CURRICULUM QUALITY AUDIT: OPTIMIZING CONSTRUCTIVE ALIGNMENT AND STANDARD CASCADING IN PRE-SERVICE TEACHER EDUCATION

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ABSTRACT: *This exploratory qualitative study evaluated the institutional implementation of the Outcome-Based Pre-Service Teacher Education Program (OBSTEP) Curriculum Quality Audit (CQA) at Negros Oriental State University. Utilizing a systematic seven-step auditing framework, the research mapped the structural distribution, constructive alignment, and micro-pathway intensity of the 37 Philippine Professional Standards for Teachers (PPST) Beginning Teacher Indicators (BTIs) across 15 foundational Professional Education courses. Data analysis was guided by Biggs' framework of constructive alignment to evaluate structural congruence across the definitive Outcome-Content-Assessment (OCA) matrix. The macro-distribution audit revealed significant structural fragmentation and sharp imbalances; content knowledge application (BTI 1.1.1) served as the primary curriculum anchor (f=13), whereas multi-language facilitation (BTI 1.6.1) and professional networking (BTI 7.3.1) were severely under-represented (f=1). Out of 210 verified BTI contact points, the differentiated alignment audit identified that only 69 instances achieved complete, mutually reinforcing constructive alignment (O+C+A). Conversely, 66 instances remained isolated outcomes (O) listed for bureaucratic compliance but entirely decoupled from day-to-day instructional content or authentic assessment validations. Furthermore, micro-pathway dimension mapping exposed critical operational deficits, with essential equity and discipline strategies remaining shallowly operationalized. These findings illuminate the persistent structural friction between macro-level educational policies and micro-level instructional delivery in teacher preparation. Ultimately, this research provides higher education leaders and quality assurance specialists with an empirical, scalable blueprint to move past superficial checklist auditing and achieve deep-seated curricular institutionalization worldwide.*

Keywords: Constructive Alignment, Curriculum Quality Audit, Pre-Service Teacher Education, Outcome-Based Education, Professional Teaching Standards.

1. INTRODUCTION

In the contemporary landscape of global educational reform, aligning teacher education curricula with rigorous national and international professional standards is recognized as a fundamental imperative for ensuring pedagogical quality and graduate efficacy [1; 2]. Worldwide, teacher education institutions (TEIs) are increasingly held accountable to standardized performance indicators that operationalize the core competencies expected of beginning educators [3; 4]. In the Philippines, this systemic reform is driven by the Philippine Professional Standards for Teachers (PPST), a statutory framework that mandates the integration of 37 Beginning Teacher Indicators (BTIs) across preservice training configurations to ensure that graduates are natively equipped to navigate complex classroom ecologies [6; 7]. However, operationalizing these national policies at the institutional level presents a persistent challenge. While global policies advocate for standard-driven institutional frameworks, a distinct tension remains between macro-level educational policies and micro-level instructional practices, often leading to a superficial, compliance-driven integration of professional standards rather than deep-seated curricular institutionalization [1]; [8]; [9].

This macro-to-micro tension manifests as a specific structural problem within higher education institutions: the lack of systematic Constructive Alignment inside Competency/Outcome-Based Education (COBE) frameworks [10]; [11]. Under established pedagogical paradigms, true curriculum alignment dictates that Intended Learning Outcomes (ILOs), Teaching-Learning Activities (TLAs), and Assessment Tasks (ATs) form a coherent, mutually reinforcing ecosystem [12]. In many TEIs, including the Negros Oriental State University (NORSU) College of Teacher Education, institutional guidelines have successfully incorporated the language of the CHED typology and COBE mandates into course documentation [13]. Yet, structural friction occurs because competencies are frequently listed as broad, aspirational administrative outcomes without being explicitly woven into day-to-day instructional content or validated through authentic assessments. This structural fragmentation isolates professional standards from actual course delivery, resulting in a systemic breakdown where critical student performance metrics are assessed without being explicitly taught, or conversely, taught without generating empirical evidence of student mastery [14; 15].

Despite the acknowledged importance of resolving this structural misalignment, a significant methodological gap persists in higher education literature: the scarcity of granular diagnostic mechanisms capable of performing micro-mapping and granular curriculum quality audits (CQA) across complex pedagogical structures. While conventional institutional evaluations rely heavily on macro-level, self-reported programmatic surveys or superficial checklist reviews, they consistently fail to unpack the intricate, component-level vertical and horizontal alignment of specific standards across separate course syllabi [16]; [17]. Without a rigorous, multi-dimensional auditing methodology—such as a formalized Curriculum Quality Audit (CQA) that bridges structural alignment with micro-mapping—curriculum developers remain blind to silent pedagogical misalignments, disproportionate standard concentrations, and structural coverage gaps within core professional education courses [18]; [19]. Consequently, there is an urgent methodological need for an empirical approach that dissects course components into discrete structural pathways to diagnose exactly how national teaching standards are translated into actionable, classroom-level practices.

To address these compounding challenges, this study evaluates the implementation of the Outcome-Based Pre-Service Teacher Education Program (OBSTEP) Curriculum Quality Audit (CQA) at Negros Oriental State University (NORSU). Utilizing a systematic auditing framework adapted from Arafeh [16], this research maps the structural distribution, constructive alignment, and pathway intensity of the 37 PPST Beginning Teacher Indicators (BTIs) across 15 foundational Professional Education courses. By leveraging a multi-phased diagnostic approach, the study uncovers structural strengths and discrepancies within the curriculum, evaluating them against the rigid Outcome-Content-Assessment (OCA) matrix. Ultimately, this study contributes to the broader global and local educational discourse by providing an empirical, scalable blueprint for institutional curriculum auditing. It offers higher education leaders, curriculum designers, and quality assurance specialists a rigorous, data-driven methodology to transcend compliance-based auditing and achieve genuine, constructive alignment in teacher preparation programs worldwide.

Specifically, this research addresses the following key structural inquiries:

1. What is the curriculum alignment across the 15 Professional Education Courses based on the macro-distribution of the 37 Beginning Teacher Indicators (BTIs)?
2. What is the precise nature of the distributed 37 BTIs across the 15 Professional Education Courses when evaluated using standard PPST indicators?
3. What is the exact constructive alignment of the distributed 37 BTIs within these courses when systematically mapped against the definitive Outcome-Content-Assessment (OCA) pattern?

2. REVIEW OF RELATED LITERATURE

Standards-Based Teacher Education

Teacher education institutions are expected to prepare graduates who possess the competencies required for effective classroom practice. Globally, educational reforms emphasize professional teaching standards as the basis for curriculum development, instructional delivery, assessment, and quality assurance. These standards ensure that teacher education programs produce graduates capable of meeting contemporary educational demands.

Parveen [3] emphasized that evaluating teacher education curricula against outcome-based indicators and professional standards is essential in determining graduate readiness. Likewise, Thummaphan et al. [4] explained that competency-based curricula require strong connections among learning outcomes, instructional content, teaching strategies, and assessment. In the Philippines, the Philippine Professional Standards for Teachers (PPST) serve as the national framework for teacher competence, with the Beginning Teacher Indicators (BTIs) guiding pre-service teacher preparation.

Bacus and Tagalog [5] stressed that curriculum mapping is necessary to determine whether PPST indicators are adequately represented across teacher education programs. They observed that competencies are sometimes included only as stated outcomes without corresponding learning experiences or assessment evidence. Similarly, Bernardo et al. [7] noted that successful educational reform depends not only on adopting national standards but also on effectively translating these standards into classroom practice.

Competency-Based Education and Constructive Alignment

Competency-based education focuses on learners' demonstrated mastery of clearly defined competencies rather than mere completion of coursework [13]. Açıkgöz and Babadoğan [20] explained that competencies should be measurable and supported by appropriate learning activities and assessments. Outcome-based education likewise requires curriculum, instruction, and assessment to be intentionally organized around expected learning outcomes.

Biggs [14] introduced constructive alignment as the principle that intended learning outcomes, teaching-learning activities, and assessment tasks must reinforce one another. Biggs and Tang [12] further argued that meaningful learning occurs only when students are taught and assessed using activities aligned with the intended outcomes. Ali [10] emphasized that this alignment promotes coherence, transparency, and accountability in higher education, while Romero and Kalmpourtzis [11] demonstrated its applicability across diverse learning environments.

However, Pradhan [15] identified common barriers to implementing outcome-based education, including faculty resistance, limited collaboration, and traditional teaching practices. These challenges often result in learning outcomes being included in syllabi without adequate instructional support or authentic assessment.

Curriculum Mapping and Curriculum Quality Audit

Curriculum mapping systematically documents how competencies are distributed across courses and identifies curricular gaps, redundancies, and progression. Arafeh [16] described curriculum mapping as an effective tool for examining the scope and sequence of learning experiences within higher education programs. Through mapping, institutions can determine whether competencies are appropriately introduced, reinforced, and assessed throughout the curriculum.

Dera [17] found that curriculum mapping strengthens curriculum coherence and facilitates collaborative program improvement. Similarly, Kolomitro et al. [19] emphasized that collaborative curriculum development enhances consistency in competency development across courses.

Beyond mapping, curriculum quality auditing evaluates whether competencies are meaningfully operationalized through outcomes, content, and assessment rather than merely documented. Ciampa and Wolfe [18] argued that effective curriculum implementation requires continuous institutional monitoring and collaboration, while Pak et al. [1] emphasized that curriculum implementation involves more than policy compliance because faculty interpretation significantly influences instructional practice.

Professional Standards and Curriculum Implementation

Although professional standards provide a framework for teacher preparation, translating these standards into classroom instruction remains challenging. Ross [8] explained that curriculum implementation depends largely on how educators interpret and apply curriculum documents.

Likewise, Vreuls et al. [9] found that curriculum coherence relies heavily on collaboration among curriculum development teams.

Several studies have shown that competencies involving learner diversity, multilingual instruction, positive discipline, and professional collaboration often receive less attention than content knowledge. He [21] emphasized that teacher education should prepare graduates for culturally diverse learning environments, while Chun Lai and Tan Jin [22] highlighted the importance of integrating technology and professional identity into teacher preparation. These competencies require authentic learning experiences rather than purely theoretical discussions.

Authentic Assessment of Teaching Competencies

Assessment provides evidence that intended competencies have been achieved. Biggs and Tang [12] maintained that assessment tasks should directly measure the competencies identified in learning outcomes. In teacher education, authentic assessments such as lesson demonstrations, portfolios, classroom simulations, reflective journals, and field experiences better capture professional competence than traditional written examinations.

Yildirim [2] demonstrated that curriculum analysis can determine whether assessment-related competencies are sufficiently represented within teacher education programs. Without appropriate assessment evidence, institutions cannot confidently determine whether graduates have attained the professional competencies required by national teaching standards.

3. METHODOLOGY

This study utilizes an exploratory qualitative research design grounded in a constructivist epistemological paradigm to investigate the systemic implementation of the Outcome-Based Pre-Service Teacher Education Program (OBSTEP) Curriculum Quality Audit (CQA) at Negros Oriental State University (NORSU). Qualitative exploratory frameworks are highly effective for analyzing how institutional actors navigate complex curriculum standard alignments, negotiate quality assurance policies, and execute standard processes within dynamic educational environments [9]. By prioritizing detailed, structural analysis over statistical aggregation, this design facilitates an intensive, granular exploration of the operational milestones achieved by fusing Competency/Outcome-Based Education (COBE) frameworks with national quality assurance mandates [20]. The exploratory nature of this research is uniquely suited for decoding the institutional "Language of the Standards," allowing the investigator to capture programmatic nuances, systemic bottlenecks, and collaborative synergies that quantitative measures inherently obscure [8].

The empirical inquiry was contextualized within the multi-campus ecosystem of NORSU, extending from centralized academic offices to decentralized conference venues where critical capacity-building workshops and stakeholder training sessions took place. The study employed a purposive sampling strategy to select key institutional informants who possessed primary agency in the execution and evaluation of the OBSTEP CQA initiative. The participant cohort comprised faculty members, college deans, internal quality auditors, and specialized curriculum developers. To enrich the dataset with robust external perspectives and capture cross-institutional collaborative dynamics, the sample also included representatives and training specialists from a premier partner institution, the Philippine Normal University (PNU). This deliberate selection of heterogeneous stakeholders ensures structural validity and comp rehensive programmatic representation, aligning with rigorous standards for qualitative research in professional teacher education [21;3].

The data collection architecture was strictly governed by a systematic, seven-step Curriculum Quality Audit (CQA) mechanism originally conceptualized by Arafeh [16], which serves as a structured matrix to operationalize curriculum mapping and verify whether programmatic delivery systematically satisfies external benchmarks. The protocol unfolded through a rigorous sequential process that began with capacitating faculty, where institutional agents were trained to ensure uniform engagement with the quality indicators. This was followed by course mapping, during which 15 fundamental Professional Education course syllabi were systematically evaluated against the 37 Beginning Teacher Indicators (BTIs) of the Philippine Professional Standards for Teachers (PPST). Next, the data compilation phase aggregated these BTI coverage metrics into comprehensive matrices across the entire program, allowing the audit team to conduct a precise gap analysis that systematically isolated curricular gaps, under-representations, and instances of thematic over-representation. Once these structural disparities were identified, the team engaged in strategic formulation to design targeted rectification strategies aimed at harmonizing the curriculum. Before final implementation, a stakeholder consultation was held with course professors to evaluate the contextual feasibility of the proposed curricular updates. Finally, the process concluded with syllabus revision, where iterative modifications were formally institutionalized across the targeted courses to secure a data-driven, standard-aligned training framework.

This methodological sequence ensures that curriculum development transcends isolated course planning, evolving instead into a data-driven, standard-aligned, and collaborative institutional process [17; 19].

Data analysis was guided by Biggs' framework of constructive alignment, specifically examining the structural congruence within the Outcome-Content-Assessment (OCA) triad across the audited syllabi [10; 11]. Curricular data from the 15 Professional Education courses were cross-examined using a team of six CQA specialists, including first-generation CQA experts, trained internal quality auditors, and dedicated data analyzers. To maintain interpretive objectivity and eliminate confirmation bias, inter-coder reliability logs were rigorously maintained, and blind review protocols were enforced to keep the authorship of the audited syllabi confidential. The analytical matrix cataloged BTI frequency metrics across a gradient of alignment dimensions: standalone outcomes (O), partial alignment combinations (O+C or O+A), and complete constructive alignment (O+C+A). This multi-layered analytical framework allowed the researchers to look past superficial standard compliance,

mapping instead the precise paths through which high-level intended learning outcomes are operationalized via instructional delivery and summative assessment protocols [4; 2].

RESULTS AND DISCUSSION

Distributional Alignment of Beginning Teacher Indicators (BTIs). The systematic mapping of the 37 Beginning Teacher Indicators (BTIs) across the 15 core Professional Education courses reveals a highly variable distribution of standards integration across the curriculum. The structural representation of these mandates is organized comprehensively in Table 1, with the corresponding aggregate frequencies illustrated in Figure 1 and Figure 2.

Table 1 Basic Audit Map for the 15 Professional Education Courses

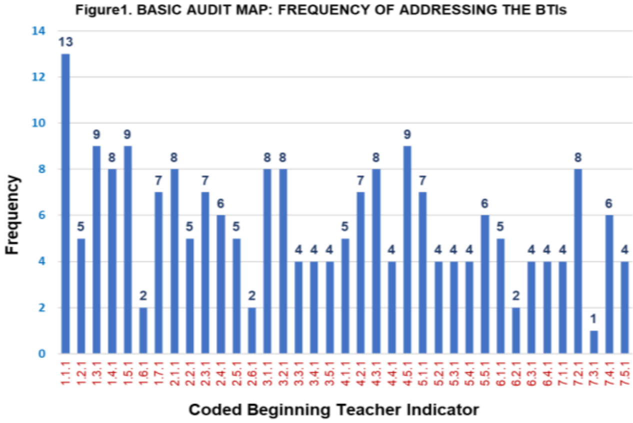


Figure1. BASIC AUDIT MAP: FREQUENCY OF ADDRESSING THE BTIs

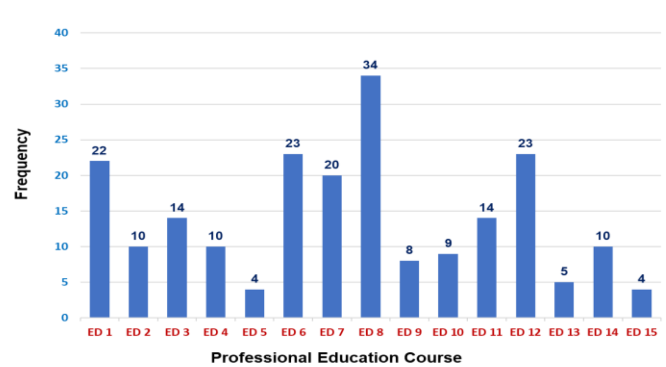


Figure2. BASIC AUDIT MAP: FREQUENCY OF ADDRESSING EACH BTI ACROSS COURSES

As delineated in Table 1 and visualized in Figure 1, BTI 1.1.1 ("Demonstrate content knowledge and its application within and across curriculum teaching areas") functions as the premier structural anchor of the teacher training curriculum, achieving a peak frequency across 13 of the 15 audited courses (f=13). This near-universal footprint confirms that institutional curriculum designers position specialized content proficiency and its pedagogical application as an absolute prerequisite across both theoretical and field-based training modules [23].

Conversely, critical baseline competencies exhibit severe under-representation. BTI 1.6.1 ("Use Mother Tongue, Filipino, and English to facilitate teaching and learning") and BTI 7.3.1 ("Seek opportunities to establish professional links with colleagues") register absolute minimal frequencies (f=1 and f=1, respectively). The isolated confinement of BTI 7.3.1 to ED 15 (Practice Teaching) demonstrates a siloed curriculum design that fails to integrate professional collegiality and networking practices throughout the foundational preparatory phases.

The structural density analysis across courses, illustrated in Figure 2, reveals sharp disparities in standards distribution. ED 8 (Curriculum Development) demonstrates the most intensive concentration, addressing standard-based competencies 34 times across the matrix. This is followed by ED 6 (Principles of Teaching 2) and ED 12 (The Teaching Profession), which both record 23 BTI intersections. This high density reflects a deliberate alignment between professional macro-structures and national teacher standards [1].

COURSE	BEGINNING TEACHER INDICATORS (BTIs) CODE																																					TOTAL
	1.1.1	1.2.1	1.3.1	1.4.1	1.5.1	1.6.1	1.7.1	2.1.1	2.2.1	2.3.1	2.4.1	2.5.1	2.6.1	3.1.1	3.2.1	3.3.1	3.4.1	3.5.1	4.1.1	4.2.1	4.3.1	4.4.1	4.5.1	5.1.1	5.2.1	5.3.1	5.4.1	5.5.1	6.1.1	6.2.1	6.3.1	6.4.1	7.1.1	7.2.1	7.3.1	7.4.1	7.5.1	
ED 1	3	3	2		3		2	2			2	2		2	3		2	2			2		2			2		3	3	3		3	2	2			1	51
ED 2	3	3	2		1		1		2					1	3																			2		2		20
ED 3	3		3	2	2			2	2		2			1						2	2			1				2			2			2				28
ED 4	3						2	3		3	2		2	3						3			1											3				25
ED 5	3		1	3	3																																	10
ED 6	3		1	2	3		2			3		2		3		1			3	1	2	3	3	3			2	3	2			2	2	2		2	2	52
ED 7	2	3	1	2	3	1	3	1	1	1	1	1	1	3	3	1	1	1	1															1				32
ED 8	3	3	3	3	3	2	1	3	3	3	3	3		3	3	1	1	3	3	3	3	3	3	3	1		1	3	3	1	3	1	3	1		2	3	84
ED 9								1												1	1		1	1	1	1	1											8
ED 10	3			1	3		2												2	2	2		2	2														19
ED 11	1		1	1					1	1					1			1					1	2	2	1	1	2								1		17
ED 12	3		2		2			2		1	2				3				2	2	2	2	2	1	2	2		2	3		3	2	2	3		2	3	50
ED 13	3			1						2						2							2															10
ED 14	1	1						1				1		1	1		1												1		1					1		10
ED 15															1						2	2													1			6
TOTAL	34	13	16	15	23	3	13	15	9	14	12	9	3	17	18	5	5	7	11	14	16	10	17	13	6	6	5	15	12	4	9	8	9	16	1	10	9	422

Legend: O (BIT is emphasized in the Course Description and CILO) = 1
C (BIT is emphasized in the Content as stated in the ILO) = 1
A (BIT is in the Assessment as it matched the ILO) = 1
if BTI is addressed in O (n=1); O+C or O+A (n=2); and O+C+A (n=3)

In stark contrast, ED 5 (Educational Technology 2) and ED 15 (Practice Teaching) exhibit severe content sparsity, incorporating only 4 BTI references each. This indicates a critical structural gap. Specialized technological integration and experiential field units remain largely isolated from the broader regulatory framework, revealing a fragmented approach to standard cascading within the institution's curriculum development processes [6].

Differentiated Constructive Alignment Analysis. To evaluate whether compliance with these standards extends beyond superficial syllabus mentions, a differentiated audit map was deployed to analyze the operational nature of the Outcome-Content-Assessment (OCA) triad. The complete breakdown of single, partial, and integrated constructive alignment patterns across courses is detailed in Table 2 and Table 3, and structurally tracked across Figures 3, 4, and 5.

Table 2. Differentiate Audit Map: BTI Frequency of Alignment Across 15 Professional Education Courses

COURSE	BEGINNING TEACHER INDICATORS (BTIs) CODE																																					TOTAL
	1.1.1	1.2.1	1.3.1	1.4.1	1.5.1	1.6.1	1.7.1	2.1.1	2.2.1	2.3.1	2.4.1	2.5.1	2.6.1	3.1.1	3.2.1	3.3.1	3.4.1	3.5.1	4.1.1	4.2.1	4.3.1	4.4.1	4.5.1	5.1.1	5.2.1	5.3.1	5.4.1	5.5.1	6.1.1	6.2.1	6.3.1	6.4.1	7.1.1	7.2.1	7.3.1	7.4.1	7.5.1	
ED1	X	X	X		X		X	X			X	X		X	X		X	X			X		X			X		X	X	X		X	X	X			X	22
ED2	X	X	X		X		X		X					X	X																			X		X		10
ED3	X		X	X	X			X	X		X			X						X	X			X				X			X			X				14
ED4	X						X	X		X	X		X	X						X			X											X				10
ED5	X		X	X	X																																	4
ED6	X		X	X	X		X			X		X		X		X			X	X	X	X	X	X			X	X	X			X	X	X		X	X	23
ED7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															X				20
ED8	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	34
ED9								X												X	X		X	X	X	X	X											8
ED10	X			X	X		X												X	X	X		X	X														9
ED11	X		X	X					X	X					X			X					X	X	X	X	X	X								X		14
ED12	X		X		X			X		X	X				X				X	X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	23
ED13	X			X						X						X							X															5
ED14	X	X						X				X		X	X		X												X		X					X		10
ED15															X						X	X													X			4
TOTAL	13	5	9	8	9	2	7	8	5	7	6	5	2	8	8	4	4	4	5	7	8	4	9	7	4	4	4	6	5	2	4	4	4	8	1	6	4	210

Legend: X= the value of 1

Figure 5. DIFFERENTIATED AUDIT MAP: BTIs CONSTRUCTIVE ALIGNMENT

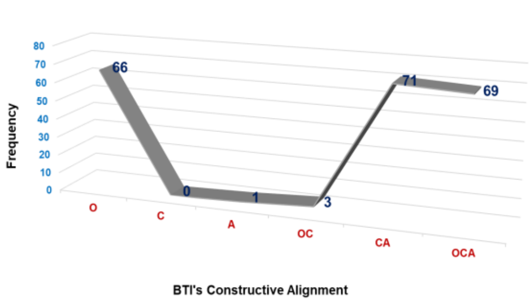


Table 3: Differentiated Audit Map: Constructive Alignment (Outcome-Content-Assessment) for the 15 Professional Education Courses

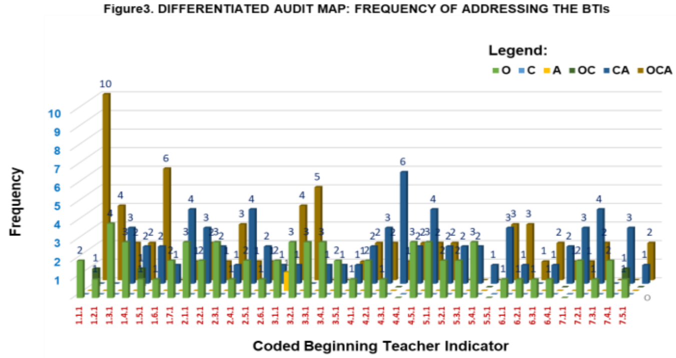
COURSE	BEGINNING TEACHER INDICATORS (BTIs) CODE																																				TOTAL
	1.1.1	1.2.1	1.3.1	1.4.1	1.5.1	1.6.1	1.7.1	2.1.1	2.2.1	2.3.1	2.4.1	2.5.1	2.6.1	3.1.1	3.2.1	3.3.1	3.4.1	3.5.1	4.1.1	4.2.1	4.3.1	4.4.1	4.5.1	5.1.1	5.2.1	5.3.1	5.4.1	5.5.1	6.1.1	6.2.1	6.3.1	6.4.1	7.1.1	7.2.1	7.3.1	7.4.1	7.5.1	
ED 1	OCA	OCA	CA		OCA		CA	CA			CA	CA		CA	OCA		CA	CA			CA		CA			CA		OCA	OCA	OCA		OCA	CA	CA			O	22
ED 2	OCA	OCA	CA		O		O		CA					O	OCA																			CA		CA		10
ED 3	OCA		OCA	CA	CA			CA	CA		CA			A						CA	CA			O				CA			CA			CA				14
ED 4	OCA						CA	OCA		OCA	CA		CA	OCA						OCA			O											OCA				10
ED 5	OCA		O	OCA	OCA																																	4
ED 6	OCA		O	CA	OCA		CA			OCA		CA		OCA		O			OCA	O	CA	OCA	OCA	OCA			CA	OCA	CA			CA	CA	CA		CA	CA	23
ED 7	OC	OCA	O	OC	OCA	O	OCA	O	O	O	O	O	O	OCA	OCA	O	O	O	O															O				20
ED 8	OCA	OCA	OCA	OCA	OCA	CA	O	OCA	OCA	OCA	OCA	OCA		OCA	OCA	O	O	OCA	OCA	OCA	OCA	OCA	OCA	OCA	O		O	OCA	OCA	O	OCA	O	OCA	O		CA	OCA	34
ED 9								O												O	O		O	O	O	O	O											8
ED 10	OCA			O	OCA		CA												CA	CA	CA		CA	CA														9
ED 11	O		O	O					O	O					O			O					O	CA	CA	O	O	CA								O		14
ED 12	OCA		CA		CA			CA		O	CA				OCA				CA	CA	CA	CA	CA	O	CA	CA		CA	OCA		OCA	CA	CA	OCA		OC	OCA	23
ED 13	OCA			O						CA						CA							CA															5
ED 14	O	O						O				O		O	O		O												O		O					O		10
ED 15															O						CA	CA													O			4
TOTAL	13	5	9	8	9	2	7	8	5	7	6	5	2	8	8	4	4	4	5	7	8	4	9	7	4	4	4	6	5	2	4	4	4	8	1	6	4	210

Legend: O (BIT is emphasized in the Course Description and CILO)
C (BIT is emphasized in the Content as stated in the ILO)
A (BIT is in the Assessment as it matched the ILO)

The architectural alignment profiles tracked in Figure 3 and Figure 4 reveal significant breakdowns in the constructive alignment framework. Out of 210 total BTI contact points verified by the audit team, only 69 instances demonstrate complete constructive alignment (O+C+A), where an intended standard is fully integrated into the course description, systematically taught via content, and directly evaluated through matching summative assessments [12].

As shown in Figure 4, ED 8 (Curriculum Development) stands out as an exemplar of rigorous design, executing complete O+C+A integration across 24 distinct competencies. This confirms that highly specialized courses

Figure3. DIFFERENTIATED AUDIT MAP: FREQUENCY OF ADDRESSING THE BTIs



naturally maintain tighter adherence to professional standards [10].

However, systemic weaknesses surface in other core offerings. For example, ED 12 (The Teaching Profession) relies heavily on incomplete Content-Assessment (CA) pairings (f=14), bypassing the formal declaration of these competencies within the primary Course Intended Learning Outcomes (CILOs).

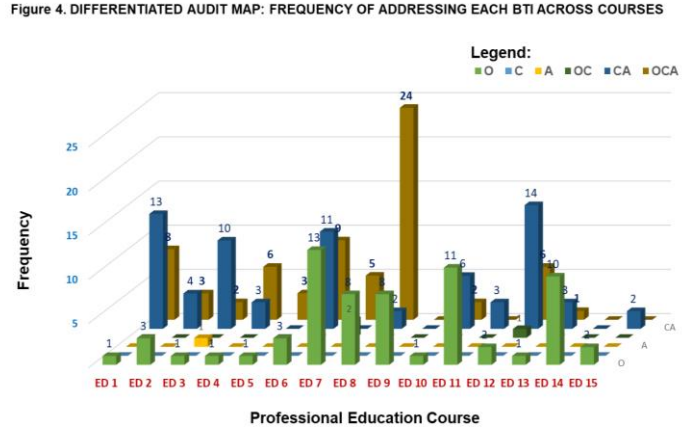
The global synthesis illustrated in Figure 5 highlights a critical pedagogical challenge: 66 instances across the institutional matrix are categorized as isolated Outcomes (O). In these cases, standards are listed in the syllabus framework but lack supporting instructional content or valid assessment mechanisms.

At its most extreme, this dynamic manifests as learning outcomes being assessed without ever being systematically taught (e.g., BTI 4.3.1), or conversely, concepts being discussed without any formal verification of student mastery (e.g., BTI 1.2.1 and BTI 7.5.1). This fragmentation breaks the constructive alignment chain, which demands that instructional activities directly scaffold the specific cognitive operations tested during validation [11; 2].

These structural gaps suggest that institutional curriculum design often treats national teaching standards as checklist items for compliance rather than as operational frameworks for classroom instruction [1]. When faculty members list target indicators without mapping them to specific instructional activities or assessments, they create a disconnected curriculum that limits the development of essential teaching skills [4].

Furthermore, this lack of coordination creates an environment of isolated instruction. Without a shared understanding of how these learning outcomes connect across courses, efforts to meet program goals remain fragmented, often leading to institutional inertia and resistance to curriculum reform [15].

Figure 4. DIFFERENTIATED AUDIT MAP: FREQUENCY OF ADDRESSING EACH BTI ACROSS COURSES



Standardized Micro-Pathways and Institutional Heat Mapping. To identify the specific operational limits of standard execution across the program, the 37 BTIs were audited against their internal structural dimensions (the 5Ps: Process, Procedure, Product, Purpose, and Particularity). The macro-distribution of these standard dimensions across the seven professional domains is mapped as an institutional heat map in Table 4, with corresponding micro-pathway boundaries illustrated in Figure 6.

Table 4. Heat Map of the Beginning Teacher Indicators (BTIs) across the 15 Professional Education Courses

The institutional heat map (Table 4) and its structural

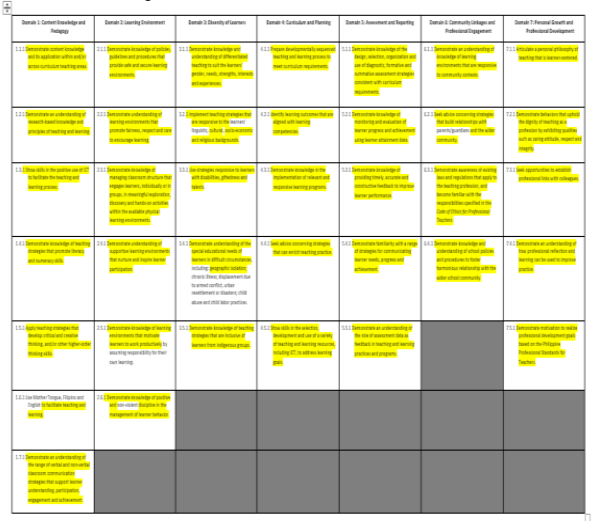
Domain 1: Content Knowledge and Pedagogy	Domain 2: Learning Environment	Domain 3: Diversity of Learners	Domain 4: Curriculum and Planning	Domain 5: Assessment and Reporting	Domain 6: Community Linkages and Professional Engagement	Domain 7: Personal Growth and Professional Development
1.1.1	2.1.1	3.1.1	4.1.1	5.1.1	6.1.1	7.1.1
1.2.1	2.2.1	3.2.1	4.2.1	5.2.1	6.2.1	7.2.1
1.3.1	2.3.1	3.3.1	4.3.1	5.3.1	6.3.1	7.3.1
1.4.1	2.4.1	3.4.1	4.4.1	5.4.1	6.4.1	7.4.1
1.5.1	2.5.1	3.5.1	4.5.1	5.5.1		7.5.1
1.6.1	2.6.1					
1.7.1						

Legend:

White	no coverage
Light Green	partial coverage
Dark Green	total coverage

summary (Figure 6) show that while 31 of the 37 indicators achieve wide coverage across the 15 courses, several critical competencies remain restricted to partial pathways. This

Figure 6. HEAT MAP: BTI PATHWAYS ACROSS COURSES



partial coverage occurs because syllabi often fail to address all operational dimensions—Process, Procedure, Product, Purpose, and Particularity—required by the national standards.

A clear example is BTI 1.6.1 (Domain 1), which addresses the use of Mother Tongue, Filipino, and English to facilitate learning. The audit reveals that while courses focus on the general process of facilitating instruction, they systematically omit multi-language delivery components from course content and assessments. This leaves pre-service teachers unprepared to navigate multilingual classrooms effectively [22].

Similar gaps appear in Domain 2 (Learning Environment) and Domain 3 (Diversity of Learners). BTI 2.5.1, which focuses on fostering independent learning, and BTI 2.6.1, which addresses positive, non-violent discipline management, are limited to partial pathways because their specific instructional methods are rarely operationalized within course requirements.Furthermore, BTI 3.4.1, which outlines strategies for teaching learners in difficult circumstances—such as geographic isolation, chronic illness, or displacement—is consistently superficial in its coverage. Syllabi frequently list the student populations (particularity) but fail to include corresponding instructional adaptations or specialized assessments (product).This partial implementation creates an operational deficit. While graduates may understand these equity frameworks in theory, they lack the practical strategies needed to support vulnerable student groups in real-world educational settings [21; 19].

CONCLUSIONS

This study provides critical empirical insights into the institutionalization of professional teaching standards within pre-service teacher education, revealing a persistent friction between macro-level quality policies and micro-level instructional execution. While Negros Oriental State University has successfully integrated the administrative "language of the standards" across its 15 core Professional Education course syllabi, deep-seated structural fragmentation remains. The macro-distribution of the 37 Philippine Professional Standards for Teachers (PPST) Beginning Teacher Indicators (BTIs) suffers from severe imbalances. Content knowledge application (BTI 1.1.1) forms an over-represented curriculum anchor, whereas baseline competencies vital to contemporary classroom ecologies—such as multilingual facilitation (BTI 1.6.1) and professional networking (BTI 7.3.1)—are marginalized and restricted to operational silos.

Furthermore, evaluating the curriculum through Biggs' framework of constructive alignment exposes a pronounced breakdown across the definitive Outcome-Content-Assessment (OCA) matrix. Only a minority of verified BTI contact points achieve complete, mutually reinforcing constructive alignment ($O+C+A$), typified by highly specialized offerings like ED 8 (Curriculum Development). In contrast, nearly one-third of the curricular entry points operate as isolated outcomes (O). These function primarily as administrative, checklist-style markers for bureaucratic compliance, entirely decoupled from day-to-day content delivery and authentic assessment validations. Finally, standard micro-pathway mapping confirms that essential equity frameworks, independent learning models, and non-violent discipline strategies remain superficially addressed. Consequently, while pre-service teachers may acquire a theoretical awareness of these professional domains, they are left with an operational deficit due to a lack of actionable, classroom-level practices embedded in their training.

RECOMMENDATIONS

Based on the systemic misalignments and operational gaps diagnosed through the Curriculum Quality Audit (CQA), the following interconnected recommendations are proposed to optimize standard cascading and institutionalize genuine constructive alignment:

Mandate Complete OCA Matrix Recalibration: Higher education leaders and curriculum designers must transition from checklist-based syllabus preparation to a strict constructive alignment protocol. All 66 isolated outcomes (O) identified across the syllabi must be systematically revised or eliminated. If a BTI is designated as an intended learning outcome, it must explicitly govern corresponding Teaching-Learning Activities (TLAs) within the content domain and be validated by an authentic, criterion-

referenced Assessment Task (AT).

De-silo and Redistribute Under-Represented Standards: The College of Teacher Education must address structural distribution disparities by intentionally embedding marginalized indicators throughout the curriculum. Crucial standards like multi-language facilitation (BTI 1.6.1) must be integrated into foundational pedagogical blocks rather than omitted, and professional networking (BTI 7.3.1) should be scaffolded across early field experiences instead of being isolated exclusively in Practice Teaching (ED 15).

Operationalize Standard Micro-Pathways for Equity and Discipline: To eliminate the operational deficit regarding student diversity and classroom management, course developers must systematically expand partial pathways into complete dimensions (Process, Procedure, Product, Purpose, and Particularity). Syllabi addressing learners in difficult circumstances (BTI 3.4.1) or non-violent discipline (BTI 2.6.1) must move past theoretical categorization; they must require practical deliverables, such as modified instructional plans and specialized assessment adaptations.

Institutionalize Continuous, Data-Driven Quality Audits: Rather than treating curriculum review as an episodic reaction to external accreditation cycles, the university should establish the seven-step CQA framework as a permanent, iterative quality assurance mechanism. Regular capacity-building workshops must be sustained to keep faculty adept at micro-mapping. This ensures that collective curriculum critiques actively counter institutional inertia, overcome instructional isolation, and maintain ongoing alignment with national regulatory shifts.

REFERENCES

[1] Pak, K., Polikoff, M., Desimone, L., & García, E. (2020). The adaptive challenges of curriculum implementation: Insights for educational leaders driving standards-based reform. AERA Open, 6(2), 1–15. https://doi.org/10.1177/2332858420932828

[2] Yildirim, A. (2024). Teaching summative assessment: A curriculum analysis of pre-service language teacher education in Sweden and Finland. Journal of Teacher Education, 75(2), 203–218. https://doi.org/10.1177/00224871231214799

[3] Parveen, A. (2020). Evaluation of undergraduate teacher education curriculum with reference to outcome based indicators and national professional standards for teachers in Pakistan. Pakistan Social Sciences Review, 4(2), 218–231. https://doi.org/10.35484/pssr.2020(4-ii)18

[4] Thummaphan, P., Sripa, K., & Prakobthong, W. (2022). Competency-based school curriculum: A development and implementation framework. Rajabhat Chiang Mai Research Journal, 23(3), 185–205. https://doi.org/10.57260/rcmrj.2022.261665

[5] Bacus, R. C., & Tagalog, R. M. P. (2023a). Aligned or misaligned? Mapping the pre-service teacher education curriculum against national professional standards. Philippine Journal of Teacher Education, 11(2), 45–61.

[6] Bacus, R. C., & Tagalog, R. M. P. (2023b). Assessing the professional readiness of pre-service teachers against the Philippine Professional Standards for Teachers (PPST). Journal of Teacher Education and Pedagogy, 11(1), 45–58.

[7] Bernardo, A., Wong-Fernandez, B., Macalaguing, M., & Navarro, R. (2020). Filipino senior high school teachers' continuing professional development attitudes: Exploring the roles of perceived demand amid a national education reform. Journal of Research Policy & Practice of Teachers & Teacher Education, 10(2), 63–76. https://doi.org/10.37134/jrpptte.vol10.2.5.2020

[8] Ross, E. (2023). Teachers' interpretation of curriculum as a window into 'curriculum potential'. The Curriculum Journal, 35(1), 38–55. https://doi.org/10.1002/curj.239

[9] Vreuls, J., Koeslag-Kreunen, M., Klink, M., Nieuwenhuis, L., & Boshuizen, H. (2022). Responsive curriculum development for professional education: Different teams, different tales. The Curriculum Journal, 33(4), 636–659. https://doi.org/10.1002/curj.155

[10] Ali, L. (2018). The design of curriculum, assessment and evaluation in higher education with constructive alignment. Journal of Education and E-Learning Research, 5(1), 72–78. https://doi.org/10.20448/journal.509.2018.51.72.78

[11] Romero, M., & Kalmpourtzis, G. (2020). Constructive alignment in game design for learning activities in higher education. Information, 11(3), 126–139. https://doi.org/10.3390/info11030126

[12] Biggs, J., & Tang, C. (2011). Teaching for quality learning at university (4th ed.). McGraw-Hill Education.

[13] Hartel, R. W., & Foegeding, E. A. (2004). Competency-based education. Journal of Food Science Education, 3(4), 69–75. https://doi.org/10.1111/j.1541-4329.2004.tb00047.x

[14] Biggs, J. (1996). Enhancing teaching through constructive alignment. Higher Education, 32(3), 347–364. https://doi.org/10.1007/BF00138871

[15] Pradhan, S. (2022). Overcoming faculty resistance to outcome-based education implementation in higher education institutions. International Journal of Educational Management, 36(4), 512–527. https://doi.org/10.1108/IJEM-09-2021-0350

[16] Arafeh, S. (2016). Curriculum mapping in higher education: A case study and proposed content scope and sequence mapping tool. Journal of Further and Higher Education, 40(5), 585–611. https://doi.org/10.1080/0309877X.2014.1000278

[17] Dera, H. (2021). Curriculum mapping and alignment of the neuroscience block in an undergraduate medical education program: A Delphi study. Advances in Medical Education and Practice, 12, 567–575. https://doi.org/10.2147/AMEP.S263915

[18] Ciampa, K., & Wolfe, Z. (2020). The adaptive challenges of curriculum implementation: Insights for educational leaders driving standards-based reform. AERA Open, 6(2), 1–15. https://doi.org/10.1177/2332858420932828

[19] Kolomitro, K., Graves, L., Kirby, F., Turnnidge, J., Truelove, A., Dalgarno, N., & Mulder, J. (2022). Developing a curriculum for addressing the opioid crisis: A national collaborative process. Journal of Medical

Education and Curricular Development, 9, 1–11. https://doi.org/10.1177/23821205221082913

[20] Açıkgöz, T., & Babadoğan, M. C. (2021). Competency-based education: Theory and practice. Journal of Educational Relevance, 14(2), 112–125.

[21] He, Y. (2023). Cross-cultural research on early childhood teacher education curriculum design. Research in Comparative and International Education, 18(4), 620–635. https://doi.org/10.1177/17454999231201452

[22] Chun Lai, X., & Tan Jin, Y. (2022). Professional identity orientations as predictors of technology integration for content delivery among pre-service teachers. Computers & Education, 182, Article 104473. https://doi.org/10.1016/j.compedu.2022.104473

[23] Santos, J. M., & Castro, R. D. R. (2021). Pedagogical content knowledge and teaching standards: Auditing the preparation of pre-service teachers. Asian Journal of Distance Education, 16(1), 89–104.