

Journal of Business and Economic Options



Enhancing Economic Development through Vocational Education: Insights from Pakistan

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Abstract

The study examines the influence of vocational education on the economic growth of Pakistan, aiming to assess the impact of public investment in vocational education and the availability of teachers in this field. Utilizing time series data for empirical analysis, the research investigates the relationship between vocational education and economic development. The findings of the study reveal a positive correlation between vocational education and economic growth. Enhanced vocational education contributes to the efficiency and productivity of the labor force, thereby fostering economic development. The study underscores the importance of upgrading the existing vocational education system to maximize its potential benefits. Furthermore, addressing the shortage of teachers in technical institutions is identified as a critical priority. Ensuring an adequate supply of qualified teachers and providing them with proper training are essential steps towards improving the quality of vocational education. By enhancing the skills and competencies of both students and educators, vocational training can better meet the evolving needs of the labor market and support sustainable economic growth. The study underscores the pivotal role of vocational education in propelling economic development in Pakistan. Through strategic investments in vocational training and targeted efforts to overcome challenges such as teacher shortages, policymakers have the opportunity to unleash the full potential of vocational education. By doing so, they can significantly enhance productivity, efficiency, and overall economic prosperity in the country. Vocational education equips individuals with practical skills and knowledge that are directly applicable to the needs of the labor market. By providing specialized training in various trades and professions, vocational programs empower individuals to enter the workforce with relevant skills, thereby reducing unemployment and underemployment rates. Moreover, a well-trained workforce enhances productivity levels across industries, driving innovation and competitiveness in the economy. Addressing challenges such as teacher shortages is crucial for ensuring the quality and effectiveness of vocational education programs. By recruiting and training qualified instructors, policymakers can enhance the delivery of vocational training and improve learning outcomes for students. Investing in the professional development of teachers and providing them with access to resources and support systems can further strengthen vocational education institutions and elevate the standard of education provided.

Keywords: Vocational Education, Economic Growth, Pakistan

JEL Codes: I25, J24, O15

1. INTRODUCTION

Human capital serves as a fundamental driver of economic growth, encompassing various elements such as education, health, and notably, vocational training and skill development. Vocational education, a subset of this broader concept, is specifically designed to equip individuals with the necessary skills and knowledge to enter the workforce, enhancing their productivity and expanding their career opportunities. By preparing individuals for employment and enhancing their human potential, vocational education plays a crucial role in promoting self-employment and diversifying career options. It is widely acknowledged that technical education and vocational training are instrumental in enabling individuals to generate income and contribute to the economic growth and social development of a country. A trained labor force is recognized as a key factor in driving development, as it enhances productivity, fosters innovation, and contributes to overall economic prosperity. As emphasized by Mustafa (2005), the importance of a skilled labor force in promoting economic development cannot be overstated. Vocational education and training programs are essential for equipping individuals with the skills needed to secure employment and make meaningful contributions to the economy. By investing in vocational education and skill development, countries can empower their citizens to fulfill their potential, enhance their livelihoods, and contribute to the advancement of society as a whole.

The demand for vocational education and training is on the rise, particularly as societies undergo processes of industrialization and modernization. Recognized as indispensable tools for enhancing labor mobility, adaptability, and productivity, vocational education and training are integral to fostering economic development and technological advancement. Khilji (2012) underscores the significance of technical and vocational competency within the workforce, highlighting its pivotal role in achieving sustainable economic growth. The enrollment of teachers in vocational institutions holds particular importance in this context. Teachers serve as the backbone of vocational education, shaping the skill sets and competencies of future workers. By investing in teacher training and professional development, countries

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can ensure a steady supply of qualified instructors equipped to meet the evolving needs of the labor market. Moreover, vocational education stands apart from general education due to its focus on practical skills and job readiness. By enhancing the skill levels of the workforce, vocational education contributes directly to economic growth and plays a crucial role in reducing unemployment rates. Skilled workers not only bolster the quality and efficiency of production but also drive innovation and technological progress. Vocational education is a catalyst for enhancing the productivity and competitiveness of nations. By equipping individuals with the technical skills and competencies required for success in the workforce, vocational education and training pave the way for sustainable economic development and improved livelihoods. As societies continue to evolve, investing in vocational education remains essential for building resilient and dynamic economies capable of thriving in an increasingly competitive global landscape.

In Pakistan, vocational education institutes provide courses ranging from three months to two years, typically following completion of eighth grade. These educational opportunities are offered through a variety of channels, including polytechnic institutes, vocational centers, and apprenticeship programs. While the Government of Pakistan has made efforts to enhance the vocational education system in recent years, significant challenges persist. One such challenge is the quality of teachers in vocational institutes, which remains a concern. Many vocational educators lack adequate training and expertise, impacting the effectiveness of instruction and the overall learning experience for students. Additionally, outdated learning materials further hinder the quality of education provided in vocational institutions. As a result, Pakistan's workforce is often characterized by low skills and inadequate preparation to compete in the globalized economy. The gap between the skills demanded by employers and those possessed by workers contributes to unemployment and underemployment, limiting economic growth and social development. Kazmi (2007) underscores these challenges, highlighting the urgent need for improvements in Pakistan's vocational education and training system. Addressing issues such as teacher quality, curriculum relevance, and access to modern learning resources is essential for equipping the workforce with the skills needed to thrive in today's competitive labor market.

Pakistan, as a developing nation, grapples with challenges exacerbated by its rapidly growing population, particularly its youthful demographic. As noted in the Economics Survey of Pakistan (2014), the youth population constitutes a significant portion of the country's inhabitants. However, despite this demographic advantage, the capacity of the vocational education sector to adequately equip the workforce with the necessary skills remains insufficient to meet the demands of the modern labor market. In contrast to many leading global economies that heavily invest in skills development, Pakistan faces hurdles in optimizing its vocational education system. The current structure of vocational education in the country is intricate, involving multiple agencies and levels of administration. Government vocational education institutes fall under the purview of provincial education departments, with training delivered through various channels such as polytechnics, vocational training centers, apprenticeships, and commercial training institutions. Prior to the establishment of technical and vocational education in Pakistan, there were notable deficiencies in the responsiveness and adaptability of the training system to industry demands. The linkages between training institutions and the industrial sector were weak, resulting in a disconnect between skills taught and those required by employers. Moreover, limited financial resources hindered the acquisition of new machinery and equipment, impeding the modernization of training facilities. Consequently, training institutions operated in a supply-driven manner, failing to effectively meet the evolving needs of the labor market. Kazmi (2007) elucidates these challenges, emphasizing the imperative of enhancing the alignment between vocational education and industry requirements. Strengthening partnerships between training institutions and the private sector, alongside increased investment in modernizing infrastructure and curriculum development, is essential for revitalizing Pakistan's vocational education system. Only through such reforms can Pakistan effectively harness the potential of its burgeoning youth population and propel the nation towards sustainable economic growth and development.

The true challenge lies in establishing institutions that recognize the inherent value of investing in people, offering dignity and fair treatment to working individuals while fostering a well-educated and skilled labor force. An effective human resource development system yields a significant outcome: the creation of decent employment opportunities by enhancing workers' abilities to secure and retain jobs. In navigating the competitive conditions of the new global economy, technical vocational education must transcend the confines of low-level skills and embrace a trajectory of upward mobility. Recognizing the immediate market demands is paramount in this endeavor (Khilji, 2012). Globalization and technological advancements underscore the imperative for vocational education and the modernization of existing technical institutions. In the era of large-scale industries, the presence of robust vocational education and training programs becomes indispensable, offering individuals marketable skills that align with the evolving needs of industries. The traditional structure of Pakistan's domestic economy has proven inadequate in producing a skilled labor force capable of enhancing the quality and productivity of industries. Therefore, investments in vocational education are necessary to augment the productivity of workers and bolster economic growth. This study provides a concise overview of how vocational education influences economic growth in Pakistan. It underscores the importance of vocational education in addressing contemporary challenges and contributing to national development. By shedding light on this critical aspect of human capital development, the study makes a valuable contribution to the existing literature, paving the way for informed policymaking and strategic interventions aimed at enhancing vocational education and driving sustainable economic progress.

2. LITERATURE REVIEW

Kazmi (2007) delves into the challenges faced by developing countries in their labor markets, particularly in competing for the required skills and technological innovation. The study highlights the dynamic nature of skill requirements, which

are not only growing but also constantly evolving. It emphasizes the pivotal role of knowledgeable and skilled labor in driving the growth trajectory of nations. The study underscores the importance of vocational education at the school and secondary levels to meet the demands of existing job opportunities. However, it identifies challenges such as the quality of teachers and limited supplies of skilled workers as hindrances to effective vocational education. The study concludes that Pakistan urgently needs to enhance its vocational education system, as its workforce is described as low-skilled and ill-prepared to compete in the globalized world. It advocates for direct investments in vocational education to address these pressing issues.

Inamullah et al. (2009) examine the current profile of technical vocational education in Pakistan, focusing on the perceptions of teachers and students regarding the physical and academic facilities of technical education institutions. The primary objective is to assess the adequacy of facilities in these institutions. Using a questionnaire designed for this purpose and employing a total design method for empirical analysis, the study finds significant deficiencies in technological infrastructure and physical facilities. While laboratory and computer facilities are deemed sufficient, shortcomings are observed in building infrastructure, transportation, first aid provisions, hostel accommodations, fire-fighting facilities, availability of the latest reading materials, online research facilities, and budget allocations. Overall, the study concludes that the physical facilities in technical education institutions are unsatisfactory, highlighting the need for substantial improvements in infrastructure and resource allocation to enhance the quality of technical vocational education in Pakistan.

Shah et al. (2011) conducted a study examining the status of vocational training and technical education in Punjab. They emphasize the potential of technical education and vocational training in enabling individuals to generate income and contribute to the economic and social development of a country through the acquisition of knowledge and skills. The study aims to explore teachers' perceptions regarding the effectiveness of vocational education and technical training, as well as the impact of teacher training courses. Findings reveal that while the curriculum of Technical Education and Vocational Training (TEVT) is deemed satisfactory, its linkage with industry is weak, and internships are poorly managed. Additionally, outgoing students are found to be ill-prepared for the job market, and teachers encounter challenges such as inadequate housing and lack of incentives for better performance.

Khilji et al. (2012) undertake a study to investigate the impact of vocational education on economic growth. Their findings highlight vocational education as a crucial determinant of economic growth, emphasizing its role in enhancing labor efficiency. The study suggests that government spending on education positively influences the productivity of the labor force. Utilizing time series data, the study underscores the need to refocus vocational education to ensure that the labor force contributes effectively to economic growth. It advocates for improving the quality of vocational education to align with the demands of the labor market and foster sustainable economic development.

Mustafa et al. (2005) examine the demand for vocational education in the context of industrialization and modernization. Their study delves into the pivotal role of vocational education in enhancing the productivity of workers and addressing unemployment rates. By improving the skills and quality of the labor force, countries are better positioned to compete with others on a global scale. The study underscores the need for Pakistan to upgrade its technical education system and devise strategies to enhance the productivity of its workforce, thereby fostering economic growth and development.

Agrawal (2013) investigates the role of the vocational education system in Asian countries. While governments in these nations have increasingly prioritized this sector in recent years, the outcomes remain subpar. Despite efforts to bolster vocational education, challenges persist in effectively preparing individuals for the labor market and equipping them with the skills needed for success. The study sheds light on the need for continued improvements in the vocational education system to align with the evolving needs of industries and promote sustainable economic advancement across Asian countries.

Ajmal et al. (2011) conducted a comparative analysis of the vocational training structures in Pakistan with those of the British and German models. Their study aimed to propose a vocational and technical education and training model tailored to Pakistan's context. Data collection involved interviews and surveys. The findings revealed that the existing training system in Pakistan does not adequately meet the requirements of industries. Additionally, the study observed that the dual systems of vocational training, which are successful in countries like the UK and Germany, face challenges in Pakistan.

Ansari et al. (2013) investigated the crucial role of technical and vocational education in the socio-economic development of a country, with a specific focus on Pakistan. Their study aimed to highlight the developmental phases of Pakistan's technical vocational education and assess the efforts made to reform this sector, particularly through the proposed Skilling Pakistan reforms outlined in the National Skills Strategy (NSS). Quantitative information was collected from published literature and reports. The study revealed that Pakistan is confronted with a significant skills gap, exerting immense pressure on labor productivity in both domestic and foreign labor markets.

Mohammad (2006) investigates the current status of the vocational education system, shedding light on the challenges encountered by technical vocational education systems and the quality of such systems in developing countries. The study identifies numerous limitations faced by the technical and vocational education sector in developing nations, emphasizing the need for improvements to address these challenges and enhance the quality of education provided.

Javied (2009) explores the role of training in determining labor wages, with a particular focus on the importance of training quality. The study underscores the significance of providing workers with vocational technical education to boost productivity. Employing the least square technique for empirical analysis, the study examines the impact of training on wages. While schooling and other demographic variables exhibit expected signs and magnitudes, the study finds that training is insignificant in determining wages, suggesting potential areas for further research and policy intervention to enhance the effectiveness of training programs in improving labor productivity and wage outcomes.

3. THEORETICAL MODEL

Vocational education and training operate within the framework of the human capital theory, as posited by Becker (1981). According to this theory, additional education or training enhances an individual's useful knowledge and technical skills, thereby increasing their productivity and lifelong income. The underlying premise is that investments in education and training yield returns in the form of enhanced productivity and earning potential over the course of an individual's career. Becker (1993) further elaborates on the human capital theory, emphasizing the positive relationship between education, training, and workers' productivity. This relationship implies that as individuals acquire higher levels of education and undergo training programs, they become more skilled and proficient in their respective fields, leading to improved productivity levels. However, it's important to recognize that the effects of training may vary based on factors such as gender, age, duration, and cost of training, highlighting the nuanced dynamics involved in the relationship between education, training, and workforce productivity.

The conceptualization of human capital, as initially proposed by Smith and further developed by Becker (1962), underscores the notion that individuals can enhance their economic value through education, training, and other activities aimed at improving their future income and lifetime earnings. In this framework, human beings are viewed as assets that can generate income in the future, akin to physical capital. Smith (1776) elucidates that education serves to augment the productive capacity of workers, akin to how new machinery or other forms of physical capital enhance the productivity of a factory or enterprise. This perspective highlights the transformative potential of education and training in bolstering human capital and contributing to overall economic prosperity. Baldwin (1991) advances the idea that participation in training programs is a multifaceted phenomenon, encompassing various dimensions of human development. This multidimensional perspective recognizes the diverse forms that training activities can take, underscoring the complexity of the training process. Furthermore, research by Nie and Wilk (1993) emphasizes a positive relationship between the rate of participation in training activities and human development. This suggests that engaging in training programs can lead to tangible benefits in terms of skill development, personal growth, and ultimately, enhanced human capital.

The Theory of Learning, as articulated by Stromsforfer (1972), encompasses the technology of vocational training, which includes aspects such as training organization, pedagogy, instructional strategies, and management and monitoring procedures. This holistic view underscores the comprehensive nature of vocational education and training programs, highlighting the various components essential for effective skill development.

Lillis and Hogan (1983), along with Grubb (1985), perceive vocational education as a viable solution to the enrollment challenges faced by public education policies. By offering specialized training tailored to the needs of industries, vocational education programs can attract students who may not thrive in traditional academic settings, thereby addressing enrollment issues and fostering educational inclusivity. Chung (1995) reports higher returns to vocational education compared to general secondary education, emphasizing the economic benefits associated with investing in vocational training programs. This underscores the value of vocational education in enhancing individuals' employability and contributing to overall economic growth and prosperity. Mustafa (2005) employs the ordinary least square method to analyze the impact of various factors, such as the rate and variability of increase in institutions, enrollment, and teachers, on output growth. This empirical approach allows for the examination of the relationship between vocational education indicators and economic output, providing insights into the effectiveness of vocational education policies in driving economic growth. Khiliji (2012) utilizes time series data to investigate the relationship between labor stock, capital stock, and economic growth. By examining the dynamics between labor and capital inputs and their influence on economic growth, the study contributes to our understanding of the factors shaping long-term economic development. Shah (2011) employs a questionnaire containing 15 items targeted at a specific group to explore the relationship between investment in vocational education, teacher enrollment, student enrollment, and economic growth. By gathering insights directly from stakeholders, the study aims to assess the perceived impact of vocational education initiatives on economic growth, providing valuable input for policy formulation and implementation.

The model of the study become as:

Economic growth = f (Investment in vocational education, teachers enrolment, students enrolment)

4. RESULTS AND DISCUSSION

The table 1 outlines expenditure on education in Pakistan from 2010-11 to 2014-15, delineating current expenditure, development expenditure, total expenditure, and expenditure as a percentage of GDP for different provinces and federal entities. In 2010-11, the federal government allocated 44,023 million rupees for current expenditure and 15,963 million rupees for development expenditure, summing up to a total expenditure of 59,986 million rupees on education. This constituted 1.8% of the GDP. Additionally, the provincial breakdown reveals significant spending by Punjab (143,497 million rupees), Sindh (72,295 million rupees), Khyber Pakhtunkhwa (26,906 million rupees), and Balochistan (20,127 million rupees) on education. In subsequent years, from 2011-12 to 2014-15, there is an evident upward trajectory in education expenditure across all regions. For instance, in 2011-12, total education expenditure in Pakistan surged to 393,523 million rupees, accounting for 2.0% of the GDP. This trend persisted in 2012-13 and beyond, with total education spending escalating to 598,315 million rupees in 2014-15, equivalent to 2.2% of the GDP. The data also highlight disparities in expenditure patterns among different provinces and federal entities. Punjab consistently allocated a substantial portion of its budget to education, with total expenditures surpassing those of other regions in most years. Conversely, Balochistan generally exhibited lower expenditure levels compared to other provinces. Furthermore, detailed examination reveals variations in current and development expenditure within each region over the years. These fluctuations may reflect shifts in educational priorities, infrastructure projects, or policy initiatives undertaken by

respective governments. Overall, the table offers valuable insights into the trends and distribution of education expenditure in Pakistan over the specified period, reflecting the government's financial commitment to enhancing educational infrastructure and services nationwide.

Table 1

Years	Expenditure on Education (Rs. million)			(Rs million)	
		Current Expenditure	Development Expenditure	Total Expenditure	As % of GDP
2010-11	Fedral	44,023	15,963	59,986	1.8
	Punjab	133,283	10,214	143,497	
	Sindh	64,370	7,925	72,295	
	Khyber Pakhtunkhwa	16,080	10,826	26,906	
	Balochistan	18,483	1,644	20,127	
2011-12	Pakistan	276,239	46,572	322,811	2.0
	Fedral	45,278	12,521	57,799	
	Punjab	151,474	22,578	174,052	
	Sindh	57,758	10,810	68,568	
	Khyber Pakhtunkhwa	53,429	14,255	67,684	
2012-13	Balochistan	22,289	3,131	25,420	2.1
	Pakistan	330,228	63,295	393,523	
	Fedral	57,027	14,686	71,713	
	Punjab	186,763	9,323	196,086	
	Sindh	92,697	5,728	98,425	
2013-14	Khyber Pakhtunkhwa	65,856	18,602	84,458	2.1
	Balochistan	26,601	2,570	29,171	
	Pakistan	428,944	50,909	479,853	
	Fedral	65,497	21,554	87,051	
	Punjab	187,556	30,485	218,038	
2014-15	Sindh	99,756	6,157	106,093	2.2
	Khyber Pakhtunkhwa	7,048	18,756	89,704	
	Balochistan	29,978	6,911	36,889	
	Pakistan	453,735	83,863	537,598	
	Fedral	73,322	27,969	101,291	
	Punjab	201,882	25,208	227,090	
	Sindh	109,274	7,847	117,121	
	Khyber Pakhtunkhwa	83,205	28,506	111,711	
	Balochistan	32,299	8,803	41,102	
	Pakistan	499,982	98,333	598,315	

Investment in vocational education plays a crucial role in shaping the scope of vocational training and serves as a key determinant of the performance of output in producing high-quality labor, thereby positively impacting economic growth. By allocating resources to vocational education and skill development initiatives, countries can bridge the gap between skilled and unskilled labor forces, fostering technological advancements and optimizing resource utilization. This, in turn, enhances productivity levels and contributes to overall economic growth. Moreover, the enrollment of both teachers and students holds significant importance in driving output growth within vocational education systems. Teachers play a pivotal role in maintaining and enhancing the quality of education and training, thereby influencing student learning outcomes. The enrollment of trained teachers is particularly crucial, as it ensures that students receive instruction from qualified professionals, thereby enhancing the effectiveness of vocational education programs. Research indicates a positive relationship between investment in vocational education, enrollment of trained teachers, and economic growth. Increased expenditure in vocational education not only sustains infrastructure and facilitates teacher and student learning

but also fosters technological advancements essential for national development. However, perceptions of vocational education as having low status in countries like Pakistan can pose challenges, potentially resulting in the recruitment of lower-quality teachers and discouraging talented students from pursuing vocational careers. Therefore, efforts should be directed towards increasing the number of trained teachers to positively influence student learning outcomes and promote the overall effectiveness of vocational education systems.

The National Vocational and Technical Training Commission (NAVTTTC) serves as the apex body and national regulatory authority tasked with addressing the challenges within the Technical and Vocational Education and Training (TVET) sector in the country. NAVTTTC plays a pivotal role in various aspects of TVET, including policy formulation, strategy development, and the regulation and enhancement of the TVET system. One of NAVTTTC's key functions is to participate in policy-making processes related to TVET, ensuring that policies align with national development objectives and address the evolving needs of industries and the labor market. Additionally, the Commission is responsible for formulating strategies aimed at enhancing the quality, relevance, and accessibility of TVET programs across the country. Regulation and revamping of the TVET system are also central to NAVTTTC's mandate. The Commission works to establish and enforce standards and guidelines for TVET institutions and programs, ensuring compliance with quality assurance measures and promoting continuous improvement within the sector. Moreover, NAVTTTC is actively involved in revitalizing and modernizing TVET curricula and methodologies to meet the demands of changing industries and technologies. In addition to its domestic efforts, NAVTTTC plays a crucial role in fostering linkages among various stakeholders within the TVET ecosystem, both nationally and internationally. By facilitating collaboration and partnerships between government agencies, educational institutions, industry representatives, and international organizations, NAVTTTC aims to create a more cohesive and coordinated approach to TVET development and implementation. Overall, NAVTTTC serves as a key driver of progress and innovation within the TVET sector, working tirelessly to enhance the quality, relevance, and effectiveness of vocational and technical education and training programs across the country. Through its multifaceted initiatives and partnerships, NAVTTTC strives to ensure that TVET plays a central role in supporting national development goals, promoting economic growth, and empowering individuals with the skills and competencies needed for success in the workforce.

The Prime Minister's Youth Skill Development Program (PMYSDP) was initiated under the directives of the Prime Minister to address the unemployment and education gap among youth. In collaboration with Provincial Technical Education and Vocational Training Authorities (TEVTAs), including those in Azad Jammu & Kashmir, Gilgit-Baltistan, FATA, as well as other Government and Private Sector Skill Training Institutes, the National Vocational Technical Training Commission (NAVTTTC) executed Phase-I of the program. During this phase, 24,834 individuals were equipped with hands-on skills tailored to meet industry demands. Building upon the success of Phase-I, NAVTTTC launched Phase-II of the PMYSDP, aiming to train an additional 25,000 individuals across 195 demand-driven trades. The overarching goal of the PMYSDP is to cultivate a skilled workforce that is not only competent and motivated but also entrepreneurial, adaptable, and creative, capable of meeting the demands of both local and international markets. By providing participants with better earning opportunities and livelihoods, the program aims to foster a mindset conducive to positive and innovative endeavors. Through initiatives like the PMYSDP, the government seeks to empower youth with the skills and capabilities necessary to thrive in a rapidly evolving economic landscape, thereby contributing to overall socio-economic development and prosperity.

5. CONCLUSIONS

Vocational education stands as a cornerstone of economic growth, primarily by bolstering the efficiency of the labor force. Through vocational training, individuals acquire the necessary knowledge and skills to contribute meaningfully to economic development and social progress. Education coupled with practical training not only fosters job creation but also serves as a catalyst for heightened economic growth. By enhancing the productivity of workers, vocational education plays a pivotal role in sustaining the momentum of economic growth. Research findings consistently demonstrate a positive correlation between vocational education and economic development. Elevated standards of vocational education lead to improved efficiency and productivity among the workforce, thereby driving overall economic advancement. However, in Pakistan, there exists a notable lack of investment in vocational education, which undermines the productivity potential of the labor force. This deficit in investment stifles the ability of individuals to acquire the necessary skills and competencies demanded by evolving industries, thereby impeding overall economic progress. Addressing this shortfall in investment in vocational education is imperative for Pakistan to unlock its full economic potential. By prioritizing and bolstering vocational education initiatives, the country can empower its workforce with the skills and capabilities essential for driving sustained economic growth and fostering socio-economic development. Increasing public expenditure on vocational education is essential to bridge the gap between skilled and unskilled labor and ensure the country's competitiveness on a global scale. To address this challenge effectively, the government must formulate strategic plans aimed at bolstering vocational education initiatives. One crucial aspect of these strategies involves addressing the shortage of teachers in vocational education institutions. This can be achieved by promptly filling sanctioned teaching positions with individuals possessing the latest skills and expertise. By ensuring that institutions are adequately staffed with qualified teachers, students can receive up-to-date instruction and guidance, enhancing the overall quality of vocational education. Moreover, upgrading the existing vocational education system is paramount to aligning it with modern challenges and industry demands. This entails revising syllabi to incorporate emerging technologies and industry-relevant skills, as well as enhancing facilities to provide students with hands-on training opportunities. By modernizing vocational education infrastructure and curriculum, the system can better equip students with the skills and knowledge needed to

thrive in today's dynamic workforce. Investing in vocational education not only addresses the immediate need for skilled labor but also contributes to broader societal goals such as poverty reduction and socio-economic development. By facilitating demand-driven, high-quality technical and vocational training, governments can empower individuals to secure gainful employment, thereby fostering economic prosperity and social progress. In conclusion, increasing public expenditure on vocational education, coupled with strategic planning and modernization efforts, is essential to address the skills gap, promote economic competitiveness, and drive overall societal development. By prioritizing vocational education initiatives, governments can lay the foundation for a skilled and prosperous workforce capable of meeting the challenges of the future.

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