Bridging Competency Gaps between the Matatag Curriculum and Pre-Service Teacher Education Programs

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ABSTRACT

This study sought to determine the level of alignment between the MATATAG Curriculum and Pre-service teachers from the Bachelor of Technical-Vocational Teacher Education (BTVTEd) program at Cebu Technological University-Main Campus, as basis for a curriculum enhancement plan. The study used a quantitative descriptive method, which involved the use of a survey questionnaire distributed to fifty pre-service teachers. The data were analyzed using descriptive statistics, such as mean and standard deviation, and inferential statistics to identify differences in the perceptions based on selected profile variables. The results revealed that the MATATAG Curriculum is perceived as highly effective in highlighting the key competencies, including the technical skills, occupational safety, entrepreneurship, sustainability, and experiential learning. Likewise, the BTVTEd program was perceived as effective in developing technical skills and pedagogical skills for pre-service teacher. It also revealed a strong alignment between the curriculum requirements and the competencies developed in the BTVTEd program. Respondents indicate a high need for continuous improvement in curriculum design, faculty professional development, institutional collaboration, and the provision of instructional resources. Moreover, no significant differences in perceptions were found when grouped according to age, gender, or program enrolled. This research concludes that the MATATAG supports the development of learner's competencies and the BTVTEd program sufficiently equips pre- service teachers for curriculum-aligned instruction. It is recommended for institutions to continue and maintain a regular review of their curriculum, enhance mentoring and practical training for pre-service teachers, and enhance communication and collaboration among stakeholders to ensure program effectiveness and relevance.

Keywords: Technical-vocational education, MATATAG Curriculum, Competency gaps, pre-service teachers, Curriculum alignment, Teacher preparation

INTRODUCTION

The MATATAG Curriculum marks a significant shift from Philippine basic education, focusing on foundational learning, condensed content, and enhanced career-ready competencies in all learning areas, including Technology and Livelihood Education (TLE), which prepares learners with practical, technical, and entrepreneurial skills needed for local and global industries. With the introduction of new competencies, decongested learning standards, and more focused skill-based outcomes, it is clear that pre-service TLE teacher education programs must be preparing future educators to meet the demands of the MATATAG classroom.

In this context, the curriculum's reorientation toward basic competencies and authentic experiences increases the demands on the TLE teachers. TLE teachers are now called upon not only to transmit information, but to facilitate the students in experiencing real-world situations in learning activities based on their industry. This requires teachers to be proficient in their technical skills and in creating the learner-centered activities based on their industries. Therefore, pre-service TLE teachers' education programs should produce individuals that could integrate modern instructional technologies, apply competency-based assessments and embed entrepreneurship which is strongly emphasizes by the MATATAG curriculum as central components in their delivery.

In addition, as TLE develops with the fast pace of technology and the demands of the economy, there must be parallel developments to the TLE teacher. The MATATAG Curriculum necessitates that teachers be flexible, reflective, and be able to continue developing their skills in response to industry needs. To prepare TLE pre-service teachers adequately, therefore, teacher education must involve more than just training inside a classroom. They must be exposed to industry settings through on-the-job training and apprenticeship, modernized lab exercises, and innovations in the technical fields that are creating livelihoods today. Otherwise, pre-service teacher graduates will only come out with outdated and incomplete skills that cannot respond to the new curriculum requirements.

However, the initial curriculum analyses showed a widening gap between what pre-service teachers learning in their Teacher Education Institutions (TEIs) and what competencies were necessary to implement the MATATAG Curriculum, particularly in TLE, as many TEIs are still following traditional course structures, outdated syllabi, and limited technical training opportunities that do not align with the new TLE standards, and struggle with aligning pedagogical strategies, technical skills, and content knowledge with the updated curriculum frameworks during their field experiences.

These gaps issues be addressed not only to pre-service teachers but also to basic education schools which depend on newly trained teachers for continuing quality TLE education, to have ineffective learners, less proficient skill development and inconsistency in application of competency-based approach and to make learning meaningful in livelihood preparation and the socio-economic development in the whole society.

Given these concerns, this study aimed to analyze the relationship of pre-service TLE teacher education programs with the MATATAG Curriculum, identify specific gaps in competencies, and suggest recommendations to improve the curriculum coherence based on evidence-based interventions. More specifically, this study identified the importance of incorporating the TESDA National Certificate (NC II) guidelines to the program, improving the certification options of the pre-service teachers, increasing the on-the-job immersion of the pre-service teachers with their respective industries, and providing advanced faculty skills by having Trainer Methodology (TM II) certification.

Ultimately, bridging the competency gaps is essential to ensure that future TLE teachers have the technical, pedagogical, and curricular competencies required to deliver high-quality, relevant, and forward-looking TLE education that equips learners with employable skills, community livelihood, and national development. In line with this**,** (Fiel & Sermona, 2024) found that pre-service TVET teachers exhibit varying levels of technical and pedagogical competencies, underscoring the importance of improving their training and curriculum alignment to adapt to changing educational and industrial requirements.

THEORETICAL BACKGROUND

This study is grounded on different foundational theories that provide a comprehensive framework for understanding curriculum development, teacher competence, and instructional readiness. These include Tyler's Model of Curriculum Development (1949), Taba's Grassroots Model of Curriculum Design (1962), Shulman's Concept of Pedagogical Content Knowledge (1987), and Bandura's Social Cognitive Theory (1986). In addition to these theoretical underpinnings, the study is guided by important legal bases and policy frameworks that govern the implementation of curriculum and teacher education in the Philippines, namely Republic Act No. 10533 (Enhanced Basic Education Act of 2013), Republic Act No. 7722 (Higher Education Act of 1994), DepEd Order No. 21, s. 2019, and the Philippine Professional Standards for Teachers (PPST). These theories and legal basis highlight the importance of curriculum alignment, pedagogical competence, and policy coherence, as they provide direction for this study's conception and methodology.

The Model of Curriculum Development (1949) of Ralph Tyler is one of the most classic and enduring curriculum development models. Tyler's model of curriculum development has a focus on four fundamental questions: (1) What educational purposes should schools aim to attain? (2) What educational learning experiences can be provided that are likely to attain these purposes? (3) How can these educational experiences be effectively organized? and (4) How can we determine whether these purposes are being attained? This model implies the necessity of well-defined purposes and appropriate learning experiences, combined with sound organization and

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continuous evaluation. It emphasizes that all curriculum components—objectives, content, teaching methods, and assessment—must be coherently aligned to ensure effective instruction and measurable learning outcomes.

In the context of pre-service teacher education, Tyler's model functions as a guiding framework for the systematic and outcome-oriented design of BTVTED curricula. In line with this perspective, aligning learning objectives with instructional strategies and assessment practices allows teacher education programs to better equip pre-service teachers to meet the competencies required by the MATATAG Curriculum. However, research by Alonzo et al., 2023 shows that although TLE teachers have adequate knowledge of outcomes-based assessment, their knowledge does not translate into their teaching practice. Similarly Alciso et al., 2023 highlighted that the development of learning resources based on outcomes-based education for pre-service teacher education programs can improve the integration of learning outcomes, teaching and assessment methods. Therefore, the integration of Tyler's principles in teacher preparation programs facilitate curriculum design and evaluation, leading to effective, reflective and competent teachers.

Hilda Taba's Grassroots Model of Curriculum Design (1962) builds on Tyler's model by advocating for a participatory, inductive and teacher-centered approach to curriculum design. More specifically, the model views teachers - who are directly in contact with learners - as important stakeholders in the process of identifying learners' needs, setting objectives, designing learning experiences and assessment instruments. According, (Do, 2020) teachers' participation in curriculum development enhances relevance and ensures that curriculum decisions are grounded in classroom realities. Supported by this view, (Matiki et al., 2023), found that teacher involvement in curriculum development processes significantly enhances curriculum quality and implementation effectiveness, particularly when teachers are actively engaged in decision-making rather than being limited to implementation roles.

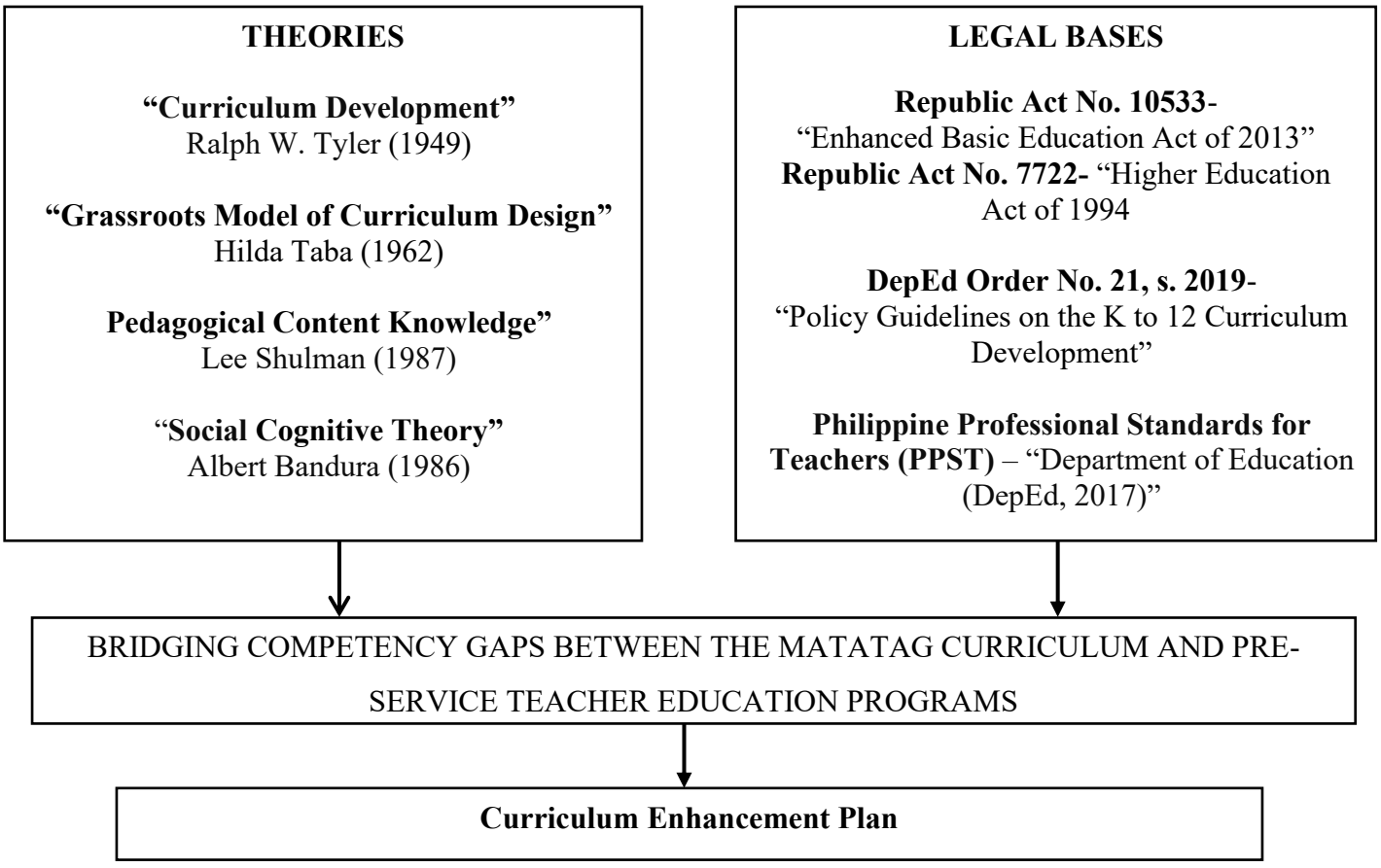

Figure 1.

Theoretical - Conceptual Framework of the Study

In support of this perspective, research in Philippine schools has highlighted the practical relevance of Taba's model. For instance, Superio, 2022 found that while curriculum objectives, content, and learning experiences

are well implemented, evaluation practices vary, highlighting the importance of teacher engagement in ensuring curricular coherence. Similarly, Reyes, 2023 reported that the active level of teacher participation in curriculum design is positively related with student learning performance. Likewise, (Aquino, 2024) emphasized the importance of higher levels of teacher participation in order for the MATATAG Curriculum to be implemented effectively to have learning aligned with intentions. Furthermore, (Bernardo et al., 2020) noted that curriculum reforms in the Philippines result in more teacher accountability, and support and engagement in curriculum implementation is needed. As a result, Taba's model is shown to facilitate adaptability, responsiveness and contextualization for curriculum implementation.

Building on these insights, Taba's model has particular relevance to pre-service teachers in BTVTED programs in which they need to develop skills in reflective and adaptive curriculum design. Canalita & Jugar, 2025 found that collaboration in lesson planning enables pre-service teachers to collaborate in designing learning experiences in a range of learner and community contexts. Furthermore, Sonsupap et al., 2025 reported that engagement in a community of practice through lesson study enables pre-service teachers to develop lesson materials that cater to diverse learning styles and foster innovation. Similarly, (Li, 2025) found that reflective practice in pre-service teacher education enhances critical thinking, professional development and curriculum implementation. Consequently, Taba's framework promotes fosters collaboration, reflection and contextual teaching strategies necessary for curriculum implementation of the MATATAG Curriculum

Pedagogical Content Knowledge (PCK) by Lee Shulman's (1987) emphasizes the integration of knowledge of content and pedagogy to transform information into meaningful form for the students. According to Ibag, 2024, suggests higher competency among TLE practitioners is associated with higher PCK, revealing that content knowledge in TLE is not enough if it cannot be translated to pedagogical knowledge. Likewise, Blanco & Tingzon, 2023 found that organizational support and adequate resources significantly enhance the development of PCK among teachers. Furthermore, (Sarkar et al., 2024) emphasized that PCK remains essential in integrating content and pedagogy to improve student learning outcomes across disciplines.

For the pre-service teachers training under the BTVTED courses, Shulman's (1987) framework highlights the interplay of technical knowledge and pedagogical knowledge under the competency-based concept of the MATATAG curriculum. As such, the integration of technical and pedagogical knowledge equips pre-service teachers and workforce with much-needed readiness according to Bangayan et al., 2025 Similarly, the effective teaching strategies of TLE instructors are enhanced by using culturally responsive and contextually appropriate pedagogies as indicated by Navasca et al., 2025 The pre-service teachers also showed lack of readiness concerning PCK (Tellermo, 2024) and its crucial role for students' success (Yue et al., 2024). It is thus recommended that pedagogical reasoning and instructional design in the teacher education programs need to be strengthened to equip pre-service teachers with the competence of fostering learner's higher-order thinking and applied competencies.

Albert Bandura's Social Cognitive Theory (1986) learning and teacher development occur in both social and psychological terms, particularly emphasizing self-efficacy which play a significant role in influencing motivation, perseverance and effective teaching performance. Within TLE context, according to R. Leparto & P. Ponsades, 2024 higher self-efficacy among teachers correlate higher to teaching competence with performance standards mediating this effect while, Abela et al., 2025 showed that opportunities of experiential learning such as mentoring and practicum increases confidence in using instructional strategies and classroom management among pre-service teachers.

For pre-service teachers, Bandura's Social Cognitive Theory argues that hands-on experience or learning through observation, practice teaching and mentorship would enhance the development of their self-efficacy. Correspondingly, Tijtgat, 2025 revealed that practical and blended learning experience strengthens pre-service TLE educators' teaching self-efficacy which increases confidence in teaching practices and managing classroom while (Wettstein et al., 2021) states that teachers' self-efficacy had a significant relationship with teachers' effectiveness in the aspect of classroom management and classroom environment that foster students engagement. Consequently, developing self-efficacy among BTVTED students is essential for the effective implementation of the MATATAG Curriculum and for improving teaching effectiveness and student outcomes.

The presented study was guided by key legal and policy frameworks that ensure the alignment of curriculum development and teacher preparation with national education goals. Republic Act No. 10533, Republic Act No. 10533 or Enhanced Basic Education Act of 2013 enacted and implemented the K-12 program and mandated curriculum that must be learner-centered, outcomes-based and must integrate the 21 st century competencies of the students with high quality of teachers and continued development. In line with this, it was found by (Burgos, 2025) that RA 10533 provides support for curriculum enhancement and strengthening teacher preparation among the public schools in the Philippines. Moreover, teacher self-efficacy is promoted by the development and utilization of effective pedagogical practices such as training and the implementation of supportive learning environment that ultimately result in a more effective instruction and classroom management (Duan et al., 2024)

Republic Act No. 7722 or Higher Education Act of 1994 gives the Commission on Higher Education (CHED) the power to promote relevance and quality of higher education. The creation of policies on higher education and on the different programs including that of teacher education were attributed to RA 7722. It also covers the curriculum development, program evaluation and faculty development of higher education. In conjunction with DepEd policies concerning curriculum development and teacher preparation, teacher education program such as the BTVTED course is regulated by RA 7722. This legal basis also emphasize the alignment between CHED and DepEd and the necessity of vertical alignment among the teacher education curriculum (pre-service teacher preparation) and the basic education curriculum. Carvajal et al., 2025, further support this claim saying that curriculum for pre-service teacher preparation must comply with RA 7722 and that the development of curriculum through policy direction are crucial factors to develop well-prepared and industry ready teachers.

Furthermore, DepEd Order No. 21, series of 2019, provides policy guidelines on K to 12 curriculum development, emphasizing principles such as coherence, flexibility, and responsiveness to national and local contexts. The order promotes collaboration between basic and higher education institutions, ensuring that curriculum objectives are consistent across educational levels. Supporting this, (Cerezo et al., 2023) found that the policy framework strengthened alignment and coherence in curriculum implementation, highlighting its role in preparing teacher education programs to deliver relevant and continuous learning experiences that respond to national and local educational needs.

The Philippine Professional Standards for Teachers (PPST) is a competency-based framework that defined as national guidelines of expected knowledge, skills, and values of teachers at their career stages. (Espiritu, 2021) found that pre-service teachers' awareness of PPST strengthens its integration into teacher education curricula. In addition, (P. Mantos et al., 2025) reported that the PPST promotes effective instructional practices toward the development of the appropriate learning environment responsive to the demands of the 21st century learning. Consequently, the PPST guides teacher education institutions in aligning curriculum outcomes and learning experiences with national professional standards to better prepare pre-service teachers for the demands of the profession.

These theoretical and policy frameworks offer an integrated foundation for examining how curriculum design, teacher competence, and instructional readiness interact in shaping effective teacher preparation. Tyler's and Taba's models establish systematic and participatory approaches to curriculum development, while Shulman's and Bandura's frameworks emphasize the pedagogical and psychological dimensions of teaching. National directives such as RA 10533, RA 7722, DepEd Order No. 21, s. 2019, and the PPST ensure that teacher education programs remain aligned with contemporary educational standards and professional expectations. Research also shows that aligning teacher education curriculum with national policy mandates supports comprehensive curriculum reform and readiness among pre-service teachers, further grounding the study's framework in both theory and policy Dr. Carvajal et al., 2025.

METHODOLOGY

Research Design

The study used a descriptive-correlational design of research to investigated the congruence of the MATATAG Curriculum with the pre-service teacher education program of Bachelor of Technical-Vocational Teacher Education (BTVTEd). It identified the extent of the implementation of the MATATAG Curriculum through

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descriptive method and the extent to which pre-service programs are preparing teachers through identifying their competency. This method descriptively and correlates with no manipulation of the variables which systematically defined and describe what is and what is related on this subject which in relation to a real data would be interpreted objectively. As supported by (Clarete et al., 2023), the descriptive-correlational design enabled researchers to investigate and interpret the relationship between the education constructs in a natural setting, offering valid insights into program effectiveness

Furthermore, the correlational aspect of the study determined the strength and direction of relationships between curriculum implementation, competency development, and alignment perceptions among pre-service teachers. This approach was particularly suitable in educational contexts where experimental manipulation was neither ethical nor practical. As demonstrated by (Cubillas et al., 2021), this method effectively establishes links between curriculum contextualization and learner performance, while (Bacosa & Caballes, 2022) highlight its usefulness in evaluating instructional practices amid changing educational frameworks. Integrating both descriptive and correlational approaches, ensured a comprehensive, systematic, and evidence-based understanding of how the MATATAG Curriculum aligned with pre-service teacher preparation programs.

Research Locale

This study was conducted at Cebu Technological University-Main Campus, Cebu City among BTVTED preservice teachers SY 2023-2024. The College of Education provides CHED-COPC complaint programs, including the Bachelor of Technical-Vocational Teacher Education (BTVTED) program that provides education of competent educators for technical vocational areas. It had 8 major specializations namely, Architectural Drafting, Automotive Technology, Civil and construction technology, electrical technology, electronics technology, Food Service management, Garments, Fashion and Design, and Welding and fabrication technology. The program aimed in developing pedagogical and technical knowledge to teach the TLE subject of MATATAG Curriculum by combining the program with industry-based competencies, hands-on practice and application of modern technologies, sustainable practices and the implementation of innovative teaching techniques for teaching purposes.

Research Participants

The respondents of this study were the pre-service teachers enrolled in the Bachelor of Technical-Vocational Teacher Education (BTVTED) program at Cebu Technological University – Main Campus SY 2023-2024.

Table 1 Distribution of Respondents

Variable	Category	Frequency (f)	Percentage %
Age	21	18	36.00
	22	19	38.00
	23	10	20.00
	24	3	6.00
Gender	Male	19	38.00
	Female	31	62.00
Specialization	Architectural Drafting	7	14.00
	Automotive Technology	5	10.00
	Civil and Construction Technology	2	4.00
	Electrical Technology	7	14.00
	Electronics Technology	4	8.00
	Food Service Management	8	16.00
	Garments, Fashion and Design	12	24.00
	Welding and Fabrication Technology	5	10.00
Total		50	**100.00**

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Table 1 showed the sample distribution on age, sex, and choice of specialization. Respondents were picked randomly to have a fair chance in the sampling process and to minimize bias. The age of the respondents varied between 21 and 24 years with majority at the range of 21-22 years old (74%). Women were more numerous in the samples compared to men (women 62%; men 38%). Most of the respondents were from Garments, Fashion, and Design program (24%) and Food Service Management program (16%) while those from Civil and Construction Technology programs were only 4% in all. Fifty pre-service teachers were included in the study; their profile was gathered in order to get the background of the findings and identify possible relations on their profile to their views on MATATAG Curriculum and the BTVTED program. Age, sex and specialization were chosen as appropriate variables for assessing individual experiences, competence and views.

RESULTS

The study showed that majority of the pre-service teacher's respondents fall on the younger age, most were females, and majority are in different specializations under the BTVTEd program. It was noted that the highest focus was on the core and specialized technical skills and hands-on and project-based learning methods of the MATATAG Curriculum, suggesting high implementation on these competencies. Entrepreneurial, sustainability skills, and Occupational Safety and Health (OSH) standards had a lower emphasis. In relation to the BTVTEd program implementation, the highest mean scores were on the program's ability to develop pre-service teachers with practical teaching skills and technical skills needed for basic education. The MATATAG curriculum and BTVTEd program were noted as highly aligned particularly on the technical and skills-based competencies. Respondents identified highest need for professional development and workplace skills as most needing improvement. Statistical analysis revealed no significant difference between responses based on age, gender, and specialization of the respondents. Based on the findings, a curriculum enhancement plan was developed to further improve practical skills and industry relatedness as well as continuous professional development.

DISCUSSION

A description of the respondents in the study is necessary because it gives a baseline knowledge of the group studied and can be used to identify possible relations between the characteristics of the respondents and the research variables. In this study, the profile of the respondents is important as a baseline of the group that was studied and for the identification of possible associations between the profile of the respondents and the research variables to be analyzed (age, gender, and specialization). The respondents in this study were the pre-service teachers enrolled in the Bachelor of Technical-Vocational Teacher Education (BTVTED) program of the institution. The profile of the respondents is relevant for contextualizing the findings, and age, gender, and specialization are profile indicators of the respondents that can be used for analysis of patterns and differences among groups, which can help to provide a more complete interpretation of the results.

Table 2: Age and Gender

This section examined the demographic characteristics of the respondents, particularly their age and gender distribution. Understanding these variables provides a clearer context for interpreting the results of the study, as age and gender may influence learners' experiences, perspectives, and academic engagement. The descriptive data gathered are shown in Table 2

Table 2 Age and Gender						
Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
24	2	4.00	1	2.00	3	6.00
23	4	8.00	6	12.00	10	20.00
22	12	24.00	7	14.00	19	38.00
21	13	26.00	5	10.00	18	36.00
Total	**31**	**62.00**	**19**	**38.00**	**50**	**100.00**

Table 2 illustrated the demographic characteristics based on their age and gender. Fifty people completed this survey; there were 31 females (62%) and 19 males (38%). The age of the respondents was between 21 and 24, majority were between 21 to 22, where 22 years old constituted 38% of all respondents and followed by 21 years old with 36%, while respondents of 23 years old occupied 20% of all respondents and 24 years old took 6%.

The data revealed a higher representation of female respondents and a greater number in the youngest age group (21-22 years of age), indicating that samples represent young female pre-service teachers primarily. According to (Gaganao & Odon, 2024), female pre-service teachers in 4th year level in Eastern Samar State University reached 67% and a large proportion of the respondents (90%) aged between 22 to 34 years of age. A study identified female respondents at 88.8% with mean of age 21.5 years old. (Ramos et al., 2020).

Consequently, age and gender may influence engagement, learning preferences, and perceptions of curriculum effectiveness.

Table 3: Specialization

This section presented respondents' specialization distribution, highlighted their academic backgrounds and areas of specialization. Examining specialization helps contextualize learning experiences, practical skills exposure, and competency development, which may affect students' readiness to meet MATATAG Curriculum expectations.

The descriptive data on respondents' specialization are summarized in Table 3.

Table 3 Specialization		
Specialization	f	%
Automotive Technology	5	10.00
Civil Construction Technology	2	4.00
Drafting Technology	7	14.00
Electricity Technology	7	14.00
Electronics	4	8.00
Food Service Management	8	16.00
Garments Fashion and Design	12	24.00
Welding Fabrication Technology	5	10.00
Total	**50**	**100.00**

The Table 3 indicated that the largest proportion of respondents are enrolled in Garments Fashion and Design (24%). Food Service Management (16%) is the second popular course. Drafting technology and Electricity technology have the equal number of respondents (14% each), Automobile technology and Welding fabrication technology share the same amount of respondents (10% each). The minority respondents are Electronics and Civil construction technology (8% and 4% respectively). This result shows the variance of people taking technical-vocational courses due to different interests, sense of career prospect or contact with technical based learning environment.

The data shown a varied distribution of respondents across technical and vocational programs, with a notable concentration in Garments Fashion and Design and Food Service Management, suggesting that these specializations attract higher enrollment due to perceived career opportunities, program popularity, and available resources. Supporting this, (Dumaplin, 2024) Filipino TVET students indicated that a choice of specialization could be driven by availability of job opportunities, equipment and resources and student's interests. On the other hand, the remaining specializations where there is a less number of samples are Civil Construction Technology and Electronics, which may be due to the students' lack of interest and limited specialization areas and in a study it showed that uneven access to available resources and support service is a cause of high and low student enrolment (Abao et al., 2025). Therefore, the study data is more representative of the population enrolled in these two popular programs, and for this reason, the survey sample for the future should represent more students enrolled in technical and vocational education fields that lack enrollment and student attention.

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Table 4: Extent To Which the Matatag Curriculum Emphasize Key Competencies For k-10 learners

The study investigated how the MATATAG Curriculum supports core competencies of K-10 learners in terms of foundational, technical, entrepreneurial, and sustainability skills as perceived by pre-service teachers of Cebu Technological University Main Campus. This study was done to look into the effectiveness of the curriculum and recommend needed modifications of the curriculum.

Foundational, Common Industry, and Specialized Technical Skills

This section presents findings on the MATATAG Curriculum's emphasis on foundational, common industry, and specialized technical skills for K–10 learners. These skills are essential in developing technical proficiency and preparing learners for future careers and practical industry-related competencies.

Occupational Safety and Health (OSH) standards

This section presents on the extent to which OSH standards are emphasized in the MATATAG Curriculum for K-10 learners. The OSH standards promote a culture of safety in a workplace or industry and create a working environment that is free from hazards; develop a consciousness of health and safety in school and industrial settings.

Entrepreneurial, Sustainability, Hands-on, and Project-based Learning Approaches

This section presents the evidence to the emphasis of entrepreneurial, sustainability, hands-on and project-based learning approaches in the K-10 MATATAG curriculum. These approaches endeavor to enhance the creativity, critical thinking, practical ability and awareness of sustainability and at the end cultivate learners to be innovative, responsible and industrially relevant.

Table 4 Extent to Which the MATATAG Curriculum Emphasize Key Competencies for K-10 Learners				
S/N	**Indicators**	**WM**	**SD**	**Verbal Description**
	In Terms of Foundational, Common Industry, and Specialized Technical Skills			
1	The MATATAG curriculum places a strong emphasis on foundational hand-tool skills for Grade 7 learners.	3.44	0.54	Very High
2	The curriculum gives high importance to the mastery of common industry skills for Grade 8-9.	3.52	0.58	Very High
3	The curriculum's specialized technical skills for Grade 10 are well-defined and career-oriented.	3.54	0.61	Very High
	In Terms of Occupational Safety and Health (OSH) Standards			
4	Occupational Safety and Health (OSH) standards are a central and consistent focus throughout the curriculum.	3.64	0.53	Very High
	In Terms of Entrepreneurial, Sustainability, Hands-on, and Project-Based Learning Approaches			
5	The curriculum adequately integrates entrepreneurial skills into lessons.	3.50	0.61	Very High
6	The curriculum's learning competencies are appropriately decongested and manageable for learners.	3.40	0.67	Very High
7	The curriculum strongly advocates for hands-on and project-based learning activities.	3.62	0.64	Very High
8	The curriculum provides clear guidelines for the use of modern and advanced industrial technologies.	3.56	0.61	Very High
9	The curriculum emphasizes the use of local materials and sustainable practices.	3.44	0.67	Very High

10	The curriculum is well-aligned with the needs of the local labor market and industry.	3.50	0.61	Very High
Aggregate Weighted Mean		**3.52**		**Very High**
Aggregate Standard Deviation			**0.61**	
Legend: 3.25-4.00-Very High; 2.50-3.24-High; 1.75-2.49-Low; 1.00-1.74-Very Low				

Table 4 shows the emphasis given in the MATATAG Curriculum on the development of foundational, common industry, and specialized technical skills for K–10 learners. It shows a very high degree of emphasis for all indicators, with the weighted mean scores from 3.44 to 3.54. Considering the indicators, the curriculum earned the highest emphasis for the specialization of technical skills, which was purposefully designed and developed for the grade 10 learners to be career-focused (WM = 3.54), followed by the curriculum's emphasis on industry common skills for the grade 8 and 9 learners (WM = 3.52), and a foundational hand tool skill for grade 7 (WM = 3.44). The mean weighted scores Orient the progressive ladder of technical skills development from the basic to the high-order industrial skills and career pathways for the learners. The low degree of variability of responses indicates uniformity of the pre-service teachers' perspectives on the degree of emphasis of these skills.

According to (Dayola et al., 2024), the MATATAG Curriculum focuses on foundational learning along with the incorporation of contemporary skills and the adaptability of future job requirements of learners to Industry 4.0 and 5.0. Reforms in the educational system bring skills that are valuable on a global and local scale (Diquito, 2024), and the ability of the curriculum to develop those skills is based on teacher training and instructional assistance which is necessary for the full development of the learners' competencies in the area of technical, entrepreneurial and sustainable development (Montilla et al., 2025).

Furthermore, the MATATAG Curriculum's inclusion of Occupational Safety and Health (OSH) is rated the highest of all categories (WM = 3.64, SD = 0.53). This shows continuous incorporation of OSH in the curriculum and strong positive feedback from respondents on the importance. Curriculum Proven findings on the promotion of the development of awareness of safety, prevention from occurrence, and responsible practices, both in education and in the industry, are implemented.

In the Philippine setting, education and OSH integration into the preparation of the workforce are lacking, and this contributes to compliance with safety practices, lower risk of workplace exposure, and the occurrence of hazards (Cuya–Antonio & Gabriel, 2021). In higher education, this results in improved productive outcomes and safer learning environments (Estadilla, 2025), Safety and workplace readiness, along with compliance to industry requirements, are strengthened through competency assessment and certification systems in TVET (Francisco & Jasmin, 2023). Overall, these studies support the necessity of OSH being an embedded core competency of safety and readiness for the industry.

Additionally, the data shows that an aggregate of 3.52 with a deviation of 0.61 shows that the emphasis of the MATATAG curriculum on requirements for sustainability and skills that incorporate entrepreneurship, the hands-on method, and the project-based method approaches focus to a large extent. Among the indicators, the highest-rating of the hands-on and project-based learning methodologies (WM = 3.62), followed by modern and advanced industrial technologies (WM = 3.56). Integration of entrepreneurial skills and the alignment to local labor market needs both received high scores (WM = 3.50), while the use of local materials and sustainable practices (WM = 3.44) and the manageability of learning competencies (WM = 3.40) received slightly lower scores, but still received a rating of very high. The curriculum seems to be geared toward fostering active learning, creativity, and the relevant skills of the industry and sustainability.

Studies show project-based learning methods within vocational education programs, foster advanced levels of higher-order critical thinking skills and creativity; the ability to work effectively with others as part of a team; and the ability to deal with and solve complex problems, as essential skills in the field of vocational education and training. Using structured, analytical tasks (Al-Khrisha & Mansour, 2021), helps learners improve critical thinking skills and develop collaboration and problem solving skills through self-motivating and stimulating activities (Dogara, 2023) , building the cognitive and practical skills of learners to prepare them to function effectively in the industry.

Overall, the ratings show that the MATATAG Curriculum places a great focus on experiential learning strategies. These include the integration of hands-on activities, project-based learning, entrepreneurship, and sustainability. This approach promotes active learning programs and supports the development of practical competencies that are relevant to industry needs. (Ali et al., 2025) also supports this point by showing that design-build-test experiential learning activities foster academic motivation and help strengthen the connection of theory-practice in vocational education.

Table 5: Extent to Which the BTVTED Program Equip Pre-Service Teachers with Competencies Necessary for Basic Education

The study assessed the effectiveness of the BTVTED program in developing pre-service teachers' essential competencies for basic education, including technical, entrepreneurial, and pedagogical skills. Based on responses from pre-service teachers at Cebu Technological University–Main Campus, it identifies the program's strengths and areas for improvement to support alignment with current educational and labor market demands.

Table 5 Extent to Which the BTVTED Program Equip Pre-Service Teachers With Competencies Necessary for Basic Education				
S/N	**Indicators**	**WM**	**SD**	**Verbal Description**
1	The BTVTED program effectively prepared me to teach foundational hand-tool skills.	3.38	0.60	Very High
2	My training in the BTVTED program adequately covered common industry skills for Grades 7-8.	3.40	0.57	Very High
3	The program provided sufficient opportunities to practice and master specialized technical skills.	3.50	0.54	Very High
4	I feel confident in my ability to teach and enforce Occupational Safety and Health (OSH) standards.	3.60	0.53	Very High
5	My BTVTED training equipped me with the skills to teach entrepreneurship.	3.44	0.58	Very High
6	The program's pedagogical training prepared me to conduct hands-on and project-based learning.	3.52	0.54	Very High
7	I feel prepared to use and maintain a variety of tools and equipment required in Lesson.	3.46	0.61	Very High
8	My BTVTED training prepared me to adapt my teaching for students with different learning needs	3.46	0.54	Very High
9	The program effectively prepared me to teach technical drawings and mensuration.	3.46	0.54	Very High
Aggregate Weighted Mean		**3.47**		**Very High**
Aggregate Standard Deviation			**0.56**	
Legend: 3.25-4.00-Very High; 2.50-3.24-High; 1.75-2.49-Low; 1.00-1.74-Very Low				

Table 5 shows the mean score given by the pre-service teachers as an indication of the competencies built by the BTVTED program for the Basic Education Teaching Competencies, across all the categories as "Very High." The score ranges from 3.38 to 3.60, with an aggregate score of 3.47. This indicates the program competently prepares participants for foundational, technical, entrepreneurial, safety, and pedagogical skills. The BTVTED program prepares participants for the practical and teaching competencies required for the Basic Education.

The program shows a strong emphasis on technical mastery and safety. The program rated these as highest, with the ability to teach and enforce OSH standards at 3.60 and the mastery of specialized technical skills at 3.50. The program also effectively develops hands-on and project-based learning (WM = 3.52), and the ability to teach and adapt to a variety of learners (WM = 3.46), and the ability to teach entrepreneurship (WM = 3.44) as a pedagogical competency. The foundational and general industry skills (WM = 3.38–3.40) are notably well addressed, which helps in ensuring the pre-service teachers have the competencies to assist students from the 7–8 grades.

The ratings suggest that the BTVTED program effectively integrates technical training and pedagogical training, which balances pre-service teachers in terms of knowledge and skills. Also, BTVTED's application of practical

aids, safety, and adaptability, coupled with project-based learning, offers more responsive and engaged classrooms (Bernas & Andal, 2024). while alignment with the MATATAG Curriculum, BTVTED has better teaching results and, more importantly, better student outcomes (Gerodias, 2025). Overall, the program is effective in preparing pre-service teachers for quality, curriculum-aligned instruction.

Table 6: Level of Alignment Between Competencies in the MATATAG Curriculum and Those Developed in the BTVTEd Program as Perceived Pre-Service Teachers

This section examines the alignment between the competencies of the MATATAG Curriculum and those developed in the BTVTED program as perceived by pre-service teachers from Cebu Technological University–Main Campus. It assesses how well the program prepares pre-service teachers in key competency areas in relation to K–10 curriculum requirements.

The analysis evaluates the coherence between teacher education preparation and curriculum expectations, with results presented in Table 6.

Table 6 Level of Alignment Between Competencies in the MATATAG Curriculum and Those Developed in the BTVTEd Program, as Perceived Pre-Service Teachers

S/N	Indicators	WM	SD	Verbal Description
1	The common industry skills I learned in the BTVTED program are well-aligned with the MATATAG curriculum's requirements.	3.36	0.53	Very High
2	There is a strong alignment between the specialized technical skills of my BTVTED major and those mandated by MATATAG	3.42	0.50	Very High
3	The pedagogical approaches I was trained on in BTVTED are the same as those required by the MATATAG curriculum.	3.40	0.53	Very High
4	The emphasis on Occupational Safety and Health (OSH) in BTVTED is consistent with the MATATAG curriculum's standards.	3.36	0.56	Very High
5	The entrepreneurial competencies developed in the BTVTED program are a good fit for the MATATAG curriculum's focus.	3.48	0.54	Very High
6	There is a noticeable gap between the technological skills I possess from BTVTED and those required by the curriculum.	3.42	0.54	Very High
7	The assessment methods used in the BTVTED program are suitable for evaluating MATATAG curriculum competencies.	3.42	0.54	Very High
8	My training in BTVTED prepared me for the skill progression outlined in the MATATAG curriculum.	3.42	0.50	Very High
9	The BTVTED program effectively integrates industry-relevant experiences in alignment with MATATAG standards.	3.46	0.50	Very High
10	Overall, the BTVTED program is well-aligned with the competency requirements of the MATATAG curriculum.	3.48	0.50	Very High
Aggregate Weighted Mean		**3.42**		**Very High**
Aggregate Standard Deviation			**0.52**	
Legend: 3.25-4.00-Very High; 2.50-3.24-High; 1.75-2.49-Low; 1.00-1.74-Very Low				

Table 6 demonstrates that pre-service teachers consider the alignment of BTVTED competencies with the MATATAG Curriculum to be "Very High," with their weighted mean estimates ranging from 3.36 to 3.48, with an overall mean of 3.42. This strong alignment of almost all the technical, pedagogical, entrepreneurial, OSH, and industry skills competencies suggests that the BTVTED program helps participants to understand the MAHATAG Curriculum and the essential competencies that teachers should possess.

The data indicated strong alignment of the BTVTED Curriculum Program with the MATATAG Curriculum in the areas of technical and pedagogical skills. The highest ratings were given to the entrepreneurial skills (WM = 3.48) and overall alignment (WM = 3.48), meaning that pre-service teachers were strongly prepared with the

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necessary competencies. Although the alignment of common industry skills and OSH (WM = 3.36) was somewhat lower, the data were high in overall alignment among the different aspects.

The very high ratings imply that the BTVTED program represents a good alignment with the MATATAG Curriculum, helping pre-service teachers with the pedagogical and technical skills for K–10 teaching. Minor gaps were noted in the development of key holistic competencies (Estubio & Sarsale, 2024) , the development of competencies in teaching and their effect of responding to the need of the curriculum designed (Lomeda-Junio, 2025) and the overall pedagogical and technical preservice teachers for K–10 competencies. These gaps suggest areas for deficiency, but overall, the results indicate the strengths of the preservice competencies for the teaching profession.

Table 7: Pre-Service Teachers Perceived Level of Need for Enhancing the BTVTEd Program and Professional Development

This section highlights the need to enhance the BTVTED program and strengthen professional development to support the MATATAG Curriculum. It identifies areas for curriculum improvement, capacity building, and institutional support, with descriptive data presented in Table 7.

Table 7 Pre-Service Teachers' Perceived Level of Need for Enhancing the BTVTED Program and Professional Development

S/N	Indicators	WM	SD	Verbal Description
1	It is highly necessary to revise the BTVTED curriculum to include modern industrial technologies.	3.56	0.54	Very High
2	There is a crucial need to update the BTVTED curriculum to better align with the specific competencies of the MATATAG curriculum.	3.58	0.57	Very High
3	Professional development for in-service teachers is essential for the successful implementation of the MATATAG curriculum.	3.74	0.44	Very High
4	The BTVTED program should provide more hands-on training using the same equipment that will be used in public schools.	3.68	0.47	Very High
5	It is necessary to provide supplemental training on the entrepreneurial and sustainability components of the MATATAG curriculum.	3.72	0.45	Very High
6	Additional pedagogical training is needed for BTVTED graduates to effectively conduct project-based learning.	3.70	0.46	Very High
7	Providing mentorship programs for new BTVTED graduates would be highly beneficial for their transition into teaching the MATATAG curriculum.	3.68	0.47	Very High
8	It is necessary for the BTVTED program to better prepare graduates to adapt instruction for resource-constrained environments.	3.72	0.50	Very High
9	Collaboration between DepEd and CHED is necessary to ensure continuous alignment between the two curricula.	3.76	0.43	Very High
10	Funding for new equipment and instructional materials is crucial for the successful implementation of the MATATAG curriculum.	3.72	0.45	Very High
Aggregate Weighted Mean		**3.69**		**Very High**
Aggregate Standard Deviation			**0.48**	
Legend: 3.25-4.00-Very High; 2.50-3.24-High; 1.75-2.49-Low; 1.00-1.74-Very Low				

As shown in Table 7, all indicators received a rating of "Very High," with weighted means between 3.56 and 3.76, and an overall weighted mean of 3.69. The results show great support for professional development and funding for instructional resources in DepEd-CHED collaboration. They also highlight the need for revision of the curriculum, incorporation of the new technologies, and improved training in conjunction with project learning and graduate mentorship.

The high rating shows that pre-service teachers sought the need for systemized improvement in the BTVTED program to enhance the deployment of the MATATAG curriculum. According to (Cabreros & Barbacena, 2024), it is of great support of the need for continuous review of the curriculum for quality assurance and collaborating institutions, enhancing the respondents' views for funding the instructional resources, and consolidation of mentorship and development as well as responsive actions of the educational institutions to support the areas targeted for the improvement of the BTVTED/BTVTED Program.

(Moreno et al., 2025), shows that there is an urgent need for continuous review of BTVTED program, and also shows that the curriculum and labor market in relation to the education of safe and quality practitioners is of utmost importance (Alinea & Reyes, 2023). Overall, these findings highlight the need for curriculum modernization, expanded experiential learning, and stronger institutional support to ensure the preparation of qualified teachers for basic education.

Table 8: Test Significant in the Perceptions of Pre-Service Teachers on the Emphasis of the Matatag Curriculum Regarding Key Competencies For K-10 Learners When Grouped According to Age

This section examines whether pre-service teachers' perceptions of the MATATAG Curriculum's emphasis on key K–10 competencies differ when grouped by age. It highlights the importance of age-related factors and presents the results using one-way ANOVA in Table 8.

Table 8 Test of Significant Difference in the Perceptions of Pre-Service Teachers on the Emphasis of the MATATAG Curriculum Regarding Key Competencies for K-10 Learners When Grouped According to Age

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Remarks
Between Groups	120.886	3	40.295	1.818	0.157	Not Significant
Within Groups	1019.834	46	22.170			
Total	1140.720	49				

As shown in Table 8, an F-value of 1.818 is computed with a p-value of 0.157. As the p-value is larger than the 0.05 significance level, it is evident that there is no meaningful variance in the views of pre-service teachers on age groups. Respondents, regardless of age, exhibited relatively similar views on the MATATAG Curriculum emphasis on critical competencies for K-10 learners.

The non-significant result indicates that age does not significantly influence pre-service teachers' perceptions of the MATATAG Curriculum's competency emphasis, suggesting that respondents hold similar views regardless of age. According to (Aytaç, 2023), show that, teachers perceive of curriculum change and age and their co-variances such as teaching experience non-significance for teachers perceptions toward curriculum direction.

The findings indicate that the coherent component of the BTVTED program allows all pre-service teachers to understand the MATATAG competencies irrespective of age (Verano & Baguio, 2025). This indicates that coherence in the curriculum allows for consistent perceptions that may not necessarily be distinguished by age, and other variables such as area of focus or years of teaching need to be addressed in future research.

Table 9: Significant Difference in the Perceptions of Pre-Service Teachers on the Emphasis of the Matatag Curriculum Regarding Key Competencies For K-10 Learners When Grouped According to Gender

This section examines whether pre-service teachers' perceptions of the MATATAG Curriculum's emphasis on key competencies for K–10 learners differ according to gender. It aims to determine if male and female respondents have varying learning experiences or perspectives.

The results of the Independent Samples t-test are presented in Table 9.

Table 9 Test of Significant Difference in the Perceptions of Pre-Service Teachers on the Emphasis of the MATATAG Curriculum Regarding Key Competencies for K-10 Learners When Grouped According to Gender

Source of Difference	Mean	Standard Deviation	Mean Difference	Computed t- value	p-value	Decision	Result
Female Male	35.39 34.79	4.78 5.01	0.60	0.422	0.675	Do not Reject Ho	Not Significant

*significant at $p < 0.05$ (two-tailed); df = 48

Table 9 shows the Independent Samples t-test results to compare male and female pre-service teachers. The mean score of the female respondents was 35.39, (SD=4.78), while that of the male respondents was 34.79, (SD=5.01). The mean difference between the two groups was minimal (0.60), indicating similar perceptions across gender groups

The computed t-value of 0.422 with a p-value of 0.675 is exceeds the 0.05 level of significance. Hence, the null hypothesis stands valid showing that there is no significant difference in the perceptions of pre-service teachers on whether the MATATAG Curriculum places emphasis on key competencies of K – 10 learners when grouped according to gender.

The absence of a significant difference suggested that both genders among the pre-service teachers had aligned perceptions on the MATATAG Curriculum's emphasis on key competencies. Both genders may share such perceptions due to identical teacher education experiences, curriculum exposure, and training. In line with this, (Pat et al., 2025) that there is no significant gender difference in Filipino students' involvement in co-curricular activities.

This result also implies that gender is not a significant factor in altering the perceptions of pre-service teachers, indicating that orientation on the curriculum and training programs is equally effective for both males and female pre-service teachers. In line with this, (Montebon, 2024) reported gender has no significant influence on Filipino teachers' perceptions regarding essential competencies within the K to 12 curriculum. Curriculum orientation and teacher training programs can, therefore, continue being inclusive and gender-neutral regarding curriculum implementation.

Table 10: Difference in the Perceptions of Pre-service Teachers on the Emphasis of the Matatag Curriculum Regarding Key Competencies for k-10 learners When Grouped According to Specialization

This section determined whether pre-service teachers' perceptions of the emphasis of the MATATAG Curriculum on key competencies for K–10 learners differ when grouped according to specialization. Examining program-based differences helps identify whether perceptions of the curriculum vary across academic specializations.

The one-way Analysis of Variance (ANOVA) results are presented in Table 10.

Table 10 Difference in the Perceptions of Pre-Service Teachers on the Emphasis of the MATATAG Curriculum Regarding Key Competencies for K-10 Learners When Grouped According to Specialization

Source of Variation	Sum of Squares	df	Mean	F-value	p-value	Remarks Square
Between Groups	218.393	7	31.199	1.421	0.223	Not Significant
Within Groups	922.327	42	21.960			
Total	1140.720	49				

*significant at $p<0.05$

Table 10 presented the results of the one-way Analysis of Variance (ANOVA) comparing the perceptions of pre-service teachers across different programs. The analysis shown a between-groups sum of squares of 218.393 with 7 degrees of freedom and a mean square of 31.199, while the within-groups sum of squares is 922.327 with 42 degrees of freedom and a mean square of 21.960. The computed F-value is 1.421 with a p-value of 0.223. Since the p-value (0.223) is greater than 0.05 level of significance, the null hypothesis is not rejected, indicating that there is no significant difference in the perceptions of the pre-service teachers on the emphasis of the MATATAG Curriculum on key competencies of K–10 learners when grouped according to the specialization.

The results also indicated that there is a significant difference in the perceptions of pre-service teachers regarding the MATATAG Curriculum based on the students' year level. Supporting this, (Osiesi & Blignaut, 2025) highlight that a coherent and well-structured curriculum plays a vital role in shaping similar perceptions among pre-service teachers, with (Konadu, 2025) review emphasizing common understandings of professional competencies when programs provide comprehensive curricular support.

These findings implied that the MATATAG Curriculum's emphasis is common across different pre-service teacher programs indicating the effectiveness of common curriculum integration and training that standardizes curriculum modifications that are program-specific in developing awareness of key competencies. In line with this, (Espiritu, 2021b) found that there was uniformity in the awareness and proficiency among pre-service teachers in the Philippines aligned to the Philippine Professional Standards for Teachers (PPST), thus enforcing the idea of uniformity of professional expectations across groups.

Table 11: Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Age

This section examines whether there is a significant difference in pre-service teachers' perceptions of the BTVTED program's role in developing competencies for basic education when grouped according to age. It aims to determine if variations in age, academic exposure, or training influence their perceptions of program effectiveness.

The results of the one-way Analysis of Variance (ANOVA) are presented in Table 11.

Table 11 Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Age

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Remarks
Between Groups	77.551	3	25.850	1.445	0.242	Not Significant
Within Groups Total	823.029 900.580	46 49	17.892			

*significant at $p<0.05$

As shown in Table 11, the F-value computed stands at 1.445, with its corresponding p-value being 0.242. Since the p-value is above 0.05 level of significance, the null hypothesis is not rejected which shows that there is no statistically significant difference between the different age groups of the respondents in terms of perception. This implied that age does not affect how pre-service teachers perceive the role of BTVTED program in nurturing important teaching competencies.

The non-significant difference in perceptions across age groups, therefore, meant that age does not affect how pre-service teachers evaluate the BTVTED program's effectiveness. This is in part because of standardized

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coursework, practicum experiences, and pedagogical training that leads to a certain consensus about the program's role in professional preparation.

Moreover, the lack of variation by age indicates that the program offers instructional quality and stimulates competency development among respondents despite their age. This calls for the use of standardized curricula and training to ensure that there is a uniformity of learning outcomes. Supporting this, (Vallente et al., 2025) found no significant variations between the competencies and age of the Philippine pre-service teachers, and (Rubio & Saenz, 2023) noted consistently high competencies among all demographic groups, thus supporting standardized teacher education programs.

Table 12: Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Gender

This section examined whether significant differences exist in the perceptions of pre-service teachers on the effectiveness of the BTVTED program in developing competencies for basic education when grouped according to gender. It also highlights the importance of identifying gender-based differences in evaluating program effectiveness.

The results of the Independent Samples t-test are presented in Table 12.

Table 12 Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Gender

Source of Difference	Mean	Standard Deviation	Mean Difference	Computed t- value	p-value	Decision	Result
Female	31.42	4.54	0.52	0.416	0.679	Do not Reject H_o	Not Significant
Male	30.89	3.94					
*significant at $p < 0.05$ (two-tailed); df = 48							

As shown in Table 12, the computed t-value is 0.416 with a corresponding p-value of 0.679. Since the p-value is greater than the 0.05 level of significance, the null hypothesis is not rejected, indicating that there is no statistically significant difference between male and female pre-service teachers' perceptions. This finding suggested that both groups similarly assess the role of the BTVTED program in developing essential teaching competencies.

The non-significant result indicates that gender has no influence on pre-service teachers' perceptions on the effectiveness of the BTVTED program, as both males and females' respondents undergo equal training, exposure, and effectiveness on their level of competence. This presents an effective measure of learning opportunity provisions irrespective of gender. Supporting this, (Muega-Geronimo & Carlos, 2023) found that gender has no significant influence on self-efficacy and professional readiness among Philippine pre-service teachers, with (R. Abela et al., 2025) reporting that both genders demonstrate a high level of self-efficacy and learning experience in teacher education programs, demonstrating the effectiveness of inclusive and standardized instructional practices.

Based on these findings, it is unnecessary to differentiate the implementation of the program based on gender, and it will be essential to ensure that similar structures are implemented to ensure equal levels of professional readiness among all pre-service teachers.

Table 13: **Test of Significance of Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Specialization**

This section investigated whether pre-service teachers' perceptions of the BTVTED program's role in developing

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necessary competencies differ based on their enrolled academic program. An Analysis of Variance (ANOVA) was conducted to determine if program affiliation influences these perceptions.

The results of the Analysis of Variance (ANOVA) test are presented in Table 13.

Table 13 Test of Significance of Difference in the Perceptions of Pre-Service Teachers on the Role of BTVTED Program in Equipping Pre-Service Teachers with Competencies Necessary for Basic Education When Grouped According to Specialization

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Remarks
Between Groups	101.960	7	14.566	0.766	0.619	Not Significant
Within Groups	798.620	42	19.015			
Total	900.580	49				
*significant at p<0.05						

Table 13 shown that there is no significant difference in the perceptions of pre-service teachers on the role of the BTVTED program in equipping them with competencies necessary for basic education when grouped according to their enrolled programs. The ANOVA test gave a value of ($F = 0.766$, $p = 0.619$), which is beyond the 0.05 significance level. This means that the perceptions of the pre-service teachers regarding the BTVTED program equipping them with the necessary competencies required in basic education are not different when grouped according to the enrolled programs.

This finding suggested that the BTVTED program provides a similar learning experience for pre-service teachers, regardless of the academic tracks. According to (DelaTorre-Diaz et al., 2025) , structured and aligned curricula help reduce discrepancies in teaching methods and assessments. Consistent perception of the program by the students is a reflection of its successful standardized curriculum.

The implications for program administrators and curriculum planners are significant, being that they can maintain this uniformity while looking for means to improve overall program quality. (Johnson et al., 2020) emphasize that uniformity in curriculum alignment allows educators to focus on identifying areas of continuous improvement and professional development. Theorists argue that such coherency can be fundamental in enabling program planners to develop specific competencies based on individual learner expectations without creating room for bias and variations in learning outcomes, thus boosting overall program effectiveness.

CONCLUSION

It is concluded that the MATATAG Curriculum emphasizes the identified competencies, and the BTVTED program is capable of equipping future teachers with matching skills. The lack of significant difference in groups further confirms the coherence and standardization in teacher education efforts. Notwithstanding, the pre-service teachers acknowledge the importance of promoting the current state of the program constantly to match the changing technology and labor market needs. Emphasizing the professional development, mentorship, and availability of resources remain critical in improving the level of teacher readiness.

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