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RESEARCH ARTICLE

A Theory-Guided Alignment Analysis of Department of Education Policy Corpus through the Lens of Sustainable Governance

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Abstract

This study analyzes the extent to which the governance policy architecture of the Philippine Department of Education (DepEd) aligns with principles of sustainable governance relevant to the pursuit of Sustainable Development Goal 4 (SDG 4). Using a theory-guided qualitative document analysis anchored in the capacity-to-govern framework, a systematically curated DepEd policy corpus was examined. The analysis evaluated the degree of alignment across five governance dimensions. Findings indicate that the Department of Education is policy-rich and moderately aligns with principles of sustainable governance by Clark and Harley (2020). Strong normative commitments to SDG 4 coexist with uneven governance capacities needed to operationalize them. While policy coherence and equity commitments are generally well articulated, most policies demonstrate only moderate operationalisation in terms of resource capacity, multi-level governance, and adaptive capacity. The study contributes to sustainability science by demonstrating the applicability of the capacity-to-govern framework in educational policy analysis, provides an analytical model for examining how policy architectures support or constrain systemic progress toward SDG 4 and highlights the need for future research using empirical implementation data to validate identified gaps.

Keywords DepEd Governance · SDG 4 · Capacity to Govern · Sustainable Governance · Policy Analysis · Philippines

1. Introduction

Education is widely recognized as a foundational driver of sustainable development and social transformation. The global commitment to ensuring inclusive and equitable quality education is embodied in United Nations Sustainable Development Goal 4 (SDG 4), which calls for the expansion of inclusive, equitable, and lifelong learning opportunities for all by 2030 (UN, 2015). Beyond expanding access to schooling, SDG 4 emphasizes the development of education systems that promote equity, quality learning outcomes, and institutional resilience in addressing emerging social and economic challenges. Achieving these goals requires not only ambitious policy commitments but also governance systems capable of translating policy objectives into sustained institutional action. Recent scholarship in sustainability science highlights that progress toward global development goals depends significantly on the governance capacities of institutions responsible for policy implementation.

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Sustainable governance frameworks emphasize the ability of institutions to coordinate across multiple levels, mobilize resources, integrate knowledge into decision-making, and adapt policies in response to changing conditions (Clark & Harley, 2020; Harley & Clark, 2025). These capacities are essential for operationalizing sustainability-oriented policies and ensuring that policy commitments translate into measurable societal outcomes. In the absence of such governance capacities, policy systems may exhibit strong normative commitments while remaining constrained in their ability to implement reforms effectively (Cash et al., 2006; Folke et al., 2005).

Within this context, education governance has increasingly been recognized as a critical domain for sustainability transitions. Education systems serve not only as mechanisms for knowledge transmission but also as institutional platforms for advancing social equity, economic mobility, and civic participation. Consequently, the governance structures that shape education policy play a central role in determining how effectively national systems can respond to sustainability challenges and achieve long-term development goals. The Philippines provides a compelling context for examining these governance dynamics. Over the past decades, the country has enacted a range of legislative reforms and policy initiatives aimed at expanding educational access, strengthening foundational learning, and promoting inclusive education. National education policies issued by the Department of Education (DepEd) articulate strong commitments to equity, quality, and lifelong learning consistent with the aspirations of SDG 4. However, despite these extensive policy reforms, persistent challenges in learning outcomes and educational inequalities continue to shape national education discourse (Albert et al., 2020; EDCOM II, 2023).

These challenges suggest that the effectiveness of education reform may depend not only on the presence of policy commitments but also on the governance capacities embedded within policy architectures. While previous studies on Philippine education reforms have largely examined program implementation or policy development, relatively few studies have systematically analyzed the governance structures underpinning these reforms. Understanding how governance capacities are embedded within policy frameworks is essential for evaluating whether education systems are institutionally equipped to sustain reform and achieve long-term development objectives. This study addresses this gap by examining the extent to which Philippine education policies align with principles of sustainable governance relevant to SDG 4. Using a theory-guided document analysis anchored in the governance capacity framework proposed by Clark and Harley (2020), the study analyzes national education laws, policy frameworks, and institutional directives issued by the Department of Education. The analysis distinguishes between normative alignment, which refers to the extent to which policies reflect sustainability-oriented values such as equity and inclusion, and operational alignment, which refers to the extent to which policies embed governance mechanisms necessary for effective implementation. By examining how governance capacities are institutionalized within education policies, the study provides a deeper understanding of the governance architecture shaping Philippine education reforms. In doing so, the research contributes to sustainability governance scholarship by demonstrating how national policy systems translate global development commitments into institutional governance structures capable of supporting the realization of SDG 4. This study analyzed the policy architecture of the Department of Education in relation to its capacity to achieve Sustainable Development Goal 4 through the lens of sustainability science, particularly the capacity to govern framework proposed by Alicia Harley and William Clark (2020, 2025). Specifically, this study sought to (1) examine the governance policies, laws, rules, and legal issuances of the Department of Education related to the implementation of Sustainable Development Goal 4 (SDG 4); (2) assess the extent to which the policy corpus of the Department of Education align with the principles of sustainable governance in terms of capacity to govern; and (3) identify the gaps, strengths, and areas for improvement in the Department of Education's governance system based on the sustainable governance framework aimed at strengthening its capacity to govern toward achieving SDG 4.

2. Literature Review

2.1. Sustainable Development Goal 4 and Educational Governance

Sustainable Development Goal 4 (SDG 4) emphasizes inclusive, equitable, and quality education, requiring governance systems capable of delivering learning outcomes effectively. Recent literature underscores that achieving SDG 4 depends on governance structures that enable coordination, adaptability, and accountability

across multiple levels of education systems (Pham & Lindqvist, 2025). Studies further argue that SDG 4 implementation is not only a curricular or pedagogical concern but also a systemic issue requiring coherent policy frameworks, inter-agency coordination, and sustained institutional capacity. Existing research, however, focuses primarily on curriculum integration and learning outcomes, with limited attention to how governance systems themselves shape SDG 4 implementation (Pham & Lindqvist, 2025). In the Philippine context, SDG 4 is embedded in national education reforms, yet persistent challenges such as inequitable access, resource shortages, and uneven quality suggest that governance capacity remains a critical bottleneck (EDCOM II, 2025). These issues highlight the need to examine governance not just as an administrative structure but as a dynamic system of capacities that enable or constrain SDG achievement.

2.2. EDCOM II Findings on Philippine Education Governance

The Second Congressional Commission on Education (EDCOM II, 2025) provides a critical empirical foundation for understanding governance challenges within the Department of Education (DepEd). The Commission highlights that despite policy reforms, the education system remains highly centralized, with decision-making authority concentrated at the central office, limiting responsiveness at local levels (EDCOM II, 2025). EDCOM II (2025) also identifies a culture of over-compliance and control, which constrains innovation and adaptive governance, particularly at regional and school levels. Governance fragmentation persists due to the existence of multiple inter-agency bodies with weak coordination, resulting in inefficiencies and overlapping mandates (EDCOM II, 2025). Additional reports point to systemic governance failures, including inadequate monitoring systems, lack of leadership continuity, insufficient funding mechanisms, and weak quality assurance processes (EDCOM II, 2026). These governance issues are directly linked to broader educational outcomes, such as the persistence of a learning crisis and functional illiteracy, indicating that governance capacity directly impacts system performance (Cariaso, 2025).

2.3. Capacity to Govern Cooperatively toward SDG 4

The capacity to govern framework, as articulated by Harley and Clark (2025), emphasizes that governance effectiveness depends not only on formal structures but also on the ability of institutions to coordinate actors, integrate knowledge, adapt to changing conditions, and sustain collective action toward long-term goals. Key capacities include coordination across scales and sectors, inclusiveness and stakeholder engagement, knowledge integration and learning, and adaptability and reflexivity (Harley & Clark, 2025). Sustainability research highlights that governance systems often fail not because of the absence of policies but due to limited capacity to operationalize them effectively (Harley & Clark, 2025). Despite its relevance, this framework has been underutilized in education research, particularly in developing country contexts. Most applications focus on environmental governance, leaving a gap in applying the framework to education systems and SDG 4 implementation.

2.4. Sustainability Science and Governance Systems

Sustainability science emphasizes that governance systems must address complex, interconnected challenges through integrated, adaptive, and participatory approaches. Governance for sustainability is characterized by the ability to align policies across sectors, respond to uncertainty, and engage diverse stakeholders in decision-making processes (Harley & Clark, 2025). In education, sustainability-oriented governance requires linking policy, practice, and outcomes across multiple levels, from national agencies to local schools. Literature suggests that many governance systems remain fragmented, hierarchical, and resistant to change, limiting their ability to support SDGs (EDCOM II, 2025). Sustainability science calls for evidence-based, iterative learning processes, where policies are continuously evaluated and refined (Harley & Clark, 2025). This aligns with the study's proposed theory-guided approach to policy analysis, where *de jure* governance frameworks and *de facto* realities interact dynamically.

Recent scholarship on education governance underscores that the effectiveness of policy reforms is contingent not only on their design but on the institutional and systemic capacities that enable their implementation. Studies from the Philippine Institute for Development Studies (Albert et al, 2020) highlight persistent structural constraints in the Philippine education system, including inefficiencies in resource

allocation, disparities in teacher distribution, and gaps in education financing. These findings suggest that governance challenges are deeply embedded in fiscal and administrative systems, limiting the translation of policy commitments into practice. Complementing this, global diagnostics from the World Bank (2018, 2019, 2022) point to the prevalence of learning poverty in the Philippines, indicating that increased access to education has not consistently resulted in improved learning outcomes. This reinforces the argument that governance effectiveness must be assessed not only in terms of policy coverage but also in terms of system performance. From a comparative governance perspective, analyses by the Organisation for Economic Co-operation and Development emphasize that decentralization reforms, while intended to enhance responsiveness and local autonomy, often produce uneven outcomes when not supported by adequate capacity-building and coordination mechanisms. This is particularly relevant in contexts such as the Philippines, where local education units vary significantly in institutional capacity. Earlier work on Philippine public administration further identifies enduring challenges of fragmentation, weak inter-agency coordination, and limited administrative capacity, which shape the broader environment in which education policies are implemented (Brillantes & Fernandez, 2011). Moreover, policy implementation theory provides a critical lens for understanding the gap between policy intent and practice. James P. Spillane (2004) argues that policies are not simply executed as written but are interpreted and enacted by local actors within specific organizational and contextual conditions. This perspective highlights that alignment at the policy level does not guarantee coherence in implementation, as outcomes are mediated by human agency, institutional routines, and local constraints. These studies provide an analytical foundation for examining the disjunction between *de jure* policy commitments and *de facto* realities from a sustainable governance perspective, reinforcing the need to assess education governance through both structural and capacity-oriented lenses.

There is a clear lack of studies systematically analyzing DepEd governance policies using a sustainability science lens, particularly the capacity to govern framework, and engaging policy documents in a theory-guided alignment analysis. This study contributes to the ongoing global conversation of sustainability science by linking these insights to sustainable governance frameworks by Clark & Harley (2020) and Harley & Clark (2025).

Table 1. Conceptual definitions and operationalization

Concept	Definition	Operational Indicator in Policy
Normative Alignment	Extent to which DepEd policy reflects SDG 4 values (equity, quality, inclusion) and sustainable governance principles by Clark & Harley (2020) and Harley & Clark (2025)	Presence of explicit SDG-related goals, inclusive language and sustainable governance principles
Operational Alignment	Extent to which policies translate normative commitments into actionable governance mechanisms that enable implementation, coordination, monitoring, and adaptive learning within the education system.	Presence of clear implementation guidelines, defined institutional responsibilities, resource allocations, monitoring and evaluation systems, multi-level coordination mechanisms, and feedback or adaptive policy provisions.
Theory-guided Alignment Analysis	Iterative comparison between theory and policy text to identify alignment, tensions, and absences	Coding of both explicit and implicit policy elements

3. Methodology

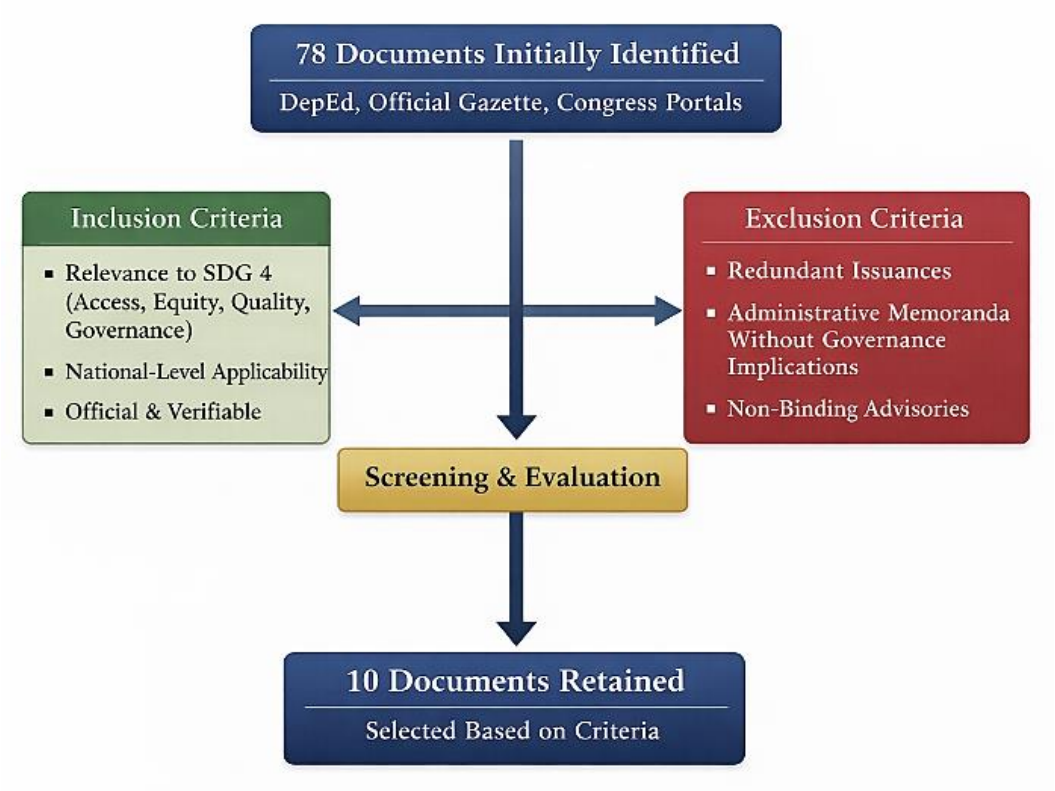

Figure 1. Systematic procedure of selecting the document corpus

This study employed a qualitative policy analysis using theory-guided document analysis to examine the alignment of Philippine education policies with principles of sustainable governance by Clark & Harley (2020) and Harley & Clark (2025) which conceptualizes governance capacity as a set of institutional abilities required to operationalize sustainability goals (Figure 2). These capacities include policy coherence, resource capacity, multi-level governance coordination, adaptive capacity, and equity orientation. Document analysis is an established qualitative method for systematically examining policy texts to identify underlying institutional priorities, governance mechanisms, and policy orientations. The design is particularly suited for assessing complex, multi-layered policy environments, allowing both descriptive mapping and interpretation of institutional alignment with Sustainable Development Goal 4. The comparative institutional approach facilitates cross-policy synthesis and enables the identification of structural strengths, gaps, and areas for improvement. By combining documentary mapping, theory-guided policy alignment and interpretive gap analysis, the methodology ensures a rigorous, transparent, and reproducible procedure. Data were collected from official and publicly accessible repositories, including the DepEd website, Official Gazette, and Senate/House legislative portals. Only authorized, published, and verifiable policy documents were included, ensuring ethical compliance and minimizing the risk of using unvalidated or non-public data. A purposive sampling strategy was used to construct a corpus of key education governance documents in the Philippines. Documents were selected based on their relevance to national education governance and their role in guiding policy implementation across the education system. This process resulted in a curated corpus of ten policy documents that collectively represent the institutional architecture of Philippine education governance. To maintain trustworthiness, each document was verified against multiple official sources, and a document retrieval matrix was used to track inclusion and exclusion criteria systematically (Figure 1). Policies included in the corpus were those that explicitly addressed governance, curriculum, inclusion, or institutional reforms related to SDG 4. A total of 78 documents were initially identified from official repositories (DepEd, Official Gazette, Congress portals). After screening, 10 documents were retained based on the inclusion and exclusion criteria. All data sources are legally accessible, non-confidential, and do not involve human participants or personally identifiable information; thus, formal ethical clearance was not required. Nevertheless, the study

adheres to established research ethics by ensuring accurate representation, proper citation, and responsible interpretation of all documents. The researcher also upholds transparency and respects intellectual property rights in the use and reporting of all sourced materials.



Figure 2. Sustainable governance model

3.1. Data Analysis

The study applied a theory-guided alignment analysis that examined two levels of policy alignment. The first is the normative alignment which refers to the extent to which policy texts reflect sustainability principles such as equity, inclusion, and quality education. Next is the operational alignment, the extent to which policies embed institutional mechanisms necessary for implementation, including governance coordination, resource allocation, monitoring systems, and adaptive feedback mechanisms. An iterative coding process was conducted to identify both explicit policy statements and implicit governance mechanisms embedded within policy texts. Policy provisions were coded based on their degree of alignment with the governance dimensions of the analytical framework. The analysis involved three stages:

1. Initial coding of policy provisions reflecting governance capacities
2. Cross-document comparison to identify patterns of alignment across policies
3. Interpretive synthesis to assess the overall governance capacity of the policy architecture

This analytical approach allowed the study to move beyond descriptive policy mapping and instead evaluate how governance capacities are institutionalized within the Philippine education policy system. The coding framework in Table 2 was derived from governance capacities identified in sustainability governance literature and operationalized into five analytical dimensions.

Table 2. Coding framework based on Clark & Harley (2020) and Harley & Clark (2025) capacity to govern framework

Governance Dimension	Operational Indicators	Sustainable Governance Framework	Alignment
Policy Coherence	Cross-policy consistency, absence of duplication	Capacity to govern cooperatively / coordinate across actors	Clark & Harley (2020) and Harley & Clark (2025) emphasize that governance enables coherent action across multiple policies and actors, reducing conflict or duplication and ensuring policies reinforce each other.
Resource Capacity	Budget mention, staffing provisions	Capacity to link knowledge with action / support operationalization	Adequate resources are necessary for translating governance intentions into action, reflecting the "linking knowledge to implementation" aspect of governance capacity.
Multi-level Governance	Defined roles across national, regional, local levels	Capacity to govern cooperatively / multi-level coordination	The framework emphasizes collaborative governance, including coordination among levels of government and stakeholders.
Adaptive Capacity	Evidence of policy revision or innovation	Capacity to adapt development pathways	Governance capacity in Clark & Harley (2020) includes the ability to revise policies in response to feedback, uncertainty, or new knowledge.
Equity	Targeting marginalized groups	Capacity to promote equity within and between generations	Clark & Harley (2020) explicitly identify equity as a core governance capacity, emphasizing inclusion and fair distribution of opportunities and benefits.

The analysis focuses on normative alignment to SDG 4 and sustainable governance principles as well as operationalisation rather than just awarding scores, highlighting the dynamic link between the capacity to govern and policy aim. For example, the Republic Act No. 10533 (Enhanced Basic Education Act – K-12 Act), the policy received scores of 4, 3, 3, 3, 3 for policy coherence, resource capacity, multi-level governance, adaptive capacity, and equity and inclusion, respectively. A score of 4 for policy coherence was assigned because the Act aligns clearly with national education objectives and other education laws, reinforcing SDG 4 goals, though minor implementation inconsistencies exist at the local level. Resource capacity scored 3 since funding and staffing are allocated but vary regionally, limiting consistent implementation. Multi-level governance scored 3 because roles are defined across national, regional, and local levels, but structured coordination mechanisms are weak. Adaptive capacity scored 3 as curriculum revision processes exist, yet formal feedback loops are underdeveloped. Lastly, equity and inclusion scored 3 because the policy promotes quality education for all learners, but operational gaps remain in reaching marginalized groups, such as learners in remote areas.

4. Results and Discussion

4.1. Governance policies, laws, rules, and legal issuances of the Department of Education related to the implementation of Sustainable Development Goal 4 (SDG 4)

The results of the documented analysis of the Philippine Department of Education's (DepEd) governance policies, regulations, and legal issuances with regard to the achievement of Sustainable Development Goal 4 (SDG 4) are shown in Table 3. The table methodically presents the legal bases, type, year implemented, verifiable sources, sustainable development four dimensions, key focus, and their governance level based on a carefully selected and validated corpus of national legislation and DepEd policy instruments sourced from official repositories.

Table 3. Governance policies, laws, rules, and legal issuances of the Department of Education related to the implementation of Sustainable Development Goal 4 (SDG 4)

Legal Bases	Type	Year	Source	SDG 4 Dimension	Focus	Governance Level
Republic Act No. 10533 (Enhanced Basic Education Act)	Law	2013	Official Gazette / Congress	4.1, 4.7	K–12 curriculum, quality education	National
Republic Act No. 10157 (Kindergarten Education Act)	Law	2012	Official Gazette	4.2	Universal kindergarten access	National
Republic Act No. 11650 (Inclusive Education Act)	Law	2022	Official Gazette	4.5	Inclusion of learners with disabilities	National
Republic Act No. 9155 (Governance of Basic Education Act)	Law	2001	Official Gazette	Governance	Decentralized education governance	National–Local
DepEd Order No. 21, s. 2019	DepEd Order	2019	DepEd Website	4.1	K–12 policy guidelines, curriculum implementation	System-wide
DepEd Order No. 44, s. 2021	DepEd Order	2021	DepEd Website	4.5	Inclusive education for learners with disabilities	Multi-level
DepEd Order No. 23, s. 2022 (Child Find Policy)	DepEd Order	2022	DepEd Website	4.5	Identification of marginalized learners	School–Community
DepEd Order No. 1, s. 2026 (ALS Guidelines)	DepEd Order	2026	DepEd Website	4.3, 4.4, 4.6	Alternative Learning System expansion	Community-based
DepEd Order No. 003, s. 2026 (AI in Education)	DepEd Order	2026	DepEd Website	4.1, 4.7	Digital and AI integration in learning	System-wide
MATATAG Curriculum Reform **&** Philippine SDG 4 Framework	Policy Reform and Framework	2023-present	DepEd Website/ NEDA / SDG Portal	All SDG 4	Foundational skills (literacy, numeracy) & National SDG alignment	National–School

The corpus indicates that the Philippine basic education governance system is underpinned by a dense and multi-layered policy architecture that, at the *de jure* level, demonstrates substantial alignment with the core dimensions of SDG 4, namely access, equity, quality, and lifelong learning. The Republic Act No. 10533 institutionalizes the K–12 basic education reform in the Philippines, expanding the curriculum to include kindergarten and two additional years of senior high school. It directly supports SDG Targets 4.1 and 4.7 by enhancing access to complete, quality basic education and integrating competencies such as critical thinking, global awareness, and sustainable development concepts (Official Gazette, 2013). This law strengthens national capacity to deliver inclusive and relevant learning outcomes. Complementing this, Republic Act No. 10157 mandates universal access to kindergarten education, ensuring that all Filipino children receive early childhood education as a prerequisite to formal schooling. Aligned with SDG Target 4.2, it emphasizes school readiness and foundational development, contributing to improved long-term educational outcomes (Official Gazette, 2012). Addressing educational equity, Republic Act No. 11650 institutionalizes inclusive education for learners with disabilities. It advances SDG Target 4.5 by ensuring equitable access to education regardless

of physical, cognitive, or socio-emotional conditions. The law promotes systemic reforms such as accessible infrastructure, specialized teacher training, and individualized support mechanisms (Official Gazette, 2022).

Meanwhile, Republic Act No. 9155 redefines the governance structure of basic education by decentralizing authority to local levels. It contributes to the governance dimension of SDG 4 by empowering schools and local government units to make context-responsive decisions, thereby improving efficiency, accountability, and responsiveness in education delivery (Official Gazette, 2001). At the policy implementation level, DepEd Order No. 21, s. 2019 provides detailed guidelines for the operationalisation of the K–12 curriculum. It supports SDG Target 4.1 by ensuring consistency and quality in curriculum delivery across the system, reinforcing standards for teaching, assessment, and learner outcomes (Department of Education, 2019). Further strengthening inclusion, DepEd Order No. 44, s. 2021 outlines policies for educating learners with disabilities within mainstream and specialized settings. Aligned with SDG Target 4.5, it operationalizes inclusive practices across multiple governance levels, ensuring that equity principles are translated into classroom practices (Department of Education, 2021). The DepEd Order No. 23, s. 2022 focuses on identifying out-of-school children and marginalized learners. It contributes to SDG Target 4.5 by strengthening school-community partnerships to locate, assess, and integrate learners who are often excluded from formal education systems (Department of Education, 2022). Expanding access beyond formal schooling, DepEd Order No. 1, s. 2026 enhances the Alternative Learning System (ALS), targeting out-of-school youth and adults. It aligns with SDG Targets 4.3, 4.4, and 4.6 by promoting lifelong learning opportunities, functional literacy, and skills development through flexible, community-based modalities (Department of Education, 2026). Responding to emerging technological demands, DepEd Order No. 003, s. 2026 integrates artificial intelligence and digital tools into teaching and learning processes. It supports SDG Targets 4.1 and 4.7 by fostering digital literacy, innovation, and future-ready competencies, while promoting ethical and responsible use of technology in education (Department of Education, 2026). The MATATAG Curriculum Reform prioritizes foundational skills such as literacy and numeracy, aiming to address learning gaps exacerbated by systemic challenges. It contributes to SDG Target 4.1 by focusing on improving learning outcomes and ensuring that all learners acquire essential competencies (Department of Education, 2023). Finally, the Philippine SDG 4 Framework serves as the overarching national strategy aligning education policies with global SDG commitments. It integrates all SDG 4 targets into national planning and monitoring systems, ensuring coherence, accountability, and sustained progress toward inclusive and equitable quality education for all (National Economic and Development Authority, ongoing).

4.2. Extent to which the governance mechanisms of the Department of Education align with the principles of sustainable governance in terms of capacity to govern

Using the capacity to govern framework by Clark & Harley (2020) and Harley & Clark (2025), this section evaluates how well the Department of Education's (DepEd) governance systems adhere to sustainable governance principles. Each rating reflects both the policy's alignment with sustainable governance principles and the extent to which it is operationalized in practice (Clark & Harley, 2020; Harley & Clark, 2025). Table 4 presents the alignment matrix, integrating rating scales, policy corpus, and sustainable governance dimensions.

Table 4. Normative and Operational Alignment of DepEd Policies with Sustainable Governance Dimensions

Legal Bases	**Sustainable Governance by Clark & Harley (2020) and Harley & Clark (2025)**				
	Policy Coherence	***Resource Capacity***	***Multi-level Governance***	***Adaptive Capacity***	***Equity and Inclusion***
	4	3	3	3	3
Republic Act No. 10533 (Enhanced Basic Education Act)	Aligns clearly with national education objectives and SDG 4, with minor gaps in operational consistency across programs.	Resources (teacher training, curricula) exist, but implementation capacity varies by region.	Roles across national, regional, and local levels are defined, but coordination is uneven.	Allows curriculum updates and revisions, but feedback mechanisms are limited	Targets all learners broadly, but inclusion of marginalized groups is partial.

Table 4 (cont.). Normative and Operational Alignment of DepEd Policies with Sustainable Governance Dimensions

Legal Bases	Sustainable Governance by Clark & Harley (2020) and Harley & Clark (2025)				
	Policy Coherence	***Resource Capacity***	***Multi-level Governance***	***Adaptive Capacity***	***Equity and Inclusion***
Republic Act No. 10157 (Kindergarten Education Act)	4 Strong alignment with early learning policies, ensuring coherence with primary education goals.	3 Budgeted for early childhood education, but resource deployment may be limited.	3 Local government roles defined, yet coordination and implementation vary.	2 Provides only nominal guidance for adapting policy to local feedback.	3 Targets early learners, but equity operationalization is inconsistent.
Republic Act No. 11650 (Inclusive Education Act)	5 Fully coherent with national inclusive education and SDG 4 goals; strongly integrated across education sectors.	3 Resources mandated (specialized services), but capacity to fully operationalize may be limited.	4 Governance roles well-defined; coordination is mostly established.	3 Policies allow for adaptation through individualized education plans, but mechanisms are developing.	5 Explicitly targets marginalized learners, fully integrating inclusion in operations.
Republic Act No. 9155 (Governance of Basic Education Act)	3 Articulates governance reform objectives but overlaps and gaps exist across agencies.	2 Resource allocation and staffing guidance are minimal; operationalisation is weak.	2 Multi-level coordination is largely conceptual, not fully realized.	2 Few mechanisms exist for feedback and policy revision; adaptation is limited.	3 Equity addressed nominally, but inclusion in practice is weak.
DepEd Order No. 21, s. 2019	4 Coherent integration of wellbeing and learning support across policies.	3 Resources exist but implementation varies by school capacity.	3 National guidelines cascade to schools, though local coordination is uneven.	3 Provides for monitoring and program adjustments, but adaptation is limited.	4 Explicit inclusion of learner support and marginalized learners is prioritized.
DepEd Order No. 44, s. 2021	4 Aligns with inclusive education goals; policies reinforce each other.	3 Operational provisions and resources exist, but coverage may vary.	3 Multi-level governance defined, though execution may be inconsistent.	3 Allows iterative program improvements, but systematic adaptation is partial.	4 Focused on inclusive practices; equity is well-considered but not fully universal.
DepEd Order No. 23, s. 2022 (Child Find Policy)	4 Coherent with early identification and intervention goals; complements other education policies.	3 Resources and personnel identified, but implementation may vary.	3 Roles across national and local levels are outlined, but coordination varies.	3 Policy allows adaptation through monitoring, but mechanisms are limited	5 Prioritizes early identification for marginalized or at-risk learners, strongly equity-oriented.
DepEd Order No. 1, s. 2026 (ALS Guidelines)	4 Coherent with non-formal and alternative learning objectives; aligns with national education strategy.	3 Budgeted support and operational provisions exist, but capacity varies regionally	3 Multi-level governance is established but coordination is uneven.	3 Flexible learning pathways allow adaptation, but feedback loops are limited.	4 Explicitly addresses out-of-school learners and inclusion.

Table 4 (cont.). Normative and Operational Alignment of DepEd Policies with Sustainable Governance Dimensions

Legal Bases	Sustainable Governance by Clark & Harley (2020) and Harley & Clark (2025)				
	Policy Coherence	***Resource Capacity***	***Multi-level Governance***	***Adaptive Capacity***	***Equity and Inclusion***
DepEd Order No. 003, s. 2026 (AI in Education)	4 Aligns with modernization and digital learning policies; complements other education initiatives.	3 Resources allocated for AI initiatives, but capacity is still developing.	3 Governance roles across levels are defined, but multi-level collaboration is emerging.	4 Policy allows adaptation to emerging AI technologies, showing stronger adaptive capacity.	3 Equity depends on access to technology; partial operationalization.
MATATAG Curriculum Reform & Philippine SDG 4 Framework	5 Fully coherent across national education objectives and SDG 4; well-integrated with other policies.	3 Operational provisions exist (training, pilot programs), though scaling remains incomplete.	4 Multi-level governance roles and coordination are clearly defined for implementation pilots.	4 Pilot programs support iterative adaptation and policy refinement.	5 Strongly promotes equity and inclusion as a core principle of the curriculum.

Note:

Rating	Interpretation	Alignment Indicators
5 Strongly Aligned	Policy fully embodies the sustainable governance principle with clear mechanisms and operational structures; implementation is coherent, resourced, and inclusive across all levels.	- Policy is fully consistent with other relevant policies, avoids duplication, and reinforces goals across sectors (Policy Coherence). - Adequate and dedicated resources (budget, staffing, infrastructure) fully support implementation (Resource Capacity). - Roles and responsibilities are clearly defined across national, regional, and local levels (Multi-level Governance). - Policy includes formal mechanisms for feedback, revision, and learning (Adaptive Capacity). - Explicitly targets marginalized groups and promotes fair distribution of opportunities and benefits (Equity).
4 Aligned and Substantially Operationalised	Policy clearly aligns with the sustainable governance principle and provides operational guidance, but gaps exist in resources, coordination, or consistency of implementation.	- Cross-policy alignment exists, but minor overlaps or gaps may remain. - Resources are allocated but may be insufficient or uneven. - Governance roles are largely clear but coordination challenges persist. - Policy includes adaptation measures, but feedback loops or monitoring are partial. - Equity is addressed, but some marginalized groups may not be fully reached.
3 Aligned but Weakly Operationalised	Policy articulates the principle conceptually, but institutional arrangements or implementation mechanisms are limited.	- Policy goals are consistent but duplication or gaps exist. - Resources or staffing are minimal or inconsistently applied. - Multi-level coordination is unclear or weak. - Adaptive mechanisms are vague or ad hoc. - Equity is mentioned but not systematically operationalised.
2 Normatively Aligned Only	Policy reflects the principle in principle or rhetoric but lacks concrete mechanisms, operational guidelines, or enforcement.	- Policy states the principle, but cross-policy coherence is not ensured. - Resource provision is largely absent or undefined. - Governance roles and coordination are undeveloped. - No systematic adaptation or feedback mechanisms exist. - Equity is acknowledged but not implemented.
1 Not Aligned	Policy does not demonstrate alignment with the sustainable governance principle; no operational mechanisms exist.	- Policy does not consider consistency with other policies. - No budget or staffing provisions for operationalisation. - No multi-level governance structures in place. - No adaptive mechanisms or innovation procedures. - Equity considerations are absent.

The analysis reveals that Philippine education laws and DepEd orders exhibit variable alignment with the core principles of sustainable governance as articulated by Clark & Harley (2020) and elaborated in Harley & Clark (2025). While several frameworks demonstrate normative alignment with the theoretical dimensions of coherence, resource capacity, multi-level governance, adaptability, and equity, operationalisation gaps remain evident. These findings reflect broader patterns observed in sustainability governance scholarship that emphasize the difficulty of translating policy intent into integrated governance action. Policy coherence refers to the extent to which a policy avoids conflict with other policies and reinforces shared objectives across sectors and levels of governance (Clark & Harley, 2020). In the scoring, RA 11650 and the MATATAG/SDG 4 framework scored highest (5), indicating explicit integration of inclusion and sustainable learning goals across complementary legislative frameworks. These policies clearly embody cross-policy consistency, demonstrating alignment with sustainable education goals at multiple scales. In contrast, RA 9155 scored lower (3) not because it lacks coherence at the level of legislative articulation, but because the framework lacks integrated mechanisms to enforce cross-policy reinforcement. This mirrors the caution in sustainability science that coherence in rhetoric does not automatically translate to systemic integration (Clark & Harley, 2020). Indeed, policy networks can remain fragmented when institutional incentives and governance structures are not designed for collaborative action, a point underscored in the sustainability literature (Cash et al., 2006). Adequate resource capacity is essential for turning policy aspirations into action (Harley & Clark, 2025). The evaluation placed most policies at moderate alignment (3) including the K-12 Act, Kindergarten Act, and several DepEd orders reflecting institutional capacity to allocate resources, but not necessarily to sustain them effectively across contexts.

In sustainable governance, resource capacity is not merely about budgets but about the strategic linking of knowledge with implementation (Harley & Clark, 2025). Policies that score 3 suggest an uneven operationalization of capacity, where resources exist on paper but may not be structured to enable adaptive learning or cross-sectoral support. This aligns with the broader literature on sustainability transitions, which warns that resource deployment without strategic capacity remains insufficient (Meadowcroft, 2009). Multi-level governance demands clearly defined roles and coordination among national, regional, and local actors (Clark & Harley, 2020). The results show stronger alignment (4) for frameworks that define such roles explicitly (e.g., Inclusive Education Act and SDG 4 framework), compared to those that provide only weakly operationalized multi-level structures (score 3). An important insight from Harley & Clark (2025) is that multi-level governance is not merely hierarchical delegation; it is about collaborative networks capable of iterative dialogue and shared learning. Policies with moderate scores lack governance architectures that enable sustained cooperation across scales, highlighting a common challenge in sustainability governance: the "trap" of formal decentralization without meaningful power or coordination mechanisms (Ostrom, 2010). Adaptive capacity, defined as the policy's ability to incorporate feedback and learn from implementation, exhibited considerable variation. Policies with explicit support for iterative reforms or flexible learning pathways (e.g., the AI in Education order) scored higher (4), reflecting an appreciation of governance as a dynamic, evolving process, a core emphasis of the sustainability science literature (Clark & Harley, 2020). By contrast, frameworks that are static in design with limited mechanisms for systematic correction or revision (score 2 or 3) reveal a common deficit in policy architecture. Sustainable governance framework stresses that adaptive capacity is critical when managing complex socio-ecological systems, as fixed policies can fail under dynamic conditions (Folke et al., 2005). The moderate scores suggest that while adaptation is occasionally recognized, it is often not institutionalized through explicit monitoring or learning systems. Equity and inclusion are central to sustainable governance, requiring deliberate attention to marginalised groups and fair distribution of opportunities (Clark & Harley, 2020). High scores (5) for the Inclusive Education Act and Child Find Policy reflect robust design features that explicitly target structural inequities, aligning strongly with sustainability governance principles. Other policies scored moderately (4), indicating that they address equity but stop short of fully embedding redistributive mechanisms or safeguards against systemic exclusion. Sustainability scholars argue that true equity in governance emerges from ongoing participatory processes, not just declarative policy language (Agyeman et al., 2016). The variation in scores reflects this distinction: policies may recognize equity conceptually but may not operationalize it through governance processes that ensure meaningful participation and benefit sharing.

These results suggest that Philippine education policies demonstrate normative commitment to sustainable governance principles but vary significantly in operational strength. The distinction between alignment in principle and alignment in practice resonates deeply with both Clark & Harley (2020) and Harley & Clark

(2025). The former cautions scholars and policymakers that governance capacity is as much about integration and reflexivity as it is about normative intent, while the latter emphasizes building cooperative capacity through shared structures, resources, and adaptive learning. Many policies exhibit strong rhetorical alignment with sustainability goals but lack the institutional mechanisms required to govern cooperatively or adaptively. This echoes broader observations in governance studies that policy design often outpaces implementation structures (Sachs et al., 2019). Even where roles are defined, real coordination and cooperation remain weak, underscoring the gap between formal decentralization and functionally integrated governance networks, a noted challenge in sustainability governance (Ostrom, 2010). While some policies fully operationalize equity, others treat inclusion as aspirational rather than procedurally embedded and resourced, reflecting a common sustainability governance critique that equity often remains under-institutionalized (Agyeman et al., 2016). Policies that allow adaptation in principle often lack built-in feedback loops or learning mechanisms. This limitation undermines long-term responsiveness to complex socio-educational shifts, a key point in sustainability science regarding the need for iterative learning governance (Clark & Harley, 2020).

The policy landscape exhibits a strong rhetorical embrace of sustainable governance principles. However, true operational alignment characterized by integrated governance capacity, adaptive learning structures, and equity that is deeply institutionalized, remains uneven. This critical insight aligns with the broader sustainability science literature: policy coherence and intent are necessary but not sufficient; sustainable governance requires systemic, iterative, and cooperative capacity building (Clark & Harley, 2020; Harley & Clark, 2025).

4.3. Gaps, strengths, and areas for improvement in the Department of Education's governance system based on the sustainable governance framework aimed at strengthening its capacity to govern toward achieving SDG 4

Building on the theory-guided alignment analysis, this section identifies the systemic gaps, institutional strengths, and priority areas for improvement in the governance mechanisms of the Department of Education (DepEd). Using the capacity to govern framework (Clark & Harley, 2020; Harley & Clark, 2025), the analysis moves beyond alignment assessment to interrogate the quality, depth, and functionality of governance, with particular attention to how these dimensions shape the realization of Sustainable Development Goal 4 (SDG 4).

Table 5. Gap–Strength–Improvement Matrix

Governance Dimension	Strengths	Gaps	Areas for Improvement
Policy Coherence	Strong alignment of laws and DepEd Orders with SDG 4; comprehensive policy coverage	Policy layering, duplication, weak integration mechanisms	Develop a unified policy framework or integrative roadmap linking curriculum, inclusion, and ALS reforms
Resource Capacity	Recognition of diverse learner needs; expansion of ALS and inclusive programs	Insufficient teachers, infrastructure, and learning resources; uneven allocation	Strengthen resource planning, equitable budgeting, and teacher development systems
Multi-level Governance	Institutionalized decentralization (RA 9155); school-based management	Uneven local capacity; weak coordination and monitoring systems	Enhance vertical and horizontal coordination; build capacity of local education units
Adaptive Capacity	Responsiveness to crises (MATATAG, digital reforms); willingness to recalibrate	Reactive policy cycle; limited foresight and long-term planning	Institutionalize anticipatory governance (data-driven planning, scenario-building)
Equity and Inclusion	Strong inclusion agenda (LWDs, OSY, marginalized learners); Child Find mechanisms	Persistent inequities in access to quality learning; regional disparities	Targeted interventions for disadvantaged areas; strengthen monitoring of equity outcomes

The depth and breadth of the DepEd governance system's policy corpus, which demonstrates a strong commitment to SDG 4, is one of its most notable advantages. A system that has successfully integrated global education principles is shown by the existence of several policies addressing curriculum reform, inclusivity, and lifelong learning (UNESCO, 2017). But at the same time, this strength creates a crucial divide. Policy stacking, in which several issuances function concurrently without adequate integration, is a result of the proliferation of policies. According to Clark and Harley (2020), systemic coherence and interoperability are just as important to governance capability as the existence of policies. The absence of an overarching integrative mechanism leads to fragmentation, reducing policy effectiveness. The analysis reveals that DepEd policies are highly ambitious, particularly in expanding access and promoting inclusion. However, EDCOM II (2025) highlights persistent systemic deficiencies, including shortages in classrooms, teachers, and learning materials, as well as gaps in teacher quality and training. This indicates a fundamental misalignment between policy design and resource realities, which Clark and Harley (2020) identify as a key limitation in governance capacity. Without adequate resource mobilization and strategic allocation, even well-designed policies remain aspirational. Decentralization remains a key strength of the Philippine education system, enabling local adaptation and responsiveness. However, the findings reveal that decentralization is asymmetrical, with significant variations in local capacity. EDCOM II (2025) documents disparities in learning outcomes across regions, suggesting that local autonomy, in the absence of adequate support, may exacerbate inequalities. Clark and Harley (2020) argue that effective multi-level governance requires both autonomy and coordinated capacity-building. The introduction of reforms such as the MATATAG curriculum demonstrates the system's ability to respond to emerging challenges, particularly the learning crisis. This reflects a degree of adaptive governance, which is essential for sustainability. However, the pattern of continuous policy recalibration suggests a reactive governance mode, where reforms are introduced after problems become systemic. Clark and Harley (2020) highlight the importance of anticipatory capacity, including foresight, scenario planning, and proactive policy design. DepEd demonstrates a strong commitment to inclusion, with policies targeting marginalized groups and promoting equitable access. This aligns closely with SDG 4.5 and reflects a significant governance strength. Nevertheless, EDCOM II (2025) reveals that access does not necessarily translate into quality learning outcomes, particularly for disadvantaged learners. This indicates that equity efforts remain input-focused (enrollment, access) rather than outcome-oriented (learning achievement).

The analysis suggests that the DepEd has successfully established a normatively aligned and policy-rich framework, but its ability to achieve SDG 4 is moderately affected by systemic capacity limitations. In the context of Clark and Harley's (2020) framework, the Philippine education system can be characterized as strong in policy articulation (what the corpus intends to do) and moderate to weak in governance execution (how to do it). This results in a governance condition where strengths lie in vision, inclusivity, and responsiveness and gaps lie in integration, resources, coordination, and foresight. Achieving SDG 4 in the Philippine context requires a fundamental shift from policy-driven reform to capacity-driven governance. The challenge is no longer the absence of policies, but the depth of institutional capacity to operationalize them effectively and sustainably. As Clark and Harley (2020) argue, sustainable governance is ultimately defined not by the proliferation of policies but by the system's ability to integrate, implement, and adapt them over time. In this regard, strengthening DepEd's capacity to govern is not merely a technical necessity but a strategic imperative for ensuring that educational reforms translate into meaningful and equitable learning outcomes.

This study contributes to the growing literature on sustainability governance not only in the Philippines but in other developing countries in three important ways. First, it demonstrates the applicability of the capacity-to-govern framework to the analysis of national education policy systems. While this framework has been widely used in sustainability science to examine governance capacity in areas such as climate change and environmental management, its application to education governance remains limited. By operationalizing governance capacities within the context of education policy analysis, this study extends the analytical scope of sustainability governance frameworks into the education sector. Second, the study introduces the concept of operational alignment as a complementary analytical lens to normative policy alignment. Many policy studies assess whether policies rhetorically reflect sustainability principles; however, fewer studies examine whether governance systems possess the institutional mechanisms necessary to implement those commitments. By distinguishing between normative alignment (policy intent) and operational alignment (governance capacity), the study provides a more focused framework for evaluating the effectiveness of sustainability-oriented policy architectures. Third, the study contributes to policy scholarship in developing country contexts by illustrating how policy-rich governance systems may still experience implementation constraints due to uneven institutional capacity. The Philippine case demonstrates that strong legislative commitments to

education reform do not automatically translate into sustained improvements in learning outcomes. This insight highlights the importance of examining governance architectures not only through the lens of policy ambition but also through the institutional capacities required to sustain reform across complex multi-level education systems.

These contributions advance sustainability governance research by emphasizing that progress toward SDG 4 depends not only on the presence of policy commitments but also on the development of governance capacities capable of operationalizing them.

5. Conclusion

This study applied a theory-guided policy alignment analysis grounded in the capacity-to-govern framework to examine the governance architecture of the Philippine Department of Education in relation to Sustainable Development Goal 4. By systematically analyzing a curated corpus of education laws, policy frameworks, and institutional issuances, the study assessed how sustainable governance capacities such policy coherence, resource capacity, multi-level governance, adaptive capacity, and equity orientation are embedded within the design of DepEd policies. The findings indicate that the Philippine education policy system demonstrates strong normative commitment to the principles of sustainable governance. Legislative frameworks and policy reforms consistently articulate goals related to inclusive access, equitable learning opportunities, and the strengthening of foundational skills, reflecting alignment with SDG 4 and broader sustainability objectives. However, the analysis also reveals that this normative alignment is only partially matched by functional governance capacity. While policies clearly articulate reform directions, the institutional mechanisms required to operationalize these commitments remain uneven across governance dimensions. Resource capacity frequently appears moderate, with funding provisions and program mandates present but inconsistently supported by sustained infrastructure, personnel, and capacity-building systems. Similarly, multi-level governance structures formally recognize decentralized roles but often lack integrated coordination mechanisms capable of ensuring coherent implementation across national, regional, and school levels. Adaptive capacity is present in the form of curriculum reforms and emerging digital initiatives, yet the policy architecture tends to rely on reactive recalibration rather than anticipatory governance supported by systematic feedback and learning mechanisms. These findings suggest that the Philippine education system is policy-rich but moderately aligns with principles of sustainable governance by Clark and Harley (2020). Strong normative commitments to SDG 4 coexist with uneven governance capacities needed to operationalize them. DepEd has established a comprehensive framework of reforms that strongly align with SDG 4 principles, particularly in advancing inclusion and expanding learning opportunities. Yet the translation of these commitments into sustained educational improvement depends on strengthening the institutional capacities required to integrate, resource, and coordinate policies across the system. In this sense, the central challenge facing the education sector is no longer the absence of reform initiatives but the development of sustainable governance capacities capable of operationalizing them effectively.

The study contributes to the literature by demonstrating the analytical value of applying the sustainability science capacity-to-govern framework to education governance. It also highlights the importance of examining policy architectures not only in terms of their normative commitments but also their operational capacity to sustain reform. Nevertheless, the research is limited by its document-based design, which does not directly capture policy implementation performance and dynamics, institutional practices, or resource flows. Future research may extend this analysis by incorporating interviews with policymakers and education leaders, subnational case studies of policy implementation, and empirical examination of governance performance indicators. Such approaches would enable a more comprehensive understanding of how governance capacities operate in practice and how they influence educational outcomes across diverse contexts.

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Declarations

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Annexure A

Verified official links to the 10 legal bases / policies aligned with SDG 4

Republic Act No. 10533
https://www.officialgazette.gov.ph/2013/05/15/republic-act-no-10533/

Republic Act No. 10157
https://lawphil.net/statutes/repacts/ra2012/ra_10157_2012.html

Republic Act No. 11650
https://lawphil.net/statutes/repacts/ra2022/ra_11650_2022.html

Republic Act No. 9155
https://lawphil.net/statutes/repacts/ra2001/ra_9155_2001.html

DepEd Order No. 21, s. 2019 (K–12 policy guidelines)
https://www.deped.gov.ph/deped-orders/ (DO 21 s. 2019)

DepEd Order No. 44, s. 2021 (Inclusive education for learners with disabilities)
https://depedph.com/deped-order-44/

DepEd Order No. 23, s. 2022 (Child Find Policy)
https://depedph.com/deped-order-23/

DepEd Order No. 1, s. 2026 (ALS Guidelines)
https://www.deped.gov.ph/deped-orders/

DepEd Order No. 003, s. 2026 (AI in Education)
https://www.deped.gov.ph/deped-orders/ (DO 003 s. 2026)

MATATAG Curriculum Reform
https://www.deped.gov.ph/wp-content/uploads/DO_s2024_010.pdf

Philippine SDG 4 Framework
https://sdg.depdev.gov.ph/goal-4/