

# The Influence of the Source Structure of Higher Vocational College Students on Changing Majors and Countermeasures Research

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**Abstract:** The policy of changing majors of college students is an important talent training system in China. It is not only the reform of talent cultivation system in Colleges and universities, but also reflects the reform of “student-centered” talent cultivation mode. Based on the data of changing majors and interview in a college of Shenzhen Polytechnic University as the research sample, this paper studies the influence of different types of students on changing majors by analyzing the enrollment background of the students. Combined with the problems in the process of changing majors, this paper explores and puts forward countermeasures. The purpose of this study is to provide a theoretical basis for the construction of a perfect management mechanism for changing majors, and to provide practical guidance and reference for higher vocational colleges to adjust professional settings and promote discipline reform.

**Keywords:** Student source structure; Changing Majors; Higher vocational colleges

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## 1. Introduction

With the continuous improvement of the higher education system and the deepening reform of the enrollment system in universities, the structure and quality of students in higher vocational colleges have changed. Due to the difference among students' basic knowledge and varying learning backgrounds before enrollment, different types of student exhibit characteristics of alienation and stratification. However, higher vocational colleges adopt the no difference cultivation scheme in talent training, which does not meet the needs of students' personalized development and limits the free development of students' personality. As a result, the phenomenon of changing majors has become increasingly common.

Researchers has found that the policy of changing majors is a direct factor affecting students' choice of majors. Due to different enrollment types, some students of different source types are unable to participate in changing majors. In addition, changing majors is also influenced by various non policy factors, including personal hobbies, employment prospects, the understanding of the major and the degree of adaptation to major learning <sup>[1,2]</sup>. For example, Su et al. found that academic setbacks, employment prospects and interests are the main reasons for students to change majors <sup>[3]</sup>. Yuan Yuan interviewed with students who have changed their majors, the results showed that the main reasons to change majors are mainly to make up for the mistakes in filling out the entrance examination <sup>[4]</sup>. The policy of changing majors is to meet the needs of students' development and stimulate students' learning motivation. However, the policy also increases the occurrence of students blindly following the trend. Therefore, we should focus on solving the policy orientation and talent training mode in order to solve the problem of changing majors. At the same time, it is also necessary to improve the teaching management and operation mechanism in the process of changing majors <sup>[5,6]</sup>.

This study takes the data of changing majors and interview from a certain college of Shenzhen Polytechnic University. By

analyzing the enrollment background of the students who change their majors, this paper studies the influence of different types of students on the changing majors. Combined with the problems in the process of changing majors, this study explores and puts forward countermeasures.

## 2. Current situation of changing majors

### 2.1 Changing major is influenced by learning background of students

This article conducts statistics and analysis on the changing major data of four grades of students in a certain college of Shenzhen Polytechnic University from 2017 to 2020. According to Table 1, the changing major proportion of students from nationwide unified examination (science) is relatively stable, at around 25%. The proportion of students who changing majors in the nationwide unified examination (liberal arts) is relatively high, but it has been decreasing year by year. The proportion of students changing majors in the vocational high school unified examination (Mark as VUE) is gradually increasing from 17.3% to 41.2%.

Table 1 Proportion of different types of students among 2017-2020 grade students who changing majors.

Grade	Total number	nationwide unified examination (science)	nationwide unified examination (liberal arts)	Examination of academic in general high school	vocational high school unified examination
		Proportion	Proportion	Proportion	Proportion
2017	55	26.9%	46.2%	9.6%	17.3%
2018	61	23.0%	49.2%	14.7%	13.1%
2019	33	24.2%	36.4%	3.0%	36.4%
2020	34	23.5%	29.4%	5.9%	41.2%

Through interviews, it was found that the majority of students applying to change majors have the following reasons: (1) The current majors they read are inconsistent with their original intentions. (2) The majors of students studying now are not consistent with the direction of liberal arts or science before they enter the university. (3) The professional knowledge of majors is very difficult to learn and also has no interest to learn. (4) The major of the university is inconsistent with that of the vocational high school. Students hope to continue to study the majors of vocational high school by changing majors. According to the research, it is found that the enrollment background is the main reason for students to change majors. Because too many students change their majors, major enrollment and talent training arrangements will be affected to a certain extent.

### 2.2 The lack of guidance of changing majors for students has a certain impact on their academic performance

Because students lack scientific guidance in the early stage of changing majors, some students lack understanding the majors when applying for changing majors. As a result, students are prone to choose major at random, resulting in lack of interest and difficulty in adapting to the new major. Students who change their majors should not only learn new courses, but also make up for the courses they lack in the early stage. For students with different disciplinary backgrounds, they will have closer connection of major learning and higher major identity after changing to majors of similar disciplines. However, students with interdisciplinary backgrounds lack too many courses, and there are time conflicts between make-up courses and normal courses. The heavy study task makes the students unable to adapt to the study and life of the new major, resulting in the failure to graduate on time.

### 2.3 The choice of new majors for students is limited by educational resources

Whether students can successfully change majors is affected by many factors. Among these factors, the score and the acceptable number of changing major students become the key factors to determine whether students can successfully change to a new major. As the enrollment quota of each major is limited, the hot majors with fierce competition will select the best students after assessment. Only students with excellent examination results can change their majors, while students who need to change their majors due to professional specialties, interests or major maladjustment are not eligible for admission if they do not have excellent examination results. Some students' poor academic performance is precisely because they are not interested in their major. As a result, students'

behavior of truancy, repeat grades and even dropping out of school has a serious adverse impact on the learning atmosphere of the school.

### **3. Countermeasure research**

#### **3.1 Strengthen professional education and career planning education**

Firstly, we should carry out professional cognitive education for students, which can help students establish a sense of identity and belonging to their major as soon as possible. Secondly, it introduces the development prospect and talent training plan of the major for students in detail by setting up the course of introduction to major. The purpose is to make students have a clearer understanding of major learning, so as to make learning planning according to their future development. Thirdly, in combination with school enterprise cooperation and skills competition, students' internship opportunities will be increased to deepen students' understanding of the major and expand their knowledge. Lastly, open a career planning course, and invite outstanding alumni to share their puzzles and experiences in academic or career development, so that students can better understand the industry and career development.

#### **3.2 Reasonably arrange major resources and improve the mechanism of teaching management**

Carry out consultation and guidance on the changing major through various methods, and build a feedback mechanism for changing majors. For students who intend to change their majors, positive guidance should be provided to assist them in demonstrating the necessity and feasibility of changing majors. In the process of effectively implementing the system of changing majors, we should provide targeted guidance for students' choice of majors. This can help students avoid blindness in choosing majors and prevent blindly following the trend. For example, it is recommended that students submit a detailed additional application document when applying for a major change, including the reasons, their understanding of the course offerings, their special skills, interests, career tendencies, and their learning plans. The consulting work can provide appropriate guidance to students in their confused state, allowing them to evaluate their future learning before changing majors.

#### **3.3 Reform the curriculum system and build a diversified talent training model**

Firstly, adjust the subject setting and talent training program, and improve the elective course system. Provide students with independent and open learning methods and learning environment. Secondly, carry out personalized teaching activities. Further enrich teaching organization forms based on students' ability requirements and learning conditions, including online teaching, training lectures and other teaching organization forms. Thirdly, establish the training mode of expanding the professional system or the second professional system. Students are allowed to choose majors interested in other subjects to study as their extension majors. If they meet the corresponding credit requirements, they can obtain the extension major certificate. According to this model, not only can it effectively promote the balance and expansion of student knowledge structure, but it can also broaden students' professional perspectives and increase their employment competitiveness.

## **References**

- [1] Xu Weiqin, Cen Yuhao. "Stay or Flow": A Study on the Formation Mechanism of Professional Escape Behavior among College Students, *Higher Education Research*, 2022, 43 (05): 63-73.
- [2] Gu Jianmin, Jiang Meifen, Huang Yating. Satisfaction and influencing mechanism of college students changing majors, *Research on Educational Development*. 2022,42 (03): 15-24.
- [3] Su Qiang, Zhang Dong, Zhou Jianmin, Lin Zheng. Investigation and analysis of undergraduate students changing majors, *Research on Higher Engineering Education* 2016,(01): 97-102.
- [4] Yuan Yuan. The motivation and relief strategies for college students in China to switch majors, *Research on Applied Higher Education* 2020,5(04): 28-34.
- [5] Tang Hongmei. On the Teaching Management of College Students Transferring Majors, *Journal of Shanxi University of Finance and Economics* 2009, 31(1): 264-266.
- [6] Huang Ling, Han Tingzhi. How do institutional policies regulate undergraduate major selection: A mixed study based on policy texts from 38 high-level universities, *China Higher Education Research*, 2024 (02): 54-61.