Standards-Based Teaching and Learning in a Catholic School: Benchmarking from the Standards of Quality in Basic Education

ISSN 2672-3107 (Print) 2704-288X (Online)
PHILIPPINE SOCIAL SCIENCE JOURNAL
Advancing Social Science Research in the Philippines and Beyond

DOI: https://doi.org/10.52006/main.v7i4.1079

Marisa B. Petalla
University of Negros Occidental-Recoletos, Bacolod City, Philippines

Article history:
Submitted: December 5, 2024
Revised: January 14, 2025
Accepted: January 22, 2025

Keywords:
Standards-based teaching and learning
Basic education schools
Quantitative research
Philippine education

ABSTRACT. Amidst the crises faced by the Philippine educational system, several reform movements promote standards-based teaching and learning. This descriptive-comparative study determined if differences exist in the extent of implementation of standards-based teaching and learning in a senior high school program of a private university. The study utilized 46 teachers and a stratified random sample of 227 students who completed a modified research questionnaire. Mean, standard deviation, and one-way analysis of variance were employed in data analyses. The findings revealed excellent implementation as assessed by teachers and very good implementation as assessed by students. Further, significant differences were found in the extent of implementation when students were grouped according to strand, but no significant difference when teachers were grouped according to teaching experiences and educational qualifications. The findings of the study will be the basis for the formulation of the Content, Delivery, and Assessment (CDA) Plan.

1.0. Introduction

Standards-based education (SBE) has emerged as a global paradigm shift in educational systems, aiming to establish clear and measurable learning objectives for all students (Schwartz, 2023; Slizewski, 2020). Educational standards provide a framework for teachers by outlining the specific learning objectives that students are expected to achieve. These standards not only define what should be taught but also offer guidance on effective instructional strategies to help students successfully meet those expectations (Nasser & Alhija, 2019). This approach emphasizes the crucial role of aligning curriculum, instruction, and assessment to ensure students develop the essential knowledge and skills needed to thrive in the 21st century (Wenzel, 2016; Seitz, 2017; Ismail et al., 2020). Research from around the globe, particularly in countries with high-performing education systems, has shown that standards-based education can positively impact student achievement (Schleicher, 2018).

While the benefits of standards-based teaching and learning are evident in developed countries, its implementation in developing nations presents unique challenges. While standards-based education holds great promise, its effective implementation can be hindered by challenges such as limited resources, inadequate infrastructure (Qader & Cek, 2023), and insufficient teacher training (Darling-Hammond et al., 2017). However, even with these obstacles, there's growing acknowledgement of the potential for standards-based education to enhance learning outcomes in low-income settings (UNESCO, 2015). A wave of education reform, influenced by neoliberal ideologies, has swept the globe in recent years. This movement emphasizes standardized learning outcomes, with governments implementing standards-based initiatives in an effort to improve their countries' performance on international assessments like PISA, TIMSS, and PRLIS (Nasser & Alhija, 2019).

In recent years, the Philippines has made significant strides in reforming its education system, with a

***Correspondence:** marshe112582@gmail.com
Marisa B. Petalla, University of Negros Occidental-Recoletos, Bacolod City, Philippines

©Petalla (2024). **Open Access.** This article published by Philippine Social Science Journal (PSSJ) is licensed under **Creative Commons Attribution-Noncommercial 4.0 International (CC BY-NC 4.0).** You are free to share (copy and redistribute the material in any medium or format) and adapt (remix, transform, and build upon) the material. Under the following terms, you must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way suggests the licensor endorses you or your use. You may not use the material for commercial purposes. To view the license, visit **https://creativecommons.org/license/by-nc/4.0/**

particular focus on enhancing the quality of basic education. A key component of this reform is the Department of Education's (DepEd) introduction of the K-12 curriculum, designed to align with global standards and competencies. This curriculum framework emphasizes standards-based teaching and learning as a core principle to ensure all students achieve the desired learning outcomes (DepEd, 2019). To operationalize SBE, the DepEd introduced the Standards of Quality in Basic Education (SQBE), which provides a framework for school improvement and accountability as stipulated in DepEd Quality Policy Statement (DepEd, 2021) to provide all learners with a high-quality basic education that is accessible to everyone, embraces inclusivity, and empowers individuals. This is achieved through proactive leadership, collaborative governance, policies grounded in evidence, well-defined standards and programs, curricula that are responsive and relevant, a highly competent and dedicated team of officials and personnel, and a supportive learning environment.

While the Philippines has made strides in implementing standards-based education, several challenges persist, such as inadequate teacher training, lack of resources, and variations in school contexts. These are the realities that basic education schools, including senior high schools, encounter, and addressing these issues is crucial for successfully implementing standards-based teaching and learning. These factors have hindered fully realizing the potential benefits of standards-based teaching and learning, specifically in the curriculum, instruction, and assessments.

Several studies have explored standards-based education reform (Kirst, 2024; Kenna & Russell III, 2018; Banerjee & Manjunath, 2022; Keith et al., 2024), standards-based teaching and learning (Guskey, 2016), standards-based curriculum (George et al., 2021; Asante et al., 2024; Pak et al., 2020), standards-based assessment (Herman, 2016; Kramer et al., 2024; Townsley & Wilcox, 2024; Petalla & Doromal, 2021). However, studies on implementing standards-based teaching and learning in various contexts and research is limited. This gap in the literature underscores the need for a comprehensive investigation into how these schools operationalize standards-based teaching and learning principles and the extent to which they meet the rigorous standards of quality in Basic Education Schools. Thus, this study is conducted to bridge this gap in the literature.

In this context, the researcher was driven to investigate the extent of implementation of standards-based teaching-learning in the areas of curriculum, instruction, and assessment as assessed by senior high school teachers and students. The findings of the study served as the basis for the formulation of a Content, Delivery, and Assessment (CDA) Plan to be utilized by all subjects in senior high school. Further, this study provided data to be utilized during the annual curriculum review initiatives of the department.

2.0. Theoretical Framework

This study posits that the successful implementation of Standards-Based Teaching and Learning (SBTL) in a basic education school hinges on the alignment and synergy among three core components: curriculum, instruction, and assessment. The curriculum must be meticulously designed to embody the standards, ensuring that learning objectives are clear, relevant, and challenging. Instruction should be designed to help students achieve the learning objectives, using a variety of teaching methods that address the diverse ways students learn. Assessment should be used to track student progress and provide feedback that guides both teaching and learning. When these three elements – curriculum, instruction, and assessment – are aligned and work together effectively, they create a dynamic and engaging learning environment where students can truly excel.

The theory of backward design, as advocated by Wiggins and McTighe (2005), provides a robust foundation for this framework. The backward design emphasizes the importance of starting with the end in mind and identifying the desired learning outcomes before planning instruction and assessment. This approach ensures that all aspects of teaching and learning are purposefully aligned to support student achievement of the standards. The three stages of backward design, which involve identifying desired outcomes, determining how to assess learning, and designing engaging learning experiences, closely aligning with the three core components of the proposed framework.

The connection between the proposed framework and backward design is evident in their shared emphasis on intentionality and alignment. Both frameworks recognize the importance of establishing clear learning goals based on standards and designing curriculum, instruction, and assessment to support attaining these goals. The proposed framework builds upon the backward design by explicitly highlighting the interdependence of the three components and the need for their synergistic implementation. By integrating the principles of backward design, the framework provides a practical roadmap for schools to implement SBTL effectively and ensure that all students receive a high-quality education that prepares them for success in the 21st century.

3.0. Methodology

Research design. This study employed a quantitative research design to analyze numerical data and provide a statistical representation of trends, attitudes, opinions, and relationships within the

population (Creswell & Creswell, 2022). This study used a descriptive and comparative approach to examine how standards-based teaching and learning are being implemented in curriculum, instruction, and assessment. The study analyzed data from both teachers and students and explored whether there were any differences in implementation based on demographic factors.

Respondents. The respondents of this study were 227 randomly selected senior high school students and 46 senior high school teachers at a Catholic university. The selected student-respondents were representatives of the following strands: Science, Technology, Engineering, and Mathematics- Engineering and Information Technology (STEM-EIT), Science, Technology, Engineering, and Mathematics- Allied Medical Health (STEM-AMH), Humanities and Social Sciences (HUMSS), Accountancy, Business and Management (ABM), and Technical- Vocational Livelihood- Home Economics (TVL-HE).

Measures. A modified research questionnaire based on the Standards of Quality for Basic Education Schools (PAASCU, 2021) was utilized to measure the extent of implementation of standards-based teaching-learning in the areas of curriculum, instruction, and assessment. The research instrument comprises four parts: Part I covered the demographics; Part 2 covered eight items for standard 1 on curriculum; Part 3 was composed of six items for standard 2 on instruction; and Part 4 was composed of six items for standard 3 on assessment. The instrument was validated by three experts in the field using Good and Scates (1972). The instrument obtained a score of 4.79, which is interpreted as excellent. In assessing the reliability of the instrument, the internal consistency was examined using Cronbach's Alpha through 30 sampled students. As a result, the questionnaire was considered acceptable, with a 0.803 rating deemed appropriate for data gathering.

Data analysis. Descriptive and inferential statistics were employed in treating and analyzing data. Mean and standard deviation were utilized to determine the extent of implementation of standards-based teaching-learning in the areas of curriculum, instruction, and assessment as assessed by teachers and students. On the other hand, one-way analysis of variance (ANOVA) was utilized to determine the significant difference in the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by students when grouped according to strand. This was after testing for the normality of data distribution using Anderson-Darling.

Ethical considerations. This research prioritized the well-being of participants by upholding the ethical guidelines established by the Philippine Health Research Ethics Board (PHREB). Informed consent, privacy, and confidentiality were paramount throughout the study. The researcher fostered a safe and supportive environment, ensuring voluntary participation and transparency. Driven by a desire to contribute to the field, the findings were shared with participants and the wider community, with no financial incentives for the researcher. Conducted by a qualified professional with adequate resources, this study offers valuable insights into the implementation of standards-based teaching-learning in the areas of curriculum, instruction, and assessment.

4.0. Results

Extent of implementation of standards-based teaching and learning in the areas of curriculum, instruction, and assessment as assessed by students

Table 1 shows that the extent of implementation of standards-based teaching and learning in the areas of curriculum, instruction, and assessment as assessed by students is very good (M=3.83, SD=0.88), with curriculum as the highest (M=3.87, SD=0.88), and instruction as the lowest (M=3.77, SD=0.9) both interpreted very good. Overall, the standards have been effectively implemented, leading to very good results. In terms of the strand, HUMSS obtained the highest mean (M=4.54, 0.6), interpreted as very good, while ABM/TVL obtained the lowest mean (M=3.87, SD= 0.74), interpreted as very good.

The fact that the curriculum received the highest rating suggests that students perceive it as well-implemented based on the standards and relevant to their learning needs. In addition, the highest result in the curriculum is attributed to subject orientation among subject areas and the collaboration among subject areas specific to the performance tasks. Subject orientation plays a crucial role in setting the stage for student success. It familiarizes students with the course content, expectations, and assessment methods, reducing anxiety and promoting a sense of preparedness (Davis, 2013; Hsu & Goldsmith, 2021; Neuwirt et al., 2024; Casinillo et al., 2022). Additionally, it helps establish a positive learning environment by fostering connections between students and instructors and clarifying any potential misconceptions about the subject matter (Chen et al., 2019).

The positive student perceptions of SBTL in this study suggest that the school is on the right track in implementing this approach. However, the slightly lower rating for instruction indicates potential areas for improvement in terms of implementation. Getting feedback from the parents and alumni for the improvement of the classroom activities based on the learning modality is observed to be inconsistent in implementation as assessed by students.

Parental feedback provides valuable insights that can significantly improve classroom effectiveness. When teachers understand the student experience from a parent's perspective, they can identify areas needing improvement and adapt their teaching to better meet individual needs (Đurišić & Bunijevac, 2017; Utami, 2022; Kutasi, 2023). Moreover, actively seeking parental feedback strengthens the partnership between home and school. This collaboration creates a supportive learning environment where students can thrive (Manalo et al., 2023; Paccaud et al., 2021). When parents feel heard and valued, their involvement in their child's education increases, leading to greater student motivation and academic success (Lerner et al., 2022; Đurišić & Bunijevac, 2017). Therefore, consistently and actively seeking and incorporating parental feedback is essential for creating a responsive and dynamic classroom environment that promotes optimal student learning outcomes.

In terms of the strand, HUMSS considered that the curriculum of the strand was effectively implemented, which led to excellent results followed by the assessment. The high rating from HUMSS students indicates they find their curriculum effectively implemented and believe it contributes to their excellent results. The specific mention of assessment suggests that they find the assessment methods in their strand fair, relevant, and aligned with the curriculum objectives. Moreover, HUMSS students perceived that the curriculum is dynamic, rigorous, and responsive to the challenges of changing times. It is consistent with the school's philosophy, vision, mission, and goals to ensure the learners' integral formation and lifelong learning.

An effectively implemented curriculum serves as a crucial cornerstone in fostering students' academic success. When students are immersed in learning experiences that are well-structured, engaging, and relevant to their lives, they are empowered to develop essential knowledge, skills, and critical thinking abilities that pave the way for academic excellence (Tsai, 2024; Toro, 2019). A thoughtfully designed curriculum that aligns with student needs and interests promotes intrinsic motivation, leading to deeper understanding and improved performance (Johansen et al., 2023; Harackiewicz et al., 2016). Moreover, an effectively implemented curriculum facilitates clear learning objectives, systematic assessment, and targeted feedback, enabling teachers and students to monitor progress and make necessary adjustments (Karakuş, 2021).

On the other hand, instruction is seen to be the weakest area of implementation as assessed by the ABM/TVL students. To effectively achieve desired learning outcomes, teaching modalities, methods, and learning activities must be carefully chosen to align with the school's educational philosophy. Furthermore, these approaches should be consistently implemented and regularly evaluated for effectiveness. The alignment of teaching modalities, methods, and learning activities with a school's educational philosophy is fundamental to achieving desired learning outcomes (Darling-Hammond et al., 2017). Furthermore, this alignment fosters a cohesive and transparent learning environment, allowing educators to create a supportive space where students can flourish academically, socially, and emotionally (Monteiro et al., 2021; Munna & Kalam, 2021). Ultimately, the intentional alignment of pedagogy with the school's educational philosophy is essential for creating a meaningful and impactful educational experience that empowers students to reach their full potential.

Table 1

Extent of Implementation of Standards-based Teaching and Learning in the Areas of Curriculum, Instruction, and Assessment as Assessed by Students

Variables	n	Standard 1 (curriculum)			Standard 2 (instruction)			Standard 3 (assessment)			Overall Standard		
		M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
Strand													
HUMSS	25	4.59	0.5	E	4.47	0.68	E	4.55	0.66	E	4.54	0.6	E
STEM-AMH	86	3.81	0.91	VG	3.78	0.91	VG	3.8	0.89	VG	3.8	0.89	VG
STEM-EIT	86	3.71	0.88	VG	3.56	0.91	VG	3.63	0.89	VG	3.64	0.88	VG
ABM/TVL	30	3.9	0.81	VG	3.78	0.74	VG	3.92	0.7	VG	3.87	0.74	VG
As a whole	***227***	***3.87***	***0.88***	***VG***	***3.77***	***0.9***	***VG***	***3.83***	***0.88***	***VG***	***3.83***	***0.88***	***VG***

Note: 4.15-5.00=Excellent, 3.32-4.41=Very Good, 0.00-0.82=Not Implemented

Extent of implementation of standards-based teaching and learning in the areas of curriculum, instruction, and assessment as assessed by teachers

Mean and standard deviation were utilized to measure the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by teachers when taken as a whole and when grouped according to the number of years in teaching and educational qualifications. Table 2 shows the excellent implementation of standards-based teaching and learning in the areas of curriculum, instruction, and assessment as assessed by teachers (M=4.44, SD=0.44). In terms of the standards, assessment obtained the highest mean (M=4.56, SD=0.49) while instruction obtained the lowest mean (M=4.39, SD=0.51), both interpreted as excellent.

In terms of the number of years of teaching, teachers with 11 years and more teaching experience obtained the highest mean (M=4.63, SD=0.24), while teachers with 6 to 10 years of teaching experience obtained the lowest mean (M=4.26, SD=0.42), both interpreted as excellent. However, in terms of educational qualifications, teachers who are doctorate degree holders obtained the highest mean of implementation (M=4.72, SD=0.37), while teachers with master's degrees obtained the lowest mean (M=4.3, SD=0.42), both interpreted as excellent.

Teachers' assessments indicate that the implementation of the teaching and learning standards has been successful and has yielded very positive results. This suggests that teachers agree on successfully implementing SBTL across curriculum, instruction, and assessment. This exemplary implementation of the standard can serve as a model for others, demonstrating that its application has led to outstanding results. The high rating for assessment in this study aligns with research highlighting the importance of aligning assessment practices with SBTL principles to provide meaningful feedback and support student learning (Alonzo et al., 2023; Meng, 2023).

Furthermore, a closer look at the specific standards reveals that assessment practices received the highest mean score, indicating that teachers feel most confident aligning with SBTL. Teachers perceived an in-place system to plan and select the most appropriate types of assessment is needed to align with the achievement of the expected learning outcomes (Alonzo et al., 2023; Petalla & Doromal, 2021). While still rated as excellent, instruction received the lowest score, suggesting potential areas for further development and refinement in instructional practices to fully embody SBTL principles. The slightly lower rating for instruction echoes findings that suggest that aligning instructional practices with SBTL can be challenging and requires ongoing professional development and support (Meng, 2023; Ajani, 2023).

The result of implementing standards-based teaching learning in the areas of curriculum, instruction, and assessment, as assessed by teachers, suggests that with increased teaching experience comes greater understanding and proficiency in implementing SBTL. This could be attributed to several factors, such as accumulated knowledge, refined instructional practices, and greater confidence in adapting to new teaching approaches. These results align with existing research on the relationship between teaching experience and SBTL implementation. Studies have shown that experienced teachers are often more adept at integrating SBTL principles into their practice due to their deeper pedagogical knowledge and ability to adapt to evolving educational standards (Darling-Hammond et al., 2017; Filgona et al., 2020). Moreover, studies indicate that experienced teachers tend to engage more in reflective practices and continuous professional development, which can further strengthen their implementation of standards-based teaching and learning (SBTL) (Machost & Stains, 2023; Riyanti, 2021).

In addition, other factors may be considered contributory to teachers' perceptions aside from the number of years of service. One is curriculum, instruction, and assessment alignment with SBTL, which provides clear guidance and support for teachers, irrespective of their experience. Wijngaards-de Meij and Merx (2018) and Johnson et al. (2020) emphasized the need for curriculum alignment to facilitate the consistent implementation of SBTL, ensuring that teachers have access to resources and materials that support these practices.

The school's collaborative culture, which encourages knowledge sharing and peer learning, may facilitate disseminating SBTL practices across different experience levels. Schleifer et al. (2017), Cojorn and Sonsupap (2024), and Khasawneh et al. (2023) highlighted the importance of collaborative professional learning communities in promoting the adoption of new teaching approaches based on the standards of quality education and fostering a sense of collective responsibility for student learning.

Specific to educational background, doctorate holders, having undergone rigorous research and pedagogical training, might possess a more profound understanding of SBTL principles and their practical application in diverse classroom settings. Their advanced studies may have equipped them with refined instructional strategies, assessment techniques, and curriculum design skills that align seamlessly with SBTL. These findings resonate with existing literature that underscores the positive correlation between teacher qualifications and instructional quality. Research suggests that teachers with advanced degrees often demonstrate stronger pedagogical content knowledge and a greater inclination towards student-centered, inquiry-based pedagogies, which are hallmarks of SBTL (Filgona et al., 2020). Furthermore, teachers with higher qualifications may exhibit a greater propensity for reflective practice and continuous professional development, enabling them to stay abreast of the latest educational research and refine their teaching approaches accordingly (Cojorn & Sonsupap, 2024; Darling-Hammond et al., 2017; Padillo et al., 2021). This commitment to lifelong learning could translate to a more nuanced and effective implementation of SBTL.

With this, schools and educational institutions may provide comprehensive professional development programs on SBTL, ensuring that teachers with diverse educational backgrounds receive adequate training and

support to implement these practices effectively. Research by Germuth (2018), Petalla and Madrigal (2017), Malagsic et al. (2021), and Audisio et al. (2023) found that ongoing professional development is crucial for successful SBTL implementation, fostering a shared understanding and commitment among teachers, regardless of their qualifications.

Moreover, teachers' intrinsic motivation and beliefs about the value of SBTL may drive their engagement with these practices, regardless of their educational qualifications. Barni (2019), Petalla (2024), Wolf and Brown (2023), and Latif and Wasim (2022) suggested that teachers' beliefs about the effectiveness of SBTL play a crucial role in their willingness to adopt and implement these practices.

Table 2

Extent of Implementation of Standards-based Teaching and Learning in the Areas of Curriculum, Instruction, and Assessment as Assessed by Teachers

Variables	n	Standard 1 (curriculum)			Standard 2 (instruction)			Standard 3 (assessment)			Overall Standard		
		M	SD	INT	M	SD	INT	M	SD	INT	M	SD	INT
Number of years of teaching													
0 to 3	16	4.51	0.59	E	4.49	0.6	E	4.62	0.41	E	4.54	0.51	E
4 to 5	8	4.33	0.34	E	4.33	0.45	E	4.4	0.68	E	4.35	0.41	E
6 to 10	13	4.15	0.42	E	4.23	0.52	E	4.45	0.56	E	4.26	0.42	E
11 and up	9	4.61	0.24	E	4.5	0.39	E	4.78	0.22	E	4.63	0.24	E
Educational qualifications													
Baccalaureate	23	4.5	0.5	E	4.53	0.46	E	4.58	0.51	E	4.53	0.44	E
Masters	20	4.23	0.41	E	4.2	0.52	E	4.5	0.49	E	4.3	0.42	E
Doctorate	3	4.67	0.38	E	4.61	0.54	E	4.89	0.19	E	4.72	0.37	E
As a whole	***46***	***4.4***	***0.47***	***E***	***4.39***	***0.51***	***E***	***4.56***	***0.49***	***E***	***4.44***	***0.44***	***E***

Note: 4.15-5.00=Excellent, 3.32-4.41=Very Good, 0.00-0.82=Not Implemented

Differences in the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by students when grouped according to strand

Anderson-Darling was utilized to determine the normality of data in the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, assessment, and overall standards as assessed by students when grouped according to strand. The results show a normally distributed extent of implementation of standards-based teaching learning in the areas of curriculum (AD = -47.796, p =1.000), instruction (AD = -46.719, p =1.000), assessment (AD = -47.367, p =1.000), and over-all standard (AD = -47.546, p =1.000), as assessed by students when grouped according to strand.

One-way analysis of variance was utilized to determine the significant difference in the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by students when grouped according to strand. Table 3 shows that the difference was significant in the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by students when grouped according to strand for p-values obtained exceeded 0.05.

The significant difference in the implementation of standards-based teaching learning in the areas of curriculum, instruction, and assessment as assessed by students when grouped according to strand means that the strand where students belong matters in their perception of how the school implements the standards-based teaching and learning. The difference suggests that the implementation varies notably across different strands, implying that some strands may experience more consistent implementation of standards-based teaching and learning than others. The post hoc test revealed that HUMSS participants obtained a higher mean on the extent of implementation of standards-based teaching learning in the areas of curriculum, instruction, assessment, and overall standards than other strands. This suggests that HUMSS students perceive a more effective or thorough application of these educational standards in their strand, which could reflect differences in how the standards are being implemented or possibly the alignment of teaching strategies with the nature of HUMSS subjects.

Different strands may require distinct pedagogical approaches to effectively implement SBTL. HUMSS subjects, for instance, might lend themselves well to inquiry-based learning or project-based approaches that inherently align with SBTL principles. Research by Gray and DiLoreto (2016), Cho et al. (2021), and Holmes (2014) demonstrated that adapting SBTL implementation to suit the unique characteristics of different subjects can enhance student perception, engagement, and learning outcomes. In addition, teachers' expertise and familiarity with SBTL might vary across strands, influencing their ability to implement these practices effectively. Sultan and Shafi (2014), Petalla and Madrigal (2017), and Malagsic et al. (2021) found that teachers' confidence and competence in SBTL are crucial for successful implementation and positively impact student perceptions.

Students' expectations and engagement levels might vary across strands (Calixton & Mascuñana, 2019), influencing their perception of SBTL implementation. HUMSS students, for example, may be more intrinsically motivated or have higher expectations for SBTL, leading to a more positive perception. Lo et al. (2022) and Fuertes et al. (2023) suggested that student motivation and engagement play a crucial role in their perception of teaching practices and learning experiences.

Table 3

Difference in the Extent of Implementation of Standards-based Teaching and Learning in the Areas of Curriculum, Instruction, and Assessment as Assessed by Students when Grouped according to Strand

Variables	Strand	p-values
Standard 1 (curriculum)	HUMSS STEM-AMH STEM-EIT ABM/TVL	.000*
Standard 2 (instruction)	HUMSS STEM-AMH STEM-EIT ABM/TVL	.000*
Standard 3 (assessment)	HUMSS STEM-AMH STEM-EIT ABM/TVL	.000*
Overall Standard	HUMSS STEM-AMH STEM-EIT ABM/TVL	.000*

Note: the difference in the means is significant when p≤0.05

5.0. Conclusion

The study underscores the successful integration of Standards-Based Teaching and Learning (SBTL) within the private Catholic school's Senior High School program. The positive perceptions of both teachers and students highlight the efficacy of the school's efforts in aligning curriculum, instruction, and assessment with SBTL principles. However, the identified areas for improvement, particularly in instructional practices, emphasize the need for continuous refinement and professional development to fully realize the potential of SBTL. The variations in student perceptions across different strands further underscore the importance of tailoring SBTL implementation to meet the diverse needs of learners. The study's findings offer valuable guidance for educational institutions seeking to enhance their teaching and learning practices through SBTL, promoting a more student-centered, outcomes-oriented approach to education. This research provides valuable information that can be used to shape policy decisions and professional development programs, ultimately leading to a more effective and equitable education system for all learners.

6.0. Limitations of the Findings

This study has limitations regarding its design, respondents, context, and nature. The descriptive and comparative approaches capture only a snapshot of the phenomenon at a specific time, making it difficult to track changes over time. The respondents, comprising 46 teachers and 227 students from a private Catholic university in the Philippines, may not represent the broader population of teachers and students, limiting the generalizability of the findings to other contexts. It is important to note that this study was conducted within the specific context of a private Catholic university. This context may influence the results and how applicable they are to other educational settings, such as public schools or schools with different religious affiliations. The study relied on self-reported data from questionnaires, which may introduce inherent biases and limit the depth of understanding compared to observational or qualitative methods. Finally, the study focused on the extent of implementation of standards-based teaching and learning. However, it did not delve into the specific pedagogical practices or student learning outcomes of this approach.

7.0. Practical Value of the Paper

Despite its limitations, this study offers valuable contributions. It provides empirical evidence of the successful implementation of SBTL in a Philippine Catholic school, adding to the body of knowledge on SBTL implementation in diverse contexts. The study's findings offer practical insights for educators and policymakers on aligning curriculum, instruction, and assessment with SBTL principles, potentially informing improvements in teaching and learning practices across all strands. The study encourages critical reflection and ongoing refinement of SBTL implementation by highlighting areas for improvement and variations in student perceptions. Finally, while this study focused on a private Catholic university, the findings offer valuable insights into the challenges and opportunities associated with implementing standards-based teaching and learning (SBTL) in similar contexts.

8.0. Directions for Future Research

Future research could employ longitudinal designs to track changes in SBTL implementation and its impact on student outcomes. Expanding the sample to include multiple schools with diverse contexts, such as public and private schools, urban and rural settings, and schools with varying levels of resources, would enhance the generalizability of findings. Further research could explore the specific pedagogical practices and student learning outcomes associated with SBTL implementation, providing a deeper understanding of how this approach works in practice. Examining the

influence of teacher characteristics, such as experience, qualifications, and beliefs, on SBTL implementation would shed light on the factors that further contribute to successful implementation. Finally, to further expand on this research, future studies could explore how school leadership and organizational culture influence the successful implementation and long-term sustainability of standards-based teaching and learning.

9.0. Declaration of Conflict of Interest

The author reported no conflict of interest.

.

REFERENCES

Ajani, O. (2023). Exploring the alignment of professional development and classroom practices in African contexts: A discursive investigation. *Journal of Integrated Elementary Education*, 3, 120–136. https://doi.org/10.21580/jieed.v3i2.17693.

Alonzo, D., Bejano, J., & Labad, V. (2023). Alignment between teachers' assessment practices and principles of outcomes-based education in the context of Philippine education reform. *International Journal of Instruction*, 16, 489-506. https://doi.org/10.29333/iji.2023.16127a.

Asante, G., Arhin, D., Essien, N., Bentil, S., & Asibey, G. (2024). Implementation of the standard-based curriculum: An overview of pre-tertiary curriculum in Ghana (1951-2019). *Open Access Library Journal*, 11, 1-24. https://doi.org/10.4236/oalib.1111125.

Audisio, A., Taylor-Perryman, R., Tasker, T., & Steinberg, M. (2023). Does teacher professional development improve student learning? Evidence from leading educators' fellowship model. *EdWorkingPapers,* 22–597). https://doi.org/10.26300/ah2f-z471

Banerjee, S., & Manjunath, M. (2022). Unpacking the meaning of a standards-based education system. *ResearchGate,* 1-9. https://doi.org/10.13140/RG.2.2.11129.13927

Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Front. Psychol,* 10,1645. https://doi.org/10.3389/fpsyg.2019.01645

Calixton, S. O., & Mascuñana, C. G. (2019). Strand specificity and perceived effectiveness of language activities in the senior high school English instruction. *Philippine Social Science Journal*, *2*(1), 23-36. https://doi.org/10.52006/main.v2i1.61

Casinillo, E. L., Lina, Jr., E. R., Casinillo, L. F., Batidor, P. G., & Lebante, M. R. (2022). Econometric evidence on statistical anxiety of engineering students during the new normal setup. *Philippine Social Science Journal*, *5*(4), 9-17. https://doi.org/10.52006/main.v5i4.564

Chen, C., Sonnert, G., Sadler, P.M., Sasselov, D., & Fredericks, C. (2019). The impact of student misconceptions on student persistence in a MOOC. *J Res Sci Teach*, 57, 879–910. https://doi.org/10.1002/tea.21616

Cho, H.J., Melloch, M.R. & Levesque-Bristol, C. (2021). Enhanced student perceptions of learning and performance using concept-point-recovery teaching sessions: a mixed-method approach. *IJ STEM Ed,* 8, 32. https://doi.org/10.1186/s40594-021-00276-1

Cojorn, K., & Sonsupap, K. (2024). A collaborative professional development and its impact on teachers' ability to foster higher order thinking. *Journal of Education and Learning (EduLearn*), 18, 561-569. https://doi.org/10.11591/edulearn.v18i2.21182

Creswell, J. W. & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles, CA: SAGE Publications.

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute. https://doi.org/10.54300/122.311.

Davis, J.M. (2013). The impact of orientation programming on student success outcomes at a rural community college. *Online Theses and Dissertations.* 160. https://encompass.eku.edu/etd/160

Department of Education (2019). *Policy Guidelines on the K to 12 Basic Education Program (DepEd Order No. 021, s. 2019)*. https://www.deped.gov.ph/wp-content/uploads/2019/08/DO_s2019_021.pdf

Department of Education (2021). *Institutionalization of a Quality Management System in the Department of Education (DepEd Order No. 009, s. 2021).* https://www.deped.gov.ph/wp-content/uploads/2021/02/DO_s2021_009.pdf

Đurišić, M., & Bunijevac, M. (2017). Parental involvement as an important factor for successful education. *CEPS Journal,* 7(3). https://files.eric.ed.gov/fulltext/EJ1156936.pdf

Filgona, J., John, S., & Gwany, D. (2020). Teachers' pedagogical content knowledge and students' academic achievement: A theoretical overview. *Journal of Global Research in Education and Social Science*, 14(2), 14-44. https://tinyurl.com/bddekxzx

Fuertes, H.G., Evangelista Jr., I.A., Marcellones, I.J.Y., & Bacatan, J.R. (2023). Student engagement, academic motivation, and academic performance of intermediate-level students. *International Journal of Novel Research in Education and Learning,* 10(3), 133-149). https://doi.org/10.5281/zenodo.8037103

George, S., Silva, L., Llamas, M., Ramos, I., Joe, J., Mendez, J., Salazar, R., Tehan, J., Vasquez, T., Nealy, S., & Balcazar, H. (2021). The development of a novel, standards-based core curriculum for community facing, clinic-based community health workers. *Frontiers in Public Health*, *9*, 663492. https://doi.org/10.3389/fpubh.2021.663492

Germuth, A.A. (2018). Professional development that changes teaching and improves learning. *Journal of Interdisciplinary Teacher Leadership (JoITL),* 2(1). https://doi.org/10.46767/kfp.2016-0025

Good, C.V., & Scates, D.E. (1972). In Paler-Calmorin, L., & Calmorin, M.A. (1997). *Statistics in Education and the Sciences*. Manila, Philippines: Rex Bookstore

Gray, J.A., & DiLoreto, M. (2016). The effects of student engagement, student satisfaction, and perceived learning in online learning environments*. NCPEA International*

Journal of Educational Leadership Preparation, 11(1). https://files.eric.ed.gov/fulltext/EJ1103654.pdf

Guskey, T.R. (2016, October). Standards-based learning: Why do educators make it so complex? *Education Week.* https://www.edweek.org/education/opinion-standards-based-learning-why-do-educators-make-it-so-complex/2016/10

Harackiewicz, J. M., Smith, J. L., & Priniski, S.J. (2016). Interest matters: The importance of promoting interest in education. *Policy Insights from the Behavioral and Brain Sciences*, *3*(2), 220–227. https://doi.org/10.1177/2372732216655542

Herman, J. (2016). Comprehensive standards-based assessment systems supporting learning. *The Center on Standards and Assessment Implementation.* https://compcenternetwork.org/sites/default/files/archive/CAS_SupportingLearning.pdf

Holmes, N. (2014). Student perceptions of their learning and engagement in response to the use of a continuous e-assessment in an undergraduate module. *Assessment & Evaluation in Higher Education,* 40. https://doi.org/10.1080/02602938.2014.881978

Hsu, J. L., & Goldsmith, G. R. (2021). Instructor strategies to alleviate stress and anxiety among college and university STEM students. *CBE Life Sciences Education*, *20*(1), es1. https://doi.org/10.1187/cbe.20-08-0189

Ismail, M. Z., Othman, M. K., & Rambeli, N. (2020). Curriculum content evaluation study of Bachelor of Education Program Specialization in Islamic Education with Islamic Education Philosophy. *International Journal of Advanced Science and Technology, 29(6), 1673-1680.* https://core.ac.uk/download/328825708.pdf

Johansen, M. O., Eliassen, S., & Jeno, L. M. (2023). "Why is this relevant for me?": Increasing content relevance enhances student motivation and vitality. *Frontiers in Psychology*, *14*, 1184804. https://doi.org/10.3389/fpsyg.2023.1184804

Johnson, C. E., Boon, H. J., & Dinan Thompson, M. (2020). Curriculum alignment after reforms: A systematic review with considerations for Queensland pre-and in-service teachers. *Australian Journal of Teacher Education*, 45(11). Retrieved from https://ro.ecu.edu.au/ajte/vol45/iss11/3

Karakuş, G. (2021). A literary review on curriculum implementation problems. *Shanlax International Journal of Education*, 9(3), 201–220. https://doi.org/10.34293/education.v9i3.3983

Keith, D. R., Yadama, A., O'Neill, E., & Chung, S. (2024). Anticipating the side effects of educational reform using system dynamics modeling. *Review of Research in Education*, *48*(1), 1–27. https://doi.org/10.3102/0091732X241260012

Kenna, J., & Russell III, W. (2018). The culture and history of standards-based educational reform and social studies in America. *Journal of Culture and Values in Education*, 1, 26–49. https://doi.org/10.46303/jcve.01.01.3

Khasawneh, Y. J. A., Alsarayreh, R., Ajlouni, A. A. A., Eyadat, H. M., Ayasrah, M. N., & Khasawneh, M. A. S. (2023). An examination of teacher collaboration in professional learning communities and collaborative teaching practices. *Journal of Education and E-Learning Research*, 10(3), 446–452. https://doi.org/10.20448/jeelr.v10i3.4841

Kirst, M.W. (2024). *Standards-based education reforms: Looking back to look forward*. Learning Policy Institute. https://doi.org/10.54300/647.623

Kramer, S. L., Posner, M. A., Browman, A. S., Lawrence, N. R., Roem, J., & Krier, K. (2024). The impacts of a standards-based grading system emphasizing formative assessment, feedback, and re-assessment: A mixed method, cluster randomized control trial in ninth-grade mathematics classrooms. *Journal of Research on Educational Effectiveness*, 1–32. https://doi.org/10.1080/19345747.2023.2287594

Kutasi, R. (2023). Feedback: Unveiling its impact and enhancing its effectiveness in education. *Journal of Pedagogy - Revista de Pedagogie*, LXXI, 7-32. https://doi.org/10.26755/RevPed/2023.2/7

Latif, M.W., & Wasim, A. (2022). Teacher beliefs, personal theories and conceptions of assessment literacy tertiary EFL perspective. *Lang Test Asia,* 12, 11. https://doi.org/10.1186/s40468-022-00158-5

Lerner, R.E., Grolnick, W.S., Caruso, A.J., & Levitt, M.R. (2022). Parental involvement and children's academics: The roles of autonomy support and parents' motivation for involvement. *Contemporary Educational Psychology,* 68,102039. https://doi.org/10.1016/j.cedpsych.2021.102039

Lo, K., Ngai, G., Chan, S., & Kwan, K. (2022). How students' motivation and learning experience affect their service-learning outcomes: A structural equation modeling analysis. *Frontiers in Psychology.* https://doi.org/10.3389/fpsyg.2022.825902

Malagsic, M., Petalla, M., & Doromal, A. (2021). Self-efficacy and work commitment of the private senior high school teachers in time of pandemic. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*. 60, 345-359. https://rb.gy/s3isn

Machost, H., & Stains, M. (2023). Reflective practices in education: A primer for practitioners. *CBE Life Sciences Education, 22*(2), es2. https://doi.org/10.1187/cbe.22-07-0148

Manalo, E., Yumang, E., & Almazan, R. (2023). Parental involvement and students' engagement in modular learning environments. *International Journal of Multidisciplinary Research and Analysis*, 6, 2285-2303. https://doi.org/10.47191/ijmra/v6-i5-57

Meng, S. (2023). Enhancing teaching and learning: Aligning instructional practices with education quality standards. *Research and Advances in Education, 2*(7). https://doi.org/10.56397/RAE.2023.07.04

Monteiro, V., Carvalho, C., & Santos, N.N. (2021). Creating a supportive classroom environment through effective feedback: Effects on students' school identification and behavioral engagement. *Front. Educ.* 6, 661736. https://doi.org/10.3389/feduc.2021.661736

Munna, A. S., & Kalam, M. A. (2021). Teaching and learning process to enhance teaching effectiveness: a literature review. *International Journal of Humanities and Innovation (IJHI)*, *4*(1), 1–4. https://doi.org/10.33750/ijhi.v4i1.102

Nasser, F., & Alhija, A. (2019). *Standards-Based Education*. Oxford Bibliographies. https://doi.org/10.1093/obo/9780199756810-0210

Neuwirt, H., Eder, I.E., Gauckler, P., Horvath, L., Koeck, S., Noflatscher, M., Schaefer, B. … (2024). Impact of familiarity with the format of the exam on performance in the OSCE of undergraduate medical students – an interventional study. *BMC Med Educ,* 24, 179 https://doi.org/10.1186/s12909-024-05091-0

Paccaud, A., Keller, R., Luder, R., Pastore, G., & Kunz, A. (2021). Satisfaction with the collaboration between families and schools – The parent's view. *Front. Educ.* 6, 646878. https://doi.org/10.3389/feduc.2021.646878

Padillo, G.G., Manguilimotan, R.P., Capuno, R.G., & Espina, R.C. (2021). Professional development activities and teacher performance. *International Journal of Education and Practice*, 9 (3), 497-506. https://doi.org/10.18488/journal.61.2021.93.497.506

Pak, K., Polikoff, M. S., Desimone, L. M., & Saldívar García, E. (2020). The adaptive challenges of curriculum implementation: Insights for educational leaders driving standards-based reform. *AERA Open,* 6(2). https://doi.org/10.1177/2332858420932828

Petalla, M. B. (2024). The overlapping truth: Exploring the lived experiences of graduate students in research writing. *International Journal of Social Science and Human Resources*, 7(2), 1443-1450. https://doi.org/10.47191/ijsshr/v7-i02-73

Petalla, M. B., & Doromal, A. C. (2021). Students in the real-world of performance tasks assessment: A qualitative inquiry. *Philippine Social Science Journal*, *4*(1), 53-60. https://doi.org/10.52006/main.v4i1.312

Petalla, M. B., & Madrigal, D. V. (2017). Teaching standards competence and efficiency performance of the basic education teachers. University of Negros Occidental-Recoletos, Bacolod City, Philippines. *Journal of Institutional Research in South East Asia* – Vol. 15 No.3 Dec 2017. https://tinyurl.com/yky2kxck

Philippine Accrediting Association of Schools, Colleges, And Universities (PAASCU) (2021). *Basic Education Grade School, Junior High School, Senior High School, and Basic Education Survey Instrument.* https://paascu.org.ph/wp-content/uploads/2021/08/Basic-Education.pdf

Qader, K. S., & Cek, K. (2023). Analysis of the Impact of External Auditors' Autonomy on Financial Accounting Information Quality Case Study Commercial Banks in Northern Iraq. *Sustainability*, *15*(12), 9578. https://doi.org/10.3390/su15129578

Riyanti, D. (2021). Reflective teaching as a tool for teacher professional development. *English Education: Journal of English Teaching and Research,* 6, 101–110. https://doi.org/10.29407/jetar.v6i2.16526

Schleifer, D., Rinehart, C., & Yanisch, T. (2017). Teacher collaboration in perspective: A guide to research. *Public Agenda.* https://files.eric.ed.gov/fulltext/ED591332.pdf

Schleicher, A. (2018). *World Class: How to Build a 21st-Century School System*, Strong Performers and Successful Reformers in Education, OECD Publishing, Paris, https://doi.org/10.1787/9789264300002-en

Seitz, P. (2017). Curriculum Alignment Among the Intended, Enacted, and Assessed Curricula for Grade 9 Mathematics. *Journal of the Canadian Association for Curriculum Studies*, *15*(1), 72–94. https://doi.org/10.25071/1916-4467.40286

Slizewski, L. A. (2020). *Standards-Based Reforms: Impact and Future* [Master's thesis, Bethel University]. Spark Repository. https://spark.bethel.edu/etd/587

Sultan, S., & Shafi, M. (2014). Impact of perceived teachers' competence on students' performance: Evidence for mediating/ moderating role of class environment. *I-Manager's Journal on Educational Psychology,* 8 (1). https://files.eric.ed.gov/fulltext/EJ1098630.pdf

Schwartz, S. (2023, July). What's the Purpose of Standards in Education? An Explainer. *Education Week.* https://www.edweek.org/teaching-learning/whats-the-purpose-of-standards-in-education-an-explainer/2023/07

Toro, W.X. (2019). 21st Century Learning Skills in Education and Employability. *Theses and Dissertations*, 74. https://scholar.stjohns.edu/theses_dissertations/74

Townsley, M., & Wilcox, J. (2024). Standards-based grading: Core principles and current implementation debates. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas,* 97. https://doi.org/10.1080/00098655.2024.2357615

Tsai, Y.C. (2024). Empowering students through active learning in educational big data analytics. *Smart Learn. Environ,* 11, 14. https://doi.org/10.1186/s40561-024-00300-1

UNESCO (2015). EDUCATION FOR ALL2000-2015: Achievements and challenges. *EFA Global Monitoring Report*. https://unesdoc.unesco.org/ark:/48223/pf0000232565

Utami, A. (2022). The role of parental involvement in student academic outcomes. *Journal of Education Review Provision*, 2, 17–21. https://doi.org/10.55885/jerp.v2i1.156

Wenzel, A. (2016). Curriculum alignment. In: Mertens S, Caskey, M., and Flowers N (eds) The Encyclopedia for Middle Grades Education, 2nd ed. Charlotte: Information Age Publishing, pp. 112–115. https://www.infoagepub.com/products/The-Encyclopedia-of-Middle-Grades-Education-2nd-ed

Wiggins, G., & McTighe, J. (2005). *Understanding by design (2nd ed.).* Alexandria, VA: Association for Supervision and Curriculum Development ASCD. https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/UbD_WhitePaper0312.pdf

Wijngaards-de Meij, L., & Merx, S. (2018). Improving curriculum alignment and achieving learning goals by making the curriculum visible. *International Journal for Academic Development*, 23, 1-13. https://doi.org/10.1080/1360144X.2018.1462187

Wolf, S., & Brown, A. (2023). Teacher beliefs and student learning. *Human Development*, 67, 37–54. https://doi.org/10.1159/000529450

Additional Author's Information:

MARISA B. PETALLA
marshe112582@gmail.com
https://orcid.org/0000-0001-9332-4829