

## **Sufficiency of Organizational Resources in University of Bohol**

**AMMON DENIS R. TIROL**

ammondrtirol@universityofbohol.edu.ph

ORCID No: 0000-0003-1022-8781

### **ABSTRACT**

Organizational resources include the financial, human, production facilities, and information technology. The Commission on Higher Education (CHED) evaluated the institutional sustainability of schools by looking into the learning resources and support structures, and management of resources. Educational institutions borrowed from business sectors the model of value enhancement through effectiveness and efficiency to produce quality graduates and programs. This study assessed the sufficiency of organizational resources in the University of Bohol (UB) in its continual quest for educational leadership being Bohol's first university. The researcher formulated survey questions adapted from core indicators of key result areas of the CHED Institutional Sustainability Assessment (ISA) and the Institutional Quality Assurance Monitoring Evaluation (IQuAME) Self Evaluation Documents (SED). Respondents for the study were selected through stratified random sampling from 4 distinct UB groups: administrators, faculty members, non-teaching personnel, and students. The group responses were analyzed for difference in the means through weighted means. The study revealed sufficiency of organizational resources of UB in terms of resource utilization, faculty, physical structures, laboratories, libraries, and IT facilities. The findings warrant the conclusion that the necessary quality processes are present in UB and are sufficiently robust at the institutional level, thus, enabled the institution to deliver quality teaching-learning outcomes.

## KEYWORDS

Institutional Management, learning resources, support structures, Institutional Sustainability Assessment, Self-Evaluation Document, Weighted Means, Asia, Philippines

## INTRODUCTION

It is the intention of this study to assess the sufficiency of the University of Bohol (UB) organizational resources in order to evaluate and enhance the quality of its outcomes. Specifically this study intended to answer the following questions:

1. How sufficient are the resources of UB in terms of:
  - 1.1 Resources Utilization;
  - 1.2 Faculty;
  - 1.3 Physical structures;
  - 1.4 Laboratories;
  - 1.5 Libraries; and
  - 1.6 ICT facilities?
2. Are there significant differences in the assessment of the Administrators, Faculty, Non-teaching Personnel, and Students on the Sufficiency of Organizational Resources?

This research was anchored on the Philippine Commission for Higher Education (CHED) Institutional Sustainability Assessment (ISA) framework provided for in CHED Memorandum Order (MO) 46 series of 2012. Section 24 Article VI of the CHED MO provides that Institutional quality is manifested through the Assessment Framework with five key result areas (KRA) within which judgments were made about the performance of institutions: Governance and Management; Quality of Teaching and Learning; Quality of Professional Exposure, Research, and Creative Work; Support for Students; and Relations with the Community. Within each key result were core indicators that apply to all institutions, and other indicators that apply only to institutions in relation to their mission and stage of development. The ISA Framework is an enhancement

of the previous CHed IQuAME Framework utilizing the same KRA with modifications in their categorization to facilitate implementation of the new institutional typologies. ISA criteria relating to organizational resources were covered under the first four key areas of the ISA framework.

Study areas of Resources utilization, and ICT facilities were assessed as under KRA: Enabling Features of the Governance and Management; and Management of Resources. Faculty resources were assessed under the KRA: Faculty Profile, and Quality of Teaching-Learning. School building and other physical facilities were assessed under KRA: Governance (Effective monitoring of performance) and Program Standards core indicators (Mechanisms for effective delivery of programs; and Academic support). Assessment for Laboratory and Librarial resources were part of the Learning resources result area.

In organizational studies, resource management is the efficient and effective deployment of an organization's resources when they are needed. Such resources may include financial resources, inventory, human skills, production resources, or information technology. The IQuAME framework assesses sufficiency of resources for higher educational institution by adequacy of competent faculty, effective use of ICT to support institutional programs, and viability of financial resources strategy. The PAASCU accreditation process makes a more comprehensive evaluation of the resources of the candidate institution. Separate detailed criteria are established for faculty, library, laboratories, and physical plant (PAASCU 1996). The Commission on Institutions of Higher Education New England Association of Schools and Colleges, a regional accrediting body in the United States, established nine (9) standards for accreditation of higher educational institution. Among these standards is a standard for Physical and Technological Resources which covers classrooms/laboratories, estates/land management and other physical facilities and also other standards which cover Library and Other Information resources, Financial Resources and Faculty. These accreditation standards are similar to other regional accreditation standards in the United States. The implication of these standards was that institutional resources were major factors in assessing the quality of performance of a higher educational institution (NEASC's Commission on Institutions of Higher Education).

IQuAME is the quality assurance system adopted by CHED although it is not the only mechanism for quality assurance for Philippine higher education. Accreditation by an independent body as a quality assurance mechanism preceded the government's drive for quality in education. The move for accreditation started as early as 1951, through the initiative of a group of educators from private higher

education institutions who were convinced of the importance to enhance quality education through a system of standards, continuous monitoring, and self-evaluation. This group envisioned that the accreditation would be an appropriate guide to parents and college-bound students as cited by Arcelo (2003).

The administrators of the University of Bohol fully subscribed to the idea that academic leadership is going beyond the minimum requirements set by the law and is aiming for institutional accreditation and its attendant benefits. UB obtained Level II accreditation from PAASCU in 2008 for the colleges of Liberal Arts, Commerce, and Education. UB now has the required buildings and facilities and is now poised to hurdle its quest for PAASCU re-accreditation in the above-mentioned colleges, and other accrediting bodies in other programs and as an institution.

Hence, this study is part of the steps undertaken for the institutional accreditation. Studies on the other result areas under the CHED IQUAME, particularly Community Relations and Resources Sufficiency were already undertaken by this researcher.

## METHODOLOGY

The study was a descriptive research utilizing a researcher-developed questionnaire for data collection. The questionnaire form was pre-tested on 64-test respondents for clarity and further refinement before its final distribution.

The respondents of the study were the administrators, department heads, faculty, non-teaching personnel, and selected students of the University of Bohol.

Table 1. Distribution of Respondents

Respondents	Population	Sample Size
Administrative officers	44	15
Faculty	300	101
Staff	100	34
Students	343	115
Total	787	265

Table 1 reflects the distribution of respondents involved in the study. The population of the administrative officers included all the 10 members of the Board of Trustees and the 34 officers-in-charge of the responsibility centers. The

survey population of the faculty was made up of the entire regular tenured faculty from all the 19 academic departments, excluding the probationary teachers. The survey population of the students was all the senior students, fourth and fifth years, from all the colleges. The staff or non-teaching respondents included all the service personnel with employment terms of more than three years. A third of the group population was chosen as samples for the study.

Furthermore, to select the respondents, an alphabetical list of all group members was prepared for each survey population. Random numbers generated using Microsoft Excel was used to select the respondent from the alphabetical list for each respondent group. The same procedure was used to determine the test group that was taken from the faculty, staff and students survey population but on a smaller scale equal to one-fourth of the final respondents or 64 test-respondents.

The study variables were adapted from several ISA KRA and categorized according to organizational resources: Resources Utilization, Faculty, Physical structures, Laboratories, Libraries, and ICT facilities.

The respondents were asked to rate the variables per category according to the following code:

<i>Symbol</i>	<i>Description</i>	<i>Meaning</i>	<i>Mean Weight Equivalent</i>	<i>Values Range</i>
VS	Very Sufficient	Provisions / conditions are made extensively	4	3.25-4.00
S	Sufficient	Provisions / conditions are reasonably extensive	3	2.50 -3.24
FS	Fairly Sufficient	Provisions/conditions are very limited or missing but needed	2	1.75-2.49
NS	Not Sufficient	Provisions / conditions are not desirable or inapplicable	1	1.00-1.74

Data were gathered in 3 phases: 1) Permission for the testing and the administration of the instrument was obtained from the University President; 2) upon approval, the forms were distributed and answered by the administrator-respondents in a regular academic meeting. The faculty-respondents answered the questionnaire during the monthly academic meeting. The staff- and student-respondents were called to a special meeting to answer the questionnaires, and

3) the filled-out forms were collected the same day they were administered. The respondents were given the assurance of full confidentiality on their responses for ethical considerations.

Weighted means were computed to measure the central tendencies. To test further whether there is a significant difference in the means among the groups of respondents; the analysis of variance was used.

## RESULTS AND DISCUSSION

The six-study areas for UB organizational resources were: Resources Utilization, Faculty, Physical structures, Laboratories, Libraries, and ICT facilities. The first-study area is within the cognitive aspects, Plan and Check, of the Plan-Do-Check-Act (PDCA) cycle. Institutional quality processes relating to resource utilization are evidenced by specific identification and allocation to activities of organizational resources in the institutional and departmental plans. A clear connect of the specifications and allocations to the institutional vision/ mission/ goals is a major quality indicator.

Table 2. Sufficiency in Resources Utilization

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	X	I
1. Monitoring of resource utilization and program implementation in view of established objectives.	2.78	S	2.90	S	3.02	S	2.92	S	2.90	S
2. Responsiveness of resource utilization program to external development and change.	2.67	S	2.83	S	3.00	S	2.73	S	2.81	S
<b>Group Mean</b>	<b>2.72</b>	<b>S</b>	<b>2.87</b>	<b>S</b>	<b>3.01</b>	<b>S</b>	<b>2.82</b>	<b>S</b>	<b>2.85</b>	<b>S</b>

Legend:	VS	Very sufficient	3.25	- 4.00
	S	Sufficient	2.50	- 3.24
	FS	Fairly sufficiency	1.75	- 2.49
	NS	Not sufficient	1.00	- 1.74

Table 2 exemplifies how sufficient is the utilization of resources.

The grand mean of the ratings by the respondents on this study aspect was 2.85 which indicated a “sufficient” value. Of the two items evaluated on this category, higher rating of 2.90 was given on *monitoring of resource utilization and program implementation in view of established objectives*. Among the four groups of respondents, the staff gave the highest rating (3.01), followed by faculty (2.87), then the students (2.82) and lastly, the administration (2.72).

Table 3. Sufficiency in Faculty

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	X	I
1. Constant updating of faculty capability responsive to optimum teaching standards.	3.39	VS	3.03	S	3.21	S	2.93	S	3.14	S
2. Compensation package for faculty.	3.17	S	3.01	S	3.21	S	2.84	S	3.06	S
3. Qualification and hiring standards of faculty	3.44	VS	3.20	S	3.21	S	2.93	S	3.20	S
4. Support for research and professional advancement.	2.72	S	3.00	S	3.14	S	2.84	S	2.93	S
<b>Group Mean</b>	<b>3.18</b>	<b>S</b>	<b>3.06</b>	<b>S</b>	<b>3.20</b>	<b>S</b>	<b>2.88</b>	<b>S</b>	<b>3.08</b>	<b>S</b>

Legend:	VS	Very sufficient	3.25	- 4.00
	S	Sufficient	2.50	- 3.24
	FS	Fairly sufficient	1.75	- 2.49
	NS	Not sufficient	1.00	- 1.74

Table 3 reflects the sufficiency in faculty in the institution. The grand mean of the ratings by the respondents on faculty resources is 3.08 which indicated that this resource is sufficient. The highest rating of 3.20 for the Qualification and hiring standards of faculty is consistently ranked the highest item mean in all the respondent groups. The lowest mean of 2.93 is on the support for research and professional advancement which was consistently ranked the lowest by all the respondents.

Table 4. Sufficiency of UB Physical Structures

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	x	I
1. Capacity and size of buildings and facilities following standard specifications.	2.83	S	2.63	S	2.95	S	2.76	S	2.79	S
2. Building services and upkeep are handled by efficient maintenance department.	2.67	S	2.78	S	3.19	S	2.73	S	2.84	S
3. Quantity and size of classrooms to accommodate students.	2.94	S	2.66	S	3.00	S	2.85	S	2.86	S
4. Well-planned campus and future expansions.	2.50	S	2.58	S	2.86	S	2.75	S	2.67	S
5. Support facilities such as auditorium, food area, sports, and activity centers.	2.33	FS	2.34	FS	2.67	S	2.66	S	2.50	S
<b>Group Mean</b>	<b>2.66</b>	<b>S</b>	<b>2.60</b>	<b>S</b>	<b>2.93</b>	<b>S</b>	<b>2.75</b>	<b>S</b>	<b>2.73</b>	<b>S</b>

Legend: VS      Very sufficient      3.25      - 4.00  
 S      Sufficient      2.50      - 3.24  
 FS      Fairly sufficiency      1.75      - 2.49  
 NS      Not sufficient      1.00      - 1.74

Table 4 reflects how sufficient is the UB physical structures. The grand mean of the ratings by the respondents on physical resources is 2.73 which indicated that the resource was sufficient. The item with the highest mean of 2.86 is the quantity and size of classrooms to accommodate students. The administrator (2.94) and student (2.85) respondents ranked this item as highest. The faculty and staff respondents ranked highest the efficient handling of building services and upkeep by the maintenance department, thus, resulting to the second highest mean rank. The item with the lowest mean of 2.50 was on support facilities such as auditorium, food area, sports, and activity centers. This was a common observation by all the respondent groups. The administrators (2.33) and faculty (2.34) gave a fairly sufficient rating for this item.



Table 5. Sufficiency of UB Laboratories

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	X	I
1. Laboratories follow standard specifications.	2.61	S	2.48	FS	2.90	S	2.71	S	2.68	S
2. Safety provisions are installed.	2.50	S	2.54	S	2.90	S	2.84	S	2.70	S
3. Equipment is regularly updated and laboratory supplies are available.	2.56	S	2.34	FS	2.71	S	2.62	S	2.56	S
4. Laboratories are well maintained and regularly improved.	2.44	FS	2.47	FS	2.74	S	2.63	S	2.57	S
5. Special laboratories required for specific courses are established and well maintained.	2.39	FS	2.37	FS	2.71	S	2.65	S	2.53	S
<b>Group Mean</b>	<b>2.50</b>	<b>S</b>	<b>2.44</b>	<b>FS</b>	<b>2.80</b>	<b>S</b>	<b>2.69</b>	<b>S</b>	<b>2.61</b>	<b>S</b>

Legend: VS      Very sufficient      3.25      - 4.00  
S      Sufficient      2.50      - 3.24  
FS      Fairly sufficient      1.75      - 2.49  
NS      Not sufficient      1.00      - 1.74

Table 5 illustrates the sufficiency of the UB laboratories. The grand mean of the ratings by the respondents on laboratory resources is 2.61 which indicate that the laboratory provisions are sufficient. The highest mean of 2.70 is on the item *safety provisions are installed*. This item is rated highest by the faculty, staff, and student respondents. The second highest mean is on the item - *Laboratories follow standard specifications*, the item was ranked highest by the administrator respondents. The item with the lowest mean of 2.53 was on *special laboratories required for specific courses are established and well maintained*, an item ranked lowest by the administrator (2.39) and staff (2.71) respondents.

Table 6. Sufficiency of UB Libraries

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	X	I
1. Library is staffed by qualified and organized staff.	2.78	S	2.90	S	3.02	S	2.92	S	2.90	S
2. Book holdings are regularly updated.	2.67	S	2.83	S	3.00	S	2.73	S	2.81	S
3. Library staff is adequate for student population.	3.39	VS	3.03	S	3.21	S	2.93	S	3.14	S
4. Coordination exists between librarian and faculty in securing books.	3.17	S	3.01	S	3.21	S	2.84	S	3.06	S
5. Library design is conducive to learning.	3.44	VS	3.20	S	3.21	S	2.93	S	3.20	S
6. Library facilities secure the holdings, materials, and library clients.	2.72	S	3.00	S	3.14	S	2.84	S	2.93	S
Group Mean	3.03	S	2.99	S	3.13	S	2.86	S	3.01	S

Legend: VS	Very sufficient	3.25	- 4.00
S	Sufficient	2.50	- 3.24
FS	Fairly sufficient	1.75	- 2.49
NS	Not sufficient	1.00	- 1.74

Table 6 depicts how sufficient is the UB library. The grand mean of the ratings by the respondents on the libraries is 3.01 which indicated that the library resources in UB were sufficient. The item ranked with the highest mean of 3.20 was on Library design which was conducive to learning. This item was ranked consistently highest by all the respondent groups.

The item with the lowest mean of 2.81 is given on the item - Book holdings were regularly updated. The low rating on this item was a common observation shared by all the respondents. They found this provision adequate because they were aware of the limitations confronting the school in keeping the book holdings up-to-date, and the causes of the delays are reasonable for them.

These findings coincide with the study of Kettunen 2005 on the integration of strategic management and quality assurance that affirmed the importance of taking into account the external influences on higher education to reconcile these with their internal resources. Management has a role to communicate and

implement a strategic plan throughout the organization in order to be proactive and effectively respond thereto.

Table 7. Sufficiency of ICT Facilities

Items	Admin		Faculty		Staff		Students		Total	
	X	I	X	I	X	I	X	I	X	I
1. ICT resources are efficiently and effectively used for all stakeholders.	2.78	S	2.74	S	3.02	S	2.75	S	2.82	S
2. ICT training is provided to all users including students, faculty and staff.	2.67	S	2.63	S	2.88	S	2.69	S	2.72	S
3. ICT facilities are competitive with prevailing standards.	2.72	S	2.63	S	2.93	S	2.66	S	2.74	S
4. ICT utilization and expansion are included in institutional development plans.	2.72	S	2.75	S	2.90	S	2.72	S	2.77	S
Group Mean	2.72	S	2.69	S	2.93	S	2.70	S	2.76	S

Legend: VS      Very sufficient      3.25      - 4.00  
 S      Sufficient      2.50      - 3.24  
 FS      Fairly sufficiency      1.75      - 2.49  
 NS      Not sufficient      1.00      - 1.74

Table 7 shows ICT facilities. The grand mean of the ratings by the respondents on ICT facilities was 2.76 which indicated that the resource was sufficient. The item with the highest mean of 2.82 was *ICT resources are efficiently and effectively used for all stakeholders*. Out of the four-respondent groups, three groups: administrators (2.78), staff (3.02), and students (2.75) ranked this item their highest while the faculty respondents ranked this item their second highest. The item with the lowest mean of 2.72 was on the *ICT training provided to all users*. The three respondent-groups, namely, administrators (2.67), the faculty (2.63), and the staff (2.88) consistently ranked this item their lowest. It is a pervasive sentiment among all the respondents that ICT training is adequate but considered low compared with all the other ICT concerns in UB.

The findings in this sub-area affirmed good management practices in the records and documentation management of UB similar to the findings in the study presented by Sy-Aves (2007) that quality assurance standards were complied by Capitol University through documented procedures and work instructions, and documents needed to operate, monitor, and control processes.

## **CONCLUSION**

Results showed the sufficiency of the following: resource utilization, faculty, physical structures, library and ICT facilities.

The effectiveness and efficiency of UB's resource utilization were assessed by appraising the current monitoring scheme of resource utilization and the responsiveness of the utilization program to external development and changes.

## **LITERATURE CITED**

- Altbach, Philip G. & Jamil Salmi. (2011) *The Road to Academic Excellence*. The World Bank, Washington, D.C.
- Arcelo, Adriano A. (2003) *In pursuit of continuing quality in higher education through accreditation: the Philippine experience*. International Institute for Educational Planning, UNESCO Retrieved from <http://goo.gl/Y4kAE2> , (Accessed last 16 July 2014).
- Burrell, DN & Grizzell, B.C. (2008). *Competitive marketing and planning strategy in higher education*. Academic leadership competitive Planning Strategy. Retrieved from <http://goo.gl/sR9UAH> (Accessed 16 July 2014).
- CHED Memorandum Order 15 series of 2005. *Institutional Monitoring and Evaluation for Quality Assurance of all Higher Education Institution in the Philippines*. Retrieved from <http://goo.gl/mUoK2X>, (Accessed 16 July 2014).
- CHED Memorandum Order 16 series of 2005. *Implementing Rules and Regulations of CMO No. 15 Series of 2005 entitled "Institutional Monitoring and Evaluation for Quality Assurance of all Higher*

- Education Institutions in the Philippines”. Retrieved from <http://goo.gl/a2thfY> (Accessed 16 July 2014).
- IQUAME Self-Evaluation Document (SED) Guidebook. Commission on Higher Education, February 2007 edition. Retrieved from <http://goo.gl/0pv99E> (accessed 16 July 2014)
- ISO Quality Management Principles (2012). Retrieved from <http://goo.gl/8ZmLMZ> (accessed 16 July 2014)
- Kettunen, Juha. (2005) Integration of strategic management and quality assurance. Retrieved from <http://goo.gl/zS1EGT> (accessed 16 July 2014)
- Manual of Regulations for Private Higher Education of 2008. Commission on Higher Education 2008. Retrieved from <http://goo.gl/nGhwen> (accessed 16 July 2014)
- Sabio, Ralph A. & Cecilia Junio-Sabio. (2014) Concerns for Quality Assurance and Excellence in Higher Education. *International Journal of Information Technology and Business Management*, Volume 23, No. 1 March 29, 2014
- Standards of Accreditation. Commission on Institutions of Higher Education New England Association of Schools and College Retrieved from <http://goo.gl/FIKbqp> (accessed 16 July 2014)
- Sy-Aves, Luvismín (2007) The Effectiveness of Data Provision through Quality Management System: Retooling for the Institutional Monitoring and Evaluation for Quality Assurance in Higher Education (IQUAME). 10th National Convention on Statistics (NCS), EDSA Shangri-La Hotel, October 1-2, 2007