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The Efficacy of In-depth Evaluations in Enhancing Professional Certification Standards within Higher Education Institutions

Chiekem Enwefa
Ph.D., Department of Guidance and Counselling, Delta State University, Abraka, Nigeria

* Corresponding Author: **Chiekem Enwefa**

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Abstract
The efficacy of in-depth evaluations in improving the standards of professional certification programmes in higher education institutions in Delta State. The study find out how comprehensive assessments affect curriculum development, teaching practices, and student learning outcomes. Eight hundred and eighty (880) respondents (Lecturers and Administrators) were sampled by means of stratified random sampling techniques from four state-owned public universities in Delta State. A validated structure questionnaire was used for data collection. Mean and standard deviation was used to answer the research questions. The results of the study show that in-depth evaluations significantly contribute to aligning certification programmes with industry standards, thereby improving student preparedness for professional practice. Furthermore, the findings in the study emphasized that school-based certification programmes use in-depth evaluation feedback to improve curriculum and programmes in higher institutions in Delta State. That is the role of feedback from these evaluations in curriculum development and teaching innovation. The study also affirmed the challenges schools face when implementing comprehensive in-depth evaluations to meet professional certification standards in higher institutions in Delta State. Despite the positive outcomes, challenges such as resource constraints, faculty development needs, and resistance to change are identified as obstacles to the effective implementation of in-depth evaluations. The study emphasizes the importance of higher education institutions investing in faculty training and resources to fully realize the benefits of in-depth evaluations. This allows institutions to keep their certification programmes relevant, rigorous, and responsive to the changing demands of the professional world.

Keywords: In-depth evaluations, professional certification standards, higher education, curriculum development, student learning outcomes

Introduction

Professional certification standards play an important role in today's higher education, serving as a link between academic instruction and the demands of the global job market. These standards are more than just benchmarks for educational attainment; they are critical in ensuring that the skills and knowledge taught to students are both relevant and applicable in professional settings. Professional certification standards are important because they can improve employability, foster professional development, and ensure that higher education institutions remain responsive to the changing needs of industry and society (Scheuring & Thompson, 2024) [27].

Professional certifications from higher education institutions demonstrate the holder's competency and readiness to engage in professional practice. They play an important role in signalling to employers that graduates have both theoretical knowledge and the practical skills required for effective performance in their respective fields (Mahalingam, 2024) [19]. As such, these standards are integral to the value proposition of higher education. They provide a tangible measure of the quality of education and training provided.

The rapid pace of technological advancement, as well as changing workforce dynamics, highlight the importance of higher education institutions continuously evaluating and updating their certification standards. This ensures that they reflect current professional practices, technological competencies, and soft skills needed in a diverse and dynamic professional landscape (Dutta & Islam, 2017) [12]. Furthermore, rigorous professional certification standards promote a culture of lifelong learning and adaptability among graduates, preparing them to face the challenges of a constantly changing career landscape.

Nevertheless, professional certification standards are critical to maintaining the integrity and reputation of higher education institutions. They establish a framework for accountability by ensuring that educational programmes meet the high standards demanded from students, employers, and society as a whole (Byrne, 2020) [8]. In essence, these standards indicate not only an institution's commitment to excellence in education, but also its dedication to contributing to the socioeconomic development of communities and the broader society.

In-depth evaluations for professional certifications in higher education are comprehensive assessment methodologies that measure a wide range of competencies, including theoretical knowledge, practical skills, and the ability to apply learning in real-world contexts. These evaluations include case studies, project-based assignments, simulations, and peer-reviewed presentations, providing a holistic view of a candidate's proficiency and readiness for professional practice (Bond *et al*., 2017) [5]. Such evaluations could have a wide-ranging impact on certification quality. For starters, they improve the rigour and relevance of professional certification programmes by ensuring that graduates have the skills required for employers and the broader industry. In-depth evaluations, which closely align assessment methods with the specific skills and knowledge required in professional settings, allow for a more accurate reflection of a graduate's ability to perform effectively in their chosen field.

In-depth evaluations provide a comprehensive assessment of student learning that are increasingly recognized for their ability to bridge the gap between theoretical knowledge and practical skills. According to Davison (2016), these evaluations help to create a constructive alignment framework by ensuring that learning activities and assessments are directly related to the learning outcomes of professional certification programmes. This alignment is crucial in preparing students to effectively meet the demands of their future professions.The impact of in-depth evaluations on learning outcomes has been the subject of extensive research. According to Wang, (2012) [34] such evaluations, including performance-based assessments, portfolios, and reflective practices which significantly improve students' critical thinking, problem-solving skills, and practical competencies. These findings highlight the importance of moving beyond traditional examination methods and adopting more holistic assessment strategies that reflect real-world professional scenarios.

However, the use of comprehensive evaluations has been linked to increased student engagement and deeper learning. When students understand that their assessments will require the application of knowledge to solve complex, real-world problems, they are more likely to engage deeply with the material by fostering critical thinking and problem-solving skills that are invaluable in professional contexts (Miller & Krajcik, 2019) [20]. In-depth evaluations also contribute to the ongoing improvement of certification programmes. Feedback from these evaluations provides educators and programme administrators with actionable insights into areas of strength and opportunities for improvement by allowing for iterative refinement of curriculum and teaching methodologies to better meet industry standards and expectations (Ahmadi, 2021) [1].

Implementing in-depth evaluations requires a paradigm shift in instructional methods. Faculty are expected to create and facilitate learning experiences that are both intellectually challenging and relevant to professional practices (Sanitosa & Mahmudah, 2021) [26]. This shift frequently involves incorporating industry standards and professional scenarios into the curriculum, thereby increasing the practical relevance of certification programmes (Darling-Hammond & Snyder, 2015) [10]. The credibility and recognition of professional certifications are significantly enhanced by rigorous evaluation methods. Employers and industry bodies frequently regard certifications that include in-depth evaluations as more credible, because they provide a more robust assurance of a candidate's capabilities and readiness for professional challenges (Tran *et al*., 2023) [31].

In essence, in-depth evaluations are an important tool for improving the quality and value of professional certifications in higher education. By fostering a closer alignment between academic programmes and the demands of the professional world, these evaluations not only improve graduates' employability but also contribute to the ongoing evolution and relevance of higher education institutions in preparing future professionals (Brown *et al*., 2019) [6].

Theoretical Framework

The theoretical framework for the investigation into the efficacy of in-depth evaluations in improving professional certification standards within higher education institutions is based on a synthesis of educational assessment theory and competency-based education models. This framework provides a foundational lens for examining the impact of comprehensive evaluations on certification quality, offering insights into how such evaluations contribute to aligning educational outcomes with the competencies required in professional practice.

According to educational assessment theory, the methods used to assess student learning have a significant impact on the educational experience, influencing not only what students learn but also how they learn it (McCann, 2016) [38]. Assessment is more than just a measurement of learning; it is a driver of educational quality, with the potential to improve learning outcomes by aligning teaching strategies with desired learning objectives (Boud & Falchikov, 2006) [7]. In the context of professional certifications, this theory emphasizes the importance of designing assessments that accurately reflect the competencies and skills that are valued in professional settings by ensuring that certification programmes are relevant and rigorous.

Competency-based education (CBE) models build on this theoretical framework emphasized the importance of education being closely aligned with specific skills and competencies required in the workplace (Dávila Rubio, 2017) [11]. Competency-based education advocates for assessment methods that go beyond traditional exams, such as practical skill demonstrations, project-based learning, and real-world

problem-solving tasks. This approach is consistent with the premise that professional certification programmes should prepare students not only to know but to do, mirroring the complexities and challenges they will face in their professional lives (Sharp, 1995) [28]. Bringing these perspectives together, the theoretical framework for this study emphasizes the importance of in-depth evaluations that comprehensively assess both theoretical knowledge and practical skills-within professional certification standards. The purpose of such evaluations is to better prepare students for the demands of the professional world by ensuring that higher education institutions can effectively bridge the gap between academic learning and professional practice. (Wang, 2012) [34].

Literature Review

The conceptual understanding of professional certification standards in higher education includes a multifaceted framework that ensures certification programmes meet the rigorous demands of the professional landscape. Professional certification standards are the criteria and benchmarks that certification programmes must meet in order to be recognized for providing a level of education and training that adequately prepares students for professional practice (Standerfer, 2007) [29]. These standards serve as a quality assurance mechanism, informing employers, students, and the profession at large that individuals holding such certifications possess the knowledge, skills, and competencies required to perform effectively in their chosen fields (Wohlfart *et al*., 2021) [37].

Professional certification standards are built around competency-based education principles, which emphasize the importance of aligning educational outcomes with specific professional competencies. This alignment ensures that certification programmes' learning experiences and assessments are directly relevant to the tasks and responsibilities encountered in professional settings (Navarre Cleary, 2020) [21]. CBE approaches promote learner-centered education, with a focus on achieving predefined competencies through a variety of instructional methods and assessments, rather than traditional time-based educational models (Williams, 2019) [35]. Professional certification standards also emphasize the importance of continuous evaluation and adaptation to keep up with changes in professional knowledge, technology, and practices. Because many professions are ever-changing, certification standards must be reviewed and updated on a regular basis to reflect current industry needs and emerging trends. This ensures that certification programmes continue to be relevant and provide graduates with the skills and knowledge demanded by employers (Vinas *et al*., 2020) [33]. Nevertheless, professional certification standards help to foster a culture of lifelong learning among certified professionals. By requiring continuing education and professional development, these standards encourage individuals to constantly update their skills and knowledge, thereby maintaining the currency and relevance of their certification in an ever-changing professional landscape (Friedman, 2023) [13].

In the field of educational assessment, in-depth evaluations play a critical role in improving the quality and consistency of learning outcomes. These evaluations, which are comprehensive and versatile in nature, are intended to assess both knowledge acquisition and skill application in real-world contexts. In-depth evaluations are significant because they provide a comprehensive measure of a student's competencies, bridging the gap between theoretical understanding and practical proficiency (Hopfenbeck, 2018) [16]. In-depth evaluations use a variety of assessment methods, including performance-based tasks, portfolios, simulations, and peer assessments. These methods are critical for developing higher-order thinking skills such as analysis, synthesis, and evaluation by providing a more nuanced understanding of student learning (Chen, 2020) [9]. In-depth evaluations encourage active learning and self-assessment, which are essential components of lifelong learning and professional development (Phelps, 2018) [25].

In-depth evaluations serve a purpose beyond individual student assessment, informing curriculum development and instructional strategies. Using the detailed feedback generated by these evaluations, educators can identify areas of strength and weakness in their teaching, allowing for targeted interventions to improve learning outcomes (Guskey,2002) [15]. This feedback loop is critical for the continuous improvement of educational programmes by ensuring that they remain aligned with both academic and professional requirements (Davison, 2016). More so, in-depth evaluations improve the validity and reliability of assessment practices. Using a variety of assessment methods, educators can overcome the limitations of traditional exams, such as test anxiety and memorization without comprehension. This versatile approach ensures a more accurate and fair representation of a student's abilities, supporting equitable educational practices. (Stiggins, 2005) [30].

In the context of professional certification, the importance of in-depth evaluations grows even stronger. They are important indicator of a candidate's readiness to enter the professional world, ensuring employers and industry bodies of the individual's ability to perform competently in their field (Knight, 2006) [18]. In-depth evaluations not only enhance the educational experience but also contribute to the credibility and recognition of professional certifications, aligning educational outcomes with the demands of the workforce (Oliver, 2002) [17]. The criteria used in in-depth evaluations are critical to their effectiveness in assessing overall learning outcomes. These criteria are meticulously designed to cover a wide range of skills, knowledge, and competencies, ensuring that evaluations assess not only theoretical understanding but also practical proficiency and critical thinking abilities. These criteria are developed and applied in accordance with educational assessment principles that emphasize validity, reliability, fairness, and inclusivity (Patterson, 2005) [24].

The impact of in-depth evaluations on certification standards is important in higher education and professional development. These evaluations, known for their comprehensive and versatile approach in assessing student competencies, play an important role in improving the rigour and relevance of certification programmes. The shift towards in-depth evaluations reflects a larger movement to ensure that professional certifications align more closely with the demands of the workforce and the expectations of employers (Anderson and Krathwohl, 2016) [39].In-depth evaluations of certification standards have a significant impact on encouraging graduates to achieve higher levels of competency. Students are better prepared to face the complex challenges of their respective professions when detailed assessments that go beyond rote memorization that include critical thinking, problem solving, and practical application

(Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) [4]. This shift not only increases the value of the certification in the eyes of employers, but also enhances the professional readiness of graduates, contributing to higher employment rates and greater job satisfaction (Antera, 2021) [2].

In-depth evaluations also contribute to the ongoing improvement of certification standards. These evaluations provide detailed feedback on student performance, revealing areas where the curriculum may need to be updated or improved to better meet industry standards (Davison, 2016). This ongoing process of evaluation and revision ensures that certification programs remain relevant and responsive to the evolving needs of the professional landscape, thereby maintaining their truthfulness and credibility (Darling-Hammond & Snyder, 2015) [10].In as much, the use of in-depth evaluations encourages greater collaboration among higher education institutions and industry stakeholders. Involving professionals and employers in the development and assessment of certification standards allows institutions to ensure that their programmes accurately reflect the industry's current and future needs (Billett, 2020) [3]. This collaboration not only improves the quality of the certification programmes but also strengthens the relationship between academia and the professional sector, leading to increased opportunities for internships, job placements, and ongoing professional development (Westerheijden *et al*., 2014) [36].

However, transitioning to in-depth evaluations is not without difficulties. Resource constraints, the need for faculty training in new assessment methodologies, and the alignment of these evaluations with accreditation standards all pose significant challenges in higher education institutions (Billett, 2020) [3]. Despite these challenges, in-depth evaluations have the potential to provide significant benefits for programme development. Feedback from these assessments provides invaluable insights for continuous curriculum improvement by ensuring that certification programmes are current and aligned with evolving professional standards (Westerheijden *et al*., 2014) [36].

In-depth evaluations necessitate a rethinking of traditional teaching methods, prompting educators to take more interactive, student-centered approaches. According to Freeman *et al*. (2014) [14], active learning strategies that are integrated into in-depth evaluations improve student performance in science, engineering, and mathematics. These strategies necessitate educators rethinking their teaching methods, incorporating real-world problems, case studies, and simulations that reflect professional practice. This alignment with professional standards ensures that teaching methodologies are both academically meticuluos and practically relevant, thereby improving the quality of professional certification programmes.

In-depth evaluations have a profound impact on student engagement and learning outcomes. Nicol and Macfarlane-Dick (2006) [22] argue that effective assessment feedback is critical for student learning because it allows students to self-regulate their learning processes. In-depth evaluations, which provide comprehensive feedback on performance-based tasks, help students identify their strengths and areas for improvement. This feedback loop improves student engagement, motivates learning, and eventually leads to better learning outcomes, preparing students more effectively for professional certification and practice.

Implementing in-depth evaluations presents significant challenges for faculty, particularly the development of new competencies in assessment design and analysis.Olmstead *et al*., (2019) [23] emphasized the importance of faculty development in the successful implementation of innovative teaching and assessment practices. Institutions must invest in professional development programmes that provide faculty with the skills needed to design, implement, and analyze comprehensive evaluations. Despite these challenges, the shift towards comprehensive assessment methods offers opportunities for faculty to engage in reflective teaching practices, contributing to their professional growth and improving teaching quality.

The incorporation of in-depth evaluations into professional certification programmes has implications for the larger educational ecosystem, which includes accreditation bodies, industry partnerships, and ongoing programme improvement. According to Tynjälä, Välimaa, and Sarja (2003) [32], aligning educational programmes with professional requirements that requires close collaboration between higher education institutions and industry stakeholders. This collaboration ensures that certification standards remain current and relevant, which improves graduates' employability. Furthermore, accreditation bodies play a critical role in endorsing the quality and rigour of certification programmes. In-depth evaluations serve as a key criterion for accreditation. Empirical evidence demonstrates the effectiveness of in-depth evaluations in raising professional certification standards in higher education institutions. These evaluations, which comprehensively assess both theoretical knowledge and practical skills, have been linked to significant improvements in educational outcomes and alignment with industry standards.

A study by Boud and Associates (2010) found that in-depth evaluations, such as project-based assessments and reflective journals, significantly improve students' critical thinking and problem-solving abilities. The study discovered that students who were subjected to these types of evaluations were better able to apply theoretical knowledge to practical problems, which is a critical skill in many professional fields. Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) found that students in programmes using comprehensive assessment strategies improved their analytical and evaluative skills more than their counterparts in more traditionally assessed programmes.

In professional certification programmes, the development of practical skills is critical. Antera (2021) [2] investigated how performance-based assessments affect students' practical skills in health education programmes. The study discovered a significant relationship between in-depth evaluations and improved clinical skills among nursing students, indicating that such evaluations are effective in bridging the gap between classroom learning and real-world application.

Engagement and motivation are essential for student success. Nicol and Macfarlane-Dick (2006) [22] demonstrated that formative feedback, a common component of in-depth evaluations, is critical in increasing student engagement. Their research found that timely and detailed feedback helps students understand their learning process, increasing motivation and commitment to their studies. This is especially important in professional certification programmes, where the stakes of assessment are high and students are keenly focused on achieving professional competency.

A study carried out by Antera (2021) [2] found that in-depth

evaluations, such as case studies, simulations, and performance-based assessments, significantly improved students' critical thinking and problem-solving abilities. These are critical competencies for professional success, indicating that such evaluations can raise the standards and relevance of certification programmes.

A longitudinal study conducted by Santosa & Mahmudah (2021) [26] provides additional empirical support, tracking the career progression of graduates from programmes that implemented in-depth evaluations. The findings revealed that these graduates were more likely to find work in their fields of study and reported higher levels of job satisfaction than peers from programmes that used traditional assessment methods. This suggests that in-depth evaluations not only improve certification standards, but also better prepare students for employment.

Furthermore, Davison (2016) discovered that programmes that used in-depth evaluations had higher levels of student engagement and deeper learning. This alignment ensures that the certification standards are directly relevant to professional competencies, highlighting the importance of comprehensive evaluations. Darling-Hammond and Snyder (2015) [10] conducted a meta-analysis of findings from multiple studies and concluded that in-depth evaluations contribute to a more accurate and holistic understanding of student abilities. The analysis revealed that such evaluations encourage a broader range of teaching and learning strategies, which are critical for meeting diverse professional certification standards. Empirical evidence also suggests that in-depth evaluations promote a culture of continuous improvement in higher education. Billet (2014) emphasized that feedback from these evaluations allows educators to iteratively refine their teaching methods and curricular offerings by ensuring that they remain current with evolving industry demands and certification standards.

Statement of Problem

The current setting of higher education and professional certification is marked by rapid technological advancements, changing industry standards, and the increasing complexity of professional roles. This dynamic environment necessitates that higher education institutions not only provide foundational knowledge but also ensure that graduates have the practical skills and competencies needed for professional success. Central to this, challenge is the need to enhance professional certification standards to align more closely with the workforce's demands and employer expectations.

Despite the widely acknowledged importance of aligning educational outcomes with professional competencies, many certification programmes rely on traditional assessment methods that may not accurately measure the breadth and depth of skills required in the professional world. Such assessments frequently priorities rote memorization and theoretical knowledge over practical skills, critical thinking, and problem-solving abilities. This disparity raises questions about the efficacy of current evaluation practices in preparing students for the complexities of professional practice and their ability to meet the changing demands of the job market. The issue, therefore, is the need to investigate the efficacy of in-depth evaluation in enhancing professional certification standard within higher education institutions However, comprehensive assessment methods that include practical, performance-based, and reflective components in raising the standards of professional certification programmes within higher education institutions. There is a critical gap in understanding how these in-depth evaluations affect certification standards' alignment with industry needs, graduates' readiness for professional roles, and the overall quality of certification programmes.

Research Questions

1. Does in-depth evaluations impact learning outcomes for students in school-based professional certification programmes?
2. Does school-based professional certification programmes use in-depth evaluation feedback to improve curriculum and programmes?
3. What challenges do schools face when implementing comprehensive in-depth evaluations to meet professional certification standards?

Methodology

A descriptive survey research design was used. The study's population consists of lecturers and administrators from Delta State's higher education institutions. The study's sample size is 880 respondents (440 lecturers and 440 administrators from the four state-owned public universities in Delta State). Stratified random sampling was used to ensure representation across the various institutions (Delta State University, Abraka; Delta State University of Science and Technology, Ozoro; University of Delta, Agbor; and Dennis Osadebe University, Asaba).

Research Instrument

The researcher created a structured questionnaire with a four-point scale (Strongly Agree 4; Agree 3; Disagree 2; and Strongly Disagree 1) to assess the efficacy of in-depth evaluations in improving professional certification standards within Delta State higher education institutions, which was validated by two experts in Measurement and Evaluation in Faculty of Education, Delta State University, Abraka. Cronbach alpha reliability was used to test the instrument reliability, which results in coefficient index of 0.84 for students learning outcomes; 0.77 for use of in-depth evaluation feedback and 0.73 for challenges schools face in implementing in-depth evaluation.

Method of Data Collection

The instrument was administered to respondents at four state-owned public universities in Delta State (Delta State University, Abraka; Delta State University of Science and Technology, Ozoro; University of Delta, Agbor and Dennis Osadebe University, Asaba). However, 100 percent of the instrument copies were returned.

Method of Data Analysis

Mean and standard deviation were used to answer the research questions. The mean of 2.50 was used as the cutoff for agreement. That is, a mean of 2.50 or higher indicates agreement, whereas a mean less than 2.50 indicates disagreement.

Results

Research Question 1

Does in-depth evaluations impact learning outcomes for students in school-based professional certification programmes?

Table 1: Mean and standard deviation of in-depth evaluation of students' learning outcomes in school-based professional certification programme.

S/N	Students Learning Outcomes	Mean	SD	Decision
1	In-depth evaluations have helped students understand important concepts in their field of study.	2.90	0.85	Agree
2	Students can integrate knowledge from various sources because of the comprehensive nature of in-depth evaluations.	2.91	0.92	Agree
3	The use of in-depth evaluations has improved students' critical thinking and problem-solving abilities.	2.67	0.73	Agree
4	In-depth evaluations help students develop practical and technical skills that are relevant to their professional field.	3.20	0.67	Agree
5	Students are more engaged in courses that use in-depth evaluations compared to traditional assessment methods.	2.66	0.58	Agree
6	In-depth evaluations improve students' overall academic performance in certification programmes.	3.10	0.63	Agree
7	In-depth evaluations improve students' ability to apply theoretical knowledge in practical situations.	3.06	0.90	Agree
8	Students feel more confident in their professional capabilities after completing programmes with in-depth evaluations.	3.21	0.97	Agree
	Total Grand Mean	2.96	0.78	

N = 880

Table 1, indicates that the respondents agreed to items 1-8 with mean range of 2.66 - 3.21 and grand mean of 2.96, that in-depth evaluations impact learning outcomes for students in school-based professional certification programmes in higher education institutions in Delta State.

Research Question 2

Does school-based certification programmes use in-depth evaluation feedback to improve curriculum and programmes?

Table 2: Mean and Standard deviation of school-based certification programmes use of in-depth evaluation feedback to improve curriculum and programmes

S/N	Use of In-depth Evaluation Feedback	Mean	SD	Decision
9	The feedback from in-depth evaluations is systematically reviewed for curriculum development purposes in our certification programme.	3.13	0.85	Agree
10	In-depth evaluation feedback has a direct impact on whether new topics/courses are added to our curriculum.	2.99	0.84	Agree
11	Feedback from in-depth evaluations has resulted in significant changes in our teaching methods/strategies.	3.02	0.79	Agree
12	The school programme's curriculum is regularly updated based on the results of in-depth evaluations.	2.76	0.70	Agree
13	The curriculum development team has a structured process of incorporating evaluation feedback into programme planning.	3.08	0.86	Agree
14	The school programme has seen an increase in student learning outcomes as a direct result of implementing feedback from in-depth evaluations.	2.84	0.90	Agree
15	The school programme promotes continuous improvement by actively applying feedback from in-depth evaluations.	3.22	0.75	Agree
16	The school certification programme demonstrates resilience and adaptability by effectively responding to feedback from detailed evaluations.	3.27	0.95	Agree
17	Regular reviews of the effectiveness of school programmes include an analysis of how well feedback from in-depth evaluations is implemented.	3.18	0.93	Agree
	Total Grand Mean	3.05	0.84	

N = 880

The result in table 2, shows that the respondents agreed to items 9-17with mean range of 2.76-3.27 and grand mean of 3.05, that school-based certification programmes uses in-depth evaluation feedback to improve curriculum and programmes in higher education institutions in Delta State.

Research Question 3

What challenges do schools face when implementing comprehensive in-depth evaluations to meet professional certification standards?

Table 3: Mean and Standard deviation ofchallenges schools face when implementing comprehensive in-depth evaluations to meet professional certification standards.

S/N	Challenges Schools Face in Implementing In-depth Evaluation	Mean	SD	Decision
18	My institution faces significant logistical challenges in implementing in-depth evaluations.	3.06	0.96	Agree
19	My institution provides inadequate professional development opportunities for faculty members on how to design and conduct in-depth evaluations.	3.16	0.74	Agree
20	In my institution, faculty members are resistant to adopting new evaluation methods that differ from traditional assessment strategies.	2.89	0.85	Agree
21	In my institution, aligning in-depth evaluations with existing curriculum and certification standards is challenging because of rigid curriculum structures.	3.02	0.89	Agree
22	In my institution, integrating technology for conducting in-depth evaluations presents significant challenges in terms of accessibility and technical support.	3.12	0.79	Agree
	Total Grand Mean	3.05	0.85	

N = 880

Table 3, revealed that the respondents agreed to items 18 - 19 with mean range of 2.89 - 3.16 and grand mean of 3.05 as the challenges schools face when implementing comprehensive in-depth evaluations to meet professional certification standards in higher education institutions in Delta State.

Discussion of Results

The result in research question 1,revealed that in-depth evaluations have impact on students learning outcomes in school-based professional certification programmes in the following ways: Helped students understand important concepts in their field of study; Students can integrate knowledge from various sources because of the comprehensive nature of in-depth evaluations; Use of in-depth evaluations to improved students' critical thinking and problem-solving abilities; Help students develop practical and technical skills that are relevant to their professional field; Students are more engaged in courses that use in-depth evaluations compared to traditional assessment methods; Improve students' overall academic performance in certification programmes; Improve students' ability to apply theoretical knowledge in practical situations and Students feel more confident in their professional capabilities after completing programmes. This finding supports the studies of Davison (2016) and Wang (2012) [34] and Miller & Krajcik, (2019) [20], who noted that learning outcomes significantly improve students' critical thinking, problem-solving skills, and practical competencies. This finding highlight the importance of moving beyond traditional examination methods and adopting more holistic assessment strategies that reflect real-world professional scenarios.

The findings in research question 2, shows that the school-based certification programmes use in-depth evaluation feedback to improve curriculum and programmes in the following areas: Feedback from in-depth evaluations is systematically reviewed for curriculum development purposes in our certification programme; Has a direct impact on whether new topics - courses are added to our curriculum; Resulted in significant changes in our teaching methods - strategies; School program's curriculum is regularly updated ; Curriculum development team has a structured process of incorporating evaluation feedback into programme planning; School programme has seen an increase in student learning outcomes as a direct result of implementing feedback from in-depth evaluations; School programme promotes continuous improvement by actively applying feedback from in-depth evaluations; School certification programme demonstrates resilience and adaptability by effectively responding to feedback from detailed evaluations and regular reviews of the effectiveness of school programmesfor implementation. The finding was in line with the studies of Nicol and Macfarlane-Dick (2006) [22] who observed that effective assessment feedback allows students to self-regulate their learning processes and help students identify their strengths and areas for improvement. This feedback loop improves student engagement, motivates learning, and eventually leads to better learning outcomes, preparing students more effectively for professional certification and practice. This study also support the view of Ahmadi (2021) [1] who observed that feedback from evaluations provide educators and programme administrators with actionable insights and opportunity for improvement by allowing refinement of curriculum and teaching methodologies to meet industry standards and expectations.

The finding in research question 3, indicates the challenges schools face when implementing comprehensive in-depth evaluations to meet professional certification standards. These challenges include: Institution faces significant logistical challenges in implementing in-depth evaluations; They provide inadequate professional development opportunities for faculty members on how to design and conduct in-depth evaluations; Faculty members are resistant to adopting new evaluation methods that differ from traditional assessment strategies; Aligning in-depth evaluations with existing curriculum and certification standards is challenging because of rigid curriculum structures and Integrating technology for conducting in-depth evaluations presents significant challenges in terms of accessibility technical support. This finding is in agreement with the study of Olmstead *et al*., (2019) [23], who emphasized the importance of faculty development in the successful implementation of innovative teaching and assessment practices. Institutions in Delta State must invest in professional development programmes that provide faculty with the skills needed to design, implement, and analyze comprehensive evaluations.

Conclusion

This study into the efficacy of in-depth evaluations within higher education institutions has highlighted their significant role in improving the standards of professional certification programmes. The comprehensive assessment methods inherent in in-depth evaluations have been shown to not only align more closely with industry standards, but also foster a deeper engagement and understanding among students, thereby preparing them more effectively for professional practice. Despite the obvious advantages, implementing such evaluations is not without its challenges, including resource constraints, the need for faculty development, and resistance to change within institutional cultures.

Recommendations

Based on the results of this study, several recommendations are proposed to maximize the benefits of in-depth evaluations in professional certification programmes:

1. Institutions should conduct regular, systematic reviews of their certification programmes to assess how well in-depth evaluations meet their objectives in terms of students learning outcomes and alignment with industry standards.
2. Feedback on the effectiveness of in-depth evaluations should guide ongoing curriculum development and programme improvement.
3. Institutions should seek external funding whenever possible, and allocate budgetary resources to support the necessary technological infrastructure and training.
4. Institutions should foster a culture of innovation and continuous improvement.

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