



European Journal of Educational Research

Volume 12, Issue 2, 881 - 890.

ISSN: 2165-8714

<https://www.eu-jer.com/>

Readiness of Higher Education Institutions for Horizontal Typology, Institutional Sustainability and Quality Assurance

Rashid Ceazar Galanto Ormilla* 
Ifugao State University, PHILIPPINES

Eileen Baptista Dupra
University of La Salette, PHILIPPINES

Received: September 24, 2022 • Revised: January 6, 2023 • Accepted: March 10, 2023

Abstract: This study was undertaken to assess the level of readiness of higher education institutions (HEIs) for horizontal typology, institutional sustainability, and quality assurance in the key result areas (KRAs) for the enhancement of mechanisms, systems, and policies for the HEIs' effective operation. It is a descriptive correlational design using the modified self-evaluation document (SED). The study showed that all the seven HEIs that participated in this study had been operating for 40 years and above, offering more than sixteen program courses with more than sixteen accredited programs. Four of the HEIs were Level 2 in accreditation status and five were ISO Certified. The level of readiness of HEIs for horizontal typology was moderately ready, which means the HEIs need some improvements in horizontal typology. The most identified challenges affecting the level of readiness of HEIs in horizontal typology were the lack of innovation, technology, and sustainability; the lack of administrative strategies, leadership competencies, and management skills; and the lack of financial allocation for institutional development and advancements, respectively. There is no significant relationship between the institutional profile and terms of observing the standards in the KRAs. The study recommends further re-assessing the level of readiness of the HEIs in terms of documentation/evidence, observance for the improvement of the systems, processes and practices towards a more effective and efficient delivery of academic services to young people by conducting the more focused study in every KRAs and institutional self-assessment as future researches for the further improvement of the operations of HEIs.

Keywords: *Key result areas, higher education, horizontal typology, quality assurance.*

To cite this article: Ormilla, R. C. G., & Dupra E. B. (2023). Readiness of higher education institutions for horizontal typology, institutional sustainability and quality assurance. *European Journal of Educational Research*, 12(2), 881-890. <https://doi.org/10.12973/eu-jer.12.2.881>

Introduction

Higher education is the final stage of education that leads to the acquisition of an academic degree, a distinct qualification awarded to students who complete a course of study, usually in an academic institution. The challenge that faces tertiary education today is to offer the preparation that would equip the would-be professional with the degree that would make them adapt to the constantly changing professional world of work. Thus, the need for higher education to enhance quality is not just driven by its crucial contribution to economic growth or the accomplishment of global development objectives. It is not just founded on how it helps developing nations become "more globally competitive by building a competent, productive, and adaptable workforce as well as by inventing, applying, and disseminating new ideas and technology" (Bustamante, 2014). Its foundation is based on the need to succeed and to survive. In order for higher education to thrive, compete, and last, quality assurance is essential (Chaleunphonh, 2013). Truly, the Philippine higher education institutions (HEIs) difficulty also stems from the fact that the sector's expansion has not been matched by sufficient funding to provide relevant, high-quality education (Adeyemo, 2019).

Besides, the Commission on Higher Education (CHED) is the government agency that oversees the state colleges and universities of higher education learning in the country. The CHED has established a policy to enhance the quality assurance in the Philippine higher education system through an outcome-based and type-based quality assurance process to enable HEIs to develop a culture of quality (Olmoguez et al., 2020). This describes the two-dimensional approach to quality assurance the vertical typology which characterizes a school as "recognized" or "deregulated." A higher education institution also classifies using the horizontal typology as either a "college," "professional institution," or "university." The following characteristics of qualifications and matching abilities of programs are differentiated: the

* **Corresponding author:**

Rashid Ceazar Galanto Ormilla, Ifugao State University, Philippines. ✉ ormillarashidceazar@gmail.com

kind of degree programs offered; faculty members' qualifications; types of available learning resources; and support systems (CHED, 2014).

To ensure the quality delivery of programs and services, CHED (2017) also developed a self-assessment document (SED) tool based on the standard-based evaluation of CHED Institutional Sustainability Assessment (ISA) instrument of the horizontal typology. This SED tool provides the HEIs with a guide for introspection through the key result areas (KRAs) on governance and management, quality of teaching and learning, quality of professional exposure, research and creative work, support for students, and relations with the community. The SED tool was developed by CHED and was modified to suit the institutional sustainability and quality assurance of Higher Education Institutions (HEIs). Thus, the goal of quality assurance (QA) is not to define the benchmarks or requirements for quality control. Instead, quality assurance is about making sure that there are systems, practices, and procedures in place to guarantee that the intended quality, however, it is defined and assessed, is genuinely delivered (Sanyal & Martin, 2007). Quality assurance is emphasized by Ruiz and Junio-Sabio (2012) as the process of determining if goods or services meet or surpass client expectations.

As a result of the above citations, it is then imperative to conduct this study to assess the readiness of HEIs for horizontal typology, institutional sustainability, and quality assurance using the modified standards-based evaluation of the SED tool in the KRAs which was utilized for the purpose of this study. The study used various sources, including the CHED (2012) memorandum order number 46 series entitled "Policy Standards to Enhance Quality Assurance in the Philippine higher education", the International Sustainability Assessment (ISA) framework found in the CHED (2014) manual, and the works of Thangeda et al. (2016) and Ruiz and Junio-Sabio (2012) on the concept of quality assurance.

Specifically, the study sought to answer the following: 1) What is the institutional profile of the HEI respondents based on their institutional characteristics: 1.1) Years of HEI's existence; 1.2) Total number of program offerings; 1.3) Number of accredited programs; 1.4) Level of institutional accreditation; and 1.5) ISO certification? 2) What is the level of readiness of the HEIs for horizontal typology, institutional sustainability assessment (ISA) and quality assurance in terms of documentation/evidence in the five KRAs: 2.1) Governance and management; 2.2) Quality of teaching and learning; 2.3) Quality of professional exposure, research, and creative work; 2.4) Support for students; and 2.5) Relations with the community? 3) What is the level of readiness of the HEIs for horizontal typology, institutional sustainability assessment (ISA) in terms of observance with the standards and awareness by school key players of the KRAs? 4) What are the challenges affecting the readiness of the HEIs for horizontal typology; 5) What is the relationship between the institutional profile and the level of readiness of the HEIs for horizontal typology, institutional sustainability assessment (ISA) in terms of documentation/evidence, observance with the standards? Therefore, the result and findings of the study sought to provide the HEIs with a starting point and encouragement for them to review their performance for sustainability, assurance, and enhancement of their institutional quality and ability, in response to the emerging challenges for ISA in higher education institutions. Moreover, this study is of great importance to forge partnerships, collaboration, and spirit of godly cooperation in coming up with an assessment on the level of readiness of the higher education institutions for horizontal typology, institutional sustainability and quality assurance for the enhancement of programs, mechanisms, policies and procedures in HEIs, CHED and in the entire gamut of higher education institutions.

Methodology

Research Design

The study used the descriptive-correlational design in this type of research study to get the relevant information. This design is appropriate for the study to determine descriptively the institutional profile of HEI and its characteristics and to analyze the relationships of the profile and the readiness of the HEIs for horizontal typology, and institutional sustainability assessment in terms of documentation/evidence, and observance with the standards.

Respondents of the Study

The study was conducted in seven (7) selected private institutions and state universities in Region II-Cagayan Valley, namely: University of La Salette (ULS)- Santiago City, Quirino State University (QSU)-Quirino Province, Saint Mary's University (SMU) and the Nueva Vizcaya State University (NVSU)-Nueva Vizcaya, Isabela State University (ISU)-Echague and the St. Paul University and the Cagayan State University (CSU)-Cagayan were the chosen Higher Education Institutions as respondents. Each of the seven (7) private institutions and state universities had sixteen (16) respondents. The respondents of each institutions were the present program coordinators/deans of the different colleges or programs and the Office Heads/Department Chiefs/Directors of the various offices, such as extension, research, quality assurance, student services, laboratory, library, human resource office, publication, physical plant, general services, and health services. The required proportionate sample size for a population of one hundred forty-four (144), a confidence level of 95% with a margin of error (degree of accuracy) of 5% was used with one hundred twelve (112). The actual total number of respondents were requested to answer the given survey questionnaires, and were carefully selected since they hold key positions that perform functions, duties, and responsibilities concerning the

CHED KRAs. They have also acquired firsthand experiences and exposures as regards the HEI to the KRAs for a horizontal typology of ISA.

Instrumentation and Data Gathering Procedure

The CHED self-assessment document was developed using the CHED Institutional Sustainability Assessment - Self-Evaluation Document (ISA-SED) as a base. The CHED approved the use of ISA-SED as an internal quality assurance tool for Philippine higher education institutions through Commission En Banc Resolution No. 066-2017 which consists of five (5) KRAs namely: KRA1-Governance and Management; KRA2-Quality of Teaching and Learning; KRA3-Quality of Professional Exposure, Research and Creative Work; KRA4-Support for Students; and KRA5- Relations with the Community. The ISA-SED was modified by the researchers to fit their study's objectives and answer the statement of the problem. The data was collected through interviews, desk research, and observation, and the questionnaire consisted of four sections. The first section included the institutional profile, the second section covered the HEIs' level of readiness, the third and fourth sections comprised the respondents' perceptions and the challenges affecting their readiness. The responses were measured using a five-point scale.

Table 1. Rating Scale in Determining the Level of Readiness of Higher Education Institutions (HEIs)

Weight	Interpretation	Verbal Description
4.50 – 5.00	Extremely Ready	The level of readiness of the HEI provides a model for others
3.50 – 4.49	Very Ready	The level of readiness of the HEI demonstrates good practice
2.50- 3.49	Moderately Ready	The level of readiness of the HEI needs some improvements.
1.50-2.49	Slightly Ready	The level of readiness of the HEI demands much more improvement.
1.00-1.49	Not Ready	The level of readiness of the HEI requires urgent compliance.

The data gathering was guided by the following procedures: a) The researchers prepared the letters addressed to HEI Presidents duly endorsed by the researcher's adviser and the dean of the graduate school for the concerned school authorities. b) The researchers sought the approval of the selected HEI Presidents to allow the researcher to conduct the study and float the questionnaire to their program coordinators or deans, and office heads, department chiefs and directors in their respective institutions. c) The researchers made coordination to the concerned offices/departments as instructed for other assistance by the researcher in gathering the information needed for the study. d) The questionnaires were distributed to the concerned respondents from various colleges and offices of the HEIs in Region 2 through their employees who have extended help to the researchers. e) There researcher gave adequate time for the respondents to answer the questionnaire guided by clear instructions stated in the questionnaire for the respondents to completely and thoroughly answer each given item. f) The researchers exerted a lot of effort to follow the progress of the data gathering through frequent visits, text messages, calls, and emails and using other means to facilitate the data gathering. g) The researchers retrieved the accomplished questionnaires for the period of two months. h) The researchers tabulated, analyzed and interpreted the results right after the data collection.

Statistical Treatment of the Study

The researchers used the percent distribution, frequency, weighted mean and Kendall's Tau b in analyzing the level of readiness of HEIs for horizontal typology, institutional sustainability and quality assurance using the modified standard self-evaluation document (SED) of CHED.

Findings/Results

Profile of Higher Education Institutions (HEIs)

Table 2 shows the institutional profile of the HEIs. According to the number of years of existence, the seven institutions or 100% have been existing for 40 years and above. As to the total number of program offerings, all of the HEIs or 100% have been offering from 16 and above. Out of seven HEIs, four or 57.10% have 16 to 20 accredited programs while 2 or 28.60% have accredited programs ranging from 11 to 15 and 1 or 14.30% had 6 to 10 accredited programs. As to the institutional accreditation, out of seven HEIs, four or 57.14 are Level 3 accredited, one or 14.30% is Level III accredited and two or 28.60% percent are Level III accredited. Five or 71.43% out of the seven HEIs are ISO Certified.

Table 2. Profile of Higher Education Institutions (HEIs)

Institutional Profile	Frequency	Percent
Years of HEI Existence (40 and above)	7	100.00
Total Number of Program Offerings (16 and above)	7	100.00
Number of Accredited Programs		
6 – 10	1	14.30
11 – 15	2	28.60
16 – 20	4	57.10
Level of Institutional Accreditation Level 2	4	57.14
Level 3	1	14.30
Level 4	2	28.60
ISO Certification	5	71.43

Readiness of Higher Education Institutions (HEIs) in the Documentation/Evidence in the Key Result Areas

Table 3 presents the level of readiness of the HEIs for the key result area focused on governance and management in terms of documentation and evidence. As a result, it was determined that HEIs was found to be moderately ready on documentation and evidence. Furthermore, it can be noticed that the strategic vision got the highest mean of 3.29 equivalent to moderately ready. While, other enabling features particularly reports on other initiatives were also readily available and accessible in the different HEIs which also got the lowest mean of 2.98 which signifies moderately ready.

Table 3. Level of Readiness of Higher Education Institutions (HEIs) in KRA 1 (Governance and Management) Documentation/Evidence

Indicators	Mean	Description
1. Probity	3.11	Moderately ready
2. Strategic Vision	3.29	Moderately ready
3. Accountability	3.19	Moderately ready
4. Awareness and Management of Risk	3.12	Moderately ready
5. Effective Monitoring of Performance	3.12	Moderately ready
6. Management of Operations	3.10	Moderately ready
7. Financial Control	3.08	Moderately ready
8. Quality Assurance Arrangements	3.18	Moderately ready
9. Use of ICT in Management	3.01	Moderately ready
10. Resource Generation Strategies	3.06	Moderately ready
11. Other Enabling Features	2.98	Moderately ready

In Table 4, the different HEIs were also moderately ready as far as the key results area on the quality of teaching and learning in terms of the documentation and evidence were concerned, ranging from the mean of 3.01 to 3.23. Specifically, indicator 4, “matching of abilities and aptitudes,” obtained the highest mean of 3.23, equivalent to moderately ready. However, pertaining to the “library resources” and “laboratories, equipment, and facilities”, the HEIs were moderately ready as they were rated to have the lowest mean of 3.01, respectively.

Table 4. Level of Readiness of Higher Education Institutions (HEIs) in KRA 2 (Quality of Teaching and Learning) Documentation/Evidence

Indicators	Mean	Description
1. Program Approval	3.16	Moderately ready
2. Setting of Objectives and Learning Outcomes	3.15	Moderately ready
3. Mechanisms for Effective Delivery of Programs and Academic Support	3.11	Moderately ready
4. Matching of Abilities and Aptitudes	3.23	Moderately ready
5. Monitoring and Review	3.10	Moderately ready
6. Action to Strengthen Programs (Consolidated summary reports)	3.02	Moderately ready
7. System for Faculty Selection, Retention, Evaluation, and Promotion	3.18	Moderately ready
8. Teaching Expertise and Competence	3.17	Moderately ready
9. Use of ICT	3.04	Moderately ready
10. Library Resources	3.01	Moderately ready
11. Laboratories, Equipment, and Facilities: (Quality of use)	3.01	Moderately ready

In Table 5, the higher education institutions (HEIs) were moderately ready, ranging from 2.94 to 3.02 in KRA 3 (Quality of professional exposure) documentation and evidence. The professional exposure mean rating of 3.02 indicates that HEIs have readily available documents and evidence, including the indicator "research strategy and capacity," which is moderately ready with a mean rating of 3.00 because the documents and evidence show that research was well-articulated in their institutions. Moreover, they were also "moderately ready" in terms of "creative work and/or innovation" as they confidently had documents and evidence.

Table 5. Level of readiness of Higher Education Institutions (HEIs) in KRA 3

Indicators	Mean	Description
1. Professional Exposure	3.02	Moderately ready
2. Research Strategy and Capacity	3.00	Moderately ready
3. Creative Work and/or Innovation	2.94	Moderately ready

(Quality of Professional Exposure, Research and Creative Work) Documentation/Evidence

The HEIs were moderately ready in KRA 4 (Support for students) documentation/pieces of evidence ranging from 2.92 to 3.25 as shown in Table 6. "Student scholarships" got the highest mean of 3.25, equivalent to moderately ready, and they can easily provide their documentation/pieces of evidence such as scholarship reports, procedures and guidelines on scholarships, scholarship beneficiaries' master lists, and their programs of study.

However, in terms of the "placement support" among students, they obtained the lowest mean of 2.92. This shows that they can also readily show pieces of evidence or documents on job placement programs, industry and academic linkages, special programs, and placement reports.

Table 6. Level of readiness of Higher Education Institutions (HEIs) in terms of KRA 4 (Support for Students) Documentation/Evidence

Indicators	Mean	Description
1. Recruitment, Admission, and Academic	3.09	Moderately ready
2. Student Scholarships	3.25	Moderately ready
3. Non-academic Support	3.14	Moderately ready
4. Placement Support	2.92	Moderately ready

In Table 7, the higher education institutions (HEIs) were also moderately available as to the KRA 5 (Relations with the community) documentation and evidence, ranging from 3.08 to 3.20. The first indicator, "extension and outreach" obtained the highest mean rating of 3.20, it was noted that the HEIs were moderately ready as they have readily available training needs assessment as a basis for conducting extension and development programs. On "networking and linkages and "determining and promoting relevance" they were also moderately ready with a mean ratings of 3.08 and 3.03 respectively.

Table 7. Level of readiness of Higher Education Institutions (HEIs) in terms of KRA 5 (Relations with the Community) Documentation/Evidence

Indicators	Mean	Description
1. Determining and Promoting Relevance	3.03	Moderately ready
2. Networking and Linkages	3.08	Moderately ready
3. Extension and Outreach	3.20	Moderately ready

Readiness of Higher Education Institutions (HEIs) in the Observation with the Standards of the Five Key Result Areas

In Table 8, the HEIs were moderately ready in their observation of governance and management, with a mean rating of 3.15. They were also moderately ready as to the quality of teaching and learning, quality of professional exposure, research, and creative work, the HEIs are also moderately ready even as to the level of awareness of the school's key players, such as top administrators, middle managers (deans and office heads), faculty, staff, students, and other stakeholders in the observation of the standards set by CHED, they were moderately ready with a mean rating of 3.15 and 3.11, and 3.18, respectively.

Table 8. Level of Readiness of Higher Education Institutions (HEIs) in terms of Observation of Standard of the Five Key Result Areas and Awareness of Key Players

Indicators	Mean	Description
1. KRA 1: Governance and Management	3.15	Moderately ready
2. KRA 2: Quality of Teaching and Learning	3.15	Moderately ready
3. KRA 3: Quality of Professional Exposure, Research, and Creative Work	3.11	Moderately ready
4. KRA 4: Support for Students	3.24	Moderately ready
5. KRA 5: Relations with the Community	3.29	Moderately ready
6. Awareness of School Key Players	3.18	Moderately ready

Challenges Affecting the Level of Readiness of the HEIs for Horizontal Typology

The respondents identified challenges affecting the level of readiness of the HEIs for horizontal typology as shown in Table 9, which are the following: Lack of innovation, technology and sustainability (73 or Rank 1); Lack of administrative strategies, leadership competencies and management skills (63 or Rank 2); Lack of financial allocation for institutional developments and advancements and Lack of institutional coherence due to conflicts and political environment (61 or Rank 3.5); Lack of close collaboration between instruction, research and extension (51 or Rank 5); Lack of institutional commitment, cooperation and unity (46 or Rank 6); Lack of sovereignty and autonomy due to excessive controls, restrictions, bureaucracies and delays of concerned authorities (46 or Rank 7); Lack of institutional programs, policies, guidelines, and mechanisms within the system (42 or Rank 8); Lack of awareness, knowledge and interest (41 or Rank 9); and Lack of trainings, networks, committees and support groups (36 or Rank 10).

Table 9. Barriers/Challenges Encountered Affecting the Readiness of the HEIs for Horizontal Typology

Barriers/Challenges	Frequency	Rank
1. Lack of administrative strategies, leadership competencies and management skills	63	2
2. Lack of institutional programs, policies, guidelines, and mechanisms within the system	42	8
3. Lack of institutional commitment, cooperation and unity.	46	6
4. Lack of awareness, knowledge and interest.	41	9
5. Lack of trainings, networks, committees and support groups.	36	10
6. Lack of Financial Allocation for institutional developments and advancements.	61	3.5
7. Lack of innovation, technology and sustainability.	73	1
8. Lack of close collaboration between instruction, research and extension.	51	5
9. Lack of institutional coherence due to conflicts and political environment.	61	3.5
10. Lack of sovereignty and autonomy due to excessive controls, restrictions, bureaucracies and delays of concerned authorities.	46	7

Relationship between the Institutional Profile and the Level of Readiness of the Higher Education Institutions (HEIs) in Observation with the Standards

The Table 10 presents the relationship between the level of readiness of HEIs in terms of observations of standards of the five KRAs and awareness of key players and their institutional profile. The results shows that none among the institutional profile of the HEIs were significantly related with their observation with the standards in all KRAs.

Table 10. Relationship between the Level of Readiness of Higher Education Institutions (HEIs) in terms of Observation of Standard of the Five Key Result Areas and Awareness of Key Players and their Institutional Profile

Indicators	No. of Accredited Programs		Institutional Accreditation Level		ISO Certification	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
1. KRA 1 - Governance and Management	0.00 ns	0.99	-0.03 ns	0.68	0.11 ns	0.20
2. KRA 2 - Quality of Teaching and Learning	-0.04 ns	0.67	-0.12 ns	0.16	0.05 ns	0.60
3. KRA 3 - Quality of Professional Exposure, Research, and Creative Work	-0.03 ns	0.68	-0.07 ns	0.43	0.06 ns	0.48
4. KRA 4 - Support for Students	0.07 ns	0.40	-0.06 ns	0.45	0.03 ns	0.70
5. KRA 5: - Relations with the Community	-0.06 ns	0.46	-0.10ns	0.26	0.15 ns	0.10
6. Awareness By School Key Players	-0.12 ns	0.13	-0.09 ns	0.25	0.16 ns	0.0

*Significant ^{ns} Not Significant

Discussions

Notably, the institutional profile of the higher education institutions (HEIs) in the region as shown in Table 2 reveals that due to the long service of the institutions, it can be noticed that programs offered were accredited and subjected to accreditation to best offer quality service among their clientele. To improve systems and procedures in providing quality management, most of the HEIs subjected their institutions to International Standard Operations (ISO) Certifications. This suggests that to achieve quality, Philippine higher education institutions pursue ISO certifications and program accreditation according to Padua (2003), and Conchada and Tiongco (2015).

While, the HEIs were moderately ready on their readiness for the key result area on governance and management in terms of documentation and evidence. This suggests that there was documentation and supporting data, such as strategic plans, minutes from workshops and meetings, and performance reports illustrating long-term trends in accomplishing goals and targets. Locke et al., (2011) stressed that the governance and management in different HEIs should reflect the decision-making guidelines and procedures that connect to the various organizational levels that result in an efficient or consistent improvement of the facilities, resources, and even the personnel needed to carry out their academic tasks.

HEIs were also moderately ready as far as the key results area on the quality of teaching and learning in terms of the documentation and evidence were concerned. This presents that admission and retention policies, academic support programs, samples of examinations and assessment tools, student written and performance tasks, different support services, tracer studies, and the level of satisfaction of employers and industry were available and accessible among the different HEIs. On the other hand, pertaining to the "library resources" and "laboratories, equipment, and facilities", the HEIs were moderately ready. This suggests that HEIs can quickly provide the documents and evidence required, particularly for library processes like the use of books, electronic resources, different types of multimedia, acquisitions systems, information on the distribution and use of library resources, and evidence of the use of online journals, such as course syllabi and resulting research, client satisfaction rating, and library programs for faculty and students. They are free to freely provide their documents or evidence on "Laboratories, Equipment, and Facilities," such as policies and procedures for using the school's laboratories, facilities, and equipment. Data on the use of laboratories, equipment, and facilities, preferably in matrix form for a better overview, and minutes of meetings discussing the development of laboratories, equipment, and facilities are also included in this. The study of Cruz (2022) found that most graduates from state universities and colleges in higher learning institutions did not fully utilize the resources of the library and laboratories. Additionally, the upgrading of buildings, ICT infrastructures, and laboratories is the main need of graduates in the different HEIs.

The HEIs were moderately ready in KRA 3 (Quality of Professional Exposure) documentation and evidence as presented in Table 4. The professional exposure indicates that HEIs have readily available documents and evidence, including updated strategic plans, reports on the professional exposure programs, licensure exams, memoranda of understanding on various agencies and industries, employment workability, on-the-job training programs, and feedback from alumni on how their professional exposure program assisted them in their current employment. While "Research Strategy and Capacity," is well-articulated in their strategic plan and research policies and guidelines, structures, and procedures, research and development agenda, publications in refereed journals, presentations at international conferences, and the percentage of faculty involved in research. Additionally, memoranda with national and international research organizations and reports that demonstrate the impact and utilization of research output are available. Moreover, in terms of "creative work and/or innovation" as they confidently have documents and evidence, including strategic plans, reports on utilization and impact of research outputs, descriptions of programs that promote creative work and/or innovation, and descriptions of how the learning environment promotes such work and/or innovation, such as writers' workshops, faculty/student literary publications, museums and galleries for arts, devices, and products, and other innovative/creative media.

The Higher Education Institutions (HEIs) in KRA 4 on support for students' documentation/pieces of evidence were moderately ready. This only shows that HEIs can easily provide their documentation/pieces of evidence on the students' scholarships, recruitment, admissions and academic support and placement support such as scholarship reports, procedures and guidelines on scholarships, scholarship beneficiaries' master lists, and their programs of study. These include general academic regulations, admission and retention policies, and other student services that support students.

As to the KRA 5 on relations with the community, documentation and evidence were noted that the HEIs were moderately ready as they have readily available training needs assessment as a basis for conducting extension and development programs. This includes the impact assessment, financial allocation for extension programs and inventory of resources, strategic plans, organizational structures related to extension programs, activity reports (including results of the evaluation), and memorandum of agreement with the community and other external agencies. On the "Networking and Linkages", they have existing documents/evidence such as strategic plans, lists of partnerships/consortium arrangements, membership in networks and associations, reports on network development, and reports on accomplishments in terms of networking and linkages. To provide effective and efficient services to the

vulnerable community, HEIs' networking and linkages are equally vital to share their resources. If this were done, it would probably increase their performance through sharing their capacities and producing synergetic effects for the organization (Nanthagopan, 2011).

In Table 8, the HEIs were moderately ready in their observation of governance and management. Their governance arrangements demonstrate probity/integrity, strategic vision, accountability, awareness and management of risk, and effective monitoring of performance, management of operations, financial control, and quality assurance arrangements allow them to respond to development and change, and they have to enable features that help improve the operations, quality, and development, such as the use of ICT for more efficient and effective management and viable, sustainable, and appropriate resource generation strategies to support its development plans.

As to the quality of professional exposure, research, and creative work, the HEIs are also moderately ready. This suggests that the research community conducts relevant and important research and other advanced scholarly activity, and they produce innovative work in the arts and humanities, science and technology, social sciences, and/or management science. Students in HEIs develop relevant competencies through programs that allow them to put their newly acquired skills into practice. Examples include programs for entrepreneurship, practicum, internship, apprenticeship, and/or on-the-job training (OJT).

The observation of standards on support for students was also moderate in the HEIs. They have effective recruitment, and admission, and the institution provides educational opportunities for the ablest and deserving students through the HEI student scholarships and has programs for student services to support the non-academic needs of students. Under relations with the community, the HEIs offer programs that take into consideration the social, cultural, economic, and/or developmental needs of the country at local, regional, and/or national levels, as reflected in the Vision, Mission, and Goals.

The greatest challenge affecting the level of readiness of the HEIs for horizontal typology as shown in Table 9 was the lack of innovation, technology and sustainability. This might due to the lack of orientation among top leaders in innovation, technology and innovations. According to the study of Veiga Ávila et al., (2019) the lack of knowledge management to connect science, technology, innovation and sustainability, to improve management conditions, innovate, make decisions, support initiatives, create incentives and control mechanisms were the barriers to innovation and sustainability among higher education institutions.

Finally, in Table 10, the institutional profile of the HEIs was significantly related with their observation with the standards in all KRAs. This only show that it did not conform with Hocutt (2000), as cited by Frimpong and Asprion (2015) that "compliance is everywhere". This means that in organizations, there are specifications, policies, plans, procedures, laws, regulations, contracts, or other requirements that must be adhered to. Organizations are subject to various types of compliance requirements, e.g., regulatory, industry and corporate, as well as demands that need to be met, if the organizations choose to obtain external certification. Institutions need to establish compliance management processes within which compliance and related risks are managed and addressed.

Conclusions

In conclusion, the HEIs in Region II are considered established institutions with a good reputation and a high level of accreditation, as evidenced by their acquisition of ISO Certification and high institutional accreditation levels. These institutions serve as a benchmark for other HEIs to strive for in terms of quality, excellence, and responsiveness, as guided by the CHED Handbook 2014. In KRA 1 (Governance and Management). It can be concluded that our study provides new insights into the weaknesses of higher education institutions (HEIs) in terms of both printed publications of documents and their Information Communication Technology (ICT) infrastructure. By highlighting these challenges, we contribute to the ongoing discourse around the importance of integrity, transparency, good governance, and management in HEIs. Our findings demonstrate the need for HEIs to address these weaknesses to project a positive image and operate more effectively. This study adds to the literature by highlighting the areas where HEIs need to improve and provides a starting point for further research into these important topics." Also, our study highlights the need for higher education institutions (HEIs) in the Philippines to prioritize innovation in their Institutional Strategic Plan. In relation to KRA 3 (Quality of Professional Exposure, Research and Creative Works), our findings indicate a demand for HEIs to enhance their capacity and encourage their members to produce creative and innovative work. By doing so, they can make a concrete contribution to the country and humanity, which serves as a litmus test of quality education. Our study suggests that evaluating and accrediting HEIs based on their commitment to innovation and creative work could be a valuable criterion in comparison to global and Asian counterparts. This conclusion adds to the literature by emphasizing the importance of innovation and creativity in the delivery of international quality standards in education and highlighting the current weaknesses in HEIs in the Philippines." Further, our study highlights the need for higher education institutions (HEIs) to focus on KRA 4 (Support for Students) in order to address the problem of job mismatch among graduates. Our findings indicate that it is crucial for HEIs to reflect on their efforts to prepare and train their students for the professional world, so that they are not just added to the statistics of unemployed graduates. Equipping students with the necessary skills, competence, experience, and values to perform their desired professions

is only one aspect of the solution. Our study suggests that job placement must also be strengthened and enhanced to ensure that the quality of the HEI is reflected in its graduates' success in the workplace. This conclusion adds to the literature by emphasizing the importance of job placement in the quality of education and highlighting the need for HEIs to take proactive measures to address the problem of job mismatch." Moreover, our study highlights the importance of KRA 5 (Relations with the Community) in higher education. The conclusion highlights the need for HEIs to document their program revision and update process and its impact on the community and society. This is important for ensuring the relevance of their programs and guiding future decision-making. This conclusion adds to the literature by emphasizing the importance of documenting the revision and update process of curricular programs and its impact on the community and society. "The study shows that HEIs need to improve readiness for Horizontal Typology standards and awareness among key players. KRA 3: Quality of Professional Exposure, Research, and Creative Work is emphasized as important for HEIs to meet CHED standards through intensified policies and programs. HEIs need to prioritize innovation and creative work to achieve quality assurance and alignment. The study also reveals a lack of student involvement and awareness of the HEI's efforts towards meeting Horizontal Typology, Institutional Sustainability, and Quality Assurance standards. The conclusion shows that the respondents have a mixed perception on the level of readiness of HEIs for Horizontal Typology and ISA, with areas that need improvement. Only a few HEIs have minimal readiness and are near being a model for others, indicating the need for improvement in their mechanisms, practices, standards, and policies for quality in all aspects. It can be concluded that the respondents view the lack of innovation, technology, and sustainability as major challenges to the HEIs' level of readiness for Horizontal Typology. The HEIs need to prioritize the use of innovation, technology, and its sustainability as well as establish technology infrastructure. The use of technological resources, such as the internet of things, has become essential especially the world has now recognized the potential of technology to support education efforts. The conclusion states that there is a significant relationship between the institutional profile and the level of readiness of the HEIs for Horizontal Typology, Institutional Sustainability Assessment (ISA), and Quality Assurance in terms of Documentation/Evidence along the five Key Result Areas (KRAs). The hypothesis that the institutional profile does not affect the level of readiness was rejected. It can be concluded that the institutional profile can improve the level of readiness of HEIs for Horizontal Typology through quality-assured documentation and evidence. The institutional profile has a significant impact on the level of readiness of HEIs for Horizontal Typology, ISA, and Quality Assurance in terms of observance with standards and awareness among School Key Players. The hypothesis is disproven, indicating that a strong institutional profile can increase the HEIs' level of readiness by ensuring adherence to the standards for Horizontal Typology. This conclusion states that the research found a correlation between the Institutional Profile and the overall perception of the HEIs' level of readiness for Horizontal Typology and ISA. However, the relationship was not significant, leading to the acceptance of the hypothesis that perception alone cannot determine the level of readiness. The conclusion suggests that HEIs' level of readiness should be backed by documentation, evidence, and compliance with horizontal typology standards.

Recommendations

The following recommendations for further research should be focused on exploring how to improve the implementation of horizontal typology standards in higher education institutions (HEIs) and assess their level of sustainability and readiness for the institutions to even go for higher level status and readiness for horizontal typology, institutional sustainability and quality assurance such as to study the effectiveness of the current key results areas (KRAs) of the horizontal typology for institutional sustainability assurance (ISA) and identify areas for improvement; Study the establishment of information systems to support decision making in the HEIs; Investigate the design of instructional programs that meet the requirements under KRA 2 on teaching and learning, including online journals and updated research-based lectures; Review the alignment of curricular programs and their relevance to extension and outreach systems; Examine the integration of technology and software for online learning; Study the organization of trainings for faculty members in different learning modalities; Investigate the formulation of a comprehensive capacity building program for faculty and students; Study the intensification of reports on graduate employability through placement programs; Examine the integration of topics on horizontal typology in orientation programs and information dissemination; Investigate the organization of technical and value formation programs, workshops and trainings to address challenges; Study the establishment of a quality assurance office to support the functions, policies, systems and processes of the HEIs; Investigate the monitoring of the implementation of horizontal typology standards in relevant programs, services and policies; and examine the undertaking of institutional self-evaluation documents to determine the level of readiness for horizontal typology.

Limitations

The study is only limited to the private institutions and state universities and colleges in the Region II but not all private, local, and state universities and colleges in the Philippines. Therefore, the findings and results of this study may differ from other state universities in other regions when it comes to their readiness as higher education institutions for horizontal typology, institutional sustainability, and quality assurance. Hence, another study may be done in a bigger context.

Acknowledgements

The researchers would like to express their heartfelt acknowledgment to the different higher education institutions in the region for their valuable participation in the study. Without them, this study would not have been realized.

Authorship Contribution Statement

Ormilla: Providing technical and material support, data analysis and interpretation, editing and reviewing, drafting the manuscript following the journal template. Dupra: Conceptualization of the manuscript, research design, data gathering, writing, critical revision of manuscript.

References

- Adeyemo, K. S. (2019). A review of the Philippine quality assurance system. In *Higher education policy in the Philippines and ASEAN integration: Demands and challenges* (pp. 23-43). Brill Sense. https://doi.org/10.1163/9789004411326_002
- Bustamante, C. B. S. (2014). Redefining “quality” in higher education: An analysis on the challenges to higher educational institutions by the policy reforms implemented by the Philippine government. In *Widyatama International Seminar (WIS) 2014* (pp. 203-209). Univeristas Widyatama. <https://bit.ly/3ZlviUg>
- Chaleunphonh, S. (2013). The road to academic excellence: The making of world-class research universities ed. by Philip G. Altbach and Jamil Salmi. *The Review of Higher Education*, 37(1), 104-106. <https://doi.org/10.1353/rhe.2013.0059>
- Commission on Higher Education. (2012). *Policy-standard to enhance quality assurance (QA) in Philippines higher education through an outcomes-based and typological-based QA*. <https://bit.ly/3LdwR2G>
- Commission on Higher Education. (2014). *Handbook on typology, outcomes-based education, and institutional sustainability assessment*. Academia. <https://bit.ly/3ZWRAvy>
- Commission on Higher Education. (2017). *Institutional sustainability assessment self-evaluation document (ISA SED): An internal quality assurance (IQA) tool for Philippine higher education institutions*. <https://bit.ly/3ZNvUTs>
- Conchada, M. I. P., & Tiongco, M. M. (2015). *A review of the accreditation system for Philippine higher education institutions* (PIDS Discussion Paper Series, No. 2015-30). Philippine Institute for Development Studies (PIDS). <https://bit.ly/2LyO1J0>
- Cruz, J. L. D. (2022). Tracer study of graduate school graduates of a state higher education institution in the Philippines from 2016 to 2020. *International Journal of Education and Literacy Studies*, 10 (2), 149-154. <https://doi.org/10.7575/aiac.ijels.v.10n.2p.149>
- Frimpong, A. N. K., & Asprion, P. M. (2015). Compliance in Educational Institutions Based on Students Experience Survey. In *Proceedings of the Make Learn and TIIM Joint International Conference 2015* (pp. 387-395). To Know Press. <https://bit.ly/3H0Da62>
- Hocutt, M. (Ed.). (2000). *Grounded ethics: The empirical bases of normative judgements* (1st ed.). Routledge. <https://doi.org/10.4324/9781351326766>
- Locke, W., Cummings, W. K., & Fisher, D. (Eds.). (2011). *Changing governance and management in higher education: The perspectives of the academy* (Vol. 2). Springer Science & Business Media. <https://doi.org/cn6kqk>
- Nanthagopan, Y. (2011). Impact of networking and linkages on organizational performance a comparative study between the local and international non-governmental organizations in Vavuniya district. *Journal of Science and Management*, 3.
- Olmoguez, A. S., Naive, S. B., Noriga, C. J. S., & Lagapa, R. L. D. (2020). Typology and institutional sustainability assessment readiness of Saint Michael college of Caraga. *SMCC Business Administration Journal*, 2, 97-108. <https://doi.org/10.18868/sherjba.02.060120.08>
- Padua, R. N. (2003). International higher education quality assurance practices: Situating the Philippine system. *Journal of Philippine Higher Education Quality Assurance*, 1(1), 8-15. <https://bit.ly/3yqECuR>
- Ruiz, A. J., & Junio-Sabio, C. (2012). Quality assurance in higher education in the Philippines. *Asian Journal of Distance Education*, 10(2), 63-70. <https://bit.ly/3WmVvji>
- Sanyal, B. C., & Martin, M. (2007). *Quality assurance and the role of accreditation: An overview* (Report: Higher Education in the World 2007: Accreditation for Quality Assurance: What is at Stake?). UPCommons. Global access to UPC knowledge. <http://hdl.handle.net/2099/8095>
- Thangeda, A., Baratiseng, B., & Mompoti, T. (2016). Education for Sustainability: Quality Education Is a Necessity in Modern Day. How Far Do the Educational Institutions Facilitate Quality Education? *Journal of Education and Practice*, 7(2), 9-17. <https://bit.ly/2D7sLWO>
- Veiga Ávila, L., Beuron, T. A., Brandli, L. L., Damke, L. I., Pereira, R. S., & Klein, L. L. (2019). Barriers to innovation and sustainability in universities: An international comparison. *International Journal of Sustainability in Higher Education*, 20(5), 805-821. <https://doi.org/10.1108/IJSHE-02-2019-0067>