

Exploring the Development of Vocational Undergraduate Education in the Internet and New Media Faculty: Challenges, Strategies, and Policy Impacts in Nanchang, China

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Abstract

The study aimed at assessing the factors effecting the development of vocational undergraduate education in the Internet and New Media Faculty at Jiangxi University of Software Professional Technology in Nanchang, China. The target population consists of students enrolled in the faculty of Internet and New Media at the university, with a sample size of 377 respondents. A stratified sampling technique, followed by random sampling, was employed to ensure a representative sample, with 40 respondents allocated for the pilot study and 332 for the main data collection. The study adopted a cross-sectional research design, utilizing structured questionnaires for data collection. Data analysis was conducted using the Statistical Product for the Service Solution (SPSS), incorporating both descriptive and inferential statistics to assess relationships between independent variables-challenges and opportunities, strategies employed by other institutions, industry partnerships, and government policies-and the dependent variable, vocational undergraduate education. The findings reveal that while vocational education faces resource limitations and infrastructural challenges, it benefits significantly from hands-on learning opportunities and technological integration. The study confirms that institutional strategies, industry collaboration, and government policies play critical roles in shaping educational quality and relevance, with government policies exhibiting the strongest impact. However, limitations include the study's focus on a single institution, which may restrict generalizability to broader vocational education contexts. Consequently, the study recommends strengthening industry

partnerships, increasing resource allocation, and enhancing policy support to foster a more robust vocational education system tailored to evolving industry demands.

Keywords: Exploring the Development, Vocational Undergraduate Education, New Media Faculty, Impacts in Nanchang

Introduction

Vocational undergraduate education holds paramount significance in preparing students for the rapidly evolving global workforce (Barthwal & Singh, 2020). As industries and occupations continue to transform, the role of educational institutions in providing specialized and relevant skills becomes crucial. This dynamic landscape brings both challenges and opportunities that require thoughtful consideration and strategic action (Smith, Kahlke & Judd, 2020).

In addition to the evolving demands of industries, technological advancements further amplify the need for adaptive and innovative vocational education programs. With the advent of automation, artificial intelligence, and digitalization, traditional job roles are undergoing significant transformations, necessitating a re-evaluation of educational curricula and pedagogical approaches (Brown, 2019). Therefore, vocational undergraduate education must not only equip students with technical skills but also foster critical thinking, problem-solving abilities, and adaptability to navigate the complexities of the modern workplace (Barthwal & Singh, 2020).

Furthermore, the globalization of economies and the interconnectedness of markets underscore the importance of international perspectives in vocational education. Collaborative efforts between educational institutions, industry stakeholders, and policymakers are essential in ensuring the relevance and effectiveness of vocational programs in an increasingly interconnected world (Smith, Kahlke & Judd, 2020). By embracing diverse perspectives and leveraging global best practices, vocational undergraduate education can better prepare students to thrive in the global marketplace, thus contributing to economic growth and social development on a global scale.

However, the quality and efficacy of vocational programs vary considerably, and challenges such as limited funding, out-dated curricula, and inadequate practical training opportunities persist. These challenges can hinder the ability of vocational education to meet the demands of the modern workforce and effectively equip students with the skills they need (Guo, Huang & Zhang, 2019; Bauman & Lucy, 2019). This provides an opportunity for finding a better way to compact the stated challenges in order to ensure good development in terms of funding, curricula, and practical training in order to meet the needs of the current global industries.

Expanding on the existing challenges, limited funding remains a pervasive issue in vocational education, constraining the development of modernized facilities, access to updated technology, and the recruitment of qualified instructors (Smith, Kahlke & Judd, 2020). Additionally, out-dated curricula fail to adequately address emerging trends and technological advancements in industries related to Internet and New Media, resulting in a gap between educational offerings and market demands (Grimus, 2020). Furthermore, inadequate practical training opportunities deprive students of hands-on experience essential for their

future careers, exacerbating the mismatch between theoretical knowledge and practical skills required in the workforce (Dasgupta, 2021).

Despite these challenges, there is a growing recognition of the need to revitalize vocational education to align with the evolving needs of industries. Efforts are being made to reform curricula, enhance funding mechanisms, and forge stronger partnerships with industry stakeholders to bridge the gap between education and employment (Mensah, & Gordon, 2020). Moreover, technological advancements offer opportunities for innovative teaching methods and online learning platforms, enabling greater flexibility and accessibility in vocational education delivery (Reaves, 2019). By addressing these challenges and embracing opportunities for reform, vocational education institutions can better prepare students for success in the dynamic landscape of Internet and New Media industries.

This study will be guided by the following research objectives;

- RO1: To identify the challenges and opportunities on development of vocational education in undergraduate vocational college.
- RO2: To determine the strategies employed on development of vocational education in undergraduate vocational college.
- RO3: To examine industry partnerships and collaborations on development of vocational education in undergraduate vocational college.
- RO4: To assess the government policies on development of vocational education in undergraduate vocational college.
- RO5: To develop a new strategy on development of vocational education in undergraduate vocational college.

Literature Review

The landscape of undergraduate vocational education in today's fast-paced and constantly evolving environment presents a plethora of obstacles along with considerable potential (Jeong et al., 2020). Furthermore, the landscape is continually evolving. The study delves into depth on the difficulties of this subject and identifies numerous major issues that emphasise both the challenges that are inherent in vocational education as well as the promise that it possesses. In response to the research by Jeong et al. (2020), these problems involve a wide range of elements, which can include technology improvements and evolving industrial demands, as well as limits on the curriculum and the distribution of resources. Despite the obstacles that these problems present, they also represent potential for progression, adaptability, and innovation within the field of vocational education. By highlighting the diverse nature of vocational education in the context of negotiating the complexity of the current landscape, the dynamic interplay between these opportunities and challenges is highlighted. The stakeholders in the field can leverage evidence-based strategies to capitalise on emerging opportunities while effectively mitigating the challenges, thereby fostering a more robust and responsive vocational education ecosystem (Jeong et al., 2020). This can be accomplished by acknowledging and addressing these issues head-on at the same time.

To meet the ever-changing demands of the modern workforce, it is essential for undergraduate vocational education to adjust and develop in tandem with the ever-changing criteria imposed by employers. This is a prerequisite that must be met. According to Frank et al. (2019), rapid technology breakthroughs and the proliferation of automation are catalysing considerable shifts across a variety of industries, which is resulting in a paradigm shift in the

skill requirements essential for those businesses. As a consequence of this, there is an urgent want for a new range of skills on the one hand, while the demand for existing skill sets is simultaneously decreasing. Based on Klaeijssen, Vermeulen, and Martens (2018), this calls for on-going adjustments to be made to the programmes and curriculums that are utilised in vocational education. A proactive approach to updating its offerings to fit with the developing needs of the industry is required of educational institutions that provide vocational education. This is done to ensure that graduates are equipped with the necessary skills and knowledge to succeed in the contemporary labour market. The importance of vocational education institutions in bridging the gap between academia and industry is highlighted by this need. These institutions play a vital role in ensuring the smooth transition of students into the workforce.

There are benefits and problems that come along with technological advancements in vocational education. The implementation of technology in educational settings has the potential to bring about a multitude of advantages, including the enhancement of learning experiences and the development of novel ways to teaching. However, it also requires sufficient training for both students and teachers. In order to successfully incorporate technology into vocational education, Falloon (2020) emphasises the critical role that faculty members play in the process of continual professional development. To ensure that educators are proficient in the use of the numerous technological tools that are accessible, it is essential that they receive continual training. The study conducted by Cooper and Sommer (2018) identify online learning platforms and simulations as examples of modern instructional approaches that are made possible by technology and offer educational experiences that are immersive. This has been witnessed in western institutions where they often use these online learning platforms and simulations to enhance relevance and learning (Cooper & Sommer, 2018; Falloon, 2020). However, in addition to these advantages, there are also challenges, such as the requirement for a solid infrastructure and support systems in order to make the most of the technical integration's potential. Additionally, despite the fact that technology has the potential to revolutionise vocational education, it is imperative that proactive measures be taken in order to solve problems and make the most of its benefits. This will eventually lead to improved learning outcomes and better prepare students for the demands of the digital age.

Both the establishment and management of undergraduate vocational education programmes can be considerably hampered by financial constraints, particularly when there is a limited amount of finance and resources available. Because of these limits, the quality of the programming and infrastructure that educational institutions provide may suffer as a result. If educational programmes do not receive sufficient funding, they may have difficulty keeping up with the ever-changing demands of the business and the rapid improvements in technology, which will ultimately reduce the efficiency of vocational education as a whole. The study by Zumeta et al. (2021) emphasise the importance of increasing investments in vocational education in order to overcome these financial constraints and improve the overall quality of a variety of programmes. Their findings highlight the significance of giving appropriate resources to assist initiatives in the field of vocational education. One way to ensure that students obtain the training and skills necessary to be successful in their chosen fields is to ensure that they receive these resources.

For the purpose of guaranteeing the efficacy and relevance of vocational undergraduate education, particularly in application-oriented domains like as the Internet and New Media, it is of the utmost importance that respondents within the industry work together. Through the establishment of strong links with local firms, educational institutions such as Jiangxi University of Software Professional Technology are able to acquire highly useful insights into the requirements of the sector. For the purpose of providing students with a curriculum that is in line with the requirements of the real world, these educational institutions are able to customise their programmes to fit the current needs of the business by maintaining tight partnerships. As an additional benefit, industry relationships provide possibilities for internships and work-based learning experiences, which help bridge the gap between theoretical education and its practical implementation. The findings from the study conducted by Lee, Lee, and Dopson (2019), highlight the value of robust industry interaction in vocational education. They argue that this type of cooperation directly solves the competence gap that frequently arises between theoretical knowledge and practical abilities. Given this imbalance, it is imperative that educational institutions actively connect with industry partners in order to guarantee that graduates are adequately prepared to achieve success in the disciplines in which they choose to work. To improve the quality and relevance of vocational undergraduate education at Jiangxi University of Software Professional Technology, it is vital to encourage collaboration between educational institutions and industry stakeholders. This is because of the fact that such collaboration is essential.

Theoretical Framework

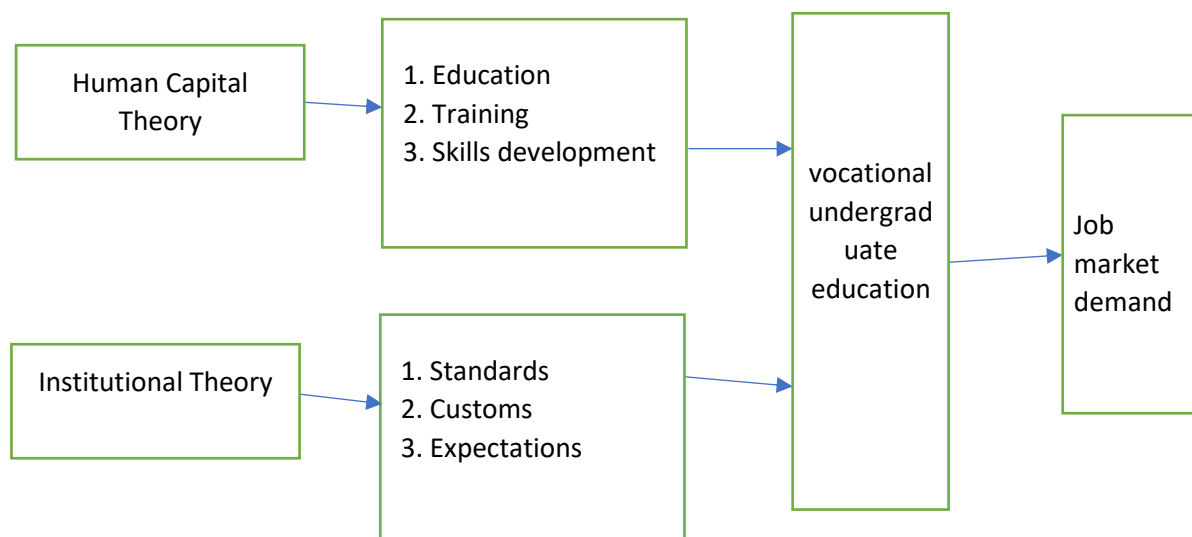


Figure 1: Theoretical framework

Human Capital Theory

The Human Capital Theory, attributed to American economist Gary Becker, underscores the notion that individuals can enhance their contribution to economic activity by investing in their education, training, and skill development. This theory, as illustrated in Figure 2, the study by Keep, Tomlinson, and Mann (2022), suggests that individuals make rational decisions to improve their human capital, which in turn leads to greater productivity and economic growth. Becker's pioneering work in this area highlights the importance of education and skill

acquisition in driving economic prosperity. When applied to undergraduate vocational education courses, which are tailored to provide students with specialized information and skills for specific occupations, the relevance of this idea becomes even more pronounced.

Institutional Theory

The study of how institutions influence the growth of organizational behaviour and practices utilizes the theoretical framework of institutional theory, which is frequently employed in organizational and educational research. Institutional theory, credited to Furusten (2023), provides a lens through which to understand the dynamics shaping the evolution of educational institutions and the strategies they employ. By exploring the interplay between institutional norms, rules, and practices, researchers gain insights into the factors driving institutional change and adaptation. In the context of undergraduate vocational education, institutional theory offers valuable perspectives on the mechanisms underlying the development and implementation of educational programs tailored to meet industry demands.

Conceptual Framework

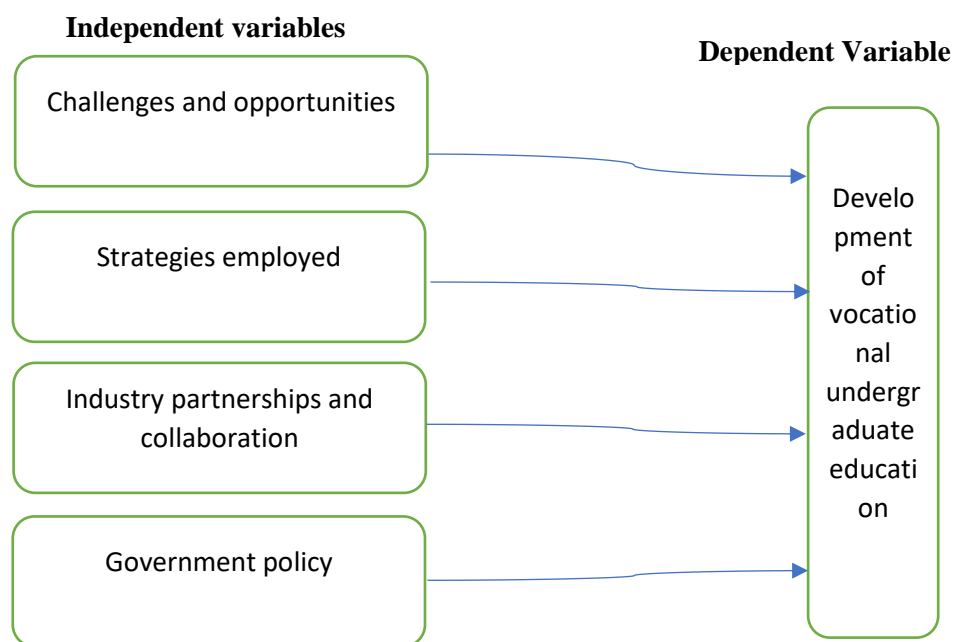


Figure 2: Conceptual framework

Methodology

In this study, the survey strategy has been selected as the most suitable approach due to its efficacy in collecting data from a large number of participants in a structured and efficient manner. Given the research focus on vocational undergraduate education in Nanchang, China's vocational colleges, the survey method provides a systematic means of capturing a diverse range of perspectives on the factors influencing the development of vocational education. Specifically, this study will employ an online questionnaire, carefully designed to ensure clarity, relevance, and comprehensiveness.

The population of this study comprises all students enrolled at Jiangxi University of Software Professional Technology in Nanchang, China. However, to ensure the study remains focused

and relevant to the research objectives, the sampling frame is narrowed to include only students from the Internet and New Media faculty, a cohort that consists of 1,001 students. In the context of this study, a sample size of 332 respondents was selected to ensure a robust, diverse, and representative dataset from the Internet and New Media faculty at Jiangxi University of Software Professional Technology.

The Statistical Package for Service Solutions (SPSS) version 20.0 will be used by the study as the program for this investigation. Data analysis and visualization functions are available in a variety of ways with the help of the comprehensive and well-liked statistical tool SPSS. SPSS's user-friendly interface, which enables even non-programmers to conduct complex analysis, supports the decision to use it. Additionally, SPSS offers a variety of statistical techniques, which makes it suitable for analysing the relationships between the study's dependent and independent variables (Pallant, 2020).

Findings

The results indicate that while vocational undergraduate education in the Internet and New Media faculty faces several challenges, there are also significant opportunities for growth. A substantial proportion of respondents strongly agreed that hands-on projects and emerging technologies are well integrated into the curriculum, enhancing practical learning experiences. However, opinions were divided on whether the university provides adequate resources and support services, suggesting gaps in infrastructure, faculty expertise, or access to cutting-edge industry tools. These challenges point to the need for continuous institutional improvements to ensure a well-rounded and competitive educational experience for students. Additionally, the study examined strategies implemented by other vocational undergraduate institutions to enhance their programs. The results reveal that institutions with robust industry linkages, diversified funding sources, and curriculum models aligned with technological advancements have demonstrated higher success rates in preparing students for the job market. These findings suggest that Jiangxi University of Software Professional Technology could benefit from adopting similar strategies, particularly in curriculum restructuring and faculty development programs that align with industry demands. The effectiveness of these strategies is further supported by the statistical analysis, which shows a positive correlation between institutional strategies and improved student outcomes.

Furthermore, the role of industry partnerships and collaboration in strengthening vocational undergraduate education was analyzed. The findings show that institutions with strong industry ties experience better student employability rates and increased access to internships and on-the-job training opportunities. The correlation analysis indicates that industry collaboration is a significant predictor of educational success in this field. However, the study also highlights the need for Jiangxi University of Software Professional Technology to strengthen existing partnerships and establish new ones to ensure sustained industry relevance. Moreover, government policies emerged as the most influential factor in the development of vocational undergraduate education. The regression analysis demonstrates a perfect linear relationship between government policies and the expansion of the Internet and New Media field, with a standardized coefficient of 1.000. This indicates that any changes in government policies directly and proportionally impact the effectiveness and growth of this educational sector. The findings suggest that, regulatory measures, funding schemes, and

policy frameworks dictate the pace and direction of development, reinforcing the necessity for continuous government support and policy refinement.

Conclusion

The study highlighted strategies from other educational institutions, such as mentorship and project-based activities that could improve educational experiences. Numerous participants observed that industry partnerships enhanced the practical relevance of the content, underscoring the significance of experiential learning. Moreover, the results emphasized the need of increased government involvement in vocational education. Although the present policies provide some level of support, there is a demand for additional enhancements. The chapter finishes by suggesting practical implementations, such as updating the curriculum to align with industry standards, maximizing resource mobilization, and enhancing industry partnerships to better equip students for competitive professions in the digital economy.

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