



TALENT CULTIVATION MODEL IN THE CONTEXT OF SPRING
COLLEGE ENTRANCE EXAMINATION

by

KAIZHU WU

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION
IN EDUCATIONAL ADMINISTRATION (INTERNATIONAL PROGRAM)

SOUTHEAST ASIA UNIVERSITY

ACADEMIC YEAR 2022

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Independent Study Title Talent Cultivation Model in the Context of Spring College
Entrance Examination

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Title	Talent Cultivation Model in the Context of Spring College
	Entrance Examination
Number of pages	58 pages
Author	Kaizhu Wu
Program	Master of Educational Administration (International Program)
Advisor	Asst.Prof. Smithirak Jantarak, Ph.D.
Academic Year	2022

ABSTRACT

This study focuses on the talent cultivation model implemented by Shenzhen K School in the context of the Guangdong Provincial Spring College Entrance Examination. Taking Shenzhen K school as the research object to find out the main problems in the talent cultivation model. In response to the specific problems of School K, countermeasures and suggestions were proposed, taking into account the actual situation of the school and drawing on advanced talent cultivation reform experiences and measures from China and abroad. This study can provide reference for the talent cultivation mode of secondary vocational schools, help secondary vocational schools optimize their talent cultivation programs and cultivate more composite skill talents.

Keywords: Talent Cultivation, the Spring College Entrance Examination, Employment Orientation, College Orientation

Acknowledgement

The period of pursuing my master's degree is a memorable time in my life, reflecting the concept of lifelong learning by living and learning.

Dr. Puttithorn Jirayus and Prof. Dr. Smithirak Jantarak for the care and teaching he gave me during his busy schedule, as well as for the rare research and practice opportunities that benefited me both academically and practically. I would like to express my sincere gratitude and high respect to Dr. Puttithorn Jirayus and Dr. Smithirak Jantarak. I sincerely thank all the teachers at the college for enlightening and inspiring me.

In addition, I would like to thank all the teachers who reviewed the thesis and participated in the defense for their help and advice!

I would also like to thank my classmates for their mutual care and support in my study life.

Finally, I sincerely thank my parents and brothers and sisters who always give me encouragement and support. It is your understanding, support and encouragement that give me the courage and confidence to keep making progress.

Kaizhu Wu

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Chapter 1

Introduction

1.1 Statement of the Research Problem

In China, secondary vocational education is a kind of secondary-level vocational education implemented at the high school level, based on nine-year compulsory education, and training a large number of skilled personnel and high-quality workers to meet the market demand for the first line of social production and services. In addition to general knowledge and culture education, secondary vocational schools also provide students with vocational knowledge and skills training according to job requirements.

High-level policy-oriented design for government. Since the beginning of the 21st century, the state has carried out a series of reforms in secondary vocational education to promote the effective and smooth integration of secondary vocational education and higher vocational education, to build a "bridge" for the growth of talents in the vocational education system, and to promote the healthy development of vocational education.

The actual requirements of society. China is currently in the biggest change of this century. Against the background of continuous iterative renewal of high technology, China's development has entered a new stage, with major changes in industrial structure and accelerating technological transformation and upgrading, the

demand for skilled personnel in all industries has changed from the previous demand for skilled personnel to the increasingly urgent demand for high quality technically skilled personnel. Enterprises not only need employees with skilled operation skills, but also need them to have high comprehensive quality and good learning ability to cope with the ever-changing technological changes. Therefore, it is difficult for secondary vocational school graduates with skilled job skills to meet the requirements of enterprises for high-quality skilled personnel, thus making it difficult for most general secondary vocational school students to find satisfactory jobs after graduation and facing severe employment pressure. What's more, in the public's deep-rooted impression that vocational education is low equal to general education, the employment-oriented secondary vocational education is now even worse and can be said to be a "hopeless road", secondary vocational school graduates cannot create a wonderful life through skills. In this way, the vicious circle, resulting in parents more reluctant to choose secondary vocational education, reluctant to let their children go to vocational education, squeezing their heads to go to the general high school "the road to prosperity".

This study briefly describes the changes in policy and positioning of secondary vocational education in economic and social development at the national and societal levels, and now raises the following questions.

1. Does the spring college entrance examination require secondary vocational schools to be college-oriented, or is it a combination of employment-oriented and

college-oriented?

2. What factors can have a significant impact on students' employment and college choices?

3. What is the status of the talent cultivation model implemented by secondary vocational schools in the context of the spring college entrance examination?

4. What talent cultivation model should be implemented in secondary vocational schools to meet the sustainable development and lifelong learning of secondary school students in the context of spring college entrance examination?

1.2 The Research Objectives

This study starts from the background of the spring college entrance examination in Guangdong Province, clarifies the current situation of talent cultivation mode implemented in Shenzhen secondary vocational education in response to national and regional planning and call, analyzes the problems of talent cultivation mode, combines theories and research results of talent cultivation, draws on the experience of talent cultivation in China and abroad, and explores secondary vocational schools to realize "dual-oriented" talent cultivation mode from the perspective of cultivating students' learner autonomy ability. The study will provide new ideas and suggestions to explore the "dual-oriented" talent cultivation mode from the perspective of cultivating students' learner autonomy ability. The "dual orientation" is the "employment orientation" which can reflect the social function of

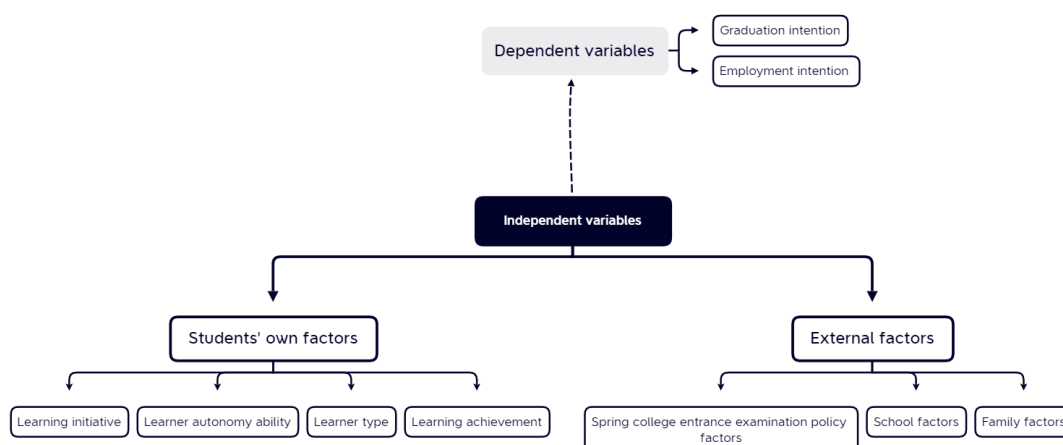
vocational education - market-oriented and employment-promoting, and the "college orientation" which can reflect the nurturing function of vocational education for the overall development of people - personal and ability-oriented. " Specifically, the main objectives of this study are as follows.

1. Exploring new talent cultivation mode path.
2. Innovating education and teaching methods of secondary vocational education.

1.3 Conceptual Framework

This study focuses on the talent cultivation model implemented by Shenzhen K School in the context of the Guangdong Provincial Spring College Entrance Examination.

Figure 1.1 : Conceptual Framework of the Study



1.4 The Research Hypothesis

Based on the problem, purpose, and research structure of this study, combined with relevant conceptual definitions, grounded theory, and literature reviews and summaries of Chinese and foreign talent cultivation models, the specific hypotheses of this study are as follows.

H1: The willingness of students to go on to higher education is significantly higher than to be employed.

In the context of the spring college entrance examination, the willingness of secondary vocational school students to go on to higher education is significantly higher than their willingness to be employed, so schools must implement a talent cultivation model that balances employment and college, satisfying both the social function and the nurturing function of vocational education.

H2: Students' own factors have a greater influence than other external factors.

Students' own factors have a greater influence on the implementation of the talent cultivation model than other external factors such as school factors, family factors, and spring college entrance examination policy factors.

H3: Students are lack of aspects related to learner autonomy abilities leads to unsatisfactory academic performance.

The lack of aspects related to learner autonomy abilities of secondary vocational school students leads to the inability to maximize the effectiveness on academic performance.

1.5 The Scope and Limitation of the Research

The spring college entrance examination covered in this study is the Guangdong model of vocational education college entrance examination in China, which adopts the assessment method of "cultural knowledge + vocational skills", and the main subjects of the study are graduates from secondary vocational schools, excluding graduates from general high schools who are admitted to higher vocational institutions based on their academic examination results.

The talent cultivation model is mainly studied in secondary vocational schools to carry out the research. The area selected for the study of secondary vocational schools is Shenzhen City, and the questionnaire distribution school is Shenzhen K School.

Due to the time constraint in preparing the research topic, the research subjects were selected as case studies, so the research results have limitations and are for reference only.

Solution: If further research is to be conducted, public and private secondary vocational schools of different regions, types and attributes should be added as research subjects in order to increase the validity, usability and representativeness of this study and provide new development ideas and paths for the development of secondary vocational education.

1.6 Terminology

1.Secondary vocational education

The Law of the People's Republic of China on Vocational Education emphasizes that vocational education is another type of education that is as important as general education. In terms of levels, vocational secondary education is the same as general secondary education and is implemented at the upper secondary level on the basis of it being a nine-year compulsory education, but its training objectives and specifications are very different from the latter. The upward path of secondary vocational education has evolved from only vocational higher education to a new situation where both vocational and general higher education options are available.

Currently, China has two major types of standardized education systems, namely general education and vocational education. General education includes eight stages of preschool education, elementary school, junior high school, high school, college, undergraduate and academic master's and doctoral degrees, and vocational education includes three stages of secondary, senior high school and applied undergraduate. Secondary vocational education and general high school education can be integrated with each other, and the path of college can lead to general undergraduate or vocational college or bachelor's degree. The spring entrance examination for counterpart vocational college or bachelor's degree is held independently of the general college entrance examination as the main way for vocational education students to further their education.

Secondary vocational schools are oriented to the market, based on the nine-year compulsory education, and are a kind of secondary vocational education implemented at the high school level to train a large number of skilled personnel and high-quality workers who meet the market demand for the first line of social production and services. In addition to general knowledge and culture education, secondary vocational schools also provide students with vocational knowledge and skills training according to job requirements.

2. Guangdong Spring College Entrance Examination

Guangdong provincial education administration for the in-depth implementation of the national examination and enrollment system reform, to promote the "cultural quality + professional skills" as the main evaluation method of higher vocational institutions enrollment, and gradually form a more mature and perfect combination of multi-dimensional multifaceted evaluation, a variety of ways to admit the classified examination and enrollment model.

In 2017, Guangdong began to explore the "two exams a year", and in 2019 the first full implementation of the spring college entrance examination work, basically formed a new pattern of spring, summer two college entrance exams.

Spring College Entrance Examination is an examination system in which all candidates apply together and are admitted to the examination during the spring.

Mainly including: First, higher education institutions to continue to implement the academic level examination of three subjects (language, mathematics, English)

total score as the basis for admission of graduates of general secondary school admission reform pilot. Second, from 2018, to further deepen the reform of the examination and admission of general higher education schools for graduates of secondary vocational schools. The enrollment of "3+Professional Skills Course Certificate" is only for fresh or former graduates of secondary vocational schools; where "3" is the test score of three cultural subjects, namely Chinese, Mathematics and English, which is used to measure "cultural quality"; The certificates of professional skills courses include the certificates issued by the Guangdong Provincial Education Examination Institute and other four examination units, such as the four major types of certificates, including the certificate of professional skills courses in accounting at E level and above, and the "1+X skills level certificate"; the higher vocational schools expand the enrollment scale of graduates from secondary vocational schools; third, the enrollment scale of graduates from secondary vocational schools is limited to fresh or former graduates of secondary vocational schools. Third, continue to implement the five-year consistent system for junior high school graduates or the three-to-two enrollment and admission test for the through training of middle and high vocational colleges. Fourth, the skills of top talents to study in higher vocational schools without examination in the form of admissions test.

3. talent cultivation mode

At present, there is no unified definition of "talent cultivation mode". In 1998, Comrade Zhou Yuanqing, then vice minister of the Ministry of Education, explicitly

elaborated his definition of talent cultivation mode at the National Conference on Teaching and Learning in schools. talent cultivation mode is to achieve the goals and specifications of talent cultivation through certain methods and means, and to apply a set of scientific management methods and evaluation system. Specifically, it includes the following connotations: (1) the objectives and specifications of cultivating educated people; (2) the whole educational process to achieve the set purpose; (3) a set of management methods and evaluation system used to manage this process; (4) the use of scientific and appropriate teaching methods, approaches and means to achieve the set purpose.

Talent cultivation model refers to the entire educational process of cultivating educated people to achieve the set goals and specifications under the guidance of certain educational theories or ideas, through the implementation of relatively stable educational contents and supporting program system, and under the supervision of scientific management system and evaluation methods, in order to promote the educated people to follow the law of development and obtain growth.

4. learner autonomy

The ability of learner autonomy is a basic ability that we must have to face the rapidly changing information age and adapt to the rapidly developing situation of technology. Generally speaking, researchers have defined learner autonomy in terms of both narrow and broad senses. According to Han Qinglin (2000), "learner autonomy" in the narrow sense refers to the development of students' autonomy through

dynamic and creative learning activities under the scientific guidance of teachers. In a broader sense, Chen Shuiqing (2000) argues that "learner autonomy" refers to learners directing their own learning, in terms of learning goals, processes and effects, as an active constructive process of self-design, self-management, self-regulation, self-testing, self-assessment and self-transformation.

The role of the educator is to guide the learner in the direction and method of learning, so that the learner can complete the learning within his or her ability. Secondly, learners have the ability to achieve their learning goals independently, including the following abilities: the ability to determine learning goals, the ability to make learning plans, the ability to choose learning contents related to learning goals, the ability to choose appropriate learning methods, and the ability to monitor and evaluate learning progress and effectiveness.

1.7 The Benefits of the Research

1. Theoretical significance

In terms of theoretical significance, this study takes humanistic theory, new vocationalism education theory, multiple wisdom theory, organizational development theory, etc. as the basis, composes Chinese and foreign literature on talent cultivation model and other related literature, tries to explore new talent cultivation model paths from the perspective of lifelong learning theory that cultivates and improves students' learner autonomy ability in secondary vocational schools, and to some

extent enriches the talent cultivation in secondary vocational schools Theoretical research.

2. Practical significance

In terms of practical significance, this study, through literature analysis, questionnaire survey and generalization, combined with the author's work experience as a full-time teacher in secondary vocational schools, not only investigates and studies the impact of the spring college entrance examination policy level on talent cultivation in secondary vocational schools, but also conducts a comparative study with factors such as students themselves, schools and families. The analysis of the current talent cultivation model, the proposed countermeasures for the shortcomings, and finally, the talent cultivation model for other secondary vocational schools for reference.

Chapter 2

Theory and Literature Reviews

2.1 Concept and Theory

1. Humanistic Learning Theory

Humanism, introduced in the 1950s by Rogers and Maslow, among others, has created a psychological boom in the U.S. The theory is that learning should be spontaneous for the learner, with a great deal of personal emotion and energy poured into it, and that the process is independent, autonomous, and active in which the learner's way of thinking plays an important role (Carl Rogers, 2006). The learning process of the educated person involves not only knowledge and information processing, but also emotional engagement, attitudes, and actions. Humanistic learning theory aims at self-actualization and choice, emphasizes the development of individual potential, encourages creativity and individualization, and gives learners the space to develop freely (Ma, 2002). This theory believes that students are the center of learning activities and should be given enough autonomy to choose their learning methods, learning contents, learning places, and learning time, etc. The teacher, as a facilitator and guide, can create a learning atmosphere for students, provide assistance at the right time, and guide students' overall healthy and sustainable development. Humanistic learning theory emphasizes that emotional experience and thinking can play an active role in the teaching process and believes

that emotion is the basis and motivation for learning, so that students can develop a strong interest in learning that they love from their heart and promote them to change their learning methods until they find a suitable method to achieve creative and personalized development.

2. New Vocationalism Theory of Education

The "new" in New Vocationalism Education contrasts with the old vocationalism, which was narrowly focused on providing education and training for a specific job or position. In the 1970s and 1980s, European and American countries like the United Kingdom reflected on the profound social, economic, and cultural changes that had occurred in their societies and recognized the need to reconstruct new curriculum systems, new institutional organization of education, new pedagogical strategies, and new standards of assessment and accreditation to meet the needs of these changes. Liu, Yang & Gao, Shuping (2019) argue that it is more important to develop creators of knowledge and technology in vocational education than to produce skilled operators for enterprises; and that it is more important to develop students' various basic vocational skills for multiple jobs than to develop students' proficiency in a single skill.

Na Hu & Hua Xie (2019) consider core competencies as the basic skills that people use in their careers in addition to the vocational skills of their jobs. They are applicable to a variety of occupations, can be adapted to changing jobs, and are enduring skills that accompany people throughout their lives. They include: self-

learning, information processing, digital applications, communicating with people, working with people, problem solving, innovation and creativity, foreign language applications, and other abilities. This facilitates workers to better adapt to changing job needs and regain new vocational skills and knowledge through lifelong learning; for enterprises, improving employees' basic vocational skills is the basis for strengthening their basic competitiveness. Based on this theory, vocational education organizers, i.e. vocational education institutions at all levels, should not only reform the talent cultivation mode and shift from cultivating professional and technical talents to cultivating complex technical talents, i.e. cultivating students with core vocational skills; but also improve students' migration learning by cultivating their theoretical knowledge and professional skills so that they have good basic professional skills and thus acquire the ability to adapt to enterprise positions ability.

3. Multiple Intelligence Theory

American psychologist Howard Gardner founded the theory of multiple Intelligence in 1983. He believed that human intelligence is diverse, and that each person possesses at least eight relatively independent Intelligence, including verbal expression, mathematical logic, physical movement, musical rhythm, visual-spatial, self-awareness, interpersonal interaction, natural observation, etc. These seemingly independently existing various Intelligence reveal the plurality of human cognition, and the purpose of education is to develop students' multiple potentials and promote their comprehensive quality. The purpose of education is to develop

students' multiple potentials and promote their all-round development. The essence of the theory of multiple Intelligence is not to say how many kinds of Intelligence people have, but to emphasize the existence of differences and diversity of human potentials. The theory of multiple Intelligence is applicable to vocational education, which encourages students to develop in the direction of their own intelligence and become successful. Huang Yanpei pointed out that the purpose of vocational education is to cultivate practical and efficient employability and to realize the process of cultivating intellectual and physical strength, theory and practice, knowledge, and skills. Vocational education cultivates students' practical and operational abilities in actual work, requiring them to practice their majors repeatedly and master their professional skills. The selection of majors is based on students' expertise and preferences. The theory of multiple Intelligence shows the differences of human intelligence, respects the advantages of intelligence, focuses on skill development and teaching differences, and teaches students according to their abilities, which reflects the fit between the theory of multiple Intelligence and the training goals of vocational education. (Su, Xiuqin, 2022).

4.Organizational Development Theory of Education

Organizational development is an effort planned, organization-wide, managed by management, to improve the effectiveness and health of the organizational development is an effort planned, organization-wide, managed by management, to improve the effectiveness and health of the organization through planned

interventions in organizational 'processes', using behavioral science knowledge (Beckhard, 1969). Organizational development is the process of systematically changing the organizational culture using techniques, research and theories. Organizational development is the process of systematically changing the organizational culture through the use of techniques, research and theories from the behavioral sciences (Burke, 1994). In other words, organizational development is a systematic learning and development strategy designed to change the foundations of the current organization. In other words, organizational development is a systematic learning and development strategy designed to change the foundations of the current organization's beliefs, attitudes, values and structural relevance in order to better absorb disruptive technologies, market opportunities and the challenges and disruptions that accompany them. The organization is a systematic learning and development strategy designed to change the foundations of the current organization's beliefs, attitudes, values and structural relevance in order to better absorb disruptive technologies, market opportunities and the challenges and disruptions that accompany them.

(Li, Chun-Ling, 2007) argues that organizational change in schools refers to the process of purposeful and planned changes to the internal structure, administrative work and information technology of school organizations in order to meet the needs of objective development and to better achieve the goals of school organizations and promote school development. Therefore, with the social and economic changes and development, the functional attributes of secondary vocational schools have shifted

from the original focus on employment to both employment and college, that is, to ensure both the social function of vocational education to provide high-quality workers and technical skill talents, and the nurturing function of vocational education to deliver talents to higher vocational institutions.

5.Lifelong Learning Theory

The representative figure of lifelong learning theory is Paul Langrand, a French expert in adult education who is known as the "father of lifelong learning". He believes that the task of lifelong learning is to enable people to learn independently, develop study habits and acquire a variety of abilities useful for lifelong learning, and it is groundless to simply devote the first half of a person's life to receiving education and the second half to work, and the ways of education are multi-channels, such as school education, community education and family education, etc., while school education is one of the many types of education a person receives, and it does not represent a person's All education, broad sense of education must be throughout the whole life.

The concept of lifelong learning is in line with the current trend of economic and social development and has had a profound impact on the formulation of education policies in many countries today, and many countries have begun to guarantee the implementation of lifelong education through legal means. At present, China's general education has established a relatively complete lifelong education system, forming an educational hierarchy from nine-year compulsory primary and junior high school to high school, university, bachelor's degree, master's degree and

doctoral degree, but the lifelong system of China's vocational education has not yet been fully established. China proposes to improve the system of training high-level applied talents according to the concept of lifelong education and to open up the growth channel of technical and skilled talents. (Gao Hong, 2014), according to the theory of lifelong education, secondary vocational education not only prepares workers for employment, but also belongs to the primary stage in the type of vocational education, part of junior high school graduates enter high school and part enter secondary vocational, and higher vocational education has an important cornerstone role in the construction of lifelong education system, which is an important part of the construction of smooth vocational education system, and the concept of lifelong education can effectively guide The concept of lifelong education can effectively guide the smooth development of secondary and higher vocational education, enhance the attractiveness of vocational education and cultivate the high-level skilled talents needed by the society.

2.2 Literature Reviews

Foreign vocational education is developed earlier, various regulations and systems are sounder, and many talent cultivation models have been explored and are more advanced. Among them, Germany's "dual system" is the most typical, which is a model for enterprises and corresponding vocational schools to jointly train talents; Singapore's "teaching factory" model combines schools, training centers and

enterprises into a trinity; the "community college" model in the United States cultivates talents with vocational and technical skills for society; Japan's "industry-university-research" model is a model in which production, learning and research are closely integrated, and enterprises provide student places for internship and training, what's more makes schools and enterprises work together to overcome technical issues and problems.

Although vocational education in China started late (the first vocational education law of the People's Republic of China was promulgated in 1996), by studying and learning from various advanced talent cultivation models abroad, and then combining China's national conditions and educational advantages to highlight Chinese characteristics, the talent cultivation model of vocational education in China has formed a certain scale, and the development trend has shown regional and diversified. Vocational education grouping model, "order-based" talent cultivation model and "integration of industry and education" talent cultivation model are all more typical models of talent cultivation model in vocational schools in China at present.

Vocational education grouping model. Group schooling is an innovation of schooling system in which a school community (led by a prestigious school) is formed by a prestigious school and some schools according to administrative guidelines and taking into account the common will of several schools. With the strong support of local education authorities, vocational schools have established vocational education

groups according to the actual situation of the schools and set up relevant management and operation departments to better promote the coordination and integration between vocational education and enterprises and industries.

"Order-based" talent cultivation model. This involves vocational schools developing talent cultivation plans based on the actual job requirements of partner enterprises, signing employment contracts with enterprises, working closely together in terms of enrollment requirements, faculty availability, and teaching methods, and being jointly responsible for student enrollment and training, with students being directed to employment after graduation and working directly for the contracted partner enterprises.

"Industry-education integration" talent cultivation model. According to the talent needs of enterprises, determine the educational objectives of the curriculum, the implementation of the combination of industry and education, school-enterprise cooperation, a high degree of integration between institutions and enterprises, the formation of school-enterprise integration mode of operation.

The objectives and specifications of the above typical talent cultivation model are mainly satisfied with the social function of vocational education of serving market-oriented and promoting employment, ignoring the nurturing function of vocational education for the overall development of people".

At present, Guangdong Province began to implement the spring college entrance examination system in 2019, and in the same year launched the "1 + X"

certificate system talent cultivation model pilot work, the spring examination in the context of high talent cultivation model aims to combine the two major orientations of employment and college, providing secondary vocational school students with the right to choose their own bottom and foundation, but the model is still in the stage of continuous exploration, research, pilot. The model is still in the stage of continuous exploration, research, and pilot.

In terms of research perspectives, whether supply and demand or the development of local vocational education, many domestic researchers have focused on the development of secondary vocational schools from an employment-oriented perspective. They have analyzed the reasons for the difficulties of secondary vocational schools from the perspectives of economy, government, and society, and put forward suggestions and countermeasures. However, with the promulgation of the policy of "vocational education college entrance examination" in recent years and the demand for "college" in society, the vision of many scholars has shifted to "college orientation". Some scholars believe that the development of college should be strongly supported, others believe that caution should be maintained, and many others believe that the type of vocational education should be maintained while pursuing college. All these help people understand "vocational education and spring college entrance examination" from different perspectives. Foreign scholars mostly study secondary vocational education in terms of its positioning, function, and impact on career, while many others study secondary vocational education in terms of the

content of adopted programs and bills.

In terms of research methods, a combination of qualitative and quantitative research is commonly used. Most researchers will use questionnaires and interviews to survey and study groups related to secondary career development, such as students, parents, and employers, and draw conclusions by compiling research reports, while other scholars also use the literature method to conduct research.

In terms of research content, most domestic studies mainly focus on the main aspects of secondary vocational schools, analyzing the current situation or dilemma of school development, or studying certain aspects such as employability, quality evaluation system, school-enterprise cooperation, etc., analyzing the social, economic, and own reasons affecting the development of secondary vocational schools, and making recommendations and strategies. Foreign studies tend to study in detail the laws and policies enacted by the government, from funding to curriculum design to the arrangement of different educational programs. There are relatively few case studies, either in China or abroad, that focus on the balance between "employment orientation" and "college orientation" in secondary vocational schools.

This study is an attempt to explore how to better promote the integrated development of secondary vocational education in terms of employment and college from the perspective of developing the lifelong learning concept of students' learner autonomy ability in secondary vocational schools, and to develop a new path for vocational education for all, so that everyone can be successful.

Chapter 3

Research Methodology

3.1 Population and Sampling Method/Variables

1. Population and Sampling Method

In this study, a stratified group sampling method was used to conduct the survey through a professional online questionnaire platform. 268 students were selected from 3,166 enrolled students in School K of Shenzhen to fill out the questionnaire, and the validity of the questionnaire was 256, and the effective rate of the questionnaire was 95.5%. The number of students who participated in the survey accounted for about 8.08% of the number of students in school K.

The questionnaire set up five questions about the basic conditions of the respondents, namely gender (46.88% of male students, 53.13% of female students), grade (45.31% of third year students, 54.69% of second year students), class type (25.78% of senior class, 19.53% of original professional class, 19.14% of accounting class, 20.70% of logistics service and management class, and 20.70% of business English class. (20.70%, 14.84% for business English class), household registration (69.92% for Guangdong household registration, 30.08% for non-Guangdong household registration), and whether they are only children (12.89% for only children, 87.11% for non-only children), to test whether there are significant differences between the above five basic information variables for the spring college entrance examination

policy, with special attention to the grade independent variable, specifically because School K no longer selects students with better grades in language, mathematics, and English to be prepared into separate Advanced Placement classes in second grade starting this year, and all students have equal rights to take the Spring College Entrance Examination.

2.Variables

The flow direction of secondary vocational school students after graduation is employment or further education, so graduation intention and employment intention are set as dependent variables in this study.

The independent variables are divided into students' own factors and external factors.

Students' own factors include learning initiative, learner autonomy ability, learner type, and learning achievement.

External factors include the spring college entrance examination policy factor, school factors and family factors.

The detail of each independent variables are as followed.

(1) Students' own factors

Students' own factors include learning initiative (learning motivation strength, learning self-confidence, spontaneous learning, academic aspirations, career aspirations), learner autonomy ability (which includes learner autonomy objectives, learner autonomy methods and plans, learner autonomy supervision, learner

autonomy Internet applications, and other abilities), learner type, and learning achievement.

Learning motivation refers to students' motivation to learn from their heart so as to gain a sense of accomplishment and enjoyment from learning, without the need for external forces. In this study, we focus on students' learning motivation, self-confidence in learning, spontaneous learning, and academic and career aspirations to observe students' learning initiative.

The ability of learner autonomy is a must for any learner with the great explosion of information data. It may be somewhat difficult for students in secondary vocational schools because they are struggling students in the process of teaching to the test, they do not experience the joy of learning and thus reject it, and the sense of experience of the rewards that learning brings is relatively lagging, making it difficult for them to deliberately develop this ability in the long run.

For students of secondary vocational schools, Guangdong Spring College Entrance Examination adopts the form of "3+Professional Skills Course Certificate" for admission assessment, in which the decisive role is played by the results of three cultural subjects, namely Chinese, Mathematics and English, and students' academic performance is an important reference factor when choosing different streams. The academic performance of the 3 subjects will directly determine whether the students are capable and confident to choose further education.

(2) External factors

External factors include spring college entrance examination policy factors, school factors (which include teacher level, curriculum, classroom culture - the degree of responsibility of the classroom teacher, learning atmosphere; teaching and learning styles - assignment completion, classroom teaching style, learning method guidance), and Family factors (including subjective factors - expectations for further education, attention to learning; objective factors - parents' education, family economic status), etc.

Spring college entrance examination policy factors, Guangdong Province spring college entrance examination to secondary vocational school students to provide a separate track, only secondary vocational school fresh graduates, former graduates can participate in the "3 + professional skills course certificate" examination, and language, mathematics, English test content from the perspective of secondary vocational school training personnel to examine Students should know and understand the general culture and have the basic conditions for further study in higher education. The content and format of the examination are different from those of the general high school entrance examination.

School factors, according to Coleman, differ between schools in terms of teacher strength and learning environment. Schools are where direct educational and teaching activities take place, and school factors include factors such as the level of teachers, curriculum, classroom culture, and the way teachers and students teach and learn. Since teachers play a leading role in teaching and learning activities, the

way they teach can have a significant impact on students' development.

The family factor, according to Bourdieu, is the small group of places that provide appropriate education for their children and has an impact on their children's future change in social status. Students from economically advantaged families have better access to educational resources early in their education, which contributes to higher academic performance and academic success. The cultural and economic capital of the family enables parents to participate in and provide a higher quality education that facilitates the cognitive and learning abilities of their children, prioritizes access to valuable educational resources and opportunities and translates this into satisfactory academic performance. The family factors considered in this study include subjective factors such as parents' expectations for their children's advancement and the degree of attention to learning, as well as objective factors such as parents' education and family economic status.

3.2 Data Collection

The questionnaire method was used in this study. During the pre-survey, a stratified sampling method was adopted to select the second and third grades of K schools, 45 copies were distributed, and 39 copies, about 86.7%, were returned. The two aspects of reliability and validity of the questionnaire were tested, and the alpha reliability coefficient was 0.784, and the KMO validity coefficient was 0.712, which were relatively good in terms of reliability and validity. According to the preliminary

findings and problems of the pre-survey questionnaire, the question types of the formal questionnaire were appropriately adjusted and improved.

During the formal survey, 268 questionnaires were distributed, and 256 valid questionnaires were distributed. The reliability and validity of the questionnaires were tested again, and the alpha reliability coefficient was 0.896 and the KMO validity coefficient was 0.904, with good reliability and validity. In addition, the Chi-Square test was used to analyze the information of whether there were significant differences in students' employment, intention to go on to higher education, and academic performance.

3.3 Instruments/Research Design

In this study, various research methods such as literature method, questionnaire method, and inductive method were combined to analyze the study.

Literature Method

The literature method refers to the method of searching, reviewing, collecting, analyzing, refining, and organizing relevant literature through various channels and means, and conducting a comprehensive study of a research issue both vertically and horizontally to form a correct and scientific understanding. Through books, journal platforms and government websites, we collected and organized a large amount of literature related to "Guangdong Spring College Entrance Examination", "Secondary Vocational Education" and "Talent Cultivation Model". Then, through reading and

analyzing a large amount of literature related to secondary vocational education and talent cultivation mode, we understand the current situation of talent cultivation mode reform in secondary vocational schools, and then find out the theoretical basis of talent cultivation mode research in the context of "Spring College Entrance Examination", which provides sufficient theoretical support for this study.

Questionnaire Method

The questionnaire method can demonstrate students' attitudes and opinions on the school education and teaching mode and talent cultivation mode, through the most intuitive data. Firstly, we refer to relevant literature and scales as the basis for the questionnaire, so as to improve the reliability and validity of the questionnaire. Then, we designed a pre-survey questionnaire, conducted a small-scale survey to test the reliability and validity of the questionnaire, and adjusted and improved the questionnaire questions in time. Then, a formal questionnaire survey was conducted, and a stratified whole-group sampling method was used to distribute questionnaires to K schools in Shenzhen. 256 questionnaires were validated, and the factors affecting students' intention to graduate from K schools were analyzed by SPSS statistical software to provide data support for subsequent talent cultivation strategies.

Inductive Method

The inductive method is to summarize and analyze the practical experience and historical experience. Through comparative studies of vocational education training models at home and abroad, problems and useful experiences are analyzed

and summarized. The study was conducted in the context of the Spring College Entrance Examination.

3.4 Statistics and Data Analysis

1. Item analysis

Figure 3.1: Item Analysis of All the Questions

Item-Analysis				
	Group (M±SD)		t (CR)	p
	Low grouping	High grouping		
	(n=70)	(n=79)		
How much do you care about "Guangdong Spring College Entrance Examination"?	1.44±0.77	2.73±0.96	8.985	0.000**
Before you learned about the Guangdong Spring College Entrance Examination, you originally wanted to A. pursue higher education, B. find a job:	1.00±0.00	1.48±0.60	7.171	0.000**
After learning about the Guangdong Spring College Entrance Examination, you want to A. Further study, B. Employment:	1.01±0.12	1.11±0.32	2.574	0.011*
You have had the idea of studying hard and trying to improve your academic performance.	1.51±0.65	2.57±0.78	8.892	0.000**
The level of learning you are at at this stage.	2.60±1.01	3.77±0.70	8.126	0.000**
You are spontaneous in your learning.	1.86±0.79	3.32±0.78	11.384	0.000**
You have clear learning goals.	1.79±0.74	3.37±0.79	12.585	0.000**
You have a clear study method and plan.	1.90±0.73	3.47±0.75	12.954	0.000**
You will summarize or reflect on what you have learned after class.	1.96±0.79	3.48±0.77	11.958	0.000**
You can effectively use Internet materials or resources for learning.	1.70±0.80	3.25±0.85	11.379	0.000**
Do you think you can achieve your desired goals based on your current attitude and academic performance.	1.97±0.51	2.96±0.49	12.057	0.000**
Which of the following is true of your assignment completion:	1.36±0.48	2.25±0.65	9.454	0.000**
Which of the following types of learners do you consider yourself to be:	1.94±1.34	3.62±1.88	6.317	0.000**
Which of the following lecture styles is closest to your classroom situation:	1.23±0.49	1.94±0.79	6.666	0.000**
How does the teacher of each subject guide the study:	1.06±0.23	2.01±0.84	9.700	0.000**
The current school teachers' teaching ability meets the requirements for your advancement to higher education.	1.71±0.76	3.08±0.66	11.598	0.000**
You think the curriculum studied is reasonable.	1.73±0.85	2.99±0.72	9.663	0.000**
The class has a relatively strong learning atmosphere.	2.00±1.01	3.16±0.74	7.952	0.000**
Your classroom teachers are responsible and conscientious.	1.29±0.68	2.27±1.00	7.064	0.000**
Your family's financial situation is relatively good.	1.93±0.80	3.08±0.66	9.468	0.000**
Your parents have high expectations for you to advance to higher education.	1.37±0.52	2.47±0.90	9.228	0.000**
Your parents are concerned about how you are doing in school.	1.53±0.77	2.84±0.82	9.940	0.000**
Your father's highest level of education:	2.57±1.27	3.48±1.07	4.693	0.000**

Item-Analysis				
	Group (M±SD)		t (CR)	p
	Low grouping (n=70)	High grouping (n=79)		
Your mother's highest level of education:	2.73±1.31	3.82±0.94	5.793	0.000**
Your reasons for choosing your current major are:	1.81±1.15	2.97±1.39	5.526	0.000**
If you choose to go on to higher education or employment, would you like to continue to choose or pursue your current field of study?	1.93±1.09	3.18±0.90	7.541	0.000**
What level of education do you hope to achieve in the future:	2.34±0.98	3.13±0.84	5.225	0.000**
Your future career aspirations are.	1.07±0.26	1.63±0.92	5.184	0.000**

* $p < 0.05$ ** $p < 0.01$

By item analysis, all questions showed significance ($p < 0.05$) as shown above, implying that a total of 28 items were well differentiated.

2. Reliability analysis

Figure 3.2: Reliability analysis

Reliability Statistics (Cronbach Alpha)			
Items	Corrected Item-Total	Cronbach Alpha if Item	Cronbach alpha
	Correlation(CITC)	Deleted	
How much do you care about "Guangdong Spring College Entrance Examination"?	0.485	0.892	0.896
You have had the idea of studying hard and trying to improve your academic performance.	0.474	0.892	
The level of learning you are at at this stage.	0.542	0.891	
You are spontaneous in your learning.	0.672	0.888	
You have clear learning goals.	0.718	0.887	
You have a clear study method and plan.	0.743	0.887	
You will summarize or reflect on what you have learned after class.	0.715	0.888	
You can effectively use Internet materials or resources for learning.	0.637	0.889	
Do you think you can achieve your desired goals based on your current attitude and academic performance.	0.632	0.891	
Which of the following is true of your assignment completion:	0.611	0.891	
Which of the following types of learners do you consider yourself to be:	0.272	0.904	
Which of the following lecture styles is closest to your classroom situation:	0.399	0.894	
How does the teacher of each subject guide the study:	0.516	0.892	
The current school teachers' teaching ability meets the requirements for your advancement to higher education.	0.639	0.889	
You think the curriculum studied is reasonable.	0.591	0.890	
The class has a relatively strong learning atmosphere.	0.478	0.892	

Reliability Statistics (Cronbach Alpha)			
Items	Corrected Item-Total	Cronbach Alpha if Item	Cronbach
	Correlation(CITC)	Deleted	alpha
Your classroom teachers are responsible and conscientious.	0.398	0.894	
Your family's financial situation is relatively good.	0.555	0.891	
. Your parents have high expectations for you to advance to higher education.	0.539	0.891	
Your parents are concerned about how you are doing in school.	0.590	0.890	
Your father's highest level of education:	0.250	0.898	
Your mother's highest level of education:	0.317	0.897	
What level of education do you hope to achieve in the future:	0.296	0.896	
Your future career aspirations are.	0.274	0.896	

Cronbach alpha (Standardized): 0.911

From the above Figure, the value of the reliability coefficient is 0.896, which is greater than 0.8, thus indicating the high quality of the reliability of the study data. For the "alpha coefficient of item deleted", the reliability coefficient does not increase significantly when any question item is deleted, thus indicating that the question item should not be removed from the treatment.

3. Validity analysis

Figure 3.3: Validity Analysis

Validity Analysis							
Items	Factor Loadings						Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
The level of learning you are at at this stage.	0.651	0.103	-0.016	0.129	0.307	0.013	0.545
You are spontaneous in your learning.	0.824	0.166	0.154	0.044	0.103	0.035	0.744
You have clear learning goals.	0.811	0.189	0.225	0.068	0.096	0.133	0.776
You have a clear study method and plan.	0.849	0.246	0.158	0.077	0.086	0.151	0.842
You will summarize or reflect on what you have learned after class.	0.825	0.272	0.109	0.079	0.096	0.097	0.792
You can effectively use Internet materials or resources for learning.	0.739	0.104	0.265	-0.045	0.220	0.020	0.677
Do you think you can achieve your desired goals based on your current attitude and academic performance.	0.506	0.239	0.187	0.241	0.339	-0.084	0.528
The current school teachers' teaching ability meets the requirements for your advancement to higher education.	0.257	0.758	0.144	0.053	0.219	0.093	0.720
You think the curriculum studied is reasonable.	0.164	0.700	0.301	-0.002	0.204	0.125	0.665

Validity Analysis

Items	Factor Loadings						Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
The class has a relatively strong learning atmosphere.	0.092	0.789	0.005	0.083	0.192	0.120	0.690
Your classroom teachers are responsible and conscientious.	0.111	0.459	0.365	-0.171	0.172	-0.086	0.423
Your family's financial situation is relatively good.	0.298	0.480	0.088	0.423	-0.016	0.345	0.626
Your reasons for choosing your current major are:	0.151	0.497	-0.060	0.138	0.014	-0.461	0.505
If you choose to go on to higher education or employment, would you like to continue to choose or pursue your current field of study?	0.286	0.523	0.140	0.065	0.065	-0.223	0.433
How much do you care about "Guangdong Spring College Entrance Examination"?	0.229	0.196	0.597	0.079	0.008	0.166	0.481
You have had the idea of studying hard and trying to improve your academic performance.	0.442	-0.105	0.555	0.085	0.136	-0.055	0.544
23. Your parents have high expectations for you to go on to higher education.	0.298	0.278	0.622	0.076	0.035	-0.226	0.611
Your parents are concerned about how you are doing in school.	0.295	0.347	0.614	0.189	-0.050	-0.062	0.627
Your future career aspirations are.	-0.088	0.038	0.639	0.058	0.198	0.167	0.488
Your father's highest level of education:	-0.020	0.084	0.050	0.847	0.144	-0.045	0.750
Your mother's highest level of education:	0.133	0.026	0.131	0.842	0.040	-0.072	0.752
What level of education do you hope to achieve in the future:	0.164	-0.014	0.311	0.326	0.025	0.210	0.275
Which of the following is true of your assignment completion:	0.346	0.234	0.248	0.128	0.604	-0.005	0.617
Which of the following lecture styles is closest to your classroom situation:	0.150	0.163	0.013	0.141	0.782	0.004	0.681
How does the teacher of each subject guide the study:	0.324	0.255	0.132	-0.059	0.599	0.107	0.561
Which of the following types of learners do you consider yourself to be:	0.258	0.115	0.070	-0.005	0.063	0.695	0.572
KMO			0.904				-
Bartlett's Test of Sphericity (Chi-Square)			3085.127				-
df			325				-
p value			0.000				-

Note: Blue indicates that the absolute value of loading is greater than 0.4, and red indicates that the communality is less than 0.4.

The KMO value is used to determine the suitability of the information extracted, and the commonality value is used to exclude unreasonable items from the study. The item of academic aspirations was deleted because it is not very relevant to other information.

Chapter 4

Data Analysis Results

4.1 Test for intention to graduate

Figure 4.1: Chi-Square Analysis of Graduation Intention

Chi-Square Analysis					
Items	Categories	Before you learned about the Guangdong Spring College Entrance Examination, you originally wanted to A. pursue higher education, B. find a job.(%)			Total χ^2 p
		Comply with A	Uncertain	Comply with B	
You have had the idea of studying hard and trying to improve your academic performance.	This idea is very strong	72(34.95)	6(13.95)	1(14.29)	79(30.86)
	This idea is strong	84(40.78)	10(23.26)	0(0.00)	94(36.72)
	Occasionally, the idea	48(23.30)	25(58.14)	5(71.43)	78(30.47)
	Never thought of it before	2(0.97)	2(4.65)	1(14.29)	5(1.95)
	Total	206	43	7	256
How much do you care about "Guangdong Spring College Entrance Examination"?	Fully compliant	80(38.83)	3(6.98)	1(14.29)	84(32.81)
	More in line with	65(31.55)	4(9.30)	0(0.00)	69(26.95)
	General	52(25.24)	34(79.07)	3(42.86)	89(34.77)
	Comparisons do not match	5(2.43)	0(0.00)	1(14.29)	6(2.34)
	Total	206	43	7	256
The level of learning you are at at this stage.	top grade	14(6.80)	0(0.00)	0(0.00)	14(5.47)
	Upper middle class	26(12.62)	0(0.00)	0(0.00)	26(10.16)
	Moderate	102(49.51)	27(62.79)	3(42.86)	132(51.56)
	Lower middle class	50(24.27)	13(30.23)	2(28.57)	65(25.39)
	Total	206	43	7	256
You are spontaneous in your learning.	Fully compliant	34(16.50)	0(0.00)	0(0.00)	34(13.28)
	More in line with	53(25.73)	2(4.65)	0(0.00)	55(21.48)
	General	104(50.49)	32(74.42)	5(71.43)	141(55.08)
	Does not meet	11(5.34)	5(11.63)	1(14.29)	17(6.64)
	Total	206	43	7	256
You have clear learning goals.	Fully compliant	33(16.02)	0(0.00)	0(0.00)	33(12.89)
	More in line with	58(28.16)	0(0.00)	1(14.29)	59(23.05)

Chi-Square Analysis

Before you learned about the Guangdong Spring College							
Items	Categories	Entrance Examination, you originally wanted to A. pursue			Total	χ^2	p
		higher education, B. find a job:(%)					
		Comply with A	Uncertain	Comply with B			
You have a clear approach and plan for studying.	General	94(45.63)	36(83.72)	4(57.14)	134(52.34)	26.2660.001**	
	Does not meet	15(7.28)	4(9.30)	1(14.29)	20(7.81)		
	Not at all	6(2.91)	3(6.98)	1(14.29)	10(3.91)		
	Total	206	43	7	256		
	Fully compliant	22(10.68)	0(0.00)	0(0.00)	22(8.59)		
	More in line with	49(23.79)	0(0.00)	1(14.29)	50(19.53)		
	General	110(53.40)	33(76.74)	3(42.86)	146(57.03)		
	Does not meet	18(8.74)	7(16.28)	2(28.57)	27(10.55)		
	Not at all	7(3.40)	3(6.98)	1(14.29)	11(4.30)		
	Total	206	43	7	256		
You will summarize or reflect on what you have learned after class.	Fully compliant	23(11.17)	0(0.00)	0(0.00)	23(8.98)	18.565 0.017*	
	More in line with	39(18.93)	1(2.33)	1(14.29)	41(16.02)		
	General	113(54.85)	32(74.42)	3(42.86)	148(57.81)		
	Does not meet	22(10.68)	7(16.28)	2(28.57)	31(12.11)		
	Not at all	9(4.37)	3(6.98)	1(14.29)	13(5.08)		
	Total	206	43	7	256		
	Fully compliant	43(20.87)	0(0.00)	0(0.00)	43(16.80)		
	More in line with	55(26.70)	2(4.65)	0(0.00)	57(22.27)		
	General	94(45.63)	36(83.72)	4(57.14)	134(52.34)		
	Does not meet	7(3.40)	2(4.65)	2(28.57)	11(4.30)		
You can effectively use Internet materials or resources for learning.	Not at all	7(3.40)	3(6.98)	1(14.29)	11(4.30)	42.4290.000**	
	Total	206	43	7	256		
	The target has been reached	12(5.83)	0(0.00)	0(0.00)	12(4.69)		
	You can reach your goal with effort	98(47.57)	11(25.58)	3(42.86)	112(43.75)		
	It is a little difficult to reach the goal	91(44.17)	28(65.12)	3(42.86)	122(47.66)		
	Impossible to reach the goal	5(2.43)	4(9.30)	1(14.29)	10(3.91)		
	Total	206	43	7	256		
	Always think independently and complete assignments on time	66(32.04)	6(13.95)	2(28.57)	74(28.91)		
	Try to complete assignments on time, but sometimes borrow from other students	132(64.08)	28(65.12)	3(42.86)	163(63.67)		
	Sloppy, often copying other students' work	6(2.91)	7(16.28)	1(14.29)	14(5.47)		
Which of the following is true of your assignment completion:	Never completes assignments on time and in quantity and does not take them seriously at all	2(0.97)	2(4.65)	1(14.29)	5(1.95)	25.2380.000**	

Chi-Square Analysis

		Before you learned about the Guangdong Spring College				Total	χ ²	p
Items	Categories	Entrance Examination, you originally wanted to A. pursue						
		higher education, B. find a job:(%)						
		Comply with A	Uncertain	Comply with B				
	Total	206	43	7	256			
Which of the following types of learners do you consider yourself to be:	More active in thinking, good at reasoning and analysis	59(28.64)	7(16.28)	0(0.00)	66(25.78)			
	Strong memory skills and high interest in liberal arts	47(22.82)	10(23.26)	1(14.29)	58(22.66)			
	Strong hands-on practical skills	30(14.56)	7(16.28)	3(42.86)	40(15.63)			
	Strong verbal skills	21(10.19)	8(18.60)	0(0.00)	29(11.33)	16.435	0.172	
	Stronger art appreciation	18(8.74)	5(11.63)	0(0.00)	23(8.98)			
	Good reflection, insight and introspection of oneself	28(13.59)	6(13.95)	3(42.86)	37(14.45)			
	Other	3(1.46)	0(0.00)	0(0.00)	3(1.17)			
	Total	206	43	7	256			
	Focus on the elaboration of subject knowledge and the development of analytical skills to broaden knowledge	118(57.28)	22(51.16)	4(57.14)	144(56.25)			
	Which of the following lecture styles is closest to your classroom situation:	appropriately						
	Explained according to the textbook and played less on the content of the textbook	64(31.07)	12(27.91)	3(42.86)	79(30.86)	7.918	0.244	
	Explain the basic ideas	24(11.65)	8(18.60)	0(0.00)	32(12.50)			
	Other	0(0.00)	1(2.33)	0(0.00)	1(0.39)			
	Total	206	43	7	256			
	The teacher pays attention to the learning method, I have a method to learn, and learn more easily	140(67.96)	23(53.49)	2(28.57)	165(64.45)			
	The teacher does not pay attention to the learning method, the learning effect is average	53(25.73)	9(20.93)	3(42.86)	65(25.39)			
	The teacher taught me everything, and I had no way to learn, so I had a hard time learning.	12(5.83)	10(23.26)	2(28.57)	24(9.38)	19.7370	0.003**	
	Other	1(0.49)	1(2.33)	0(0.00)	2(0.78)			
	Total	206	43	7	256			
	Fully compliant	38(18.45)	1(2.33)	1(14.29)	40(15.63)			
	More in line with	72(34.95)	7(16.28)	1(14.29)	80(31.25)	33.0550	0.000**	
	General	86(41.75)	35(81.40)	3(42.86)	124(48.44)			
	Does not meet	6(2.91)	0(0.00)	1(14.29)	7(2.73)			

Chi-Square Analysis

Before you learned about the Guangdong Spring College							
Items	Categories	Entrance Examination, you originally wanted to A. pursue higher education, B. find a job.(%)			Total	χ ²	p
		Comply with A	Uncertain	Comply with B			
You think the curriculum studied is reasonable.	Not at all	4(1.94)	0(0.00)	1(14.29)	5(1.95)	24.3460.002**	
	Total	206	43	7	256		
	Fully compliant	41(19.90)	1(2.33)	0(0.00)	42(16.41)		
	More in line with	59(28.64)	8(18.60)	1(14.29)	68(26.56)		
	General	89(43.20)	33(76.74)	4(57.14)	126(49.22)		
	Does not meet	11(5.34)	0(0.00)	1(14.29)	12(4.69)		
The class has a relatively strong learning atmosphere.	Not at all	6(2.91)	1(2.33)	1(14.29)	8(3.13)	17.106 0.029*	
	Total	206	43	7	256		
	Fully compliant	32(15.53)	1(2.33)	1(14.29)	34(13.28)		
	More in line with	42(20.39)	4(9.30)	1(14.29)	47(18.36)		
	General	101(49.03)	35(81.40)	4(57.14)	140(54.69)		
	Does not meet	18(8.74)	2(4.65)	0(0.00)	20(7.81)		
Your classroom teachers are responsible and conscientious.	Not at all	13(6.31)	1(2.33)	1(14.29)	15(5.86)	29.8520.000**	
	Total	206	43	7	256		
	Fully compliant	112(54.37)	12(27.91)	2(28.57)	126(49.22)		
	More in line with	59(28.64)	10(23.26)	2(28.57)	71(27.73)		
	General	32(15.53)	19(44.19)	2(28.57)	53(20.70)		
	Does not meet	1(0.49)	1(2.33)	0(0.00)	2(0.78)		
Your family's financial situation is relatively good.	Not at all	2(0.97)	1(2.33)	1(14.29)	4(1.56)	18.550 0.017*	
	Total	206	43	7	256		
	Fully compliant	27(13.11)	2(4.65)	0(0.00)	29(11.33)		
	More in line with	53(25.73)	7(16.28)	1(14.29)	61(23.83)		
	General	110(53.40)	29(67.44)	3(42.86)	142(55.47)		
	Does not meet	14(6.80)	3(6.98)	2(28.57)	19(7.42)		
Your parents have high expectations for you to advance to higher education.	Not at all	2(0.97)	2(4.65)	1(14.29)	5(1.95)	40.6710.000**	
	Total	206	43	7	256		
	Fully compliant	93(45.15)	8(18.60)	0(0.00)	101(39.45)		
	More in line with	68(33.01)	14(32.56)	5(71.43)	87(33.98)		
	General	41(19.90)	19(44.19)	1(14.29)	61(23.83)		
	Does not meet	4(1.94)	1(2.33)	0(0.00)	5(1.95)		
Your parents are concerned about how you are doing in school.	Not at all	0(0.00)	1(2.33)	1(14.29)	2(0.78)	36.4730.000**	
	Total	206	43	7	256		
	Fully compliant	61(29.61)	4(9.30)	0(0.00)	65(25.39)		
	More in line with	69(33.50)	9(20.93)	4(57.14)	82(32.03)		
	General	71(34.47)	28(65.12)	1(14.29)	100(39.06)		

Chi-Square Analysis

Before you learned about the Guangdong Spring College							
Items	Categories	Entrance Examination, you originally wanted to A. pursue			Total	χ^2	p
		higher education, B. find a job:(%)					
		Comply with A	Uncertain	Comply with B			
Your father's highest level of education:	Comparisons do not match	3(1.46)	0(0.00)	1(14.29)	4(1.56)	8.414	0.394
	Not at all	2(0.97)	2(4.65)	1(14.29)	5(1.95)		
	Total	206	43	7	256		
	Bachelor's degree and above	26(12.62)	5(11.63)	2(28.57)	33(12.89)		
	College	30(14.56)	5(11.63)	2(28.57)	37(14.45)		
	High school (or secondary school)	60(29.13)	9(20.93)	3(42.86)	72(28.13)		
	Junior High School	70(33.98)	19(44.19)	0(0.00)	89(34.77)		
Your mother's highest level of education:	Elementary school and below	20(9.71)	5(11.63)	0(0.00)	25(9.77)	16.167	0.040*
	Total	206	43	7	256		
	Bachelor's degree and above	22(10.68)	1(2.33)	0(0.00)	23(8.98)		
	College	30(14.56)	8(18.60)	4(57.14)	42(16.41)		
	High school (or secondary school)	59(28.64)	9(20.93)	2(28.57)	70(27.34)		
	Junior High School	61(29.61)	19(44.19)	1(14.29)	81(31.64)		
	Elementary school and below	34(16.50)	6(13.95)	0(0.00)	40(15.63)		
Your future career aspirations are.	Total	206	43	7	256	17.5650	0.007**
	Go to university and have a stable and decent job in the city	174(84.47)	26(60.47)	4(57.14)	204(79.69)		
	Go to college and contribute to the development of your hometown	13(6.31)	4(9.30)	1(14.29)	18(7.03)		
	Learn a skill and have a job in the city to earn a living	18(8.74)	12(27.91)	2(28.57)	32(12.50)		
	Learn a skill and return home to be able to earn a living	1(0.49)	1(2.33)	0(0.00)	2(0.78)		
	Total	206	43	7	256		

* $p < 0.05$ ** $p < 0.01$

Students' own factors

Chi-Square tests were conducted on learning subjective motivation, and we found significant differences in learning motivation intensity ($P=0<0.05$), self-confidence in learning ($P=0.012<0.05$), spontaneously conducting learning ($P=0<0.05$), and career aspirations ($P=0.007<0.05$) between different graduation intentions.

Chi-Square tests for learner autonomy ability, we found that learner autonomy objectives ($P=0.001<0.05$), learner autonomy methods and plans ($P=0.001<0.05$), learner autonomy supervision ($P=0.017<0.05$), learner autonomy Internet applications ($P=0<0.05$), all differed between graduation intentions Significant differences.

Chi-Square tests were conducted on learner types, and we found no significant differences between learner types ($p>0.05$) for different graduation intentions, indicating that secondary vocational school students' graduation intentions have little to do with their own learner types, and that each learner type has its own strengths and ideals.

Performing a chi-square test on academic performance, we found that academic performance ($P=0.044<0.05$) differed significantly between graduation intentions.

External Factors

Chi-Square tests were conducted on the factors of concern for spring college entrance examination, and we found that the concern for spring college entrance examination ($P=0<0.05$) differed significantly between different graduation intentions.

In addition, we also did a separate survey on students' intentions of employment and further education after learning about the policies related to the spring college entrance examination(see details at Figure 3.1), and found that 83.72% of students who originally chose uncertainty changed to want to pursue further education, as well as 42.86% of students who originally chose employment changed

to want to pursue further education. This proves that secondary vocational school students have good expectations for their personal development.

Chi-Square tests were conducted on school factors, and we found no significant differences between graduation intentions for classroom teaching style ($P>0.05$), and no significant differences between graduation intentions for faculty level ($P=0<0.05$), curriculum ($P=0.002<0.05$), degree of responsibility of classroom teachers ($P=0<0.05$), learning atmosphere ($P=0.029<0.05$), assignment completion ($P=0<0.05$), and learning guidance ($P=0.003<0.05$) differed significantly between graduation intentions. It indicates that the classroom teaching style that focuses on the elaboration of subject knowledge and the development of analytical skills and appropriately broadens knowledge does not directly act or influence students' intention to graduate.

Chi-Square tests were conducted on family factors and we found no significant differences between graduation intentions for father's education ($P>0.05$), expectations of further education ($P=0<0.05$), attention to learning ($P=0<0.05$), mother's education ($P=0.04<0.05$), and family economic status ($P=0.017<0.05$) There was a significant difference between the different intention to graduate. It indicates that fathers may be busy with their livelihoods and do not pay as much attention or spend as much energy on their children as their mothers do, and therefore have no effect on their children's intention to graduate.

Figure 4.2: List of Dependent and Independent Variables Indicators

Dependent variable	Independent variable	Tier 1 Indicators	Secondary indicators	Classification
Employment, intention to go on to higher education	Students' own factors	Learning Subjective Initiative	Learning motivation intensity	1=This thought is very strong, 2=This thought is strong, 3=This thought happens occasionally, 4=This thought never happens
			Learning Self-Confidence	1=Already reached the goal, 2=Effort can reach the goal, 3=It is a little difficult to reach the goal, 4=It is impossible to reach the goal
			Spontaneous learning	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			Career Aspirations	1=go to university and have a stable and decent job in the city, 2=go to university and contribute to the development of your hometown, 3=learn a skill and have a job to earn a living in the city, 4=learn a skill and go back to your hometown to earn your own living
		learner autonomy ability	learner autonomy objectives	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy methods and programs	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy supervision	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy of Internet applications	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Academic Performance		1=superior, 2=superior-medium, 3=medium, 4=inferior-medium, 5=inferior
		Spring College Entrance Examination Factors		
	School Factors	Faculty Level		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Curriculum		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Degree of responsibility of classroom teachers		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Learning atmosphere		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Teaching and learning styles	Assignment completion	1= always think independently and finish homework on time, 2= try to finish homework on time, but sometimes borrow from other students, 3= cope with it sloppily and often copy homework from other students, 4= never

				finish homework on time and in the right amount, and do not take it seriously at all
			Learning Guide	1=Teachers pay attention to learning method guidance, I have a method to learn, I learn easily, 2=Teachers do not pay attention to learning method guidance, I find my own method, the learning effect is average, 3=Teachers read the text, I learn no method, I learn very hard.
	Family Factors	Family subjective factors	College expectations	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			Focus on learning level	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Objective family factors	Mother's education	1=Bachelor's degree and above, 2=College, 3=High school (or middle school), 4=Junior high school, 5=Elementary school and below
			family economic status	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all

To sum up, variables with insignificant differences between different graduation intentions were excluded by chi-square test.

We found that students' own factors retained 9 indicators of learning motivation intensity, self-confidence in learning, spontaneously conducting learning, career aspiration, learner autonomy objectives, learner autonomy methods and plans, learner autonomy supervision, learner autonomy Internet application, and learning achievement. External factors retained 11 indicators of spring college entrance examination concern, teacher's level, curriculum, class teacher's degree of responsibility, learning atmosphere, assignment completion, learning method guidance, higher education expectation, attention to learning degree, mother's education, and family economic status.

4.2 Test for Self-assessment of Academic Performance

Figure 4.3: Chi-Square Analysis of Academic Performance

Results of cross-sectional (chi-square) analysis									
Title	Name	The level of learning you are at at this stage. (%)					Total	χ ²	p
		Upper			Lower				
		top grade	middle	Moderate	middle	inferior			
			class			class			
How much do you care about "Guangdong Spring College Entrance Examination"?	Fully compliant	7(50.00)	13(50.00)	40(30.30)	18(27.69)	6(31.58)	84(32.81)	28.574	0.027*
	More in line with	3(21.43)	4(15.38)	42(31.82)	18(27.69)	2(10.53)	69(26.95)		
	General	2(14.29)	9(34.62)	45(34.09)	24(36.92)	9(47.37)	89(34.77)		
	Comparisons do not match	2(14.29)	0(0.00)	1(0.76)	3(4.62)	0(0.00)	6(2.34)		
	Not at all	0(0.00)	0(0.00)	4(3.03)	2(3.08)	2(10.53)	8(3.13)		
	Total	14	26	132	65	19	256		
You have had the idea of studying hard and trying to improve your academic performance.	This idea is very strong	8(57.14)	7(26.92)	47(35.61)	11(16.92)	6(31.58)	79(30.86)	39.821	0.000**
	This idea is strong	5(35.71)	16(61.54)	50(37.88)	20(30.77)	3(15.79)	94(36.72)		
	Occasionally, the idea	1(7.14)	3(11.54)	34(25.76)	32(49.23)	8(42.11)	78(30.47)		
	Never thought of it before	0(0.00)	0(0.00)	1(0.76)	2(3.08)	2(10.53)	5(1.95)		
	Total	14	26	132	65	19	256		
You are spontaneous in your learning.	Fully compliant	10(71.43)	6(23.08)	13(9.85)	2(3.08)	3(15.79)	34(13.28)	164.4300	0.000**
	More in line with	4(28.57)	19(73.08)	27(20.45)	5(7.69)	0(0.00)	55(21.48)		
	General	0(0.00)	1(3.85)	88(66.67)	43(66.15)	9(47.37)	141(55.08)		
	Does not meet	0(0.00)	0(0.00)	3(2.27)	12(18.46)	2(10.53)	17(6.64)		
	Not at all	0(0.00)	0(0.00)	1(0.76)	3(4.62)	5(26.32)	9(3.52)		
	Total	14	26	132	65	19	256		
You have clear learning goals.	Fully compliant	10(71.43)	6(23.08)	12(9.09)	4(6.15)	1(5.26)	33(12.89)	140.6170	0.000**
	More in line with	3(21.43)	16(61.54)	31(23.48)	8(12.31)	1(5.26)	59(23.05)		
	General	1(7.14)	4(15.38)	83(62.88)	38(58.46)	8(42.11)	134(52.34)		
	Does not meet	0(0.00)	0(0.00)	6(4.55)	11(16.92)	3(15.79)	20(7.81)		
	Not at all	0(0.00)	0(0.00)	0(0.00)	4(6.15)	6(31.58)	10(3.91)		
	Total	14	26	132	65	19	256		
You have a clear approach and plan for studying.	Fully compliant	8(57.14)	4(15.38)	8(6.06)	1(1.54)	1(5.26)	22(8.59)	149.3490	0.000**
	More in line with	4(28.57)	13(50.00)	27(20.45)	5(7.69)	1(5.26)	50(19.53)		
	General	2(14.29)	9(34.62)	89(67.42)	39(60.00)	7(36.84)	146(57.03)		
	Does not meet	0(0.00)	0(0.00)	8(6.06)	16(24.62)	3(15.79)	27(10.55)		
	Not at all	0(0.00)	0(0.00)	0(0.00)	4(6.15)	7(36.84)	11(4.30)		
	Total	14	26	132	65	19	256		
You will summarize or reflect on what you have learned after class.	Fully compliant	8(57.14)	4(15.38)	9(6.82)	1(1.54)	1(5.26)	23(8.98)	123.1650	0.000**
	More in line with	4(28.57)	10(38.46)	22(16.67)	4(6.15)	1(5.26)	41(16.02)		

Results of cross-sectional (chi-square) analysis

		The level of learning you are at at this stage. (%)							
Title	Name	Upper			Lower		Total	χ ²	p
		top grade	middle	Moderate	middle	inferior			
			class		class				
You can effectively use Internet materials or resources for learning.	General	2(14.29)	11(42.31)	87(65.91)	39(60.00)	9(47.37)	148(57.81)	82.378	0.000**
	Does not meet	0(0.00)	1(3.85)	13(9.85)	16(24.62)	1(5.26)	31(12.11)		
	Not at all	0(0.00)	0(0.00)	1(0.76)	5(7.69)	7(36.84)	13(5.08)		
	Total	14	26	132	65	19	256		
	Fully compliant	9(64.29)	10(38.46)	18(13.64)	4(6.15)	2(10.53)	43(16.80)		
	More in line with	4(28.57)	9(34.62)	32(24.24)	11(16.92)	1(5.26)	57(22.27)		
	General	1(7.14)	7(26.92)	77(58.33)	40(61.54)	9(47.37)	134(52.34)		
	Does not meet	0(0.00)	0(0.00)	4(3.03)	5(7.69)	2(10.53)	11(4.30)		
	Not at all	0(0.00)	0(0.00)	1(0.76)	5(7.69)	5(26.32)	11(4.30)		
	Total	14	26	132	65	19	256		
Do you think you can achieve your desired goals based on your current attitude and academic performance.	The target has been reached	4(28.57)	2(7.69)	5(3.79)	0(0.00)	1(5.26)	12(4.69)	106.518	0.000**
	You can reach your goal with effort	8(57.14)	21(80.77)	67(50.76)	14(21.54)	2(10.53)	112(43.75)		
	It is a little difficult to reach the goal	2(14.29)	3(11.54)	57(43.18)	50(76.92)	10(52.63)	122(47.66)		
	Impossible to reach the goal	0(0.00)	0(0.00)	3(2.27)	1(1.54)	6(31.58)	10(3.91)		
	Total	14	26	132	65	19	256		
Which of the following is true of your assignment completion:	Always think independently and complete assignments on time	12(85.71)	12(46.15)	42(31.82)	5(7.69)	3(15.79)	74(28.91)	85.455	0.000**
	Try to complete assignments on time, but sometimes borrow from other students	2(14.29)	14(53.85)	84(63.64)	52(80.00)	11(57.89)	163(63.67)		
	Sloppy, often copying other students' work	0(0.00)	0(0.00)	5(3.79)	8(12.31)	1(5.26)	14(5.47)		
	Never completes assignments on time and in quantity and does not take them seriously at all	0(0.00)	0(0.00)	1(0.76)	0(0.00)	4(21.05)	5(1.95)		
	Total	14	26	132	65	19	256		
Which of the following types of learners do you consider yourself to be:	More active in thinking, good at reasoning and analysis	9(64.29)	10(38.46)	31(23.48)	11(16.92)	5(26.32)	66(25.78)	47.368	0.003**
	Strong memory skills and high interest in liberal arts	3(21.43)	5(19.23)	38(28.79)	10(15.38)	2(10.53)	58(22.66)		
	Strong hands-on practical skills	0(0.00)	6(23.08)	21(15.91)	10(15.38)	3(15.79)	40(15.63)		
Which of the following types of learners do you consider yourself to be:	Strong verbal skills	0(0.00)	2(7.69)	18(13.64)	7(10.77)	2(10.53)	29(11.33)	47.368	0.003**
	Stronger art appreciation	1(7.14)	1(3.85)	4(3.03)	12(18.46)	5(26.32)	23(8.98)		
	Good reflection, insight and introspection of oneself	1(7.14)	2(7.69)	19(14.39)	13(20.00)	2(10.53)	37(14.45)		
	Other	0(0.00)	0(0.00)	1(0.76)	2(3.08)	0(0.00)	3(1.17)		
	Total	14	26	132	65	19	256		

Results of cross-sectional (chi-square) analysis

		The level of learning you are at at this stage. (%)							
Title	Name	Upper			Lower		Total	χ ²	p
		top grade	middle	Moderate	middle	inferior			
			class		class				
Which of the following lecture styles is closest to your classroom situation:	Focus on the elaboration of subject knowledge								
	and the development of analytical skills to broaden knowledge appropriately	12(85.71)	19(73.08)	79(59.85)	29(44.62)	5(26.32)	144(56.25)		
	Explained according to the textbook and played less on the content of the textbook	2(14.29)	6(23.08)	41(31.06)	25(38.46)	5(26.32)	79(30.86)	42.815	0.000**
	Explain the basic ideas	0(0.00)	1(3.85)	12(9.09)	11(16.92)	8(42.11)	32(12.50)		
	Other	0(0.00)	0(0.00)	0(0.00)	0(0.00)	1(5.26)	1(0.39)		
	Total	14	26	132	65	19	256		
How does the teacher of each subject guide the study:	The teacher pays attention to the learning method, I have a method to learn, and learn more easily	14(100.00)	22(84.62)	88(66.67)	33(50.77)	8(42.11)	165(64.45)		
	The teacher does not pay attention to the learning method guidance, self-finding method, the learning effect is average	0(0.00)	4(15.38)	37(28.03)	20(30.77)	4(21.05)	65(25.39)	43.425	0.000**
	The teacher taught me everything, and I had no way to learn, so I had a hard time learning.	0(0.00)	0(0.00)	7(5.30)	10(15.38)	7(36.84)	24(9.38)		
	Other	0(0.00)	0(0.00)	0(0.00)	2(3.08)	0(0.00)	2(0.78)		
	Total	14	26	132	65	19	256		
	Fully compliant	7(50.00)	5(19.23)	18(13.64)	6(9.23)	4(21.05)	40(15.63)		
The current school teachers' teaching ability meets the requirements for your advancement to higher education.	More in line with	6(42.86)	14(53.85)	40(30.30)	18(27.69)	2(10.53)	80(31.25)		
	General	1(7.14)	7(26.92)	71(53.79)	35(53.85)	10(52.63)	124(48.44)	43.969	0.000**
	Does not meet	0(0.00)	0(0.00)	2(1.52)	4(6.15)	1(5.26)	7(2.73)		
	Not at all	0(0.00)	0(0.00)	1(0.76)	2(3.08)	2(10.53)	5(1.95)		
	Total	14	26	132	65	19	256		
You think the curriculum studied is reasonable.	Fully compliant	7(50.00)	7(26.92)	16(12.12)	8(12.31)	4(21.05)	42(16.41)		
	More in line with	4(28.57)	10(38.46)	36(27.27)	18(27.69)	0(0.00)	68(26.56)		
	General	2(14.29)	8(30.77)	72(54.55)	34(52.31)	10(52.63)	126(49.22)	39.626	0.001**
	Does not meet	1(7.14)	1(3.85)	5(3.79)	3(4.62)	2(10.53)	12(4.69)		
	Not at all	0(0.00)	0(0.00)	3(2.27)	2(3.08)	3(15.79)	8(3.13)		
	Total	14	26	132	65	19	256		
The class has a relatively strong learning atmosphere.	Fully compliant	8(57.14)	3(11.54)	11(8.33)	8(12.31)	4(21.05)	34(13.28)		
	More in line with	0(0.00)	9(34.62)	30(22.73)	8(12.31)	0(0.00)	47(18.36)		
	General	6(42.86)	10(38.46)	75(56.82)	39(60.00)	10(52.63)	140(54.69)	46.764	0.000**
	Does not meet	0(0.00)	1(3.85)	10(7.58)	7(10.77)	2(10.53)	20(7.81)		
	Not at all	0(0.00)	3(11.54)	6(4.55)	3(4.62)	3(15.79)	15(5.86)		
	Total	14	26	132	65	19	256		

Results of cross-sectional (chi-square) analysis

Title	Name	The level of learning you are at at this stage. (%)					Total	χ ²	p
		Upper			Lower				
		top grade	middle	Moderate	middle	inferior			
			class		class				
Your classroom teachers are responsible and conscientious.	Fully compliant	13(92.86)	18(69.23)	57(43.18)	27(41.54)	11(57.89)	126(49.22)	25.466	0.062
	More in line with	1(7.14)	6(23.08)	41(31.06)	19(29.23)	4(21.05)	71(27.73)		
	General	0(0.00)	1(3.85)	32(24.24)	17(26.15)	3(15.79)	53(20.70)		
	Does not meet	0(0.00)	0(0.00)	1(0.76)	1(1.54)	0(0.00)	2(0.78)		
	Not at all	0(0.00)	1(3.85)	1(0.76)	1(1.54)	1(5.26)	4(1.56)		
Total		14	26	132	65	19	256		
Your family is in a better financial position.	Fully compliant	7(50.00)	6(23.08)	9(6.82)	4(6.15)	3(15.79)	29(11.33)	69.628	0.000**
	More in line with	5(35.71)	11(42.31)	33(25.00)	10(15.38)	2(10.53)	61(23.83)		
	General	2(14.29)	9(34.62)	79(59.85)	44(67.69)	8(42.11)	142(55.47)		
	Does not meet	0(0.00)	0(0.00)	9(6.82)	7(10.77)	3(15.79)	19(7.42)		
	Not at all	0(0.00)	0(0.00)	2(1.52)	0(0.00)	3(15.79)	5(1.95)		
Total		14	26	132	65	19	256		
Your parents have high expectations for you to advance to higher education.	Fully compliant	11(78.57)	13(50.00)	54(40.91)	15(23.08)	8(42.11)	101(39.45)	51.321	0.000**
	More in line with	3(21.43)	11(42.31)	45(34.09)	25(38.46)	3(15.79)	87(33.98)		
	General	0(0.00)	2(7.69)	31(23.48)	23(35.38)	5(26.32)	61(23.83)		
	Does not meet	0(0.00)	0(0.00)	2(1.52)	2(3.08)	1(5.26)	5(1.95)		
	Not at all	0(0.00)	0(0.00)	0(0.00)	0(0.00)	2(10.53)	2(0.78)		
Total		14	26	132	65	19	256		
Your parents are concerned about how you are doing in school.	Fully compliant	7(50.00)	9(34.62)	33(25.00)	10(15.38)	6(31.58)	65(25.39)	46.763	0.000**
	More in line with	5(35.71)	12(46.15)	45(34.09)	18(27.69)	2(10.53)	82(32.03)		
	General	2(14.29)	4(15.38)	53(40.15)	34(52.31)	7(36.84)	100(39.06)		
	Comparisons do not match	0(0.00)	0(0.00)	1(0.76)	2(3.08)	1(5.26)	4(1.56)		
	Not at all	0(0.00)	1(3.85)	0(0.00)	1(1.54)	3(15.79)	5(1.95)		
Total		14	26	132	65	19	256		
Your father's highest level of education:	Bachelor's degree and above	4(28.57)	4(15.38)	18(13.64)	5(7.69)	2(10.53)	33(12.89)	15.271	0.505
	College	1(7.14)	3(11.54)	21(15.91)	10(15.38)	2(10.53)	37(14.45)		
	High school (or secondary school)	5(35.71)	10(38.46)	37(28.03)	13(20.00)	7(36.84)	72(28.13)		
	Junior High School	2(14.29)	6(23.08)	46(34.85)	28(43.08)	7(36.84)	89(34.77)		
	Elementary school and below	2(14.29)	3(11.54)	10(7.58)	9(13.85)	1(5.26)	25(9.77)		
Total		14	26	132	65	19	256		
Your mother's highest level of education:	Bachelor's degree and above	4(28.57)	4(15.38)	11(8.33)	4(6.15)	0(0.00)	23(8.98)	23.378	0.104
	College	1(7.14)	5(19.23)	25(18.94)	10(15.38)	1(5.26)	42(16.41)		
	High school (or secondary school)	3(21.43)	5(19.23)	37(28.03)	19(29.23)	6(31.58)	70(27.34)		
	Junior High School	5(35.71)	6(23.08)	46(34.85)	17(26.15)	7(36.84)	81(31.64)		
	Elementary school and below	1(7.14)	6(23.08)	13(9.85)	15(23.08)	5(26.32)	40(15.63)		

Results of cross-sectional (chi-square) analysis

		The level of learning you are at at this stage. (%)					Total	χ ²	p
Title	Name	Upper		Lower					
		top grade	middle	Moderate	middle	inferior			
			class		class				
Total		14	26	132	65	19	256		
What level of education do you hope to achieve in the future:	PhD	7(50.00)	4(15.38)	18(13.64)	9(13.85)	5(26.32)	43(16.80)	31.058	0.013*
	Master	1(7.14)	2(7.69)	10(7.58)	5(7.69)	2(10.53)	20(7.81)		
	Undergraduate	6(42.86)	19(73.08)	82(62.12)	34(52.31)	5(26.32)	146(57.03)		
	College	0(0.00)	1(3.85)	22(16.67)	16(24.62)	7(36.84)	46(17.97)		
	Intermediate	0(0.00)	0(0.00)	0(0.00)	1(1.54)	0(0.00)	1(0.39)		
Total		14	26	132	65	19	256		
Your future career aspirations are.	Go to university and have a stable and decent job in the city	12(85.71)	24(92.31)	102(77.27)	52(80.00)	14(73.68)	204(79.69)	13.768	0.316
	Go to college and contribute to the development of your hometown	0(0.00)	2(7.69)	13(9.85)	3(4.62)	0(0.00)	18(7.03)		
	Learn a skill and have a job in the city to earn a living	2(14.29)	0(0.00)	15(11.36)	10(15.38)	5(26.32)	32(12.50)		
	Learn a skill and return home to be able to earn a living	0(0.00)	0(0.00)	2(1.52)	0(0.00)	0(0.00)	2(0.78)		
	Total	14	26	132	65	19	256		

* $p < 0.05$ ** $p < 0.01$

The various factors were subjected to chi-square test on self-assessment of academic performance, and we found that there was no significant difference between the degree of responsibility of classroom teachers, father's education, mother's education, and career aspirations ($p > 0.05$), on self-assessment of academic performance. All other influencing factors were significantly different on academic performance.

Figure 4.4: List of Intermediate Variables and Independent Variable Indicators

Intermediate variables	Independent variable	Tier 1 Indicators	Secondary indicators	Classification
Academic Performance	Students' own factors	Learning Subjective Initiative	Learning motivation intensity	1=This thought is very strong, 2=This thought is strong, 3=This thought happens occasionally, 4=This thought never happens
			Learning Self-Confidence	1=Already reached the goal, 2=Effort can reach the goal, 3=It is a little difficult to reach the goal, 4=It is impossible to reach the goal
			Spontaneous learning	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Academic Aspiration		1=PhD, 2=Master, 3=Bachelor, 4=College, 5=Secondary
		learner autonomy ability	learner autonomy objectives	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy methods and plans	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy supervision	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			learner autonomy of Internet applications	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Learner Type		1=more active thinking, good at reasoning and analysis, 2=stronger memory, higher interest in liberal arts, 3=stronger hands-on practical skills, 4=stronger verbal skills, 5=stronger art appreciation, 6=good at thinking, insight and reflecting on oneself
		Spring College Entrance Examination Factors		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
	School Factors	Faculty Level		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Curriculum		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Classroom teaching style		1=Focus on the elaboration of subject knowledge and the development of analytical skills, and appropriately broaden knowledge, 2=Explain according to the textbook and play less on the content of the textbook, 3=Speak clearly the basic ideas
		Learning atmosphere		1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Teaching and learning styles	Assignment completion	1= always think independently and finish homework on time, 2= try to finish homework on time, but sometimes borrow from other students, 3= cope with it

				sloppily and often copy other students' homework, 4= never finish homework on time and in the right amount, and do not take it seriously at all
			Learning Guide	1=Teachers pay attention to learning method guidance, I have a method to learn, I learn easily, 2=Teachers do not pay attention to learning method guidance, I find my own method, the learning effect is mediocre, 3=Teachers read the text, I learn no method, I learn very hard.
	Family Factors	Family subjective factors	College expectations	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
			Focus on learning level	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all
		Objective family factors	Mother's education	1=Bachelor's degree and above, 2=College, 3=High school (or middle school), 4=Junior high school, 5=Elementary school and below
			family economic status	1=Fully conform, 2=Comparatively conform, 3=General, 4=Comparatively not conform, 5=Not conform at all

Academic performance will directly determine whether students have the ability and confidence to choose to go on to higher education. As shown in the Figure, there was a significant difference in the self-assessment of academic performance of students' intention to graduate from secondary vocational schools ($P=0.044<0.05$). The percentage of students who want to go on to higher education with self-assessment of academic performance above medium is 68.93%, which is 6.14 percentage points higher than those who are not sure; and 1.74 percentage points higher than those who want to get a job. Students' self-assessment is in line with objective facts.

Figure 4.5: Chi-Square Analysis of Academic Performance and Graduation intentions

Results of cross-sectional (chi-square) analysis

Title	Name	Before you learned about the Guangdong Spring College Entrance Examination, you originally wanted to A. pursue higher education, B. find a job:(%)			Total	χ^2	p
		Comply with A	Uncertain	Comply with B			
The level of learning you are at at this stage.	top grade	14(6.80)	0(0.00)	0(0.00)	14(5.47)	15.896	0.044*
	Upper middle class	26(12.62)	0(0.00)	0(0.00)	26(10.16)		
	Moderate	102(49.51)	27(62.79)	3(42.86)	132(51.56)		
	Lower middle class	50(24.27)	13(30.23)	2(28.57)	65(25.39)		
	inferior	14(6.80)	3(6.98)	2(28.57)	19(7.42)		
	Total	206	43	7	256		

* $p < 0.05$ ** $p < 0.01$

In order to better verify the degree of influence of related factors on academic performance, the results of the influence of academic performance of students in K school were obtained through ordered logistic regression analysis, and the following four aspects will be analyzed: students' own factors, spring college entrance examination policy, school environment, and family environment.

(1) Students' own factors

Figure 4.6: Ordered Logistic Regression of Academic Performance and Students' Own Factors

Summary of Analytical Results of Ordered Logistic Regression Models

item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Dependent variable threshold	top grade	2.604	0.642	4.054	16.431	0.000	0.074	0.021 ~ 0.261
	Upper middle class	4.151	0.646	6.427	41.302	0.000	0.016	0.004 ~ 0.056

Summary of Analytical Results of Ordered Logistic Regression Models

item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Independent variable	Moderate	7.663	0.781	9.810	96.229	0.000	0.000	0.000 ~ 0.002
	Lower middle class	10.109	0.887	11.399	129.930	0.000	0.000	0.000 ~ 0.000
	You have had the idea of studying hard and trying to improve your academic performance.	-0.070	0.176	-0.398	0.159	0.690	0.932	0.660 ~ 1.316
	You are spontaneous in your learning.	0.805	0.235	3.426	11.736	0.001	2.238	1.411 ~ 3.547
	You have clear learning goals.	0.347	0.247	1.407	1.981	0.159	1.415	0.872 ~ 2.296
	You have a clear study method and plan.	0.650	0.337	1.927	3.714	0.054	1.916	0.989 ~ 3.710
	You will summarize or reflect on what you have learned after class.	-0.258	0.291	-0.888	0.789	0.374	0.772	0.437 ~ 1.366
	You can effectively use Internet materials or resources for learning.	0.023	0.196	0.119	0.014	0.905	1.024	0.696 ~ 1.505
	Do you think you can achieve your desired goals based on your current attitude and academic performance.	1.023	0.246	4.152	17.240	0.000	2.781	1.716 ~ 4.506
	What level of education do you hope to achieve in the future:	-0.038	0.139	-0.273	0.075	0.785	0.963	0.733 ~ 1.265

McFadden R-squared: 0.208

Cox and Snell R 2: 0.411

Nagelkerke R 2: 0.446

From the perspective of the factor of spontaneous learning, the results showed that the estimated coefficient of spontaneous learning was 0.805, $OR = \exp(0.805) = 2.238$, OR value was greater than 1, and the academic performance was positively correlated with spontaneous learning, i.e., the stronger the motivation for spontaneous learning, the higher the academic performance, and the corresponding p-value of the Wald test ($P = 0 < 0.05$), spontaneous learning has a significant effect on students' academic performance. In addition, the strength of self-confidence in learning also had a significant effect on academic performance, $P = 0 < 0.05$, with a

regression coefficient of 1.023, $OR = \exp(1.023) = 2.781$, OR value greater than 1, i.e., students with stronger self-confidence in learning performed better compared to those with weaker self-confidence in learning.

However, the intensity of motivation, academic aspirations, learner autonomy objectives, learner autonomy methods and plans, learner autonomy supervision, and learner autonomy Internet applications, which had a non-significant effect on academic performance, all had p-values greater than 0.05 for the Wald test.

In addition regarding learner type, as shown in the Figure below, there were significant differences in learner type on academic performance.

Figure 4.7: Ordered Logistic Regression of Academic Performance and Learner Type

Summary of Analytical Results of Ordered Logistic Regression Models								
item	item	Regression coefficient	Standard error	z value	Wald χ^2 value	p value	OR value	OR value 95% CI
Dependent variable threshold	top grade	-2.102	0.324	-6.488	42.090	0.000	8.184	4.337 ~ 15.445
	Upper middle class	-0.912	0.248	-3.681	13.550	0.000	2.489	1.532 ~ 4.044
	Moderate	1.618	0.261	6.199	38.427	0.000	0.198	0.119 ~ 0.331
	Lower middle class	3.488	0.345	10.106	102.127	0.000	0.031	0.016 ~ 0.060
Independent variable	Which of the following types of learners do you consider yourself to be:	0.278	0.068	4.092	16.745	0.000	1.321	1.156 ~ 1.509

McFadden R-squared: 0.026

Cox and Snell R²: 0.065

Nagelkerke R²: 0.070

(2) Spring college entrance examination factors

Figure 4.8: Ordered Logistic Regression of Academic Performance and Examination Concert

Summary of Analytical Results of Ordered Logistic Regression Models								
item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Dependent variable	top grade	-2.271	0.361	-6.299	39.680	0.000	9.692	4.781 ~ 19.647
threshold	Upper middle class	-1.098	0.293	-3.746	14.032	0.000	2.998	1.688 ~ 5.324
	Moderate	1.345	0.295	4.557	20.769	0.000	0.261	0.146 ~ 0.465
	Lower middle class	3.172	0.365	8.688	75.483	0.000	0.042	0.021 ~ 0.086
Independent variable	How much do you care about "Guangdong Spring College Entrance Examination?"	0.284	0.117	2.418	5.846	0.016	1.328	1.055 ~ 1.672

McFadden R-squared: 0.009

Cox and Snell R²: 0.022

Nagelkerke R²: 0.024

From the factor of spring college entrance examination concern, the results show that the estimated coefficient of regression of college entrance examination concern is 0.284, $OR = \exp(0.284) = 1.328$, OR value is greater than 1.

(3) School factors

Figure 4.9: Ordered Logistic Regression of Academic Performance and School Factors

Summary of Analytical Results of Ordered Logistic Regression Models								
item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Dependent variable	top grade	0.278	0.513	0.543	0.294	0.587	0.757	0.277 ~ 2.069
threshold	Upper middle class	1.554	0.480	3.241	10.503	0.001	0.211	0.083 ~ 0.541
	Moderate	4.412	0.549	8.040	64.637	0.000	0.012	0.004 ~ 0.036
	Lower middle class	6.559	0.644	10.189	103.822	0.000	0.001	0.000 ~ 0.005

Summary of Analytical Results of Ordered Logistic Regression Models

item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Independent variable	Which of the following lecture styles is closest to your classroom situation:	0.369	0.197	1.875	3.517	0.061	1.446	0.984 ~ 2.127
	How does the teacher of each subject guide the study:	0.425	0.209	2.032	4.127	0.042	1.530	1.015 ~ 2.305
	The current school teachers' teaching ability meets the requirements for your advancement to higher education.	0.322	0.211	1.526	2.330	0.127	1.380	0.913 ~ 2.087
	You think the curriculum studied is reasonable.	0.079	0.177	0.448	0.201	0.654	1.083	0.765 ~ 1.532
	The class has a relatively strong learning atmosphere.	-0.184	0.168	-1.096	1.202	0.273	0.832	0.599 ~ 1.156
	Which of the following is true of your assignment completion:	1.028	0.247	4.157	17.277	0.000	2.795	1.722 ~ 4.538

McFadden R-squared: 0.104

Cox and Snell R²: 0.232Nagelkerke R²: 0.252

Firstly, from the assignment completion, the p-value of Wald test is 0, which is less than 0.05, students' assignment completion has a significant effect on academic performance, meanwhile, the regression coefficient of assignment completion is 1.028, $OR = \exp(1.028) = 2.795$.

Then from the factor of learning method guidance, the results show that the regression estimated coefficient of classroom teaching style is 0.425, $OR = \exp(0.425) = 1.53$, OR value is greater than 1.

However, classroom teaching style, curriculum, and learning atmosphere, which are not significant factors on academic performance, had p-values greater than 0.05 for the Wald test.

(4) Family factors

Figure 4.10: Ordered Logistic Regression of Academic Performance and Family Factors

Summary of Analytical Results of Ordered Logistic Regression Models								
item	item	Regression coefficient	Standard error	z value	Wald χ^2	p value	OR value	OR value 95% CI
Dependent variable threshold	top grade	0.012	0.516	0.024	0.001	0.981	0.988	0.359 ~ 2.717
	Upper middle class	1.302	0.492	2.649	7.016	0.008	0.272	0.104 ~ 0.713
	Moderate	4.053	0.557	7.271	52.862	0.000	0.017	0.006 ~ 0.052
	Lower middle class	6.021	0.621	9.691	93.922	0.000	0.002	0.001 ~ 0.008
Independent variable	Your family's financial situation is relatively good.	0.743	0.166	4.463	19.921	0.000	2.102	1.517 ~ 2.913
	Your parents have high expectations for you to advance to higher education.	0.514	0.190	2.701	7.293	0.007	1.672	1.151 ~ 2.429
	Your parents are concerned about how you are doing in school.	0.038	0.191	0.200	0.040	0.841	1.039	0.714 ~ 1.512
	Your father's highest level of education:	-0.020	0.132	-0.154	0.024	0.877	0.980	0.756 ~ 1.270
	Your mother's highest level of education:	0.062	0.135	0.460	0.212	0.645	1.064	0.817 ~ 1.386

McFadden R-squared: 0.072

Cox and Snell R²: 0.168

Nagelkerke R²: 0.182

Regarding the effect of family environment on academic performance, the p-values of the significance levels of the Wald test for father's education, mother's education, and parents' concern for academic performance were greater than 0.05, so father's education, mother's education, and parents' concern for academic performance were not the main factors affecting students' academic performance.

As for the factor of family economic status, the results show that the regression estimated coefficient of family economic status is 0.743, $OR = \exp(0.743) = 2.102$, OR value is greater than 1. The regression coefficient of parents' expectations for further education was 0.514, $OR = \exp(0.514) = 1.672$.

According to the above analyses, we can make a summary of the variables

which influence the academic performance.

To begin with student's own factors, spontaneous learning and self-confidence in learning are all part of students' subjective motivation and non-intellectual factors. The non-intellectual factor applies to Atkinson's achievement motivation theory. Achievement motivation motivates people to pursue a relatively high goal under certain social conditions and to do their best to achieve it in order to avoid failure. Students with higher academic aspirations must act more aggressively and diligently in their studies and therefore achieve relatively outstanding academic results. This, in part, influences academic confidence, which in turn increases the student's desire to succeed, which in turn increases the motivation to undertake learning spontaneously, thus creating a cycle. At the same time, various aspects of students' learner autonomy abilities have not yet played a positive role in their academic performance. This suggests that students' learner autonomy abilities in secondary vocational schools need to be given more attention so that non-intellectual factors can be combined with learner autonomy abilities that are beneficial for lifelong development and adapting to today's rapidly changing society so that students can not only gain in academic performance but also have a continuous motivation for future academic and career development. Moreover, we explore the effect on academic performance by combining the question items with multiple intelligence theory. Different learner types lead to differences in students' individual intelligence, and the differences in students' intelligence can be explained by Gardner's theory of multiple intelligence,

which suggests that human intelligence can be divided into eight different types, and that there is no mere certain intelligence or a unique way to reach a goal; each person uses his or her own method to tap into their own brain resources, and this variety of individual talents played to achieve the goal is what This kind of individual talent to achieve the purpose is the real intelligence, which creates the difference of individual human beings. However, the current form of examinations of the 3 cultural subjects of the spring college entrance examinations focuses mainly on the examination of human verbal expressions and mathematical and logical, which cannot diversify the selection of reserve talents in the field of vocational education.

As to the spring college entrance examination factors, the concern and academic performance are positively correlated, that is, the higher the college entrance examination concern, the greater the positive effect on academic performance. In addition, if we pay attention to the policies related to Guangdong Spring College Entrance Examination, we can know that this examination format is only for fresh and former secondary vocational school graduates, which is extraordinarily beneficial for secondary vocational school students, who do not need to compete with general high school students who only learn cultural basics, and therefore their learning self-confidence is enhanced.

For the school factors, it showed that students who think independently and complete their homework on time have better academic performance. It also showed that teachers focus on learning method guidance has a positive impact on learning

performance, students' learning performance will be on the upper side. The leading and guiding role played by the teacher in the teaching process and the completion of students' homework if they often think independently and complete their homework on time or try to complete their homework on time but sometimes draw on other students are relatively important to the students' learning performance in terms of timely consolidation of the knowledge acquired in the classroom.

At last, for the family factors, it showed that good family economic status can provide material protection for students' academic performance, such as additionally hiring tutors for targeted tutoring. And parents' expectations for their children's further education have a positive contribution to students' academic performance. Thus, the main factors related to the family environment that influence students' academic performance are parents' expectations for their children to advance to higher education and the family's economic status. The results obtained here are consistent with Bourdieu's cultural capital theory, which can have a significant impact on students' educational outcomes.

In conclusion, we found that 9 indicators of spontaneous conducting learning, self-confidence in learning, the college entrance examination concern, assignment completion, learning method guidance, family economic status and parents' expectations for further education had an impact on the academic performance. Then unfortunately we found that learner autonomy abilities did not influence academic achievement.

Chapter 5

Conclusion and Discussion

5.1 Conclusion

The innovation of this study is to study the role of comparing related factors in the process from the perspective of secondary vocational school students' intention to graduate, so as to explore the importance of these factors considered in the process of implementing the talent cultivation model, as well as to try to explore the possibility of improving secondary vocational school students' own knowledge ability and technical skill ability from the perspective of cultivating learner autonomy ability, in order to meet the social composite technical skill. In this way, we will explore the possibility of improving students' knowledge and technical skills in secondary vocational schools from the perspective of cultivating learner autonomy ability in order to meet the needs of society's complex technical skills and the long-term, comprehensive development of individuals themselves.

H1 is consistent with the hypothesis that, after understanding the policies related to the spring college entrance examination, most of the students who originally determined and chose employment shift to choose further education, but there are still a small number of students who firmly choose employment, so we should implement a talent cultivation model that considers the dual orientation of employment and further education.

H2 was not confirmed in this survey, and students' own factors did not play a greater influence than other external factors.

H3 is consistent with the hypothesis that the lack of learner autonomy skills of students in secondary vocational schools does not play a key role in academic performance, and the reason for this is that the lack of learner autonomy skills does not lead to a significant utility.

5.2 Discussion

Through the analysis of various aspects and dimensions and the analysis of whether there are significant differences in different variables, it is found that secondary vocational school students have a strong willingness to go on to higher education, and various factors such as students' own factors, spring college entrance examination policy factors, school factors, and family factors all influence and restrict their employment and higher education choices. In the context of the Spring College Entrance Examination, only a small number of factors influencing academic performance, which plays a key role in the 3 subjects of Chinese, Mathematics, and English examinations, play a role. In addition, the lack of students' independent learning ability and the lack of attention to the school factors such as the level of teachers, curriculum, and learning atmosphere prevented the effective connection of the factors and their superimposed effect.

5.3 Recommendation

This section makes the following recommendations for the problems identified by the research in this study.

1. Develop awareness of learner autonomy ability

Students in secondary vocational schools are characterized by weak foundation and their lack of learner autonomy ability, which is mainly manifested in their insufficient understanding of what, how and why to learn. This makes them more confused and disoriented in the learning process. For this reason, teachers need to understand their students well and clearly explain the characteristics of the subject and the meaning of the content they are learning. Students need to understand why they need to learn, what they need to learn at the secondary level, and how this content will contribute to their future when they enter society. The more clearly students understand the subject matter, the better they can integrate real life with their subject knowledge and the less confused they will be with the teacher's guidance. Thus, the teaching process in this migration mode develops the awareness of learner autonomy ability among secondary vocational school students.

2. Motivate the students' learning awareness

Secondary vocational school students have not developed good study habits of their own for a variety of reasons. If they are left to make their own decisions, they often seem clueless, without goals or emotions to drive them to study. Or they set learning goals that are so far from their

choices, or so far from what they need, that they don't know how to ask for themselves. This is the result of a chronic lack of motivation and a lack of necessary knowledge. In such cases, teachers need to start with the theory of the motivation engine, that is, to regulate their behavior through external control, and to use positive feedback as the main way to move students from "the teacher wants me to do it, to I want to do it myself or I want to do it myself". When students identify with the teacher's management and realize that the teacher is acting in their own interest, they will participate unconsciously.

3. Enrich the school curriculum

Curriculum is the support of cultivation objectives, while cultivation objectives provide the choice of specific curriculum standards and course contents for the purpose of cultivating talents. According to the composition of the current training program of secondary schools, the curriculum is generally composed of public basic courses, professional basic courses, and professional courses. According to the composition of the training program, we analyze the characteristics of the school, inherit the school tradition, integrate the regional resources, absorb the wisdom of teachers, and strive to form a curriculum system that meets the requirements of the national strategy and the sustainable development needs of students, and connect and match the national curriculum and provincial curriculum in the training

program to achieve the purpose of cultivating talents with the dual orientation of employment and further education. Therefore, we need to examine the public basic courses, professional basic courses, and professional courses in the training program with the concept of comprehensive development of talents and lifelong development education and carry out school-based reconstruction of the curriculum content in the curriculum standards and formulate curriculum implementation plans that permeate and integrate the knowledge of sustainable development.

4. Improving the teaching the level of faculty

Highly qualified and professionalized teaching staffs are an important guarantee for the implementation of human resources development and the provision of high-quality educational activities. By "teacher specialization", we mean that teachers should have certain knowledge and skills for sustainable development, as well as teaching knowledge and skills for engaging in educational activities that consider employment and further education orientation, and even can effectively link and integrate the teaching of public basic courses, professional basic courses and professional courses. Therefore, strengthening the "professionalization" training of secondary vocational schoolteachers is an urgent need for secondary vocational schools to implement the concept of comprehensive and lifelong development of human resources education.

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