Factors Influencing the Quality of Agricultural Vocational Undergraduate Students in Guangxi Vocational University of Agriculture

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Abstract

This research consists purposes were to 1. Study the various positive Factors Influencing the quality of agricultural vocational undergraduate students in Guangxi 2. Analyses relationship between the various positive Factors and 3. Aropose relevant policy recommendations for promoting the quality of agricultural vocational undergraduate students in Guangxi. This research is mixed-methods research design. The respondents of this study were 394students, and 5 representatives of enterprises and teachers in the field of agriculture in Guangxi, obtained through stratified random sampling. The research instrument employed in this study were questionnaires and a set of questions for the focus group discussion. The information and data collected were analyzed and presented in terms of KMO (Kaiser-Meyer-Olkin) sample measure, Bartlett's sphericity test and Confirmatory factor. conclusions were drawn the path coefficient from independent variable (Cultivate Target and Practical Ability) is 0.71, The path coefficient from mediation variable (Employment Quality and External Evaluation) is 0.56, The path coefficient from moderating variable (Social Needs and University Management Strength) is 0.44, indicating a significant correlation between two factors of these three variables. By analyzing their interrelationships and coefficients, there are 6 positive Factors Influencing of Cultivate Target, Practical Ability, Employment Quality, External Evaluation, Social Needs and University Management Strength on the quality of agricultural vocational undergraduate students in Guangxi. It provides theoretical insights and practical guidance for agricultural vocational undergraduate education.

Keywords: Agriculture, Vocational Undergraduate Education, Guangxi of China

Introduction

In recent years, With the wave of globalization and scientific and technological revolution, vocational education has become a new driving force to promote the sustainable development of social economy. To deepen higher vocational education, how to improve the quality and effectiveness of vocational education, (David Spence Hill, 2022) so that it can better serve the region, industry and country is an important topic that we are facing. In this context, as a vocational undergraduate university, is the main position of talent training, it is urgent to find the influencing factors restricting their development, analyze the reasons, take effective measures to optimize, and finally form a replicable and popularizable training mode. OBE, namely the achievement-oriented education concept, as a student-centered educational concept that emphasizes the setting of educational results, has been widely concerned and applied in the field of higher education in recent years. (Honghui Chen, Songhua Hu, 2024)

Guangxi, as one of the major agricultural provinces in China, its agricultural vocational undergraduate education plays an important role in cultivating high-quality talents to meet the needs of modern agricultural development. However, the current agricultural vocational undergraduate education in Guangxi still faces many challenges in the process of talent training. (Jinxi Zhu, Jiangxia Yin, Chenxuan Zhai, 2024) For example, the professional setting may be relatively old and without real-time connection with market demand; the teacher teaching quality is not high to effectively arouse students' interest in learning; the teaching talent training mode may focus too much on the teaching of theoretical knowledge and ignore the cultivation of hands-on ability, resulting in the employment ability does not meet the market demand. In addition, the lack of teaching resources and the single evaluation system may also restrict the improvement of the quality of talent training. (Yanling Jin, Huijuan Yang, Minggang Ren et al., 2025)

The OBE concept provides a new perspective and method for the talent cultivation of agricultural vocational undergraduate education in Guangxi. It emphasizes that starting from the students' learning results, setting of educational goals and teaching methods; which is highly consistent with the challenges and needs of the current agricultural vocational undergraduate education in Guangxi. Therefore, exploring the influencing factors of agricultural vocational undergraduate education talent training in Guangxi under the OBE concept can not only help to solve the problems existing in the current talent training, but also provide useful reference for the reform of agricultural vocational undergraduate education in Guangxi, the whole country and even the world. (Zhenguo Zhu, Weizu Hu, Wu Zuo, 2023)

The Outline of the Plan for Building a Strong Education Country in China (2024-2035) defines the main goals for 2027 and 2035, and sets out nine key tasks, including accelerating the development of a modern

vocational education system and training craftsmen, skilled craftsmen and highly skilled personnel in a major country. According to the list of national colleges and universities in 2024 released by the Ministry of Education, there are 51 vocational undergraduate universities nationwide. According to the Statistical Bulletin on National Education Development in 2023, vocational undergraduate colleges will recruit 89,900 students, and these data will continue to grow rapidly to achieve the goal of becoming a strong education country by 2035 (Dihua Tang,Junhua Xiang,Bei Pei, 2025)

Therefore, vocational undergraduate education will play an increasingly important role in the future job market, and the trained graduates will also participate in more and more important construction fields and career positions. (Zhiyao Liu, Lu Ren., 2025) Society, industry and colleges and universities will also be the cultivation of professional undergraduate graduates' quality at an unprecedented height, especially in China's Guangxi, as a agricultural as the main economic support of ethnic minority autonomous regions, professional undergraduate education is more important, research promote Guangxi agricultural vocational undergraduate education talent training has important theoretical value and practical significance. Previous studies from Bheemanpalli VinodKumar and B. Seema have shown that: Career aptitude is simply defined as student s aptitude towards their career. (Bheemanpalli Vinodkumar and B. Seema, 2021) Researches reveal that aptitudes crystalize quite early in life of an individual and we can know the aptitudes of the students at their school or college stage through their participation in various activities and through aptitude tests which psychologists and educational workers had developed. However, this study will rely on OBE concept, through the region of agricultural vocational undergraduate employment status, enterprise evaluation of choose and employ persons and social recognition, data analysis, summarizes the influence factor, and corresponding put forward to promote the development of agricultural vocational undergraduate students' high quality of new path and new measures.

The Purposes

1. To study the various positive Factors Influencing the quality of agricultural vocational undergraduate students in Guangxi

2. To analyses relationship between the various positive Factors

3. To propose relevant policy recommendations for promoting the quality of agricultural vocational undergraduate students in Guangxi

Literature Review

The development process of Chinese vocational education has gone through the historical journey from start -up to mature, and continues to contribute to the development of world vocational education in the development of Chinese vocational education.

Compared with non-agricultural vocational college, agricultural vocational undergraduate is directly related to agriculture education, which determines that the field of social service of agricultural vocational college is more specialized, mainly facing agriculture, rural areas and farmers (Yuting Zhou, Shi Yao, 2023). Compared with agricultural vocational college, agricultural vocational undergraduate is a higher level of education, which determines the higher level of social service between agricultural vocational undergraduate and agricultural vocational college (Bixin Li, Zong Yang, 2022).

A British scholar (Ting Fan, 2019). This theory emphasizes the promotion of knowledge application and ability improvement through reflection and action in practice, which coincides with the practice-oriented approach emphasized in the rural revitalization strategy.

Pointed out that new type of workers are the key elements to develop new quality productivity, and have the characteristics of adapting to the quality of advanced productivity, being good at using new production tools, and having multidimensional knowledge and composite skills.

summarized after receiving college education, college students should finally enter the society to adapt to the society and serve the society to realize their self-value. Employment is the intersection between college society and students. Students' employability is extremely important to both colleges and universities.

In the current research on the cultivation of vocational undergraduate students, the problems and countermeasures are mainly discussed, so as to get some general evaluation paths. However, there are few studies on the cultivation quality of agricultural vocational undergraduates in Guangxi, especially the quantitative analysis of the influence of positive factors is still in a blank stage. By learning the above literature content, this paper in combination with the basic law of vocational education development, apply the knowledge learned, agricultural vocational undergraduate education development status (difficulties and challenges) and employment quality improvement factors, problem analysis and variable measurement provide effective theoretical basis for the following article.

Methodology

1. Population and sample groups in the research include: This study was conducted of Guangxi Vocational University of Agriculture. The population of this research project was divided into two groups: 1) 394 students, including 15 international students from Southeast Asia, 2) and 5representatives of enterprises and teachers in the field of agriculture in Guangxi.

2. Research tools include: Mixed methods research (Quantitative research and Qualitative research) is employed to analyze the data because both quantitative and qualitative approaches are adopted in the research process.

2.1 Questionnaires In this research project, data collection was carried out by means of questionnaire survey. The questionnaire was divided into 2 sets: 1) the students set and 2) the representatives of enterprises and teachers set. The questionnaire was divided into 2 parts, 1) the general background, 2) the opinions of students, representatives of enterprises and teachers towards problems of journalistic writing.

2.2 A set of question for focus group discussion The panel consisted of five members: two agricultural corporate executives, an agricultural government official, a senior agricultural educator, and a successful alumnus. Participants engaged in discussions on enhancing the educational standards and training quality for undergraduate agricultural students in Guangxi, ultimately reaching a consensus on 6 key directions: Cultivate Target, Practical Ability, Employment Quality, External Evaluation, Social Needs and University Management Strength.

2.3 Descriptive statistics In this research project, this paper explains six variables in a multidimensional way, and makes hypotheses about the influence of these six variables on the training quality of agricultural vocational undergraduate students in Guangxi.

3. Data Collection: This paper collects data through the combination of network questionnaire survey and paper questionnaire survey. Network questionnaire mainly through the questionnaire star online anonymous filling form to distribute, paper-based questionnaire is mainly through the employers and other relevant personnel.

4. Data Analysis: This Research use depth interviews, in the form of real employment evaluation of 5 employers had a face-to-face communication, by combining the work performance of the agricultural vocational undergraduate graduates in the unit, I understand their feedback on the effectiveness of the education and teaching of colleges and universities and the needs of employees in different positions, and recorded the impact on the talent training quality of agricultural vocational undergraduate students in Guangxi into the content of the interview data. In this study, statistical software SPSS and Taro Yamane Formula were used as

questionnaire data analysis tools. The main analysis contents included descriptive statistical analysis, reliability analysis, validity analysis, correlation analysis and regression analysis.

5. Statistical used in research: The Research presented using SPSS22.0, the IOC (Project-Objective Consistency Index), KMO and Bartlett's Test evaluation framework and study focuses on empirically analyzing the impact of education and teaching level on the quality of agricultural vocational undergraduate students through survey research. Taking the students' training objectives and students' practical ability as the independent variables, and the employment quality and external evaluation as the intermediary variables, and the social demand and school-running strength are designed as the moderating variables. Through various scales for data analysis, the relationship and influence coefficient between six factors were obtained, and they are concluded that played positive roles in promoting the education and teaching level and quality of agricultural vocational undergraduate students in Guangxi.

Results

This Research The researcher can classify the research results as follows

1. Study the various positive Factors Influencing the quality of agricultural vocational undergraduate students in Guangxi

This study evaluates agricultural vocational undergraduate education quality through two key variables: educational objectives and practical competencies. Survey data shows that both "educational objectives" and "practical competencies" received above-average evaluations among surveyed students, with practical competency assessments slightly surpassing educational objectives. The largest cohort of respondents was fourth-year university students who demonstrated comprehensive and long-term engagement with their institution's educational goals and practical training programs, providing objective feedback. Participants covered representative agricultural disciplines across China, with geographical diversity spanning Guangxi, Henan, Hunan, Guangdong, and international students from ASEAN countries. Notably, 51.52% of respondents agreed that monthly social practice aligns with practical needs. The correlation between educational objectives and practical competencies was significant, with practical skills demonstrating substantial influence on achieving educational goals.

Table 1 Overall Reliability Statistics of the Questionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.982	0.973	48

From Table 1 this study, the reliability test of the questionnaire data was conducted using SPSS22.0 statistical analysis software, and the results obtained are shown in the table below. According to the analysis of the overall reliability statistics of the questionnaire, Cronbach`s alpha is 0.973, which is higher than 0.9, therefore, the reliability of the questionnaire is very good.

Table 2 Description of statistical results

variable	N	Mini	Max	Mean	Standard deviation	Skew	Kurtosis
Cultivate Target (CT)	394	1	5	3.649	0.932	-1.279	1.365
Practical Ability (PA)	394	1	5	3.795	0.975	-0.943	0.514
Employment Quality (EQ)	394	1	5	3.787	1.029	-0.685	-0.587
External Evaluation (EE)	394	1	5	3.672	1.143	-0.331	-1.028
Social Needs (SN)	394	1	5	3.512	1.102	-1.132	0.351
University Management Strength (UMS)	394	1	5	3.545	0.968	-0.569	-0.285

From Table 2 There are 6 variables in the relational model proposed in this study. Likert scale 5 was used for all scales, with a maximum value of 5 and a minimum value of 1. In all scales, the higher the score, the higher the evaluation level. The descriptive statistical results of 6 variables are shown in Table 2. Skewness and kurtosis in the table are normal distribution tests for formal survey data. It is generally believed that when the absolute value of skewness's less than 2 and the absolute value of kurtosis is less than 5, the sample basically conforms to normal distribution. As can be seen from the table, the absolute value of skewness of all the measurement questions is less than 2(-1.279), and the absolute value of kurtosis is less than 5 (1.365). Therefore, it can be considered that the large sample survey data of each measurement question in this study basically meet the threshold requirements mentioned above, and further analysis can be carried out.

2. Analysis relationship between the various positive Factors

In this study, the validity test of the questionnaire data was conducted using SPSS22.0 statistical analysis software, and the results obtained are shown in the table Overall KMO and Bartlett's Test of the questionnaire

Table 3 Overall KMO and Bartlett's Test of the questionnaire

KMO		0.912
Bartlett's Test of Sphericity	Approx. Chi-Square	6026.461
	df	173
	Sig.	0.000***

*P ＜.05; **P ＜.01; ***P ＜.001*

From Table 3 According to the analysis of the KMO and Bartlett's Test results of the questionnaire as a whole, the KMO value is 0.912, which are higher than 0.9, and the sample sizes are sufficient; and for the test of sphericity, the significance level is 0.000, which are less than 0.01, and conforms to the test of sphericity. The KMO value test shows that there is a correlation between the question variables, which meets the requirements of factor analysis. Therefore, this questionnaire is suitable for factor analysis.

Table 4 Convergence validity analysis results

Variable	Item	Path coefficient	S.E.	C.R.	P	CR	AVE
CT	CT1	0.863				0.889	0.743
	CT2	0.887	0.059	20.403	***		
	CT3	0.884	0.055	20.369	***		
	CT4	0.827	0.043	20.113	***		
	CT5	0.901	0.059	21.934	***		
PA	PA1	0.901				0.912	0.726
	PA2	0.831	0.038	22.815	***		
	PA3	0.818	0.027	22.096	***		
	PA4	0.922	0.044	21.632	***		
	PA5	0.902	0.036	24.437	***		
EQ	EQ1	0.855				0.876	0.721
	EQ2	0.849	0.045	20.843	***		
	EQ3	0.899	0.047	22.485	***		
	EQ4	0.901	0.056	22.617	***		
	EQ5	0.905	0.060	24.012	***		
EE	EE1	0.876				0.923	0.752
	EE2	0.861	0.045	23.182	***		

	EE3	0.849	0.037	22.454	***		
	EE4	0.871	0.048	23.508	***		
	EE5	0.889	0.051	24.013	***		
	EE6	0.901	0.056	24.132	***		
SN	SN1	0.881				0.916	0.732
	SN2	0.821	0.042	20.93	***		
	SN3	0.836	0.044	21.614	***		
UMS	UMS1	0.828				0.867	0.635
	UMS2	0.767	0.052	16.717	***		
	UMS3	0.709	0.05	15.097	***		
	UMS4	0.887	0.053	19.588	***		
	UMS5	0.788	0.062	16.762	***		

From Table 4 As can be seen from the table 5, Path coefficient reflects the load of items on latent variables, the coefficients of this study ranged from 0.709 to 0.905, which are generally recommended to be ≥0.708 (to ensure convergent validity). Most of the loadings in the table are between 0.8 and 0.9, showing good performance. S.E. The error of measuring the path coefficient estimate, and the value is between 0.042 and 0.062, the smaller the better the stability. The observed factor load, combined reliability (CR) and average variance extraction (AVE) of each variable are shown in the table. The combined reliability (CR) of each dimension was greater than 0.7 and AVE was greater than 0.5, respectively. The significance probability was $P < 0.001$. It indicated that there was a significant relationship between the 6 latent variables and the measurement index variables, and the scale structure model had very good convergence.

Table 5 Correlation and discriminant validity analysis test

	AVE	1	2	3	4	5	6
CT	0.743	0.862					
PA	0.726	.42**	0.852				
EQ	0.721	.38**	.40**	0.849			
EE	0.752	.45**	.36**	.43**	0.867		
SN	0.732	.35**	.32**	.37**	.41**	0.856	
UMS	0.635	.29**	.27**	.31**	.33**	.28**	0.797

From Table 5 As can be seen from the table 6, AVE of all dimensions of the overall scale is greater than 0.5, and the square root of AVE is greater than the correlation coefficient between dimensions, indicating that the scale has good discriminative validity.

Correlation analysis results show that (1) Discrimination Validity of CT: The root means square error (AVE) of CT (≈0.862)> correlations with other variables such as PA (0.42) and EQ (0.38), indicating good discriminant validity from other latent variables (2) Discrimination Validity of PA: The root means square error (AVE) of PA (≈0.852)> correlations with CT (0.42) and EQ (0.40), demonstrating good discriminant validity (3) Discrimination Validity of EQ: The root means square error (AVE) of EQ (≈0.849)> correlations with CT (0.38) and PA (0.40), showing good discriminant validity. (4) Discrimination Validity of EE: The root means square error (AVE) of EE (≈0.867)> correlations with CT (0.45) and PA (0.36), indicating good discriminant validity (5) Discrimination Validity of SN: The root means square error (AVE) of SN (≈0.856)> correlations with CT (0.35) and PA (0.32), demonstrating good discriminant validity (6) Discrimination Validity of UMS: The root means square error (AVE) of UMS (≈0.797)> correlations with CT (0.29) and PA (0.27), showing good discriminant validity.

In conclusion, the 6 measurement models in this study all meet the standards and can be used for the next structural equation model (SEM) analysis.
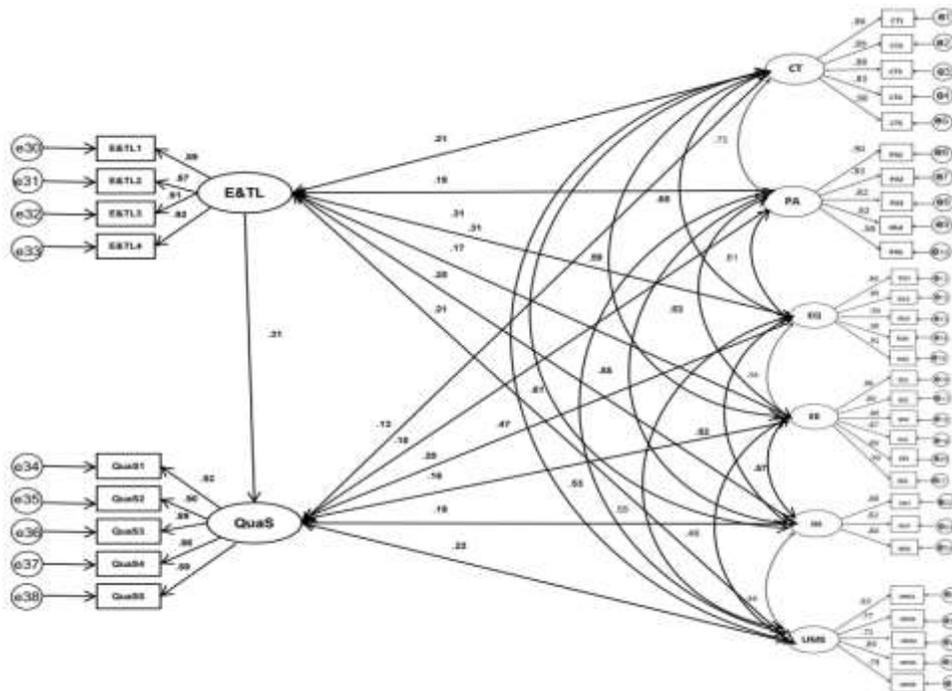

Figure 1 Running results of structural equation model graph (Yuan Wei, 2025)

Standardized estimates

Default model

×2=398.243(p=.000); df=303; ×2/df=1.314

GFi=.982; AGFI=.929

NFl=.971; IFI=.991; TLI=.994; CFl=.990; RFI=.981

RMSEA=.068

According to the fitting test index of structural equation model, the ratio NC of chi-square degrees of freedom should be between 1-3. The Residual square and square root RMSEA (Residual square error of approximation) values should be between 0.05 and 0.08. If the values are lower than 0.05, the adaptation is very good. The GFI value of the fitness index is generally considered to be greater than 0.9, and above 0.8 is acceptable. The value-added suitability index CFI value should be greater than 0.9; The TLI value of non-standard adaptation index should be above 0.9. It is generally believed that the sample size should be more than 200, main path results of the model are shown in Figure 1.

3. Propose relevant policy recommendations for promoting the quality of agricultural vocational undergraduate students in Guangxi

Based on the from data analysis, we adjusted and refined the conceptual framework of the study to establish a model demonstrating how educational capabilities in agricultural vocational undergraduate programs influence student training quality. Figure 2 clearly shows the influence path and related degree of students' participation in social practice on the teaching ability of Guangxi Agricultural Vocational University, with dashed line indicating no influence and thick line indicating the maximum influence.
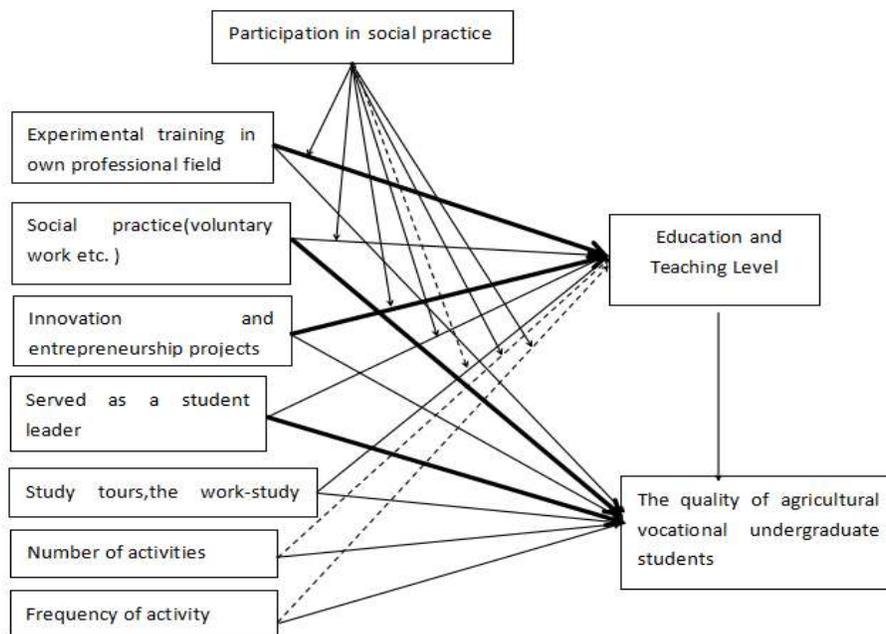
Figure 2 Research Result model (Yuan Wei, 2025)

Four important new relationships between variables can be drawn from the figure

(1) Student participation in practical activities and innovation and entrepreneurship projects in their own professional fields is a core factor affecting the level of education and teaching.

(2) Social practice (volunteer service, etc.) and participation in the work of student cadres in schools are important practical factors to measure the quality of agricultural vocational undergraduate students.

(3) The number and frequency of students' participation in activities have a direct impact on the participation degree of social practice activities, but it has no direct relationship with the education and teaching level of schools.

(4) Social practice activities organized by schools and with great influence can enhance students' enthusiasm for participation, which has a direct impact on their participation.

Conclusion

This Research The researcher can summarize the results of the research study according to the following objectives

1. This study evaluates agricultural vocational undergraduate education quality through two key variables: educational objectives and practical competencies. Survey data shows that both educational objectives and

"practical competencies" received above-average evaluations among surveyed students, with practical competency assessments slightly surpassing educational objectives.

2. The study proposes 6 hypotheses, demonstrating that three dimensions of employment quality and five dimensions of external evaluation including their source reliability positively impact educational outcomes. Notably, societal perceptions and evaluations of student cultivation quality significantly enhance the educational credibility, trustworthiness, and reputation of agricultural vocational universities. This, in turn, boosts enrollment rates and better serves local communities. In addition, both alumni evaluation and similar university evaluation regulate the quality of student training in agricultural vocational undergraduate universities in Guangxi, China to a certain extent.

3. Through analyzing the moderating effects on cultivating students 'innovative capabilities, the following conclusions can be drawn: Participation in innovation and entrepreneurship competitions can enhance students' innovative abilities to some extent. Meanwhile, engaging in such competitions and developing projects significantly improves students 'organizational coordination skills and sensitivity to innovative initiatives. Particularly in agriculture, practical innovation experiences through planting, breeding, food development, and agricultural enterprise management demonstrate a notable moderating effect on fostering students' innovative capabilities. For students with high participation in innovation and entrepreneurship competitions, both the quantity and quality of awards won, along with the guidance provided by instructors, exhibit significant moderating effects.

Discussion

This Research The researcher can discuss the research results as follows

1. This study evaluates agricultural vocational undergraduate education quality through two key variables educational objectives and practical competencies. Survey data shows that both educational objectives and practical competencies received above-average evaluations among surveyed students, with practical competency assessments slightly surpassing educational objectives. The largest cohort of respondents was fourth-year university students (29.95%), who demonstrated comprehensive and long-term engagement with their institution's educational goals and practical training programs, providing objective feedback. Participants covered representative agricultural disciplines across China, with geographical diversity spanning Guangxi, Henan, Hunan, Guangdong, and international students from ASEAN countries. Notably, 51.52% of respondents agreed that monthly social practice aligns with practical needs. The correlation between educational objectives and

practical competencies was significant, with practical skills demonstrating substantial influence on achieving educational goals.

2. Statistical analysis of sample data revealed no significant differences in the impact of demographic variables and student origin on the quality of undergraduate agricultural vocational education across different majors. This indicates that the study sample demonstrates high homogeneity in demographic characteristics and regional origins. However, it should be noted that since the research focuses exclusively on agricultural vocational undergraduate programs at universities in Guangxi, China, further validation is required to determine whether these findings apply to vocational undergraduate institutions in other disciplines or regions.

3. In view of the proposition of how to improve the quality of student talent training in agricultural vocational undergraduate universities in Guangxi, the following suggestions are put forward

3.1 Pay more attention to the talent training objectives and positioning of schools

3.2 To improve the implementation rate and quality level of graduates' initial employment, and strengthen the thinking of international export employment

3.3 Establish alumni contact mechanism, do a good job in the analysis of graduates 'employment situation, and actively carry out educational exchanges with similar vocational undergraduate universities in different regions to learn from each other's strengths and achieve win-win cooperation

3.4 Integrate multiple channels, establish a sound innovation ability improvement system, actively encourage students to participate in social practice activities and build professional brand projects.

3.5 Do a good job in the summary and publicity of the achievements of agricultural vocational undergraduate education in Guangxi, form characteristics and high-quality products, actively promote them, and enhance social recognition and international influence.

Discoveries or New Knowledge

Recommendations to enhance student training quality through improving teaching capabilities at Guangxi Agricultural Vocational Undergraduate Universities. The paper also outlines future research directions for advancing student training quality in agricultural vocational undergraduate education in Guangxi. it constructs a model that enhancing agricultural vocational undergraduate education in Guangxi. It provides theoretical insights and practical guidance for agricultural vocational undergraduate education.

Suggestion

1. Suggestions for use

1.1 Strengthening the importance of improving education and teaching ability is the core premise for agricultural vocational universities to respond to social needs and consolidate the foundation of running schools, and also the key guarantee for cultivating high-quality technical and skilled talents to meet the needs of domestic agricultural development and ASEAN agricultural cooperation.

1.2 Pay attention to external evaluation information. Valuing external evaluations serves as the "navigator" for agricultural vocational undergraduate universities to accurately determine talent development directions and dynamically optimize educational systems. Alumni feedback, industry recruitment data, and exchanges with peer institutions form the core data sources of this navigation system.

1.3 Establish a three-year employment data analysis and review mechanism to understand the dynamic barometer of social demand. The analysis and review of employment data over the past three years serve as both a barometer and navigator for agricultural undergraduate universities to accurately capture evolving social demands and dynamically adjust talent cultivation strategies.

1.4 Through the joint efforts of the government, universities and enterprises, a mechanism for deep cooperation in running schools will be formed. Enhancing educational capabilities stands as the cornerstone for agricultural vocational universities to stay ahead of market trends and cultivate talents that meet both China's agricultural development needs and ASEAN cooperation requirements.

2. Suggestions for next research

Future research should transcend geographical constraints by conducting comprehensive and precise surveys to collect high-quality sample data, thereby enhancing study reliability and the persuasiveness of research conclusions. Furthermore, tailored social practice content should be developed for different agricultural disciplines, while implementing the "government-enterprise-university" collaborative model. By aligning with societal needs and institutional strengths, new measurement dimensions should be proposed to expand research scope and conduct more in-depth studies.

References

Bheemanpalli Vinodkumar and B. Seema. (2021). Career Aptitude Assessment of the Undergraduate
Agricultural Students in Kerala Agricultural University. *Current Journal of Applied Science and Technology, 40*(8), 13-21.

Bixin Li, Zong Yang. (2022). The differentiation dimension and internal logic of undergraduate level vocational education the perspective of the type of education. *Journal Modern education management*, (5), 100-110

David Spence Hill. (2022*). Introduction to Vocational Education: A Statement of Facts and Principles Related to the Vocational Aspects of Education Below College Grade.* Creative Media Partners, LLC.

Dihua Tang, Junhua Xiang, Bei Pei. (2025). In the context of rural revitalization, the core literacy training path of students of agricultural vocational colleges. *Smart Agricultural Guide, 5*(3), 155-157

Honghui Chen, Songhua Hu. (2024). The realistic demand of developing vocational undergraduate education under the background of new quality productivity faces challenges and countermeasures. *Chinese Vocational and Technical Education,* 36, 65-73.

Jinxi Zhu, Jiangxia Yin, Chenxuan Zhai. (2024). Positioning and implementation path of social service responsibilities for undergraduate colleges and universities in agricultural vocational colleges -Take Guangxi Agricultural Vocational and Technical University as an example. *High education forum*, 12, 25-28

Yanling Jin, Huijuan Yang, Minggang Ren et al. (2025). Take employment -oriented closed -loop model alumni to help the professional construction of packaging engineering -take Xi'an University of Technology as an example. *Shaanxi Education (Higher Education)*, 1, 25-27

Yuting Zhou,Shi Yao. (2023). The orientation, dilemma and path of vocational education talent training at the undergraduate level. *Journal Vocational Education*, (3), 31-35

Zhenguo Zhu, Weizu Hu, Wu Zuo. (2023) Three -step teaching reform in the background of higher vocational education to vocational undergraduate education transitions. *Mold industry, 45*(5), 69-73

Zhiyao Liu, Lu Ren. (2025). Reshape the new blueprint of vocational undergraduate practice teaching from the perspective of enterprise. *Public Relations World*, 2, 13-15