

A Multi-Stakeholder Needs Assessment for the Curriculum Development of a Graduate Diploma Program in Teaching Profession

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Abstract

The periodic revision of teacher education curricula is essential for ensuring alignment with contemporary educational standards and societal needs. This study aimed to conduct a comprehensive needs assessment to guide the development of the Graduate Diploma Program in Teaching Profession. The research employed a needs assessment design, gathering data from 579 participants across five key stakeholder groups: administrators, instructors, students, graduates, and employers. Data were collected via custom-developed questionnaires and structured interviews, with analysis conducted using descriptive statistics and the Modified Priority Needs Index ($PNI_{modified}$) to identify and rank the gaps between the current and desired states of the program across four domains: Context, Input, Process, and Product. The findings revealed a significant perceptual gap between stakeholder groups. Instructors reported the highest overall need for development ($PNI_{modified} = 0.11$), primarily concentrated in the Input domain (resources and facilities). In contrast, employers uniquely prioritized the Character of graduates ($PNI_{modified} = 0.08$), while students expressed the highest level of satisfaction with the current program ($PNI_{modified} = 0.02$). The study concludes that a holistic strategy is essential for curriculum enhancement. Key recommendations include prioritizing investment in educational resources, realigning the curriculum to foster holistic attributes such as character, and establishing a continuous development cycle informed by ongoing stakeholder feedback.

Keywords: needs assessment, curriculum development, CIPP model, multi-stakeholder

1. Introduction

The teaching profession plays an essential role in preparing and developing educators who, in turn, shape the knowledge, skills, and overall growth of learners, the driving force of national progress in the technology- and innovation-oriented landscape of the twenty-first century. Teacher quality is therefore a decisive determinant of educational quality nationwide. Today's teachers are expected to command a wide range of complex competencies, including the capacity to conduct research that supports learning improvement (Luangrangsee & Ratsameemonthon, 2023) and strong proficiency in learning assessment, a core competency with a direct influence on students' development (Inai et al., 2022).

These evolving expectations reinforce the need for teacher education programs to undergo ongoing review and refinement to ensure their graduates are truly prepared for professional practice. In response to this imperative, the university has continued to offer its Graduate Diploma Program in the Teaching Profession. Effective curriculum development will be most successful when learners and stakeholders function as genuine partners throughout the design process (Bovill, 2020). In accordance with the Ministry of Education's graduate curriculum requirements, all programs are to be systematically reviewed and updated on a five-year cycle. (Royal Thai Government Gazette, 2022). The Graduate Diploma Program in Teaching Profession, last revised in 2019, has now reached the end of this cycle and requires updating to reflect the Higher Education Commission's 2022 standards and the Teachers' Council of Thailand's professional standards issued in 2024.

In recent years, curriculum reform in higher education has increasingly embraced Outcome-Based Education (OBE), a paradigm that foregrounds the competencies learners are expected to demonstrate upon completing a program (Jaratsopasit et al., 2024). OBE has been widely adopted across the world as a structured strategy for improving the

quality of university education and ensuring that student learning outcomes correspond closely with the competencies demanded by contemporary labor markets.

Yet the practical implementation of OBE varies considerably, shaped by differences in national policy, institutional resources, and the norms and practices embedded within local organizational cultures (Keo et al., 2025). The effectiveness of OBE depends fundamentally on the clarity of its intended learning outcomes specifically the Expected Learning Outcomes (ELOs) that graduates should attain by the time they complete their studies (Luangrangsee & Ratsameemonthon, 2023). For this reason, curriculum designers must construct programs that align not only with institutional philosophy and mission but also with the expectations and needs of all relevant stakeholders. Under current national guidelines, graduates are expected to demonstrate learning outcomes in at least four domains: Knowledge, Skill, Ethics, and Character (Royal Thai Government Gazette, 2022). Notably, research has shown that employers and other external stakeholders tend to rank Character and Ethics as the most critical domains. (Tongkampanit et al., 2024).

In this context, undertaking a thorough needs assessment is a crucial starting point for any curriculum development initiative. Such an assessment serves as a structured approach to identifying clear curriculum and instructional objectives (English & Kaufman, 1975) and offers a systematic framework for making evidence-based decisions (Gupta et al., 2014). The development of any new curriculum must begin with such an assessment, as it allows developers to pinpoint the educational or professional gaps the curriculum is designed to address (Fahad Alroumi & Belcher, 2024). At its core, the process clarifies the gap between the existing situation and the desired future state (Owen, 2006; Wongwanich, 2015), thereby supporting the prioritization of needs and the design of targeted interventions (Witkin & Altschuld, 1995).

In addition, a well-executed needs assessment fosters collaboration among stakeholders and helps build support for subsequent implementation (Sleezer et al., 2014). Oliva (2001) emphasized that curriculum developers should examine needs from five principal sources: (1) the general needs of students, (2) societal needs, (3) the specific needs of the student population, (4) community needs, and (5) needs emerging from the subject matter itself. Through this process, educational needs can be defined and their relative priorities determined. A comprehensive assessment provides detailed, nuanced insights that capture the authentic expectations of students, employers, and relevant professional bodies. This evidence serves as a solid foundation for refining and strengthening the curriculum, so it produces highly qualified teachers who meet professional standards and are equipped to respond to the changing landscape of education. Research Objectives:

1. To survey and prioritize the necessary needs of the Graduate Diploma Program in Teaching Profession from the perspectives of administrators, instructors, students, graduates, and employers.
2. To analyze and compare the necessary needs across each domain of the curriculum: Context, Input, Process, and Product.
3. To propose practical recommendations for curriculum development based on the research findings.

2. Literature Review

The development of robust educational curricula, particularly within teacher education, requires a systematic, evidence-based process (Gupta, Sleezer, & Russ-Eft, 2014). Contemporary educational reform increasingly emphasizes curricula that respond authentically to the needs of students, key stakeholders, and a society undergoing rapid transformation (Tongkampanit et al., 2024). This shift has brought Outcome-Based Education (OBE) to the forefront as a guiding framework grounded in the competencies learners are expected to demonstrate upon graduation (Jaratsopasit et al., 2024; Luangrangsee & Ratsameemonthon, 2023). Central to OBE is the articulation of clear Expected Learning Outcomes (ELOs), which inform every stage of curriculum design, instructional planning, and assessment practice.

At the European level, the importance of clearly defined learning outcomes has been repeatedly affirmed in official policy documents. This sustained emphasis reflects the growing adoption of learning-outcomes-based principles as a foundation for transnational collaboration in education and training, particularly through the development and refinement of instruments such as the European Qualifications Framework (European Commission, 2011). Similar movements have taken shape across Asia and Africa, where OBE has become a key component of broader educational restructuring aimed at improving access, equity, and employability. However, the implementation of OBE in these regions often faces structural and contextual constraints, including limited resources, substantial variation in institutional capacity, and cultural resistance to shifts in instructional practice (Basabe & Galigao, 2024).

In line with the announcement of the Higher Education Standards Committee (2022), learning outcomes in the Thai context are organized into four principal domains: Knowledge, Skills, Ethics, and Character.

Research consistently shows that stakeholders, employers in particular, tend to place the greatest value on the domains of Ethics and Character, underscoring the expectation that graduates possess forms of holistic development that extend well beyond academic achievement (Tongkampanit et al., 2024). This pattern is evident across studies in both Europe and Asia, where employers commonly rate soft skills such as communication, teamwork, and ethical responsibility as equally important, if not more important, than technical or discipline-specific competencies. (Md Pazil & Che Razak, 2019; Santos Rego et al., 2022). For teacher education programs, these expectations carry a clear mandate: to develop not only competent practitioners but also educators who can serve as ethical, responsible, and inspiring role models for their future students.

To work toward these outcomes, a needs assessment becomes an essential starting point. In its simplest form, a need represents the measurable gap between the current condition (“what is”) and the desired condition (“what should be”) (English & Kaufman, 1975; Wongwanich, 2015). A needs assessment offers a structured approach to identifying these gaps, evaluating their significance, and determining which ones require immediate attention (Witkin & Altschuld, 1995). One of its strengths lies in its incorporation of multiple stakeholder viewpoints, acknowledging that the value of any curriculum is ultimately determined by how well it serves students, faculty, and the professional community (Grant, 2002). Tools such as the Modified Priority Needs Index (PNI_{modified}) support this process by offering a clear and organized method for measuring needs and establishing priorities, thereby generating a practical roadmap for meaningful curriculum enhancement.

Research consistently identifies significant gaps in several key competencies among teaching professionals. Studies indicate that many teachers require substantial development in measurement and evaluation, particularly in constructing and validating assessment tools (Inai et al., 2022; Chomjan et al., 2022). In addition, contemporary educators are expected to demonstrate a range of 21st-century skills, including the ability to conduct research to improve learning (Luangrangsee & Ratsameemonthon, 2023) and to incorporate innovative approaches such as STEAM education to nurture critical and creative thinking (Charoenchanakit & Boonyananta, 2023).

At the same time, the effectiveness of any curriculum depends heavily on the availability of essential resources. Needs assessment studies repeatedly point to foundational infrastructure such as dependable Wi-Fi, modernized facilities, and sufficient financial support as among the most urgent challenges faced by higher education institutions (Nuansri et al., 2021). Without these basic conditions in place, even the most well-designed curriculum will fall short of its intended impact.

3. Research Methodology

3.1 Research Design

This study employs a quantitative research design integrated with a needs assessment grounded in the CIPP Evaluation Model (Context, Input, Process, and Product). Data were collected from five key stakeholder groups: administrators, instructors, students, graduates, and employees to obtain a comprehensive understanding of the program’s current conditions and expectations. These data served as the basis for comparing the Current State with the Desired State across the four CIPP domains. The resulting gaps, or needs, were then analyzed and ranked using the Modified Priority Needs Index (PNI_{modified}). The prioritized needs ultimately provide the evidence base for developing practical guidelines to strengthen and improve the curriculum. The conceptual framework guiding this research is presented in Figure 1.

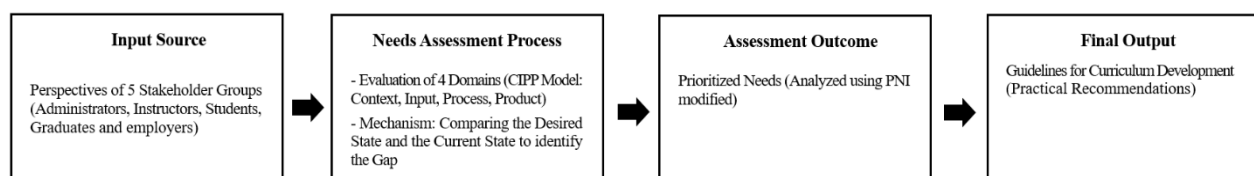


Figure 1. Conceptual Research Framework

3.2 Participants and Sampling

This study conducted a needs assessment of the Graduate Diploma Program in Teaching Profession. The target population consisted of 1,289 individuals representing five key stakeholder groups. From this population, a sample group of 579 participants was selected through multi-stage random sampling following the guidelines of Krejcie and Morgan (1970). The final samples comprised 8 administrators, 9 instructors, 90 students, 236 graduates, and 236 employers.

3.3 Research Instruments

For data collection, the study employed custom-designed questionnaires alongside a structured interview protocol. Five versions of the questionnaire were produced, one for each stakeholder group, and each followed a similar three-part format. Part 1 gathered demographic information through a checklist; Part 2 consisted of the core evaluative items; and Part 3 offered respondents an opportunity to provide additional comments or recommendations. The central component of the needs assessment instrument was a five-point rating scale used to gauge both the current and the desired levels of four key domains: Context, Input, Process, and Product. For graduates and employers, the questionnaires were extended to incorporate further dimensions, including Impact, Effectiveness, Sustainability, and Knowledge Transfer.

All instruments underwent a rigorous validation process. A panel of experts reviewed the content and retained only the items that met the minimum acceptable Index of Item Objective Congruence (IOC) of .50. Reliability was then assessed using Cronbach's alpha. Once formal approval had been secured, the instruments were distributed to the five stakeholder groups, and structured interviews were carried out to complete the data-gathering process.

3.4 Data Collection Procedures

Data collection for this study followed a systematic process, combining a needs assessment with an evaluation of the Graduate Diploma Program in Professional Teaching. Before fieldwork began, the researcher obtained formal approval by submitting an official request from the Faculty of Industrial Education, Rajamangala University of Technology Thanyaburi (RMUTT), to the Program Chairman to ensure access to and coordination with the designated participant groups.

A mixed-methods design was then employed to gather information as comprehensively as possible. Quantitative data were obtained through the Needs Assessment Questionnaire and the Program Evaluation Form, which were distributed to five key stakeholder groups: administrators, instructors, students, graduates, and employers. Qualitative data were also collected through structured interviews with administrators, instructors, and students to enable triangulation and add contextual detail that clarified and enriched the quantitative findings.

3.5 Data Analysis

For the data analysis, demographic variables were examined using descriptive statistics, and the qualitative interview data were analyzed through content analysis. To determine which needs required the most immediate attention, the study employed the Modified Priority Needs Index (PNI_{modified}). This index provides a systematic way to rank the urgency of each identified need by comparing the program's current condition with its desired state. The approach, adapted from Wongwanich (2015), is calculated using the following formula:

$$PNI_{\text{modified}} = I (I - D) \quad (1)$$

Where:

I (Importance): the mean score reflecting the Desired State, or the level of expectation and perceived necessity.

D (Degree of success): the mean score reflecting the Current State, or the level of actual performance or existing conditions.

The resulting PNI_{modified} value indicates the relative priority of each need: higher scores point to areas requiring more immediate attention or development. This approach ensures that resource allocation is evidence-based, focusing efforts on areas of high importance that also demonstrate the largest gaps between current and expected performance.

4. Results

Based on the data gathered for the needs assessment of the Graduate Diploma in Teacher Profession, the key findings

can be summarized and interpreted as follows:

4.1 The Study Collected Data from Five Groups: Administrators, Instructors, Students, Graduates, and Employers

The study gathered information from five stakeholder groups: administrators, instructors, students, graduates, and employers. The samples included respondents with diverse backgrounds in terms of gender, age, academic rank, and employment status. The primary aim was to assess the program's current condition or "what is" relative to its desired condition or "what should be", across four major domains: Context (philosophy, objectives, and program structure), Input (qualifications of personnel, student characteristics, and available resources), Process (curriculum implementation, instructional practices, and student development activities), and Product (learning outcomes and professional competencies). Based on these discrepancies between current and desired states, areas for improvement were identified and prioritized, as shown in Tables 1–5.

Table 1. Needs Assessment Results for the Context

Assessment aspects/issues	Administrator				Instructor				Student				Graduate			
	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No
Philosophy and Objectives of the Curriculum	4.25	4.83	0.14	1	4.29	4.82	0.12	2	4.42	4.5	0.02	1	4.48	4.66	0.04	1
Curriculum Structure	4.47	4.72	0.06	2	4.44	4.86	0.09	3	4.43	4.51	0.02	1	4.44	4.6	0.04	1
Course Content	4.48	4.65	0.04	3	4.22	4.87	0.15	1	4.47	4.57	0.02	1	4.61	4.69	0.02	2
Total	4.4	4.73	0.08	-	4.32	4.85	0.12	-	4.44	4.53	0.02	-	4.53	4.68	0.03	1

As shown in Table 1, the needs assessment results for the curriculum's Context domain reveal notable differences in perspectives across stakeholder groups. Among all groups, instructors reported the highest overall level of need, identifying "Course Content" as the area requiring the most urgent improvement ($PNI_{\text{modified}} = 0.15$). Administrators also expressed substantial needs, placing their greatest emphasis on strengthening the "Philosophy and Objectives of the Curriculum" ($PNI_{\text{modified}} = 0.14$). In contrast, students reported consistently low levels of need across all items ($PNI_{\text{modified}} = 0.02$), suggesting a marked perceptual gap between learners and the educator groups regarding the curriculum's contextual components.

Table 2. Needs Assessment Results for the Input

Assessment aspects/issues	Administrator				Instructor				Student				Graduate			
	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No
Administrators Qualifications	4.44	4.75	0.07	4	4.25	4.78	0.12	3	4.43	4.53	0.02	2	4.3	4.58	0.07	1
Instructors Qualifications	4.63	4.94	0.07	4	4.44	4.86	0.09	4	4.51	4.61	0.02	2	4.56	4.79	0.05	2
Learner Qualifications	4.38	4.88	0.11	2	4.03	4.85	0.02	5	4.5	4.62	0.03	1	4.63	4.7	0.02	3
Learning Resources	4.4	4.83	0.1	3	4	4.76	0.19	1	4.44	4.58	0.03	1	4.63	4.71	0.02	3
Facilities/Budget	4.35	4.75	0.25	1	4.18	4.87	0.17	2	4.46	4.57	0.02	2	4.63	4.71	0.02	3
Total	4.44	4.34	0.09	-	4.18	4.82	0.15	-	4.47	4.58	0.02	-	4.55	4.67	0.03	-

Table 2 shows that the needs assessment for the Input domain reveals a clear divergence between educator and learner perceptions. Administrators and instructors reported considerably higher levels of urgent need, whereas students and graduates expressed very low concern in this area. Instructors indicated the greatest overall need ($PNI_{\text{modified}} = 0.15$), highlighting substantial issues related to program resources. Their most pressing needs were associated with Learning Resources ($PNI_{\text{modified}} = 0.19$) and Facilities/Budget ($PNI_{\text{modified}} = 0.17$). Administrators also reported a relatively high level of need ($PNI_{\text{modified}} = 0.09$), identifying Facilities/Budget as their top priority

($PNI_{\text{modified}} = 0.25$), followed by Learner Qualifications ($PNI_{\text{modified}} = 0.11$). In contrast, students and graduates reported minimal needs ($PNI_{\text{modified}} = 0.02$ and 0.03 , respectively), indicating general satisfaction with the program's inputs and little perceived need for improvement compared to administrators and instructors.

Table 3. Needs Assessment Results for the Process

Assessment aspects/issues	Administrator				Instructor				Student				Graduate			
	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No
	(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D	
Curriculum Management	4.4	4.72	0.07	1	4.21	4.81	0.14	2	4.5	4.58	0.02	1	4.43	4.63	0.05	3
Learning Management	4.5	4.75	0.06	2	4.22	4.86	0.17	1	4.53	4.61	0.02	1	4.5	4.68	0.04	4
Professional Teaching Attributes	4.58	4.75	0.04	3	4.4	4.85	0.12	3	4.49	4.58	0.02	1	4.36	4.63	0.06	2
Measurement and Evaluation	4.68	4.85	0.04	3	4.36	4.76	0.12	3	4.52	4.6	0.02	1	4.48	4.79	0.07	1
Total	4.54	4.77	0.05	-	4.43	4.89	0.1	-	4.51	4.59	0.02	1	4.44	4.68	0.03	-

As shown in Table 3, the Process domain assessment reveals clear differences in how stakeholder groups perceive the program's developmental needs. Instructors reported the highest overall level of need ($PNI_{\text{modified}} = 0.10$), identifying Instructional Management as the most pressing area for improvement ($PNI_{\text{modified}} = 0.17$). Administrators and graduates reported similar overall needs ($PNI_{\text{modified}} = 0.05$), though their priorities differed. Administrators placed the greatest emphasis on enhancing Curriculum Management ($PNI_{\text{modified}} = 0.07$), whereas graduates identified Measurement and Evaluation as their most urgent concern ($PNI_{\text{modified}} = 0.07$), reflecting insights gained from their professional experience after completing the program. Consistent with other domains, students expressed very low concern across all items ($PNI_{\text{modified}} = 0.02$), suggesting general satisfaction with the current instructional processes.

Table 4. Needs Assessment Results for the Product

Assessment aspects/issues	Administrator				Instructor				Student				Graduate				Employers			
	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No	\bar{x}	\bar{x}	PNI	No
	(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D		(D)	(I)	modified (I-D)/D	
Knowledge	4.18	4.7	0.12	1	4.06	4.87	0.2	2	4.49	4.56	0.02	1	4.66	4.77	0.02	2	4.51	4.67	0.04	3
Skills	4.28	4.78	0.12	1	4.03	4.87	0.21	4	4.48	4.54	0.01	2	4.6	4.76	0.03	1	4.55	4.71	0.04	3
Ethics	4.38	4.81	0.1	2	4.03	4.89	0.21	4	4.55	4.61	0.01	2	4.63	4.76	0.03	1	4.4	4.62	0.05	2
Character	4.3	4.75	0.1	2	4.2	4.8	0.14	3	4.48	4.54	0.01	2	4.63	4.76	0.03	1	4.34	4.67	0.08	1
Teacher professional competence	4.29	4.55	0.06	3	4.48	4.79	0.07	4	4.48	4.55	0.02	1	4.53	4.68	0.03	1	4.49	4.68	0.04	3
Total	4.54	4.77	0.05	-	4.43	4.89	0.1	-	4.51	4.59	0.02	1	4.44	4.68	0.03	-	4.47	4.68	0.05	-

As illustrated in Table 4, the assessment of the Product domain shows clear variation in how different stakeholder groups view the program's outcomes. Administrators and instructors reported the greatest overall need for improvement ($PNI_{\text{modified}} = 0.10$ and 0.08 , respectively). Administrators identified Knowledge and Skills as the area's most in need of development ($PNI_{\text{modified}} = 0.12$ for both), while instructors pointed to Skills and Ethics as their most critical concerns ($PNI_{\text{modified}} = 0.21$ for both). Employers, though reporting a lower overall level of need compared to the educator groups ($PNI_{\text{modified}} = 0.05$), placed distinct emphasis on the Character of graduates ($PNI_{\text{modified}} = 0.08$), a priority that reflects the expectations of the labor market. In contrast, students and graduates expressed high satisfaction with the program's outcomes, reporting the lowest levels of need ($PNI_{\text{modified}} = 0.02$ and 0.03 , respectively). Their responses suggest that they view the program's learning outcomes as largely meeting their expectations.

Table 5. Needs Assessment Results

	Administrator			Instructor			Student			Graduate			Employers							
Assessment aspects/issues	\bar{x} (D)	\bar{x} (I)	PNI modified (I-D)/D	No (D)	\bar{x} (I)	PNI modified (I-D)/D	No (D)	\bar{x} (I)	PNI modified (I-D)/D	No (D)	\bar{x} (I)	PNI modified (I-D)/D	No (D)	\bar{x} (I)	PNI modified (I-D)/D	No				
Context Evaluation (C)	4.4	4.73	0.08	3	4.32	4.85	0.12	2	4.44	4.53	0.02	1	4.52	4.65	0.03	3				
Input Evaluation (I)	4.44	4.82	0.09	2	4.18	4.82	0.15	1	4.47	4.58	0.02	1	4.55	4.67	0.03	3				
Process Evaluation (P)	4.54	4.77	0.05	4	4.43	4.89	0.1	3	4.51	4.59	0.02	1	4.44	4.68	0.05	1				
Product Evaluation (P)	4.18	4.7	0.1	1	4.49	4.83	0.08	4	4.49	4.56	0.02	1	4.59	4.73	0.04	2	4.47	4.68	0.05	1
Total	4.39	4.76	0.08	-	4.36	4.85	0.11	-	4.48	4.57	0.02	-	4.53	4.68	0.04	-	4.47	4.68	0.05	-

Table 5 summarizes stakeholder perceptions of the program's overall needs. Instructors reported the most urgent needs across all domains ($PNI_{\text{modified}} = 0.11$), followed by administrators (0.08), employers (0.05), graduates (0.04), and students (0.02), with students perceiving the smallest gap between the current and desired states of the program. These results provide clear guidance for prioritizing improvements in the Graduate Diploma Program in Teacher Profession. For instructors, the group with the highest level of need, the most critical domain was Input ($PNI_{\text{modified}} = 0.15$), particularly concerning Learning Resources ($PNI_{\text{modified}} = 0.19$) and Facilities/Budget ($PNI_{\text{modified}} = 0.17$). This underscores the importance of investing in updated teaching materials, modern facilities, and increased financial support to strengthen the program.

For administrators, the top priority was Product ($PNI_{\text{modified}} = 0.10$), with a focus on ensuring graduates acquire the necessary Knowledge and Skills ($PNI_{\text{modified}} = 0.12$ for both). This suggests that administrators see a need for the program to place greater emphasis on equipping graduates with the competencies required for professional success. Their second most pressing area was Input ($PNI_{\text{modified}} = 0.09$), particularly Facilities/Budget ($PNI_{\text{modified}} = 0.25$), highlighting the critical role of infrastructure and resources in supporting program quality.

For employers, the focus was solely on Product outcomes ($PNI_{\text{modified}} = 0.05$), with the highest priority given to Graduate Character ($PNI_{\text{modified}} = 0.08$) and Ethics ($PNI_{\text{modified}} = 0.05$). This feedback highlights that employers value graduates not only for their academic knowledge but also for strong professional character and ethical conduct. Students reported minimal need for change across all domains ($PNI_{\text{modified}} = 0.02$), with consistently low scores for Context, Input, Process, and Product, suggesting high satisfaction with their current educational experience. Graduates' primary concern was within the Process domain ($PNI_{\text{modified}} = 0.05$), particularly regarding Measurement and Evaluation ($PNI_{\text{modified}} = 0.07$). This suggests that graduates see room for improvement in how their learning and overall program outcomes are assessed.

4.2 Key Findings from Stakeholder Interviews

Interviews with key stakeholders, including administrators, instructors, and students revealed four primary areas of consensus concerning the Graduate Diploma in Professional Teaching.

4.2.1 Curriculum Management: Collective Commitment to Quality and Standards

Interviews with administrators, faculty, and students indicate that effective curriculum management relies on a shared commitment among all stakeholders to uphold quality, maintain professional standards, and address the evolving needs of learners and the labor market. Both administrators and faculty emphasized that curriculum development should align with the announcement of the Committee on Higher Education Standards Subject: Details of Learning Outcomes in Accordance with the Higher Education Qualifications Standards, B.E. 2565 (Royal Thai Government Gazette, 2022) and university regulations, particularly by designing programs based on clearly defined Program Learning Outcomes (PLOs) through a Backward Curriculum Design approach. All three groups also highlighted the importance of inclusive participation from a wide range of stakeholders, drawing on student feedback, fostering collaborative curriculum development among faculty, and incorporating input from communities and the labor market. These mechanisms are considered essential for ensuring that the curriculum remains relevant and

responsive to broader social and professional demands.

In addition, all stakeholder groups agreed that effective curriculum management must support adaptability to changing conditions by ensuring that course content is regularly updated to stay current and aligned with emerging twenty-first-century learning trends. At the same time, it should support faculty development, ensuring instructors have the skills to teach according to evolving professional and academic standards.

4.2.2 Direction and Trends: Toward Flexibility and Technology Integration

Stakeholders emphasized that the future direction of teacher education programs must prioritize flexibility to keep pace with rapid social and technological change, with digital technology playing a central role in enhancing educational quality. Administrators and faculty emphasized the need for curricula that can adapt to evolving policies and global trends, particularly through hybrid learning models that combine online and in-person instruction to meet diverse learner needs. Faculty and students also agreed that teacher education programs should focus on preparing highly competent teachers capable of effectively integrating digital technology and artificial intelligence (AI) into their instructional practices, an essential skill set for navigating the demands of the digital era. Additionally, faculty stressed the importance of cross-disciplinary content integration and the use of active learning strategies, enabling students to engage in practical, hands-on experiences. They also emphasized fostering a culture of lifelong learning that connects academic preparation with ongoing professional development beyond graduation.

4.2.3 Impact of Standards Reform: Challenges in Structural Adaptation

Changes in teacher professional standards and national education standards have immediate and far-reaching effects on curricula, creating substantial challenges for timely content restructuring and personnel development. All stakeholder groups: administrators, faculty, and students which acknowledge that standards reform requires redesigning curricula to address emerging competencies such as digital literacy and ethical development. Faculty members point out that implementing new standards creates significant challenges for resource preparation and maintaining curriculum quality. Students, in turn, express concern that delays in updating curricula may hinder their ability to successfully complete professional licensing examinations. Across all stakeholder groups, there is consensus that standards reform necessitates intensive faculty development to ensure a thorough understanding of technological integration and emerging pedagogical approaches, including competency-based instruction. Additionally, revisions to assessment systems and instruments are required to reflect the new criteria. These measures are viewed as essential for maintaining quality assurance and producing graduates who fully meet professional standards.

4.2.4 Continuous: Continuous Development

The interview findings underscore a clear conclusion: the development of the Graduate Diploma in Professional Teaching program should follow a model of continuous reform, supported by mechanisms that ensure transparent communication, flexible resource management, and active collaboration among all stakeholders.

The overall findings emphasize the need for a curriculum governance system that is both transparent and responsive. The curriculum should focus on preparing highly competent and adaptable teachers, with technology integration and ongoing faculty development recognized as key drivers of program quality. In addition, clear and consistent communication about study plans and practicum arrangements is essential to minimize confusion and build confidence in the program's implementation.

5. Discussion

The assessment findings for developing the Graduate Diploma in Teaching Profession reveal four key themes, highlighting both the challenges and opportunities in professional teacher education.

5.1 Striking Perceptual Gap Among Stakeholders on Program Satisfaction and Development Needs

One of the most notable findings is the perceptual gap between instructors, administrators, and students. Students reported a relatively high level of satisfaction with the current state of the program ($PNI_{\text{modified}} = 0.02$), whereas instructors indicated the greatest need for development ($PNI_{\text{modified}} = 0.11$). This discrepancy may stem from the fact that students, as direct recipients of the program, focus primarily on their immediate classroom experiences, which they perceive as satisfactory. In contrast, instructors and administrators, who adopt a more systemic and long-term perspective, are acutely aware of resource limitations that could affect the quality of the curriculum over time. These findings align with previous research indicating that students in higher education often identify learning support as a key concern, highlighting resource-related issues as a widely recognized structural challenge within the higher

education sector (Nuansri et al., 2021).

5.2 Foundational Resources as Critical Prerequisites for Achieving Educational Quality

The Input domain—particularly learning resources and facilities/budget—emerged as the top priority for instructors and the second-highest concern for administrators. These findings underscore a fundamental principle: no matter how well-designed the curriculum or how effective the instructional process, achieving high educational quality is challenging without adequate, up-to-date foundational resources. Consequently, investment in educational infrastructure is a crucial factor that directly impacts the competence and quality of program graduates.

5.3 Employers Prioritize Graduates' Character and Ethics Over Pedagogical Competence

Data from employers provides a valuable perspective, emphasizing the Product domain and, in particular, prioritizing graduates' Character. This clearly indicates that the labor market expects teacher graduates to demonstrate not only pedagogical competence but also holistic personal qualities and strong professional ethics. These findings align with research showing that program stakeholders also prioritize Character and Ethics. Similar patterns across multiple disciplines suggest a broader trend in education toward fostering learners' holistic development (Tongkampanit et al., 2024).

5.4 Alumni Feedback: Addressing Gaps in Professional Preparation Through Stronger Measurement and Evaluation Skills

Graduates entering the professional workforce place the greatest emphasis on the Process domain, particularly on Measurement and Evaluation. This perspective often arises as alumni encounter the realities of teaching and realize that the assessment methods they experienced during the program may not have fully prepared them to evaluate student learning effectively. This finding aligns with research indicating systemic challenges in this area; contemporary studies in teacher education highlight that pre-service teachers demonstrate the greatest developmental needs in designing and validating assessment instruments (Inai et al., 2022). Consequently, alumni feedback indicates that the program needs to strengthen its focus on assessment and evaluation to better support student development and professional practice.

5.5 Trends in Outcome-Based Education (OBE)

The curriculum must place strong emphasis on developing graduates' Character to meet employer expectations and comply with the standards set by the Teachers' Council of Thailand. Employers consistently rank the Product domain as their top priority, reflecting a global trend that highlights the importance of transversal competencies, which the labor market considers as critical as academic knowledge. Within the Outcome-Based Education (OBE) framework, learning outcomes typically encompass four dimensions: Knowledge, Skills, Ethics, and Character (Royal Thai Government Gazette, 2022).

The emphasis on Character, which includes Ethics and Leadership, is consistently ranked as the most important skill for employment, often surpassing Knowledge in priority (Shalini & Alamelu, 2021). This growing focus on character aligns with international developments in teacher education. Consequently, the curriculum must go beyond academic content by intentionally designing learning activities that cultivate well-rounded attributes and professional ethics, enabling graduates to serve not only as competent instructors but also as role models.

Graduates' emphasis on Measurement and Evaluation underscores a critical challenge in the global implementation of Outcome-Based Education (OBE): the development of authentic assessment. Although European frameworks, such as the Bologna Process, emphasize competency-based assessment, many educators continue to rely heavily on traditional examinations (Struyven et al., 2005). Authentic assessment methods go beyond conventional testing to evaluate the complex competencies and professional attributes that teachers need in real-world classroom settings.

6. Limitation

First, because this study was conducted at a single institution, the identified needs of the Graduate Diploma Program in Teaching Profession may reflect the specific context of that setting. Therefore, caution is warranted when applying these findings to other institutions with different characteristics. Second, the study relied primarily on self-reported questionnaires, which capture participants' subjective views and experiences. Such instruments are susceptible to response biases, including the tendency to provide socially desirable answers. Finally, although the Modified Priority Needs Index (PNI_{modified}) is effective for identifying and ranking needs, it does not provide insight into the underlying causes of those needs.

7. Research Suggestion

7.1 Suggestions for Applying Research Results

Given the differing perspectives of administrators, teachers, and students regarding program needs, the institution should establish a regular forum that facilitates open dialogue among all stakeholders. Such a platform would allow students to understand resource limitations and the program's longterm plans, while helping administrators and faculty better grasp student satisfaction and current challenges. This ongoing communication would help bridge perceptual gaps and foster the shared understanding necessary for effective curriculum development and continuous program improvement.

The research indicates that employers place a high priority on graduates' Character. Consequently, the curriculum should go beyond academic content to intentionally design learning activities that cultivate soft skills and professional qualities. Examples include analyzing ethical dilemmas through teacher case studies, conducting collaborative projects to enhance teamwork, and inviting school administrators as guest speakers to discuss essential teacher attributes. By integrating such activities, the program can ensure that graduates are not only technically competent but also possess the character and ethical grounding valued by the labor market.

Feedback from graduates, which highlights the importance of Measurement and Evaluation, indicates a gap between the program's current assessment methods and the demands of professional practice. To address this, the curriculum should be comprehensively reviewed to improve assessment tools, with greater emphasis on performance-based evaluation. This could include Portfolio Assessment, Simulation-Based Assessment, and structured practicum evaluations, all guided by clear and detailed rubrics to ensure consistency and transparency.

7.2 Future Research Recommendations

This study highlights several avenues for further research. A logical next step would be a qualitative investigation to uncover the underlying reasons for these needs. While the current data effectively pinpoints what instructors and employers prioritize, it does not reveal the factors driving these expectations. Conducting in-depth interviews with instructors could illuminate the real challenges they face and the constraints within which they operate, while focus groups with employers would provide clearer insights into the qualities, they most value when hiring recent graduates.

With a clearer understanding of the underlying causes, the research could move into a development phase focused on creating practical solutions. This would involve designing targeted curricular innovations that address the identified challenges, such as new approaches for fostering teachers' professional character or assessment strategies tailored to graduate diploma students. These innovations would then need to be implemented and tested in real teaching environments to verify their effectiveness in achieving the desired educational outcomes.

The final component of this research plan should focus on longitudinal follow-up of graduates. Tracking graduates at one, three, and five years after program completion would reveal how workplace demands evolve as they gain practical experience in their fields. This longitudinal perspective is particularly valuable, as the priorities and challenges faced by new graduates may differ significantly from those encountered after several years in the profession. Data from these follow-ups would create a continuous feedback loop, providing evidence to guide ongoing curriculum revisions and program improvements.

8. Conclusion

The findings reveal a consistent gap between stakeholder expectations and the current reality of the program. Instructors reported the highest overall need for improvement ($PNI_{\text{modified}} = 0.11$), with the Input domain identified as their top priority ($PNI_{\text{modified}} = 0.15$), highlighting fundamental structural challenges within the program. In contrast, employers placed the greatest emphasis on graduates' Character ($PNI_{\text{modified}} = 0.08$), signaling that personal qualities are valued more highly than purely academic credentials.

To enhance the quality of the Graduate Diploma Program in Teaching Profession and ensure it meets the expectations of all stakeholders, a holistic and integrated strategy is essential. This strategy should begin with prioritizing investment in foundational resources, which serve as the cornerstone of educational quality. Particular attention should be given to addressing deficiencies in the Input domain, including developing modern learning resources and securing adequate funding, to tackle the most critical needs identified by instructors and administrators. At the same time, the program should redefine its graduate profile to emphasize essential holistic attributes, ensuring that graduates are not only academically competent but also professionally and ethically well-prepared.

This approach entails intensive development of Character alongside academic knowledge and pedagogical skills, ensuring that graduates are not only competent instructors but also exemplary role models who fully meet employer expectations. To sustain and maintain the relevance of these improvements, a continuous curriculum development cycle must be established. This cycle should be supported by a systematic evaluation and review process, drawing on data from all stakeholder groups: current students, alumni, faculty, and employers to inform regular program improvements. Such an ongoing process will ensure that the curriculum remains up-to-date and capable of producing high-quality teachers equipped to navigate the evolving challenges of the educational landscape.

Viewed from an international perspective, the study's conclusions gain further significance. The prioritization of the Input domain by instructors reflects a broader challenge faced by many rapidly expanding universities in Asia, where investment in infrastructure often struggles to keep pace with growth. Likewise, employers' emphasis on Character is not merely a local preference but a global trend, aligning with findings from Europe and other parts of Asia that underscore the critical importance of transversal competencies and personal attributes for graduate success.

Thus, the proposed holistic strategy not only addresses institutional needs but also aligns with global best practices in teacher education. Prioritizing investment in educational resources is reinforced as a critical enabling for the effective implementation of Outcome-Based Education (OBE) worldwide. Simultaneously, redefining the graduate profile to emphasize Character development ensures that the program produces educators who meet the consistent expectations of the international labor market. Ultimately, establishing a continuous development cycle transforms the curriculum from a static framework into a dynamic system that can adapt to the evolving challenges of globalized education and ensure graduates remain relevant, competent, and effective.

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