Status of CHED's Center of Development in Information Technology Education in Region I

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Abstract – *This research determined the status of the three Centers of Development in Information Technology Education Institutions in Region 1, particularly, Colegio De Dagupan, Don Mariano Marcos Memorial State University – Mid La Union Campus and Lorma Colleges, in compliance with the Commission on Higher Education's (CHED) Center of Development (COD) / Center of Excellence (COE) Criteria along the areas of Instructional Quality, Research and Publications, Extension and Linkages, and Institutional Qualifications, as a basis of evolving a six-year development plan for Pangasinan State University – Lingayen Campus. This research utilized the qualitative method of research using the COD/COE Criteria as contained in CHED Memorandum Order Number 19, series of 2006 to define the parameters for the data collection. The proposed six-year development plan was validated by the group of experts such as the CHED Regional Office 1 – Information Technology Education (ITE) Supervisor, Deans of the three COD in ITE Institutions in Region I, and the Campus Executive Director of PSU – Lingayen Campus. Findings showed that the status of PSU – Lingayen Campus in terms of Institutional Qualifications were compliant to the requirements of CHED's COD/COE Criteria; however in terms of Instructional Quality, Extension and Linkages; more so in Research and Publications were not yet complied to the said criteria. The proposed six-year development plan for PSU – Lingayen was formulated and revealed a very high level of validity. It was generally concluded the proposed six-year development plan is a valid framework for the achievement of Center of Development and eventually Center of Excellence in Information Technology Education status for PSU – Lingayen Campus. Further, the proposed six-year development plan is executable, acceptable and recommended to use as a guide and basis for the PSU –Lingayen Campus and other higher education institution offering Information Technology Education.*

Keywords – *Center of Development, Commission on Higher Education, Information Technology Education.*

INTRODUCTION

This research determined the status of the three Centers of Development in Information Technology Education Institutions in Region 1, particularly, Colegio De Dagupan, Don Mariano Marcos Memorial State University – Mid La Union Campus and Lorma Colleges, in compliance with the CHED's COD/COE Criteria along the areas of Instructional Quality, Research and Publications, Extension and Linkages, and Institutional Qualifications, as a basis of evolving a six-year development plan for Pangasinan State University (PSU) – Lingayen Campus.

This research utilized the qualitative method of research using the COD/COE Criteria as contained in CHED Memorandum Order Number 19, series of 2006 to define the parameters for the data collection. The proposed six-year development plan was validated by the group of experts such as the CHED Regional Office 1 – ITE Supervisor, Deans of the three COD in ITE Institutions in Region 1, and the Campus Executive Director of PSU – Lingayen Campus.

OBJECTIVE OF THE STUDY

The objective of this research was to formulate a six-year development plan for Pangasinan State University – Lingayen Campus for its Information Technology Education programs. The development plan was focused on the preparation of the Campus to attain the Center of Development in Information Technology Education award by the CHED in three years time, and eventually to attain the Center of Excellence status after three years again. This can be done through assessing its current status and by benchmarking from the three Center of Development in Information Technology Education in Region I.

METHODOLOGY

This research study used the qualitative research method. Qualitative research seeks out the 'why', not the 'how' of its topic through the analysis of unstructured information – things like an interview, open-ended survey responses, feedbacks, photos, and videos. The main methods employed in qualitative research are observation, interviews, and documentary analysis.

Documents relevant to the status assessment in the areas of instructional quality, research and publication, extension and linkages, and institutional qualifications was systematically collated, analyzed and presented. Interviews to the Deans, Faculty Members of IT (Information Technology) Colleges or departments, officers – in - charge in different libraries, laboratories, and other offices accompanied by observations and inspections was also employed to gather pertinent data needed in this study.

This study was conducted at Pangasinan State University- Lingayen Campus particularly the Information and Communication Technology Department and in the three Centers of Development in Information Technology Education in Region I namely the Colegio de Dagupan which is located at City of Dagupan, Pangasinan, the Don Mariano Marcos Memorial State University – Mid La Union Campus and Lorma Colleges which is both located at City of San Fernando City, La Union.

A group of recommended representatives and experts such as Deans or Program Heads of State Universities, Private Higher Education, and CHED ITE Supervisor in Region I were tapped to validate the Proposed Six Year Development Plan. The Validators were selected by the researcher because they were important requirements in the study. The distribution of validators was shown in Table 1.

Table 1. Distribution of Validators

Validators	Number
Dean, CICS, Colegio de Dagupan	1
Dean, CIT, DMMMSU-MLUC	1
Dean, CCSE, Lorma Colleges	1
CED, PSU – Lingayen Campus	1
ITE Supervisor, CHED R1	1

As guidelines for evaluating the status of IT Education programs of PSU – Lingayen Campus, the CMO 19 S. 2006 – Implementing Guidelines for the Identification, Support, and Development of Centers of Excellence and Centers of Development in Information Technology [1] was downloaded from the internet, particularly the CHED's official website – http://www.ched.gov.ph. This memorandum order is the set of standards and guidelines which helped the researcher in determining the specific areas to be evaluated.

Documents in the form of records, reports, and checklist were retrieved, collated and analyzed. The results of the CHED's Monitoring Instrument for COE's and COD's for Information Technology were requested from the three Centers of Development in IT Education in Region I as a basis for the proposed development plan.

The values in the CHED's Monitoring Instrument for COE's and COD's for Information Technology were presented in the tables. The values were based on the documents presented after the usual procedure of verification of documents, tallying and counting of frequencies. Frequency counts, percentages,

presence or absence (Yes/No) were applied to summarize the variables. The analysis and evaluation were tabulated and presented in tables.

The data that were gathered using documentary analysis on the different areas of in CMO 19 S. 2006 such as Instructional Quality, Research and Publications, Extension and Linkages, and Institutional Qualification will be tabulated. The researcher seeks the assistance of the CHED Office of Policies and Standards (OPS) to convert frequencies, percentages, and absence or presence of criteria into points. The COD and COE cut-off score was the basis for identifying the compliance of PSU – Lingayen Campus to the different areas to be evaluated.

The proposed development plan of Pangasinan State University – Lingayen Campus was validated by a group of experts comprises the Deans of the Centers of Development in Information Technology Education in Region I, the Dean of PSU – Lingayen Campus and a Regional CHED Supervisor in Information Technology Education. The proposed development plan was validated as to its acceptability, benificiality, objectivity, and usability.

The mean values of ratings of the validators were computed and interpreted based on the given standards and criteria following a Likert Scale which was utilized to interpret the results for the degree of validity.

RESULTS AND DISCUSSION

After the data were presented, interpreted, and analyzed, the researcher arrived at the following significant findings:

The status of the Information Technology Department of PSU – Lingayen Campus showed that along:

A. Instructional Quality

Along Faculty, for academic qualifications, not yet complied as to full time faculty members with master's degree and in terms of percentage with master's degree; and

Table 2. Status of faculty in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
Academic Qualifications. 1. Faculty members with Masters Degree (Full-time)	8.00	7.20	Not Yet Complied
2. Percentage of Faculty with masters degree	8.00	6.55	Not Yet Complied
Other Qualifications. 1. Faculty Development Initiatives	0.80	0.80	Complied
2. Faculty-Student Ratio	2.40	0.80	Not Yet Complied
3. Faculty with Ph.D. and full-time	2.40	0.00	Not Yet Complied
4. Faculty with industry experience	2.40	0.48	Not Yet Complied

for other qualifications, complied as to faculty development initiatives and not yet complied as to the faculty with industry experience, faculty-student ratio and full time faculty with IT doctoral degree.

Along Laboratories, compliant along with software support but not yet complied in terms of computer-student ratio, access to printers, access to the internet, and audio-visual equipment.

Table 3. Status of laboratories in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Computer-student ratio	2.80	0.24	Not Yet Complied
2. Access to printers	0.70	0.42	Not Yet Complied
3. Access to the Internet	2.10	0.42	Not Yet Complied
4. Software support	0.70	0.70	Complied
5. Audio-visual equipment	0.70	0.35	Not Yet Complied

Along Libraries, compliant as to digital holdings – Instructional Materials sub area, library facilities, and library support staff library, but not yet complied along with library holdings and online book/journal subscription sub area.

Table 4. Status of library in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
Library Holdings.			
1. Above 5 titles per course	0.90	0.54	Not Yet Complied
2. Recency of holdings	0.60	0.30	Not Yet Complied
3. IT Magazines/journals	0.30	0.12	Not Yet Complied

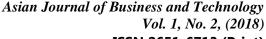|			
Digital holdings			
1. Online books/journal subscriptions	0.30	0.00	Not Yet Complied
2. Instructional Materials	0.15	0.15	Complied
Library Facilities			
1. Online catalog	0.15	0.15	Complied
2. Internet Access in the library	0.30	0.30	Complied
Library Support Staff	0.30	0.30	Complied

Along Curriculum, PSU Lingayen Campus was fully compliant in terms of curriculum flowchart, syllabi, revision of the curriculum and course electives.

Table 5. Status of the curriculum in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Curriculum flowchart	0.30	0.30	Complied
2. Syllabi	0.40	0.40	Complied
3. Revision of the curriculum	0.20	0.20	Complied
4. Course Electives	0.10	0.10	Complied

Along with Program Administration, PSU - Lingayen Campus was fully compliant in terms of professional development training,

awards and citations, organizational structure, and presence of strategic or development plan but not compliant as to qualifications of the Department Head of ICT.

Table 6. Status of program administration in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Qualification of the Dept. Head	0.80	0.30	Not Yet Complied
2. Professional Devt. Training	0.20	0.20	Complied
3. Awards and Citations	0.20	0.20	Complied
4. Organizational Structure	0.40	0.40	Complied
5. Strategic Devt. Plan	0.40	0.40	Complied

Along with Student Support, PSU – Lingayen Campus fully complied with student support requirements in terms of availability of study centers, student-faculty consultations, and co-curricular programs.

Table 7. Status of student support in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Availability of Study Centers	0.80	0.80	Complied
2. Student-Faculty Consultation	0.60	0.60	Complied

3. Co-curricular offerings	0.60	0.60	Complied

Along with IT Capability, as to IT capability, PSU – Lingayen Campus was fully complaint specifically in terms of availability of internet ports and online resources.

Table 8. Status of IT Capability in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Availability of Internet ports	0.80	0.80	Complied
2. Online resources	1.20	1.20	Complied

Along Graduate Program, PSU – Lingayen Campus was not yet complied in terms of the presence of a graduate program in IT.

Along with Graduate Profile, PSU – Lingayen Campus complied fully with requirements in terms of the presence of admission and retention policy and presence of enrollment and graduate statistics.

Along Graduate Tracer, PSU – Lingayen Campus complied fully with requirements in terms of the graduate tracer.

Table 9. Status of Graduate Program, Graduate Profile and Tracer in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
Graduate Program	3.00	0.00	Not Yet Complied
Graduate Profile			
1. Admission /	0.25	0.25	Complied

Retention Policy			
2. Enrollment / Graduate Stat.	0.25	0.25	Complied
Graduate Tracer	0.50	0.50	Complied

B. Research and Publication

PSU – Lingayen Campus was found to be zero points in this criteria.

Table 10. Status of Research and Publication in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Internally funded applications, devt., and research projects.	7.00	0.00	Not Yet Complied
2. Externally funded applications, devt., and research projects.	7.00	0.00	Not Yet Complied
3. Publications	7.00	0.00	Not Yet Complied
4. Presentation in Conferences	7.00	0.00	Not Yet Complied
5. Commercialization Initiative	2.00	0.00	Not Yet Complied

Based on the results along research and publication criteria, the PSU-Lingayen Campus must create and raise internally funded research projects by strengthening the capability of faculty-researchers, implement incentive scheme for faculty-researcher to attract more research proposals, and immediate release of funding of approved research proposals. Another is that, establishment of linkages with research funding agencies like CHED and Department of Science and Technology (DOST), to generate more research projects. Furthermore, the dissemination of research outputs must be encourage for completed researches through presentation in the conferences, conventions, symposia, and publication in the referred research and scientific journals. Lastly, acceleration of technology commercialization initiatives through systems development to improve the productivity and competitiveness of some business

C. Extension and Linkages

Extension and linkage parameters fully complied in terms of outreach programs while not yet complied in terms of industry-academe linkages, and academic linkages.

Table 11. Status of Extension and Linkages in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Industry-Academe Linkages	8.00	3.00	Not Yet Complied
2. Academe-Linkages	6.00	0.00	Not Yet Complied
3. Outreach Programs	6.00	6.00	Complied

D. Institutional Qualifications

Institutional qualifications were fully complied with, specifically in terms of the accreditation process, national and international recognitions, and IT-enabled processes.

Table 12. Status of Institutional Qualifications in compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Accreditation Process	2.00	2.00	Complied
2. Government Recognitions	1.50	1.50	Complied
3. IT Enabled Process	1.50	1.50	Complied

In sum, PSU – Lingayen got full points for institutional qualifications; but lacked points for instructional quality, extension, and linkages; and more so for research and publications because it gains zero points in this criteria; total points arrived it was 41.32 out of a possible 60 points for COD status and 81 points for COE status.

Table 13. Summary on the Extent of PSU compliance to the CHED COE/COD criteria.

Specific Area	Full Points	PSU Points	Extent of Compliance
1. Instructional Quality	45.00	27.32	Not Yet Complied
2. Research and Publication	30.00	0.00	Not Yet Complied
3. Extension and Linkages	20.00	9.00	Not Yet Complied
4. Institutional Qualifications	5.00	5.00	Complied
Total	**100.00**	**41.32**	

COD / COE recognized are entitled to funding assistance from CHED. Funds to be released can be utilized for student scholarships, faculty development, library and laboratory upgrading, research and extension services development of instructional materials and networking with existing CODs and COEs in Information Technology Education. The COD and COE status also means that HEI is high priority in the selection of CHED institutional partners with regards to CHEDs development projects. HEIs also entitle to non-monetary subsidies and awards, such as graduate scholarships for faculty members, priority consideration for CHED research grants, and consideration for identification as an autonomous or deregulation institution. That is why the Pangasinan State University – Lingayen Campus must undergo CHED accreditation to become Center of Development and eventually Center of Excellence in Information Technology Education in the near future to enjoy those stated benefits.

On the basis of the status assessment of the three COD in ITE institutions in Region I, the proposed six-year development plan was formulated. The result of the validation was very highly valid. The copy of the validated six-year development plan for Pangasinan State University towards Center of Development and Center of Excellence in Information Technology Education will be provided upon request.

CONCLUSION

With reference to the findings of the study, the following were deduced:

The findings on the status of the PSU – Lingayen Campus showed that the Information and Communication Technology got full points for institutional qualifications; but lacked points for instructional quality and extension and linkages; and zero points for research and publications; hence this present status is not adequate to acquire Center of Development and more so for Center of Excellence in Information Technology Education status.

The proposed Six Year Development Plan for PSU – Lingayen Campus is a valid

roadmap that provides the framework for the achievement of Center of Development and eventually Center of Excellence in ITE recognition for the ICT Department of the campus.

RECOMMENDATIONS

Cognizant to the criteria set up for COD/COE status of higher education institutions, the following recommendations are offered for consideration:

The PSU – Lingayen Campus must sustain its strong capabilities in institutional qualifications; however, it must address rigorously the lapses in instructional quality and extension and linkages; and in research and publications to bolster its quest for COD and COE status. Specifically improvements in terms of instructional quality through compliant credentials of the faculty, Masters and Doctoral degree fulfillment and industry immersions of faculty; provision of better ratio between faculty and students; and, computers, printers and internet ports; procurement of audio-visual equipment; updating its library holdings; qualifications of the ICT Department Head; and offering of IT graduate program; for quality research and publications, it must address compliance issues in terms of internally funded and externally funded applications, publication and presentation of researches in conferences; and commercialization initiatives; and for extension and linkages, it must also address compliance issues on industry-academe linkages and academe linkages for proper and faster technology transfer and possible development training and programs.

The proposed PSU – Lingayen Campus Six Year Development Plan be submitted for consideration to the University Officials and offered as a valid framework for its quest for Center of Development and Center of Excellence status in Information Technology Education.

Other higher education institutions offering Information Technology Education may consider this research in light of their own strategic objectives for the center of development and center of excellence recognitions and also as a guide for general improvement in terms of quality improvement of their programs and services.

REFERENCES

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