial resources.

Table 15. Statistical Table of Satisfaction of Entrepreneurship Guidance in Double-top Universities

Category		Index	Abundance	Characteristic	Practicability	Adequacy of entrepreneurial resources
Types of colleges and universities	First-class university	Average value	3.69	3.63	3.58	3.48
		Standard deviation	0.89	0.95	0.89	0.91
	First-class discipline	Average value	3.81	3.69	3.70	3.76
		Standard deviation	0.78	0.96	0.90	0.89
University area	East	Average value	3.77	3.68	3.72	3.76
		Standard deviation	0.85	0.95	0.90	0.81
	The Northeast area	Average value	3.57	3.67	3.38	3.67
		Standard deviation	0.73	1.17	0.90	0.94
	Midland	Average value	3.90	3.65	3.65	3.63
		Standard deviation	0.77	0.96	0.82	1.09
	Western part of the country	Average value	3.85	3.71	3.69	3.63
		Standard deviation	0.69	0.88	0.93	0.96

3. Analysis of the current situation of teaching and training in colleges and universities

This paper evaluates students' satisfaction with the teaching and training work in colleges and universities through four factors: characteristics, practicality, adequacy of educational resources and cultivation of social responsibility. As shown in Table 16, as far as the types of colleges and universities are concerned, the satisfaction of teaching and training in first-class universities and first-class disciplines is relatively close. As far as colleges and universities are concerned, the overall satisfaction degree of teaching and training of colleges and universities in the eastern region is higher than that of the other three regions, while the practicality of teaching and training in the western region is only lower than that in the eastern region, but the adequacy of its educational resources is the lowest compared with the other three regions, which is 3.88. The satisfaction degree of teaching and training characteristics, practicality and social responsibility training of universities in Northeast China is low, which are 3.48, 3.57 and 3.62 respectively, and the degree of dispersion is high.

Compared with the previous job satisfaction of employment and entrepreneurship guidance, students' satisfaction with teaching and training in colleges and universities is

generally higher, especially in the characteristics of teaching and training and the adequacy of educational resources.

Table 16. Statistical Table of Satisfaction of Teaching and Training in Double-top Universities

	Category	Index	Charac- teristic	Practic ability	Adequacy of educational resources	Cultivation of social responsibility
Types of colleges and universities	First-class university	Average value	3.92	3.81	3.88	3.92
		Standard deviation	0.61	0.99	0.78	0.89
	First-class discipline	Average value	3.88	3.87	4.03	3.95
		Standard deviation	0.73	0.87	0.78	0.85
University area	East	Average value	3.94	3.90	4.05	4.02
		Standard deviation	0.65	0.85	0.75	0.83
	The northeast area	Average value	3.48	3.57	3.90	3.62
		Standard deviation	0.96	1.09	0.97	1.09
	Midland	Average value	3.93	3.83	4.03	3.90
		Standard deviation	0.82	1.00	0.82	0.83
	Western part of the country	Average value	3.87	3.88	3.88	3.90
		Standard deviation	0.62	0.82	0.75	0.79

CONCLUSION

After statistical analysis of the overall employment situation of "double-first-class" universities, it is found that "double-first-class" universities have good overall employment implementation rate, high employment quality and high employment satisfaction. And has a high rate of further study and a more balanced graduation destination. "Double-class" colleges and universities also fully cultivate students' sense of social responsibility, and guide graduates to work in key areas and fields.

At the same time, however, we can also see that this policy has some problems in guiding the employment of undergraduates in colleges and universities. First, the "Matthew effect" of graduates' spatial mobility is obvious, and the employment trend to the eastern region is obvious. Second, the characteristics of the "double-first-class" policies of different universities are not strong, especially the characteristics of employment guidance. Third, the phenomenon of "slow employment" in "double-first-class" colleges and universities is obvious, resulting in double waste of human resources and educational resources.

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