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Posted Date: 8 October 2025

doi: 10.20944/preprints202510.0594.v1

Keywords: micro-credentials; quality assurance; government policies; inclusive life-long learning; recognition frameworks

 doi:10.20944/preprints202510.0594.v1

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Examining Government Policies on Micro-Credentials in the Philippines: Toward Inclusive and Quality-Assured Lifelong Learning

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Abstract

This study examines current government policies and institutional initiatives supporting the development and implementation of micro-credentials in the Philippines, with a focus on identifying policy gaps affecting their quality, recognition, and inclusivity. Using a qualitative document analysis approach, the research reviewed policy documents from three key institutions: Commission on Higher Education (CHED), Technical Education and Skills Development Authority (TESDA), and the University of the Philippines Open University (UPOU). These documents include CHED Memorandum Order No. 1 series of 2025, TESDA Circular No. 077 series of 2024, and UPOU OVCAA Memo 2023-003. Data collection was conducted through a structured web-based search from May to June 2025. Thematic analysis revealed eight key themes across the policies: (1) Micro-credentials Definition, (2) Target Groups and Inclusivity, (3) Delivery Mode, (4) Development and Industry Involvement, (5) Assessment and Certification, (6) Quality Assurance Mechanisms, (7) Stackability and Recognition, and (8) Integration with the Philippine Qualifications Framework (PQF). While each institution aligns its micro-credential initiatives with its mandate, CHED with higher education, TESDA with technical-vocational training, and UPOU with open and distance learning, the absence of a unified national framework results in fragmented definitions, inconsistent quality standards, and limited recognition mechanisms. A second layer of analysis identified critical policy gaps, including the lack of harmonized quality assurance, unclear stackability pathways, limited recognition across sectors, and insufficient equity provisions for non-traditional learners. The study concludes with recommendations for developing a coordinated national micro-credentials strategy aligned with the PQF and guided by principles of coherence, inclusivity, and quality assurance.

Keywords: micro-credentials; quality assurance; government policies; inclusive life-long learning; recognition frameworks

Introduction

The global rise of micro-credentials has been rapid and transformative, reshaping education and workforce development. Micro-credentials are short, focused credentials that recognize specific skills or competencies, typically gained through modular learning experiences (Oliver, 2022; Wheelahan & Moodie, 2024; Varadarajan et al., 2023). Unlike traditional degrees, micro-credentials offer learners a more flexible, targeted, and affordable way to acquire knowledge. Educational institutions and online platforms are increasingly exploring micro-credentials, offering stackable and modular options that may contribute toward full degree programs (Brown et al., 2021; Cardoz, 2023; Organisation for Economic Co-operation and Development [OECD], 2021). At the same time, employers are showing growing acceptance, with many moving toward skills-based hiring practices. For learners, especially those without traditional degrees, micro-credentials offer a pathway to employment and career advancement. As a result, micro-credentials are playing a key role in promoting lifelong learning, closing skills gaps, and aligning education more closely with the dynamic needs of the modern workforce.

 doi:10.20944/preprints202510.0594.v1

Within lifelong learning frameworks, micro-credentials are gaining prominence as tools for creating more inclusive, accessible, and responsive education systems. They support continuous learning across a person's life span, enabling individuals to adapt to evolving labor markets and technological shifts without committing to full degree programs (Gamage & Dehideniya, 2025; OECD, 2023a). International bodies such as United Nations Educational, Scientific and Cultural Organization (UNESCO) and the OECD advocate for micro-credentials as mechanisms to democratize education, enhance employability, and achieve broader policy goals like the United Nations Sustainable Development Goal 4 on quality education (Oliver, 2022). As Henderikx et al. (2022, p. 9) noted, "micro-credentials have become a priority for the European Commission and the Bologna Process," further signaling their rising policy relevance. In the United States, Europe, Canada, and New Zealand, stackable credentials are increasingly offered by both universities and tech companies, providing learners with flexible options that can lead to full degrees or immediate employment opportunities (OECD, 2021). In Malaysia, public universities have launched over 300 micro-credential courses, while private universities have offered more than 2,000 as of May 2021, supporting flexible learning pathways (Hijden & Martin, 2023). Building on these global and national efforts, the MICROCASA project co-funded by the European Union (EU) seeks to advance the modernization and adaptability of higher education in Southeast Asian countries by developing institutional expertise in micro-credentialing, covering areas such as collaborative course design, educational technologies, transparent quality assurance, digital credential issuance and verification, and formal recognition (MICROCASA consortium, 2025). As more countries integrate micro-credentials into national qualifications frameworks or develop complementary systems, they are helping to build agile, learner-centered ecosystems that reflect global trends in lifelong learning and skills development. However, national and institutional variations add to the complexity, making the portability and broader recognition of micro-credentials even more challenging (Varadarajan et al., 2023).

The Philippine education and workforce training system is governed by a tri-focal structure involving DepEd, CHED, and TESDA, each overseeing different education sectors. Serving as a unifying framework, the Philippine Qualifications Framework (PQF) establishes national standards for learning outcomes across all levels and sectors, aiming to promote quality assurance, comparability, and lifelong learning (PQF-National Coordinating Council [NCC], 2023). While the system supports multiple learning pathways, challenges persist, particularly in inclusivity, quality assurance, recognition of alternative credentials, and coordination among agencies (Second Congressional Commission on Education [EDCOM II], 2024). Learners in remote and underserved areas face barriers such as limited internet access and economic constraints, while varying institutional capacities affect the consistency and credibility of training programs (Gocotano et al., 2021; Khatiwada et al., 2021; Villaseñor, 2024). These gaps highlight the need for more flexible, accessible, and industry-aligned approaches to education and skills development.

Micro-credentials are foreseen to play a crucial role in strengthening the Philippine education and workforce policy by addressing skill gaps and enhancing employability in a rapidly evolving job market (National Economic and Development Authority [NEDA], 2023). These short, targeted programs offer accessible pathways to reskilling and upskilling, particularly for working professionals seeking to improve their employability (Alenezi et al., 2024; Pirkkalainen et al., 2023). A preliminary scan of micro-credential providers in the Philippines identifies institutions such as Batangas State University, Mariano Marcos State University, the Technical Education and Skills Development Authority (TESDA), and the University of the Philippines as key frontrunners in this emerging landscape. These providers develop their own programs and/or collaborate with industry partners to ensure that the content remains relevant to labor market demands. As the country works toward building a future-ready workforce, integrating micro-credentials into national education and workforce strategies can support continuous learning, foster stronger industry-academe collaboration, and contribute to a more inclusive, agile, and globally competitive economy.

 doi:10.20944/preprints202510.0594.v1

Given the growing global and national interest in micro-credentials, it is essential to examine how government policies in the Philippines are evolving to support their development, implementation, and integration within education and workforce systems. While micro-credentials are gaining traction as tools for lifelong learning and employability, questions persist regarding the coherence, inclusivity, and effectiveness of related policy frameworks (Fisher & Leder, 2022; Pirkkalainen et al., 2023; UNESCO, 2023). As their number continues to grow, concerns have also emerged about the variability in quality and the credibility of providers (Narayanaswamy et al., 2024; Berry & Byrd, 2019; Ngo et al., 2023). Oliver (2022, p. 5) underscores the need for "robust quality assurance frameworks" to protect their value. Although these issues have been widely examined in global studies, it remains unclear how they are being addressed in the Philippine context, where government-led initiatives are still in their early stages.

This study explores how current government policies and initiatives are enabling or constraining the effective use of micro-credentials, and what gaps remain in ensuring their quality, recognition, and equitable access. Understanding these dynamics is vital for informing coordinated policy responses that maximize the potential of micro-credentials to advance flexible, inclusive, and high-quality learning opportunities. To this end, this research addresses the following questions:

1. How are current government policies and initiatives in the Philippines supporting the development and implementation of micro-credentials in education and workforce training?
2. What policy gaps and challenges exist in ensuring the quality, recognition, and equitable access to micro-credentials in the Philippines, and how might these be addressed to strengthen inclusive and quality-assured lifelong learning?

Methodology

This study employed a qualitative document analysis to examine how government policies and institutional initiatives in the Philippines support the development, implementation, and recognition of micro-credentials, and to identify policy gaps that may affect their inclusivity and quality assurance. Data were collected from June to July 2025 through a structured web-based search using the Google search engine as the primary tool. The search strategy included combinations of keywords such as "micro-credentials," "government policy," "circular," and "memorandum." It was designed to locate publicly accessible documents issued by the Philippine government and educational institutions involved in micro-credentialing.

From the search results, relevant policy documents and initiatives were identified from key government and educational institutions involved in micro-credential implementation, namely the Commission on Higher Education (CHED), the Technical Education and Skills Development Authority (TESDA), and the University of the Philippines Open University (UPOU). Documents were selected based on their relevance to micro-credential policy development, implementation strategies, regulatory frameworks, and institutional practices. A total of three core policy documents were identified and analyzed: (1) CHED Memorandum Order (CMO) No. 1, Series of 2025, (2) TESDA Circular No. 077, Series of 2024, and (3) UPOU Office of the Vice Chancellor for Academic Affairs (OVCAA) Memo 2023-003.

Thematic analysis was employed as the primary method for interpreting and analyzing the policy documents gathered for this study. The process began with familiarization, where each document was read multiple times to gain a comprehensive understanding of the language, structure, and policy intentions. This initial phase helped surface early observations about differences in scope, emphasis, and institutional roles.

Next, a systematic coding process was conducted. Relevant phrases, provisions, and descriptions were labeled using inductive and deductive codes derived from both the research questions and emerging insights from the data. Codes were assigned to segments of text relating to aspects such as definitions of micro-credentials, target beneficiaries, development and delivery models, quality assurance mechanisms, stackability, recognition, and alignment with broader policy frameworks like the PQF.

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Following the coding process, related codes were grouped into preliminary themes that reflected broader conceptual patterns. These themes were refined and restructured through an iterative review to ensure internal coherence and distinctiveness. Eight key themes emerged from the analysis: (1) Micro-credentials Definition, (2) Target Groups and Inclusivity, (3) Delivery Mode, (4) Development and Industry Involvement, (5) Assessment and Certification, (6) Quality Assurance Mechanisms, (7) Stackability and Recognition and Stackability, and (8) Integration with the PQF.

Each theme was clearly defined to reflect how the institutions conceptualize, regulate, and operationalize micro-credentials within their respective mandates. For example, the theme on Micro-credentials Definition captures how micro-credentials are formally described and positioned within education or workforce systems, while the theme on Development and Industry Involvement addresses the methods and partnerships involved in their creation. Other themes, such as Quality Assurance and Recognition, focus on mechanisms that influence trust, value, and utility of micro-credentials across sectors.

In addition to the thematic analysis used, the study employed a second layer of qualitative document analysis to identify policy gaps, implementation challenges, and potential areas for improvement in the micro-credential frameworks of CHED, TESDA, and UPOU. This involved a critical cross-comparison of the themes previously established. Through systematic coding and analytical memoing, the researcher noted inconsistencies, omissions, and underdeveloped provisions across the selected policy documents. Particular attention was given to the absence of harmonized standards, lack of mutual recognition mechanisms, and variation in implementation models. These observations were not limited to what was explicitly stated in the documents but also included inferred limitations based on policy logic and alignment with national and international frameworks. To ensure rigor and relevance, the coding process included both inductive and deductive elements, allowing for the emergence of context-specific insights while being guided by the research objectives. Recommendations were formulated through an interpretive synthesis of the observed challenges, supported by best practices in micro-credentialing policy and grounded in the principles of coherence, inclusivity, and quality assurance.

This study was limited by its reliance on publicly available documents accessed online, which may not capture internal or unpublished policies. Additionally, the use of Google search, while practical, may not guarantee the retrieval of all relevant materials due to algorithmic limitations or access restrictions. Lastly, the analysis was based on interpretation of policy texts and did not include interviews or stakeholder perspectives, which could provide deeper insights into implementation challenges.

Results and Discussion

The table below provides a comparative overview of current policies on micro-credentials by key Philippine government agencies (CHED, TESDA) and a leading public higher education provider (UPOU). It highlights how each entity is contributing to the development and implementation of micro-credentials in support of lifelong learning and workforce readiness.

As shown in Table 1, all three institutions, CHED, TESDA, and UPOU, have issued policies to support the implementation of micro-credentials. CHED released CMO No. 1, series of 2025; TESDA issued Circular No. 077, series of 2024; and UPOU operationalized its approach through OVCAA 2023-003. While CHED and TESDA operate at the national level, UPOU's policy is institutional, though aligned with broader government initiatives.

Table 1. Comparison of Policies on Micro-credentials by CHED, TESDA, and UPOU.

Theme	CHED	TESDA	UPOU
Policy Basis/ Issuance	CMO No. 1, series of 2025	Circular No. 077, series of 2024	OVCAA 2023-003
Agency Role	Regulator	Regulator and Provider	Provider

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Micro-credentials Definition	-a course or sets of courses offered to lifelong learners within a field of study offered by an HEI or industry partners, solely developed or jointly developed by the HEl and industry partner as a component of a recognized higher education program or a standalone course that will benefit the lifelong learner's academic, personal and professional growth, aligned with the standards, and needed skills and competencies of the industry.	-a record of focused learning achievement that verifies what the learner knows, understands, or can do.	-a proof that attests to a person's knowledge and skills in a particular subject or area. -comes in the form of a certificate or badge and is usually concentrated on a single skill or body of information.
Target Groups & Inclusivity	HEI, Industry, Micro-credentials providers; Academic-oriented	TVET Providers, Workers and Learners; Industry-oriented	Faculty, Students & Other Learners; Academic-oriented
Delivery Mode	Can be offered fully online, flexible, blended or in conventional modalities	Face-to-face, online, blended and face-to-face, distance, blended distance and f2f learning	On-demand, cohort-based
Development & Industry Involvement	Can be a collaboration between HEIs and industry partners; Should be industry-aligned	Developed based on TRs, industry needs and labor market analysis; Already aligned since TRs are industry-based	Developed internally by faculty; may include co-development with partners (industry associations or professional societies); Should be industry-aligned
Assessment & Certification	Digital badges; Assessment should be performance-based, and the quality of learners' performance is verifiable.	Digital badges; Assessments are institutional, aligned with industry standards, and may be based on Recognition of Prior Learning (RPL) concept	Digital certificate or badge; Assessment has guided principles (validity & reliability, clarity of instructions, inclusion, integrity), and implementation

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			modalities (scheduled, on-demand)
Quality Assurance	Should be internal and external processes; HEIs need to secure CHED approval and authority to offer ODeL programs before operating a Micro-credentials program	Aligns with the established TRs, COCs, MCC, and NTRs; Providers and issuers of micro-credentials must undergo TESDA accreditation to obtain a CTPR or COR for Micro-Credential Course	Internal; Seeks to have the micro-credential courses accredited by relevant accreditation bodies
Recognition & Stackability	Shall post a listing of recognized micro-credentials and the approved providers annually; Proposed stackable units within degree programs (e.g., 30/9/7 units for undergrad/grad/ doctoral)	Proposes the development of a Digital Badge Issuance System; Bundling/ unbundling of UCs, COC, CS/TR	Proposes mutual recognition of micro-credentials across higher education sector; 0.5 unit, max of 50% units in undergraduate and 9 units in graduate programs
Integration with PQF	PQF levels 5 to 8	Aligned with PQF levels through TRs	PQF levels 3 to 7

Each policy outlines a framework for micro-credential implementation, but only TESDA explicitly adopts an international definition by referencing UNESCO (TESDA, 2024). Previously, TESDA adopted the New Zealand Qualifications Authority (NZQA) definition of a micro-credential (TESDA, 2021). CHED defines micro-credentials with emphasis on lifelong learning and as standalone or component courses within formal higher education (CHED, 2025), while UPOU describes them as short, focused learning experiences that validate specific skills or knowledge (UPOU, 2023). These varying definitions reflect each agency's distinct mandate: CHED emphasizes alignment within the higher education system; TESDA focuses on skills training and certification; and UPOU, as an open university, promotes flexible, modular, and digital learning pathways. As Galindo et al. (2024) observed, "the definition of micro-credentials can vary, depending on who uses the term and in what context" (p. 5). However, the absence of a common definition may lead to confusion among learners, providers, and employers, potentially undermining the credibility and recognition of micro-credentials across sectors (Oliver et al., 2021; Oliver, 2022).

The intended audience of the policies on micro-credentials varies based on the distinct roles of the issuing agencies. As a regulatory body, CHED targets Higher Education Institutions (HEIs), industries, and micro-credential providers. TESDA, serving both as regulator and provider, focuses primarily on TVET providers, workers, and learners.

Meanwhile, UPOU, as a provider, designs its micro-credential offerings mainly for faculty, students and other learners. In terms of inclusivity, CHED and UPOU's approaches are primarily academic-oriented, whereas TESDA's focus is more industry- and workforce-oriented. This reflects a broader divide between the higher education and technical-vocational sectors, with potential implications for equity of access. For individuals outside the formal academic system, TESDA's offerings may be more accessible and responsive to immediate skills needs. In contrast, CHED and UPOU's initiatives may still primarily benefit those already engaged in higher education. As noted

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by Ashizawa et al. (2024), micro-credentials are generally designed for non-traditional learners rather than full-time students pursuing conventional diplomas or degrees. This underscores the importance of tailoring micro-credential policies to serve diverse learner profiles and support lifelong learning pathways across sectors.

Despite differences in institutional mandates, all three agencies promote diverse delivery modes, including online, blended, and face-to-face learning, a trend supported by Abramovich (2016), OECD (2021), and McGreal and Olcott (2022). UPOU, in particular, emphasizes on-demand and cohort-based formats aligned with its Open and Distance e-Learning (ODeL) framework, fostering flexible and learner-centered delivery. The value of on-demand micro-credentials is also highlighted by Hunt et al. (2020), while a similar cohort-based micro-credential approach has been adopted by the Rwandan government to enhance job performance and workforce development (APEC, 2024).

In terms of development and industry involvement, the policy provisions governing the creation of micro-credentials across Philippine institutions reflect each agency's core mandate, operational structure, and degree of industry integration. CHED, in particular, advocates for a collaborative development framework involving HEIs and industry partners. This approach is consistent with CHED's regulatory function and national higher education priorities. As supported by Tecilazić et al. (2023), there is a recognized "need for greater collaboration between education providers and employers" (p. 27), reinforcing the value of joint curriculum development to ensure both academic integrity and responsiveness to labor market demands. However, the process may be slower due to formal approval requirements and the complexity of multi-stakeholder coordination.

TESDA, by contrast, adopts a more agile model based on its established Training Regulations (TRs). These regulations are already aligned with industry standards, enabling faster response to labor market demands. TESDA's micro-credentials are designed to certify specific technical competencies, offering a clear and direct pathway for skills recognition and employment. This approach aligns with findings by Wheelahan & Moodie (2024), who affirm that industry-relevant credentials are commonly viewed as especially valuable by employers. In this context, industry engagement is not merely supplementary but foundational to TESDA's framework, with its Training Regulations developed through long-standing partnerships with sectoral bodies and employer representatives.

Meanwhile, UPOU leverages its institutional autonomy and expertise in ODeL to independently design and implement micro-credentials. This allows for rapid, flexible, and innovative course development, often focused on capacitating other institutions related to ODeL and other emerging fields. Although UPOU encourages partnerships with professional or industry associations, its development process remains largely institution-driven, and the extent of employer engagement is less formalized compared to TESDA.

These differences in development models and levels of industry involvement underscore the broader challenge of ensuring coherence, labor market relevance, and interoperability across micro-credential offerings in the Philippines. The absence of a unified framework hinders mutual recognition among institutions and may limit the portability of credentials for both learners and employers. To address this, the model proposed by Pawilen et al. (2022), which includes five phases: needs analysis, curriculum development, implementation, evaluation, and adjustment and enhancement, offers a structured, quality-assured approach that can guide institutions toward more consistent practices. Complementing this, Gamage and Dehideniya (2025) emphasize the effectiveness of project-based learning in enhancing practical, job-ready skills, reinforcing the importance of aligning micro-credential pedagogy with real-world demands.

Assessment policies across CHED, TESDA, and UPOU reflect their respective institutional mandates, with each agency adopting distinct approaches to evaluating learning outcomes within micro-credential offerings. While there is consensus on the importance of structured assessments, the nature and implementation of these assessments vary significantly.

CHED advocates for performance-based assessment that is verifiable and academically rigorous, consistent with its mandate to uphold quality standards across HEIs. Assessments are expected to

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measure demonstrable competencies, aligning with curriculum outcomes and ensuring academic integrity. TESDA, in line with its competency-based training model, anchors its assessment processes in industry-defined standards. These assessments are institutional in nature but often involve mechanisms such as the Recognition of Prior Learning (RPL), which allows individuals to gain credit for existing skills and experience. This approach enables more inclusive recognition of workforce competencies and supports labor market mobility. UPOU, as a leader in ODeL, employs assessment strategies grounded in principles of validity, reliability, inclusivity, and academic integrity. Its implementation modalities are flexible, offered as scheduled or on-demand assessments, to cater to diverse learner contexts. These practices reflect UPOU's commitment to accessibility and learner-centered design in digital education.

To strengthen these diverse practices, Abramovich and Reed's (2024) assessment framework offers a valuable reference. The framework begins with identifying stakeholders and value types, followed by setting goals and benchmarks, designing appropriate measurement instruments, and addressing common assessment challenges through iterative evaluation. This structured approach can support all three agencies in enhancing the coherence, quality, and stakeholder alignment of their assessment systems for micro-credentials.

In terms of certification, all three agencies favor the issuance of Digital Badges (DBs) or certificates as evidence of achievement. These digital credentials serve as portable and verifiable indicators of skills or knowledge acquired, and can be shared across platforms such as LinkedIn, Open Badges, and digital portfolios. DBs, in particular, have gained traction for their visual representation of skills and capacity to enhance learner motivation (Askeroth & Newby, 2020; Flynn et al., 2023; Dyjur & Lindstrom, 2017). However, their value largely depends on how well they are understood and accepted by employers and other education providers.

Despite their growing use, current Philippine policies do not yet provide clear or unified guidelines on the interoperability, security, or national standardization of digital credentials. This lack of coherence may result in inconsistent practices across institutions and weaken the recognition of micro-credentials across sectors.

Quality assurance mechanisms are another point of divergence. CHED encourages a combination of internal quality assurance, such as curriculum reviews and self-assessment, and external mechanisms, including accreditation and compliance with national standards, to ensure the integrity of micro-credential programs. HEIs need to secure approval and authority to offer ODeL programs before implementing any micro-credential initiatives. TESDA, by contrast, anchors its quality assurance with existing Training Regulations (TRs), competency standards, and other frameworks, ensuring consistency with labor market requirements. Micro-credential providers need to undergo formal accreditation to receive a Certificate of TVET Program Registration (CTPR) or a Certificate of Recognition (COR). Meanwhile, UPOU employs internal quality assurance systems shaped by its extensive experience in ODeL and also endorses accreditation by relevant external organizations to enhance the credibility of its micro-credential offerings.

In general, the most effective and credible micro-credentials are those that are competency-based, research-informed, learner-centered, available on demand, and easily shareable, while also clearly recognizing learner achievements (Galindo et al., 2024). Similarly, Nguyen et al. (2024, p. 955) noted that "relevant, engaging micro-credential content; hybrid learning mode; convenient timing; provider reputation and provider strategies to identify target learners; self-directed, proactive micro-credential learners; and workplace support were key enablers of micro-credential effectiveness." In response to the growing need for coherence in quality assurance, Pawilen et al. (2024) have proposed a framework for HEIs, encompassing key elements such as standards, design, achievements, and learners' data.

Recognition of micro-credentials is another area where institutional policies diverge. Central to these efforts is the recognition that micro-credentials serve to formally acknowledge and validate skills and competencies, thereby enhancing employability and enabling educational progression (McGreal et al., 2022). In line with this, CHED has indicated plans to publish annual lists of

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recognized micro-credentials and accredited providers. TESDA is currently developing a digital badge issuance system to support skill validation. Meanwhile, UPOU advocates for mutual recognition and external accreditation mechanisms to ensure broader acceptance across institutions and sectors.

Stackability, or the ability to combine micro-credentials into full qualifications (Lang, 2023; Orman et al., 2023), is a critical feature, as learners are more likely to engage with micro-credentials when they carry academic credit (Stein, 2025), and accumulating short-term, targeted credentials has been shown to improve employment outcomes (OECD, 2021). Recognizing these, CHED proposes embedding stackable micro-credentials within degree programs, 30 units for undergraduate and 9 units for graduate programs. TESDA promotes modularity through the bundling and unbundling of short courses and certifications aligned with its competency-based framework. UPOU allows micro-credentials to contribute up to 0.5 units each, with a maximum of 50% of an undergraduate program or nine units in graduate studies.

These policies align in principle with international standards that associate micro-credentials with clearly defined credit values. For instance, the European Credit Transfer and Accumulation System (ECTS) assigns a minimum of 5 credits to a micro-credential (MicroHE, 2019), equivalent to approximately 125–150 hours of learning. Likewise, the New Zealand Qualifications Authority defines micro-credentials as ranging from five to 40 credits (Brown et al., 2021). While CHED, TESDA, and UPOU do not explicitly adopt these systems, their practices suggest a move toward establishing comparable credit equivalencies that support integration into formal qualifications and clearer expectations around learner workload. As McGreal and Olcott (2022) note, "the amount of academic credit that might be given to stacked non-credit activities will be at the discretion of the institution awarding credit" (p. 8), highlighting the autonomy institutions retain in assigning credit to micro-credentials.

Despite these individual efforts, there remains no centralized framework or digital infrastructure to support cross-institutional recognition and articulation, resulting in barriers to learner mobility, the stackability of credentials, and the seamless integration of micro-credentials into formal qualifications.

Meanwhile, the PQF has eight levels defined by learning outcomes in knowledge, skills, and values, application, and independence, with sub-frameworks aligned to various education and training subsystems (PQF-NCC, 2023). All three institutions show efforts to align micro-credentials with the PQF, paralleling Tecilazić et al. (2023) view that integrating micro-credentials into the National Qualifications Framework (NQF) would offer advantages to both individuals and employers. CHED aligns with levels five to eight, equivalent to Baccalaureate, Post-Baccalaureate, Doctoral and Post-Doctoral degrees. TESDA maps micro-credentials to PQF levels one to four via National Certificates (NC) I to IV. UPOU reports levels three to seven, which correspond to NC III to Post-Baccalaureate. This alignment enhances the potential for formal recognition but still requires clearer processes for equivalency and progression within formal education or employment systems. This contrasts with international approaches such as New Zealand's inclusion of micro-credentials across all levels (1–10) in its re-launch of the New Zealand Qualifications and Credentials Framework (NZQCF), and Australia's deliberate exclusion of them from national frameworks to preserve flexibility and differentiation from formal qualifications (Ashizawa et al., 2024; OECD, 2023b).

The identified key themes namely, Micro-credentials Definition, Target Groups and Inclusivity, Delivery Mode, Development and Industry Involvement, Assessment and Certification, Quality Assurance, Stackability and Recognition, and Integration with the PQF, reflect notable variations across the policies of the three government agencies supporting the development and implementation of micro-credentials in education and workforce training in the Philippines. These variations stem from the distinct mandates and operational scopes of each agency: CHED focuses on higher education institutions, TESDA on technical-vocational education and training, and UPOU as an academic provider with a strong emphasis on open and distance learning.

 doi:10.20944/preprints202510.0594.v1

While the differences are understandable given their institutional contexts, the absence of a unified framework or shared standards across agencies presents challenges in achieving a coherent national micro-credentialing ecosystem. Divergent definitions, inconsistent recognition mechanisms, and varying approaches to quality assurance risk creating confusion among learners, providers, and employers. This fragmentation may hinder learner mobility, limit stackability, and reduce the perceived value of micro-credentials in both local and international settings.

To address these policy discrepancies and issues, a closer examination of the existing gaps and challenges is necessary. Table 2 outlines the key policy gaps identified across the three agencies, highlights the associated challenges, and proposes strategic recommendations to support the development of a more coherent and integrated micro-credentialing ecosystem in the Philippines.

First, the fragmentation of policies and frameworks across CHED, TESDA, and UPOU highlights a lack of unified vision and coordination in the Philippine micro-credentialing landscape. Each institution operates within its own regulatory and operational domain, resulting in inconsistent definitions, development processes, and quality standards. This divergence hampers interoperability and undermines efforts to build a coherent national ecosystem for micro-credentials. Pirkkalainen et al. (2023) underscore that such fragmentation is a common global challenge and stress the importance of strong national and international strategies to address both policy and technological barriers in micro-credential implementation. In the Philippine context, this reinforces the urgent need for a unified National Micro-Credentials Framework that aligns with the Philippine Qualifications Framework (PQF) and promotes cross-agency collaboration and policy harmonization. International examples offer valuable models. In Scotland, the Good Practice Guide for Micro-credentials and Small Qualifications is a policy document that sets out shared principles agreed upon by stakeholders through the Scottish Tertiary Education Network for Micro-credentials (Quality Assurance Agency [QAA], 2023). In Ontario, Canada, 14 colleges and universities co-developed a harmonized micro-credential framework. (Gooch, 2020). Likewise, countries like Australia, Malaysia, and New Zealand have also established national frameworks to ensure coherence, quality, and recognition (Asia-Pacific Economic Cooperation [APEC], 2024).

Table 2. Policy Gaps, Challenges, and Recommendations for Micro-Credentials in the Philippines.

Policy Gap/Challenge	**Description**	**Recommended Actions**
1. Fragmentation of Policies and Frameworks	CHED, TESDA, and UPOU have separate policies and systems, leading to inconsistent definitions, standards, and recognition of micro-credentials.	Develop a unified National Micro-Credentials Framework aligned with the PQF; foster cross-agency coordination and interoperability.
2. Development Disparities	The development of micro-credentials varies widely across agencies. CHED emphasizes HEI-industry collaboration, TESDA follows standardized TRs, and UPOU exercises institutional autonomy. This lack of alignment can lead to duplication, gaps in coverage, and inconsistent quality.	Create shared development guidelines adaptable across agencies; establish cross-agency development panels to ensure relevance, coherence, and efficient resource use.

 doi:10.20944/preprints202510.0594.v1

3. Quality Assurance Inconsistencies	Varying QA mechanisms (e.g., CHED internal and external, TESDA via TRs, UPOU internal); lack of external accreditation and common QA benchmarks.	Establish a national QA mechanism for micro-credentials involving HEIs, industry, and accrediting bodies.
4. Limited Recognition and Portability	Micro-credentials are often recognized only within issuing institutions; no mutual recognition across sectors or countries.	Promote Mutual Recognition Agreements (MRAs) among HEIs and industry partners; adopt digital verification systems for portability.
5. Access and Inclusivity Gaps	Academic-heavy focus (CHED, UPOU) may exclude non-traditional learners; TESDA's reach is limited for some underserved sectors.	Provide scholarships/subsidies for disadvantaged groups; expand community-based and mobile learning delivery; improve digital access.
6. Unclear Stackability and Integration Paths	Stackability options differ per agency; unclear how micro-credentials lead to full qualifications or degrees.	Define standard stackable pathways for undergraduate and graduate programs; integrate micro-credentials within formal education ladders.

Second, disparities in the development of micro-credentials present a significant challenge to policy coherence. CHED promotes their integration into formal degree pathways, TESDA adheres to structured TRs, while UPOU independently innovates based on its open and distance learning mandate. These divergent approaches result in inconsistencies in structure, duration, assessment, and learning outcomes, making cross-system comparability difficult and leading to duplicated efforts, inefficiencies, and varied learner experiences.

Internationally, several initiatives offer useful models for addressing these issues. Centralized micro-credential platforms such as MicroCred Seeker in Australia, hoch & weit in Germany, MicroCreds in Ireland, and Credential Finder in the United States improve transparency, facilitate comparability, and streamline access for both learners and employers (OECD, 2023b). At the institutional level, tools like the University of Maryland, Baltimore County's (UMBC) Microcredential Evaluation Rubric demonstrate how a structured, criteria-based framework can support consistency in design and review (Sulivan, 2025). Drawing on these examples, the government should mandate the development of national micro-credential design guidelines and establish cross-agency development panels. This will ensure alignment with both academic and labor market goals, improve system-wide consistency, and enhance the overall credibility and impact of micro-credentialing in the country.

Third, inconsistencies in quality assurance present a significant challenge. CHED applies both internal and external mechanisms, TESDA relies on established Training Regulations, and UPOU depends primarily on internal processes. However, the absence of a shared quality assurance framework results in variability in the perceived value and trustworthiness of micro-credentials across institutions. To address this, a national quality assurance mechanism, developed collaboratively with higher education institutions, industry stakeholders, and accrediting bodies, is essential to ensure that micro-credentials are reliable, transferable, and globally competitive. Key dimensions such as stackability, recognition, and portability must be prioritized to uphold quality standards (Greere et al., 2023). In this context, the European Training Foundation (ETF) (2022) has

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advocated for a risk-based approach to quality assurance, one that adjusts oversight mechanisms according to the scale and potential impact of micro-credentials, acknowledging their distinct nature compared to traditional degree programs. Meanwhile, in countries like Ireland and New Zealand, program-level quality assurance applies only to private independent providers, with universities remaining responsible for assuring the quality of their own micro-credential offerings (OECD, 2023b).

Fourth, the limited recognition and portability of micro-credentials significantly constrain their overall utility. At present, most micro-credentials remain institution-bound, with limited acceptance across sectors or international contexts. For instance, a TESDA-issued certificate may not carry the same weight or recognition as a CHED-endorsed course or a UPOU digital badge, depending on the receiving employer or academic institution. The absence of Mutual Recognition Agreements (MRAs) and interoperable digital credentialing systems further hampers learner mobility and employability, as individuals may encounter difficulties in having their micro-credentials acknowledged for credit transfer, further study, or job applications. This challenge is not unique to the Philippines, as the recognition and standing of micro-credentials differ significantly across countries, reflecting variations in policy frameworks, institutional trust, and labor market acceptance (Gamage et al., 2025).

To enhance the value and effectiveness of micro-credentials, it is imperative that they incorporate recognition mechanisms that facilitate seamless transitions between education and employment pathways. In this regard, the establishment of a national framework for the recognition of micro-credentials is critical to promote consistency, ensure quality assurance, and strengthen the credibility of credentials across providers and sectors (Selvaratnam & Sankey, 2021).

Fifth, access and inclusivity gaps remain a concern. The academic focus of CHED and UPOU may not adequately serve non-traditional learners, while TESDA's reach, though industry-aligned, often excludes marginalized or underserved communities. Policies must promote equity in access by expanding community-based delivery, supporting mobile learning solutions, and providing targeted subsidies or scholarships for disadvantaged learners. International examples of such equity-driven measures include student loans in Canada (Government of Ontario, 2020), university-funded scholarships in University of Western Australia (Brown et al., 2023), and "durable funding mechanism" in Austria, Finland, and France (OECD, 2023b, p. 19).

Finally, there is an evident lack of clarity around stackability and integration pathways. Without clear policies and academic structures to allow micro-credentials to accumulate toward formal qualifications, learners are left uncertain about long-term educational and professional trajectories. Establishing standardized stackable pathways across undergraduate and graduate programs will bridge this gap and incentivize continued learning. As a starting point, this could involve developing a coordinated system for standardizing micro-credential metadata or designating a central agency to provide advisory evaluations on how various micro-credentials equate to academic credit (Usher et al., 2023).

In summary, the Philippine micro-credentialing landscape faces critical challenges stemming from policy fragmentation, inconsistent development standards, limited quality assurance, and inadequate recognition and portability. The lack of a unified national framework among CHED, TESDA, and UPOU may result in inefficiencies, varied learner experiences, and barriers to academic and workforce mobility. While international models, from centralized platforms to harmonized frameworks, offer valuable insights, the Philippines must urgently establish a coordinated, cross-agency strategy that ensures quality, promotes stackability, and supports learner transitions across sectors. A national micro-credentials framework aligned with the PQF, supported by clear guidelines for design, quality assurance, recognition, and equity in access, is essential for building a coherent, inclusive, and future-ready credentialing ecosystem.

Conclusion

This study examined how current government policies and initiatives in the Philippines support the development and implementation of micro-credentials in education and workforce training, and

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identified key policy gaps and challenges in ensuring their quality, recognition, and equitable access. The analysis reveals that while CHED, TESDA, and UPOU have each developed policy instruments aligned with their respective mandates, their varied definitions, target audiences, delivery modalities, and quality assurance mechanisms may lead to a fragmented micro-credentialing landscape. These differences, while reflective of institutional roles and priorities, may hinder interoperability, consistency, and national recognition.

The absence of a unified national framework may result in significant disparities in how micro-credentials are developed, assessed, and integrated into formal qualifications. Challenges may persist around stackability, industry relevance, digital credentialing standards, and learner mobility across sectors. Although each institution has taken steps to align with the PQF, there remains a lack of cohesive articulation processes and mechanisms for cross-institutional recognition. Moreover, policies have yet to sufficiently address equity concerns for non-traditional and underserved learners, who stand to benefit most from modular, flexible learning options.

To address these gaps, a national micro-credentials strategy is urgently needed, one that harmonizes definitions, aligns standards, and ensures portability across education and training systems. Drawing from international models and local innovations, the government should establish a cross-agency coordinating body tasked with developing a comprehensive framework aligned with the PQF. This framework should include shared quality assurance protocols, credit transfer mechanisms, and robust recognition policies that enable micro-credentials to serve as meaningful, stackable components of lifelong learning and workforce development.

As a final point, micro-credentials hold significant promise as tools for promoting flexible, accessible, and lifelong learning in the Philippines. However, realizing their full potential requires more than the continued efforts of CHED, TESDA, UPOU and other relevant agencies. It demands the development of a coherent, inclusive, and future-ready micro-credentialing ecosystem. This will require inter-agency coordination, cross-sectoral collaboration, and a strong policy commitment to inclusive and quality-assured lifelong learning, the very goal at the heart of this study's inquiry.

Ethics Statement: Ethics approval was not sought, as the study did not engage human or animal subjects.

Disclosure of AI Use: OpenAI's ChatGPT (version August 2025) was used to refine the language and grammar of this paper, with all revisions carefully reviewed and confirmed by the author.

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