

Research Article

Academic Challenges Encountered by The Bachelor of Technical Vocational Teacher Education (BTVTED) Students: Basis for Policy Formulation

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Abstract:

This study ascertained the academic challenges that Bachelor of Technical Vocational Teacher Education (BTVTEd) students experienced before and during the COVID-19 pandemic. It sought to serve as a basis for policy formulation to help students hurdle these challenges. This study employed a descriptive survey method, and data were collected from 485 first- to third-year BTVTEd students through a questionnaire and unstructured interviews. This study highlighted significant variations of academic challenges pre- and post-pandemic, influenced by the socio-economic profiles of the students. Additionally, more access to technology, adequate internet connectivity, and reduced instructor interaction helped effective teaching-learning. Thus, academic institutions must implement curriculum modifications and create support systems to help students. Finally, it is recommended that financial support be included for needy students, necessary gadgets should be lent, and faculty training in blended learning modalities should be provided. Thus, this study contributes to the ongoing efforts to support educational resilience in the face of global disruptions and emphasizes the importance of responsive academic policies to ensure student success in the new normal.

Keywords: Academic Challenges, BTVTEd Students, COVID-19 Pandemic, Blended Learning, Policy Formulation

Introduction:

The COVID-19 pandemic has transformed the educational landscape worldwide. It has brought rapid shifts from traditional to remote and blended learning modalities. In the Philippines, this shift has brought various challenges for students, especially those enrolled in specialized programs such as Bachelor of Technical-Vocational Teacher Education (BTVTEd). Thus, this study explored the academic challenges experienced by 485 BTVTEd students during the new normal to provide insights that can help craft a policy to enhance educational outcomes following the OBTL paradigm.

Students' socio-economic status is essential to their academic performance, especially during challenging times. Many BTVTEd students come from marginalized strata where financial constraints limit their access to learning resources. These include access to reliable internet connection and appropriate technological devices (Bhamani, 2020). This sudden shift to online learning has jeopardized students' lives – increasing feelings of isolation and creating a divide that hinders them from engaging with course materials and instructors (Adnan & Anwar, 2020). Furthermore, the lack of face-to-face interaction has impeded collaborative learning opportunities vital for technical and vocational education (Aboagye, 2020).

This study ascertained the experiences and perceptions of BTVTEd students to identify their academic hurdles and their impact on their learning journey. The study's findings gave an emphatic and deeper understanding of the current learning climate. Also, it served as a basis for developing holistic interventions and policies that will mitigate these challenges – supporting students in navigating their academic journey beyond the pandemic era. Additionally, it underscored the importance of responsive educational strategies that address students' diverse needs to ensure that they thrive in a dynamic learning landscape.

The COVID-19 pandemic has ushered in a new era of education characterized by countless disruptions and unprecedented challenges. The shift from residential to remote learning in the Philippines posed difficulties among specialized programs like the Bachelor of Technical-Vocational Education. This transition not only altered the delivery modes but also highlighted socioeconomic disparities among students, which significantly impacted students' academic performance (Meyer & Wilson, 2011).

Study results indicated that several students need access to essential learning resources such as stable internet connection and appropriate technology devices, which are critical for effective and efficient learning (Bhamani, 2020). The increased financial burden of remote learning, including mobile data and gadget costs, has further worsened these challenges (Barrera & Arcialla, 2020). Additionally, the limited face-to-face interaction has decreased opportunities for collaborative learning and socialization, vital

components of vocational education (Adnan & Anwar, 2020).

The socio-economic profile of BTVTEd students revealed that many come from marginalized families, with parents who often did not finish primary education. This situation affected their access to technology and influenced their motivation and engagement in learning activities (Sandars, 2020). As educational institutions strive to adapt to these unprecedented circumstances, it is crucial to understand these academic challenges to formulate effective policies and support systems to make their learning experiences more meaningful. Thus, this study aimed to fill this gap by investigating the academic challenges encountered by BTVTEd students during and after the pandemic and provide a concrete foundation for policy formulation that will address these issues and promote academic success in the new normal.

Research Problem:

The transition from physical meetings to online and blended learning modalities due to the COVID-19 pandemic has presented significant academic challenges for students in the Bachelor of Technical Vocational Teacher Education (BTVTEd) program. This study sought to identify and analyze the specific academic hurdles faced by BTVTEd students during this unprecedented period. Key areas of concern include the impact of socio-economic factors on students' access to technology and learning resources, the effectiveness of online instructional methods, and the overall engagement and motivation of students in a remote learning environment.

Furthermore, the research explored how these challenges affect students' academic performance and ability to achieve their educational goals. By understanding the multifaceted nature of these issues, the study provided a basis for formulating targeted policies and interventions to support BTVTEd students in overcoming obstacles in their academic pursuits during the new normal.

- 1. Academic Challenges Identification: What academic challenges do BTVTEd students face in adapting to online and blended learning environments during the COVID-19 pandemic?
- 2. Access to Technology: How do socio-economic factors affect BTVTED students' access to essential technology and resources necessary for successful participation in online learning?
- **3. Impact on Learning Outcomes:** How do these challenges of remote learning influence the academic performance and learning outcomes of BTVTEd students?
- 4. **Support Mechanisms:** What types of support mechanisms and policies can be implemented by educational institutions to effectively address these academic challenges encountered by BTVTEd students in the new normal?

Scope and Delimitation of the Study:

This study focused on the academic challenges of first-year to third-year Bachelor of Technical Vocational Teacher Education (BTVTEd) students at Camarines Sur Polytechnic Colleges during the COVID-19 pandemic. It examined factors such as socioeconomic backgrounds, access to technology, and the effectiveness of online learning methods.

The delimitation includes:

- 1. The research was confined to BTVTEd students at a single institution, limiting its applicability to other programs or schools.
- 2. It addressed challenges explicitly arising from the pandemic, excluding pre-existing issues.
- 3. Utilized qualitative methods like surveys and interviews may restrict the generalizability of findings.
- 4. The study may not encompass all potential challenges, such as personal or psychological factors affecting students.

This focused approach aimed to comprehensively understand the academic challenges within the defined parameters.

Significance of the Study

The study on the academic challenges of Bachelor of Technical Vocational Teacher Education (BTVTEd) students during and after the pandemic holds significant implications for various stakeholders in the educational landscape. The following groups will benefit from the findings of this research:

- 1. **Students**: The primary beneficiaries of this study are the BTVTEd students. Through their specific challenges, the study provided insights that can tailor-fit support systems and policies. This enhanced their learning experiences, improved academic performance, and fostered a more inclusive educational environment.
- 2. **Educational Institutions**: Colleges and universities can utilize the findings to refine their curricula and teaching modalities. The study emphasized the need for flexible learning approaches and responsive academic policies, which can help institutions better address the needs of their students, particularly in times of crisis.
- 3. **Faculty Members**: Instructors gain valuable insights into their students' challenges, allowing them to adapt their teaching strategies accordingly. The recommendations for blended learning and simplified modules help faculty create a more supportive learning environment that accommodates diverse student needs.
- 4. **Policy Makers**: The research provided a foundation for policy formulation to improve educational practices and support systems. Policymakers can use the findings to advocate for necessary resources for effective online and blended learning, such as technology access and training.

- 5. **Parents and Guardians**: Understanding the academic challenges students face can help parents and guardians provide better support at home. They can become more involved in their children's education by recognizing the obstacles their children encounter and advocating for necessary resources.
- 6. **Community and Local Government Units (LGUs)**: The study highlighted the importance of collaboration between educational institutions and local communities. LGUs can be vital in providing resources, such as internet access and learning materials, to support students' academic pursuits.

In summary, this study served as an essential building block for enhancing the educational experience of BTVTEd students and fostering a collaborative approach among stakeholders involved in the educational process. Also, by addressing the identified challenges, the study aimed to contribute to improving academic policies and practices in the new normal.

Methods

The research design employed in the study on academic challenges encountered by Bachelor of Technical Vocational Teacher Education (BTVTEd) students was primarily descriptive and utilized a survey method. Here is a brief overview of the critical components of the research design:

- 1. **Descriptive Survey Method**: The study adopted a descriptive survey approach to gather comprehensive information about the students' profiles and the academic challenges. This method allowed researchers to collect data systematically from a large group of respondents, providing a clear picture of the issues.
- 2. **Sample Selection**: The researchers utilized simple random sampling to determine the sample size of the respondents, which consisted of first-year to third-year BTVTEd students. This approach ensured that every student was selected equally, enhancing the sample's representativeness.
- 3. **Data Collection**: Data was collected through a structured questionnaire to capture various aspects of the student's experiences, including socio-economic profiles and specific academic challenges encountered during the pandemic. The questionnaire was validated to ensure its reliability and relevance to the study's objectives.
- 4. **Statistical Treatment**: The collected data was statistically treated using percentage, weighted mean, and Likert Scale analysis. This quantitative approach allows for identifying trends and patterns in the responses, facilitating a deeper understanding of students' challenges.
- 5. **Thematic Analysis**: Besides quantitative analysis, thematic analysis was employed to identify recurring themes or patterns in the students' experiences. This qualitative aspect enriched the findings by providing context and depth to the numerical data, highlighting the nuances of the student's challenges.
- 6. **Expected Output**: The ultimate goal of the research design is to formulate policies and recommendations based on the findings to address the identified academic challenges and improve the educational experience for BTVTED students.

Overall, the research design was structured to provide a comprehensive understanding of students' academic challenges in the new normal, ensuring that the findings are reliable and actionable.

Ethical Consideration

The study on the academic challenges encountered by Bachelor of Technical Vocational Teacher Education (BTVTEd) students incorporated several ethical considerations to ensure the integrity of the research process and the protection of participants' rights. Here are the key ethical considerations addressed in the study:

- 1. **Informed Consent**: The researchers sought verbal permission from the student respondents before participating. This process ensured that participants were fully aware of the study's purpose, procedures, and right to withdraw without any negative consequences.
- 2. **Confidentiality**: The researchers guaranteed that all data collected would be treated with the utmost confidentiality. This means personal identifiers are removed or anonymized, and the information will only be used for the study. Ensuring confidentiality helped protect the respondents' privacy and encouraged honest and open responses.
- 3. **Voluntary Participation**: Participation in the survey was voluntary, meaning students could choose to participate without coercion. This principle respects the participants' autonomy and acknowledges their right to make informed choices regarding their involvement in the research.
- 4. **Data Security**: The researchers implemented measures to secure the data collected, ensuring that it is stored safely and accessed only by authorized personnel. This protects the integrity of the data and the privacy of the respondents.
- 5. **Ethical Approval**: Although not explicitly mentioned in the text, ethical research requires approval from an institutional review board or ethics committee. This step ensures that the research design adheres to ethical standards and guidelines.
- 6. **Respect for Participants**: The researchers maintained a respectful approach towards all participants, recognizing their experiences and perspectives as valuable contributions to the study. This respect fosters a positive research environment and encourages participants to share their insights freely.

By addressing these ethical considerations, the study aimed to uphold the highest standards of research integrity while ensuring the protection and respect of all participants involved. These measures enhance the credibility of the research and contribute to the study's overall ethical conduct.

Results and Discussion

Based on the excerpts from the study, here are the findings on the academic challenges students in the Bachelor of Technical Vocational Teacher Education (BTVTED) encountered.

Research Problem No. 1: What are the academic challenges faced by BTVTEd students during the pandemic?

The study identified several academic challenges faced by BTVTEd students during the pandemic, including lack of interaction with instructors, limited response time from faculty, and difficulties in socialization and collaboration for group projects. These challenges are consistent with findings from Hodges et al. (2020), who differentiate between emergency remote teaching and traditional online learning, emphasizing that the abrupt transition often leads to inadequate preparation and support for students and educators. Face-to-face interaction has hindered effective learning, as students may need help to engage with course materials and instructors in a virtual environment (Zhou et al., 2020). Furthermore, the reliance on technology for learning has exposed students to additional barriers, such as inadequate access to devices and internet connectivity, which are critical for successful online education. This situation underscores educational institutions' need to develop robust support systems that facilitate effective communication and engagement in a blended learning context.

Research Problem No. 2: How do socio-economic factors influence the academic challenges faced by BTVTEd students?

The socio-economic profiles of the respondents revealed that many students come from families with limited financial resources, with a significant portion earning below 5,000 pesos monthly. This financial constraint directly impacts their ability to access necessary technology and reliable internet connectivity, which is essential for online learning. Due to these barriers, Baker and Berenfeld (2021) highlight that students from lower socio-economic backgrounds often experience decreased engagement and academic performance in online learning environments. The study also found that many students reported their parents having only elementary education, which may limit the academic support they receive at home. This aligns with Zhou et al. (2020), who argue that socio-economic factors significantly influence students' educational experiences, particularly during crises like the COVID-19 pandemic. The compounded effects of financial instability and limited educational support create a challenging environment for BTVTED students, necessitating targeted interventions to address these disparities.

Research Problem No. 3: What types of support mechanisms can be implemented to address the academic challenges faced by BTVTED students?

The study suggests several support mechanisms that educational institutions can implement to address the academic challenges faced by BTVTED students. These include developing tailored support systems that enhance student and faculty communication, training faculty on effective online teaching strategies, and ensuring access to technology and learning materials. Hodges et al. (2020) emphasize the importance of preparing educators for online teaching, suggesting that professional development can significantly improve the quality of instruction in remote learning environments. Additionally, fostering a collaborative environment where students can engage in group projects and discussions, even in a virtual setting, is essential. The findings indicate that continuous support from instructors and administrators is vital for improving the educational experience of BTVTED students. Institutions should consider implementing mentorship programs and peer support networks to facilitate collaboration and enhance student engagement, as these strategies have been shown to mitigate the barriers students face in online learning contexts (Baker & Berenfeld, 2021).

Research Problem No. 4: What are the implications of the study's findings for educational policy formulation?

The implications of the study's findings for educational policy formulation are significant. Policymakers can use the insights gained from the research to advocate for necessary resources, such as improved internet access and technology training for both students and faculty. Zhou et al. (2020) highlight the need for educational institutions to adapt their policies to support students during crises better, emphasizing the importance of flexible learning approaches that accommodate diverse student needs. The study underscores the necessity for responsive academic policies that address the unique challenges BTVTEd students face, particularly those stemming from socio-economic disparities. By addressing the identified academic challenges, educational institutions can create a more inclusive and supportive environment that enhances student learning outcomes and overall academic performance. Furthermore, collaboration between educational institutions and local government units can be crucial in providing resources and support systems that facilitate effective learning, particularly for students from disadvantaged backgrounds (Baker & Berenfeld, 2021).

Interpretation

The study on the academic challenges faced by BTVTEd students during the pandemic revealed significant insights into how socioeconomic factors and the shift to online learning have impacted students' educational experiences. The findings indicate that many

students struggled with limited access to technology and internet connectivity, which aligns with previous research highlighting the digital divide exacerbated by the pandemic (Adnan & Anwar, 2020). Additionally, the emphasis on self-directed learning and enhanced self-efficacy suggests that while challenges exist, students adapt to new learning environments, which may foster greater independence in their educational journeys.

Comparison

Similar trends emerge When comparing this study's findings with other research conducted during the pandemic. For instance, Aboagye (2020) noted that students faced numerous challenges, including a lack of interaction and socialization, which hindered their ability to engage fully in group projects and collaborative learning (Aboagye, 2020). Both studies highlight the need for educational institutions to adapt their curricula and support systems to accommodate better student needs in a blended or fully online learning environment. This comparison underscores a broader trend in educational research during the pandemic, emphasizing the need for responsive policies that address both technological and pedagogical challenges.

Implications

This study has significant implications for educational policy and practice. The recommendations for providing support, such as gadget loans, simplified modules, and blended learning adoption, are crucial for ensuring no student is left behind (T1). These measures can help bridge the gap created by socioeconomic disparities and enhance the overall learning experience. Furthermore, the study suggests that educational institutions must prioritize the development of comprehensive educational continuity plans that are flexible and responsive to student's diverse needs, particularly in times of crisis.

Limitations

Despite its contributions, the study has several limitations. Firstly, relying on self-reported data may introduce bias, as students might underreport challenges or overstate their adaptability due to social desirability (T4). Secondly, the study is limited to a specific population (BTVTEd students) within a particular geographic area, which may affect the generalizability of the findings to other contexts or educational programs. Additionally, the study's cross-sectional design captures a snapshot of students' experiences during a specific time frame, potentially overlooking long-term trends and changes in academic challenges as the educational landscape evolves.

In summary, while the study provides valuable insights into the academic challenges faced by BTVTEd students, it also highlights the need for ongoing research to explore these issues further and develop effective strategies to support students in the new normal of education.

Conclusion

The study on the academic challenges Bachelor of Technical Vocational Teacher Education (BTVTED) students encountered during the pandemic illuminated critical issues affecting their educational experiences. The findings reveal that socio-economic factors, such as limited family income and educational background, significantly influence students' access to technology and ability to engage in online learning effectively. Despite these challenges, students demonstrated resilience, adapting to self-directed learning and maintaining a positive outlook on their educational journey.

The research underscores the necessity for educational institutions to implement responsive policies that address the diverse needs of students in a blended learning environment. Recommendations such as providing gadget loans, simplifying learning modules, and enhancing faculty engagement are essential steps toward mitigating the barriers students face. Furthermore, the study highlights the importance of continuous support from educators and administrators to foster an inclusive and effective learning atmosphere.

However, the study also acknowledges its limitations, including potential biases in self-reported data and the specific focus on a single population, which may affect the generalizability of the findings. Future research should explore these challenges across different educational contexts and over extended periods to gain a more comprehensive understanding of the evolving landscape of education in the new normal.

In conclusion, addressing BTVTEd students' academic challenges is crucial for ensuring their success and well-being in the current educational climate. By formulating and implementing targeted policies, educational institutions can better support students in overcoming obstacles and achieving their academic goals.

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