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The Status of Implementation of Bachelor of Technology and Livelihood Education (BTLED) in Abra State Institute of Sciences and Technology, Bangued Campus

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Abstract

The study analyzed the Bachelor of Technology and Livelihood Education (BTLED) program, focusing on student and faculty profiles, implementation status, and key recommendations for improvement. Findings showed that the majority of students were younger, single females aged 20-29, indicating a need for specific support services, especially in career development and artistic education. Surveys revealed that 85% of students wanted career growth workshops, and 72% were interested in sketching, highlighting gaps in the curriculum. Faculty profiles indicated that 80% had over five years of experience, positively impacting educational quality, although shortages in certifications like the National Certificate II (NC II) were noted.

The implementation status showed positive views on faculty roles, but 65% of students felt inadequately supported, contrasting with 80% of faculty who believed students were supported. Recommendations included enhancing support services, increasing professional development for faculty, improving resource allocation, and addressing satisfaction disparities. Additionally, the study suggested investing in physical infrastructure and tailored teaching methods to boost student engagement. Overall, the findings emphasized the need for strategic realignment of resources to improve educational outcomes in the BTLED program and meet diverse student needs. The overall mean rating was 4.09, marked as "Very Satisfactory," indicating good performance in most areas, though there remained a significant opportunity for collective improvement, with the rating being 50% higher than the AACUP standards.

Keywords: Support Services, Curriculum Gaps, Faculty Experience, Career Development, Student Engagement.

1. Introduction

The Bachelor of Technology and Livelihood Education (BTLED) program at Abra State Institute of Sciences and Technology, Bangued Campus, demonstrates the institution's dedication to equipping students with vital skills for the technology and livelihood sectors. This program focuses on improving educational quality and meeting local employment demands by offering thorough training and hands-on experiences in various technologies and livelihood strategies. Surveys revealed that 85% of students wanted workshops aimed at advancing their careers, while 72% expressed interest in sketching, indicating important areas lacking in the curriculum. Eighty percent of faculty members had more than five years of

experience, which helped improve the quality of education. However, there were still gaps in certifications, such as the National Certificate II (NC II). This situation highlighted a difference in perception between faculty and students concerning support: while 80% of faculty believed that students received enough support, 65% of students felt they did not receive adequate assistance.

The analysis showed a research gap regarding how different people viewed support services. It emphasized the need to enhance the curriculum and improve professional development for faculty to better address student needs. The study also found a demand for more resources and support systems for BTLED students, as their unique backgrounds could affect their engagement in education.

This study related to several Sustainable Development Goals (SDGs), particularly Goal 4: Quality Education, which aims to provide inclusive and equitable education for everyone and promote lifelong learning opportunities. It also focused on Goal 5: Gender Equality by addressing the unique needs of young female students in education. The recommendations advised making strategic investments in physical facilities and teaching methods to boost student engagement, thereby improving educational outcomes and meeting the diverse needs of BTLED students.

The findings indicated varying performance levels across different areas, highlighting both strengths and areas for growth. Area II received an "Excellent" rating of 4.37 due to its strong standards, setting a benchmark for others. In contrast, Area IX scored the lowest at 3.38 and was classified as "Very Satisfactory," indicating the need for attention to overcome challenges and improve effectiveness. The results pointed out that while many areas had solid frameworks, specific efforts were required for those underperforming, particularly Area IX. The overall average rating was 4.09, classified as "Very Satisfactory," and exceeded AACUP standards by 50%. Ongoing feedback and participation from stakeholders in lower-rated areas were considered crucial for making improvements and ensuring consistency across all areas.

2. Related Research Work

The Bachelor of Technology and Livelihood Education (BTLED) Major in Industrial Arts, authorized by Board Resolution No. 44, Series of 2018 and aligned with CHED Memorandum Order No. 78, Series of 2017, aimed to provide educators with both theoretical knowledge and practical skills essential for their professional growth and lifelong learning. The program's objectives included:

Students gained in-depth knowledge of their specialization to support ongoing education and professional development. The program emphasized the development of expertise in teaching methodologies, instructional design, assessment strategies, and educational technologies relevant to technology and livelihood education. Additionally, the curriculum fostered skills in business management, marketing, financial literacy, and sustainable practices.

The program encouraged students to embrace innovation, problem-solving, creativity, and critical thinking to adapt to technological advancements. It also promoted ethical values, professional integrity, and social responsibility, which are essential for leadership in technology-related fields. Students could choose specializations in Industrial Arts, Home Economics, or other relevant areas that aligned with their interests and career goals.

The curriculum integrated hands-on training, workshops, and real-world industry experience to ensure the effective application of theoretical knowledge. Students participated in outreach projects and partnerships that addressed societal challenges and supported sustainable development. Graduates were prepared for various roles, including technology and livelihood educators, curriculum developers, and community dev-

elopment officers.

In the K-12 Curriculum, Technology and Livelihood Education (TLE) courses followed the Learning Outcomes and Performance Criteria outlined in TESDA's Training Regulations (TRs). This prepared students for high-paying jobs that required higher-level National Certificates as needed by industry. TLE teachers were required to complete TESDA training to enhance the learning experiences of their students, ensuring alignment with industry demands. Although the Department of Education (DepEd) was mainly responsible for K-12 education, Republic Act 10533 mandated collaboration with CHED and TESDA to improve basic education programs, stressing the need for aligning Tec-Voc courses with TESDA TRs. TESDA certification indicated that educators had the necessary knowledge and skills for their disciplines, helping to ensure students graduated with industry-ready competencies.

The EDCOM report (2012), cited by Ariaso et al. (2016), highlighted the challenges educators faced in maximizing TLE students' potential in light of declining educational quality in the Philippines. At that time, there was a low enrollment in vocational courses, with many prospective students recognizing job opportunities available without a college degree. Ultimately, TLE programs played a crucial role in helping individuals acquire financial skills to improve their livelihoods and provide a pathway to socio-economic advancement.

Research by Elli and Ricafort (2020) on Grade VI TLE teachers revealed that the majority were young, predominantly female, and often in entry-level positions. Many TLE instructors had completed master's units but lacked extensive experience and national certification. The findings underscored that while teachers generally exhibited competence in TLE subject areas, there was no significant correlation between their profiles and competencies in ICT, Entrepreneurship, Agriculture, Home Economics, and Industrial Arts, except regarding their position titles in Agriculture.

Garcia (2007) emphasized the considerable responsibility placed on TLE teachers to nurture student potential for productive living. Additionally, ongoing challenges hindered the effectiveness of the BTLED curriculum, reiterating the need for continuous evaluative studies to identify areas for improvement.

3. Research Methods

This portion presents the research design, population, data gathering instrument, data gathering procedure and statistical treatment of data.

Research Design

The descriptive-correlation research method was used to systematically evaluate the implementation of the Bachelor of Technology and Livelihood Education (BTLED) Program at Abra State Institute of Sciences and Technology, Bangued Campus. This method was suitable because it allowed for a thorough review of current educational practices and analyzed the relationships between various factors that affected the program's implementation.

Population and Locale of the Study

This study involved a complete count of all participants in the Bachelor of Technology and Livelihood Education (BTLED) program at Abra State Institute of Sciences and Technology – Bangued Campus for the academic year 2023-2024. The population included key stakeholders in the BTLED Program, specifically focusing on three main groups: faculty and students.

The group of BTLED faculty consisted of all individuals responsible for teaching within the program. This group was crucial to the study, as their insights and experiences were essential in assessing the program's implementation. By including the perspectives of all BTLED instructors, the research aimed to

collect a variety of views on curriculum delivery, teaching challenges, and job satisfaction

The study also included all fourth (4th) year students enrolled in BTLED courses. Gathering feedback from these students was vital, as it offered a direct understanding of their educational experiences, thoughts on curriculum relevance, and satisfaction with teaching methods. By including all students in the total count, the research ensured a comprehensive approach that captured the educational environment from various viewpoints.

Research Instrument

The questionnaire is organized into four distinct parts, each designed to gather pertinent information relevant to the study's objectives.

Part I: Profile of Respondents

The first part of the questionnaire will collect demographic and background information about the respondents, including their roles (i.e., students, and faculty) educational background, years of experience, and other relevant characteristics. This profile data will facilitate a comprehensive understanding of the sample population, allowing for more nuanced analysis of the findings.

Part II: Implementation Indicators of the BTLED Program

Part II will focus on the indicators related to the implementation of the BTLED program as perceived by the two key stakeholder groups: students, and faculty members. This section will include items that assess various aspects of the program, such as instructional strategies, alignment with educational objectives, and overall effectiveness. The insights generated from this part will help identify strengths and areas for improvement within the program's execution.

Part III: Perception Differences Between Faculty and Students

The third part will aim to compare and contrast the perceptions of faculty members and BTLED students regarding the Status of implementation of the BTLED Program. By analyzing the potential differences in viewpoints, this section seeks to uncover any disparities in the assessment of teaching quality, curriculum relevance, and student engagement between teachers and their students.

Part IV: Perception of the relationship between faculty profile and status of implementation of BTLED program of ASIST – Bangued, Campus.

Part V: The problems encountered by the teachers in teaching BTLED Subjects.

Data Gathering Procedure

The questionnaire utilized in this study underwent a thorough modification and validation process, conducted by experienced and qualified instructors of the Bachelor of Technology and Livelihood Education (BTLED) Program at Abra State Institute of Sciences and Technology, Bangued Campus. This collaborative effort ensured that the questionnaire accurately addressed the specific context and needs of the BTLED Program, enhancing its relevance and effectiveness in gathering meaningful data.

Prior to the distribution of the questionnaire, the researcher adhered to established protocols to obtain the necessary permissions for conducting the study. This process began with securing approval from the College President, followed by obtaining consent from the Dean of the College of Teacher Education at Abra State Institute of Sciences and Technology, Bangued Campus. Such procedural rigor underscores the researcher’s commitment to ethical research practices and respect for institutional governance.

Upon receiving the appropriate approvals, the researcher took personal responsibility for the distribution and collection of the questionnaires. This direct engagement with respondents was crucial in ensuring that

the study was conducted in a controlled and supportive environment. The researcher monitored the distribution process to guarantee that it took place under favorable conditions, thereby minimizing any external pressures or influences that could compromise the integrity of the responses.

The researcher also provided assurances to the participants regarding the confidentiality and anonymity of their responses, fostering an atmosphere of trust which is essential for honest and accurate data collection. After distribution, the researcher systematically retrieved the completed questionnaires, ensuring that all responses were collected efficiently and securely.

Statistical Treatment of Data

The data gathered through the questionnaire were tallied, tabulated, organized, and analyzed with the following statistical measures:

1. Frequency count and percentage to describe the profile of the respondents.
2. Mean to determine the status of implementation of Bachelor of Technology and Livelihood Education Program of ASIST Bangued Campus.
3. T – Test – Independent Sample

Data Categorization

The following norms for interpretation were used to evaluate the Status of Implementation of BTLED Program of ASIST – Bangued, Campus.

Range	Item Descriptive Rating	Overall Descriptive Rating
4.20 – 5.00	Excellent	75% Greater than the standards
3.40 – 4.19	Very Satisfactory	50% greater than the standards
2.60 – 3.39	Satisfactory	100% compliance with the standards
1.80 – 2.59	Fair	50% lesser than the standards
1.00 – 1.79	Poor	75% lesser than the standards
0	-	Missing
NA	-	Applicable

The following norms for interpretation were used to Evaluate the items that represents the content coverage on the Status of implementation of Bachelor of Technology and Livelihood Education Program in Abra State Institute of Sciences and Technology, Bangued Campus.

Item Description	Norm	Overall Description
5 – Very Much	4.21 – 5.00	Very High
4 – Much	3.41 – 4.20	High
3 – Moderate	2.61 – 3.40	Moderate
2 – Little	1.81 – 2.60	Low
1 – Not at all	1.00 – 1.80	Very Low

The following norms of interpretation were used to Evaluate the items that represent the content coverage on the Problems encountered by the Faculty who teach BTLED Program.

Item Description	Norm	Overall Description
5 – Very Much	4.21 – 5.00	Very High
4 – Much	3.41 – 4.20	High
3 – Moderate	2.61 – 3.40	Moderate
2 – Little	1.81 – 2.60	Low
1 – Not at all	1.00 – 1.80	Very Low

4. Conclusions

1. Students needed specialized support, as indicated by the studies. Even though experienced faculty positively impacted education and student satisfaction, differences in qualifications led to varying levels of student satisfaction with support services.
2. Faculty members expressed concerns regarding inadequate resources and laboratory facilities, which adversely affected the quality of teaching and student outcomes.
3. Statistical analyses revealed significant differences in the perceptions of support services and infrastructure between students and faculty, highlighting the need for improvements in these areas to better meet student needs.

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