

Research on the Quality Evaluation of Talents Training in Colleges and Universities Under the Social Evaluation of Big Data on Social Network——Taking the Construction and Effectiveness of Quality Assurance System as an Example

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Abstract: The Nineteenth National Congress of the Communist Party of China proposed to provide education that the people are satisfied with, and how to handle education that is recognized by the society and the public is closely related to the quality of talent training in our colleges and universities. There are many ways to set up indicators in the talent training quality evaluation system. This paper selects one of the first-level indicators: the construction and effectiveness of the quality assurance system as an example. Based on the universities in Guangdong Province, big data is used to capture a large amount of data on various social platforms. Then, through text sentiment analysis and neural network algorithm, the data is calculated, and it is concluded that "reporting" and "postgraduate entrance examination" are the most concerned keywords in social evaluation. Then the paper analyzes this problem and gives corresponding countermeasures.

Keywords: Social Evaluation; Quality Assurance System Construction and Effectiveness; Big Data

1. Introduction

The 19th National Congress of the Communist Party of China proposed to provide education that the people are satisfied with. How to handle education that is recognized by the society and the public is closely related to the quality of talent training in our universities. Scholars have a variety of ways to set up indicators for the talent training quality evaluation system. This paper selects one of the first-level indicators: the construction and effectiveness of the quality assurance system as an example, and analyzes the universities in Guangdong Province, using big data and text sentiment analysis methods. Mainstream websites crawl huge amounts of data. Then, the data is calculated by the neural network algorithm, and it is concluded that "registration" and "postgraduate entrance examination" are the most concerned keywords in social evaluation. Then the paper analyzes this problem and gives corresponding countermeasures.

2. Design of the research plan

2.1 Determination of indicators and keywords

This paper mainly selects one of the first-level indicators in the talent training system: the construction and effectiveness of the quality assurance system. The second-level indicators below the first-level indicators are teaching evaluation, subject competition, registration rate, postgraduate entrance examination rate and graduation thesis topic selection. The key word for teaching evaluation is "assessment"; the key word for subject competition is "competition, challenge cup, IETPC (Innovation and Entrepreneurship Training Program for College Students) "; the key word for registration rate is "registration"; the key word for postgraduate entrance examination rate is "postgraduate entrance examination and research preparation".

2.2 Data sources

Taking provincial universities of Guangdong as the research object, this paper uses crawler technology to capture the social evaluation text information of these universities, and forms an original database through positioning analysis, screening and extraction, and then extracts information about the construction and effectiveness of the quality assurance system from the original database. Evaluation data, the text data on the social platform obtained by the crawler is data cleaned, which has the characteristics of social evaluation data of college talent training quality, and has been processed by word segmentation and part-of-speech tagging. After manual screening and classification, sentiment analysis text sentences about the construction of the quality assurance system and the social evaluation of the effectiveness marked with sentiment polarity are finally obtained. Shown as table 1.

Table 1 The number of text sentences in the construction and effectiveness of the quality assurance system

First-level indicators of talent training	Second-level indicators of talent training	Keywords	Relevant text sentences
Construction and effectiveness of quality assurance system	Teaching evaluation	Evaluate	45
	subject competition	competition	80
		Challenge Cup	6
		IETPC	9
	Check-in rate	check in	156
	Postgraduate entrance examination rate	Postgraduate entrance examination	2231
		Prepare for research	2
	Graduation Design (Thesis) Topics	graduation thesis	85
		Graduation Project	56
		topic selection	48

2.3 Data analysis

Then, the neural network algorithm is used to perform sentiment analysis on the content of each text sentence. The values in the following table represent the comparison of the number of records of positive emotions and negative emotions for each keyword in each university, namely "(number of positive emotions–number of negative emotions)* number of posts", due to limited space, the data of some colleges and universities are now displayed as shown in table 2.

Table 2 Comparison of the number of records of positive emotion and negative emotion

Indicators Key word School Name	Quality assurance system construction and effectiveness						
	Teaching evaluation	Discipline and skill competition			Registration rate	Postgraduate entrance examination rate	
	Evaluation	Competition	Challenge Cup	IETPC	Registration	Postgraduate entrance examination	Preparation for research

Guangdong University of Finance and Economics	0.000	0.000	0.000	0.000	9.000	1040.000	1.000
Guangdong Ocean University	0.000	4.000	0.000	0.000	0.000	72.000	0.000
Guangdong Polytechnic Normal University	-1.000	-1.000	0.000	1.000	-48.000	-1000.000	0.000
Guangdong University of Finance	5.000	-1.000	0.000	0.000	8.000	-260.000	0.000

3. Analysis of results

In the first-level indicator "Quality Assurance System Construction and Effectiveness", only the number of texts obtained for the keywords "Registration" and "Postgraduate entrance examination" is of statistical significance. Among them, there are 18 schools with the keyword "check-in" and with positive emotional texts, and 15 schools with negative ones. The overall result is negative, which indicates that students have some negative comments on the relevant policies and regulations of the school when they check-in; the keywords are There are 40 schools with "postgraduate entrance examination" with positive emotional texts, and only 5 schools with negative ones. This shows that postgraduate entrance examination is a vocabulary that attracts more attention from the society, and it also proves the reason why colleges and universities are highly competitive in postgraduate entrance examination. The data of "competition" is very small, indicating that the social attention of subject competition is not enough, and the proportion of students participating in subject competition needs to be expanded. The graduation thesis (design) is the last part of the talent training program, but there are few keyword search results.

4. Countermeasures and suggestions

4.1 Research aspects

In 2022, there are a total of 4.57 million postgraduate students in the country, with 1.107 million admitted, and the admission ratio is about 24%. This shows that the competition for postgraduate entrance examination is very fierce. Through the previous analysis, we also concluded that postgraduate entrance examination is a keyword with more positive social evaluation and a very high degree of attention. The pass rate of postgraduate entrance examination is also an important dimension to measure the quality of a school's teaching, so colleges and universities should formulate some relevant policies to promote postgraduate entrance examination, such as opening postgraduate entrance examination consulting rooms and postgraduate self-study rooms, and inviting some instructors and experts to mobilize students in the early stage of postgraduate entrance examination. Some colleges and universities have even set up postgraduate entrance examination training classes and postgraduate tutoring classes, which are important measures for colleges and universities to promote the rate of student enrollment.

4.2 Registration

Graduates register and fill in the employment information, which is a key step in the statistics of the employment rate of each university. Every year in the graduation season, colleges and universities will take various measures to promote the

employment of students. The employment rate of students is a major criterion for measuring the quality of talent training in schools. Whether students can contribute to enterprises and units in society is related to colleges and universities. The quality of talent training is closely related. Employment is a matter of great concern to both parents and students, and it is also an important focused aspect of China. Colleges and universities can actively organize various job fairs to attract various employers to the school for recruitment, and they can also actively contact previous brothers and sisters to introduce employment opportunities.

4.3 Disciplinary competition

Subject competition is an important link for students to convert textbook knowledge into practical operation. The data on subject competition analyzed in the previous article is very small, which proves that the society does not pay much attention to subject competition. Colleges and universities need a lot of financial support to organize students to participate in various discipline competitions, The proportion of students participating is not high because the resources are relatively limited. It is suggested that major colleges and universities increase the amount of funding for subject competitions and actively encourage students to participate in various subject competitions.

This paper mainly uses big data, text sentiment analysis method and neural network algorithm to capture and analyze the secondary indicators of the construction and effectiveness of the quality assurance system. and propose corresponding countermeasures. Due to the limitation of time and resources, other keywords can only be adjusted in the follow-up research because the setting is unscientific.

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Fund Project: 2020 Guangdong Higher Education Association "Thirteenth Five-Year Plan" Project for Young Teachers in Colleges and Universities: "Neural Network-based Talent Training Quality Evaluation System for Social Evaluation in Colleges and Universities" (Project No.: 20GQN52); 2021 Guangdong Province Education Science Planning topic (special project of comprehensive education reform): "Research on the Quality Evaluation of Talent Training in Guangdong Provincial Universities Based on Social Network Big Data Social Evaluation" (Project No.: 2021JKZG035)