Faculty Digital Competence and Organizational Commitment as Correlates of Accreditation Readiness: A Historical Baseline from Information Technology Programs in Western Visayas

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Abstract

This article reappraises cross-sectional data collected in academic year 2011-2012 from non-accredited information technology programs in state universities and colleges in Western Visayas, Philippines. The original study surveyed 154 faculty members using an 86-item computer-technology competence instrument and a 30-item organizational-commitment instrument. One program head from each of 31 campus programs completed the faculty-area checklist of the Accrediting Agency of Chartered Colleges and Universities in the Philippines. Faculty reported high competence ($M = 4.55$, $SD = 0.45$) and commitment ($M = 4.67$, $SD = 0.33$). Reconstructing the program-level readiness estimate from the six provincial summaries yielded $M = 4.35$ ($SD = 0.58$), within the study's "highly ready" band. Accreditation readiness was not associated with aggregated faculty competence ($r = -0.075$, $p = .687$) or commitment ($r = 0.104$, $p = .579$). The results suggest that strong individual self-ratings do not necessarily correspond to documented program capacity for external quality assurance. Interpretation must remain cautious because the evidence is historical and self-reported, the modified instruments lack reported psychometric coefficients, raw data were unavailable, and the dissertation contains inconsistencies in the readiness sample and summary statistics. The study is most useful as a historical baseline and as a rationale for contemporary replication using current accreditation standards, direct performance evidence, and multilevel analysis.

Keywords: accreditation readiness; digital competence; information technology faculty; organizational commitment; quality assurance; state universities and colleges

Introduction

Accreditation is both an accountability mechanism and an organized process of institutional learning. In Philippine higher education, quality assurance asks institutions to align their learning environments with their missions, demonstrate educational and service outcomes, and develop a sustainable culture of quality (Commission on Higher Education [CHED], 2012, 2014). This expectation makes faculty capacity central, but it also makes clear that program readiness is not reducible to the attributes of individual teachers. Accreditation requires documented policies, adequate staffing and workload systems, professional development, scholarly activity, evidence of implementation, and coordinated institutional support.

Information technology programs face an additional challenge: the meaning of professional competence changes rapidly. Earlier measures emphasized computer operation, word processing, spreadsheets, databases, networking, telecommunications, and media equipment. Contemporary frameworks retain technical capability but extend it to the pedagogical, ethical, collaborative, inclusive, and professional uses of digital technology. The UNESCO ICT Competency Framework for Teachers, for example, connects technology use with curriculum, assessment, pedagogy, organization, administration, and continuous professional learning (UNESCO, 2018). Falloon (2020) similarly argues for a holistic teacher digital competence that integrates technical knowledge with curriculum decisions, personal-ethical judgment, and professional engagement.

This broader conception matters when historical self-ratings are interpreted. Systematic reviews of higher-education research show that teacher digital competence is often assessed through self-report and that the field needs more rigorous, integrated, and context-sensitive measurement (Basilotta-Gómez-Pablos et al., 2022; Peters et al., 2022). A high score on an older technical checklist may indicate confidence with the tools of its period, but it cannot establish competence with later technologies or with technology-supported

pedagogy and assessment. Historical data can nevertheless provide a valuable baseline when their time period and measurement boundaries are explicit.

Organizational commitment is another plausible human factor in quality improvement. Commitment describes a psychological relationship with an organization, including attachment, perceived obligation, and the costs associated with leaving (Meyer & Allen, 1991). Committed faculty may be more willing to participate in documentation, curriculum review, professional development, and other accreditation work. Yet organizational readiness for change is a collective property rather than a simple sum of individual attitudes. Weiner (2009) distinguishes the shared resolve to implement change from shared confidence that the organization has the knowledge, resources, and circumstances required to do so. This distinction provides a useful explanation for why faculty competence or attachment may coexist with incomplete program systems.

The original dissertation by Lagon (2012) examined competence, commitment, and accreditation readiness among faculty members of non-accredited information technology programs in state universities and colleges across Western Visayas. The study is potentially informative, but its direct publication now requires two forms of reframing. First, the 2011-2012 results must be presented as historical rather than current evidence. Second, the unit of analysis must follow the data-collection design: competence and commitment were reported by faculty members, whereas one accreditation-readiness checklist was completed for each campus program.

Purpose of the Study

This archival reappraisal had three objectives: (a) to describe the reported levels of faculty computer-technology competence and organizational commitment; (b) to reconstruct a defensible program-level estimate of accreditation readiness from the published provincial summaries; and (c) to examine the reported program-level associations of accreditation readiness with aggregated faculty competence and commitment. The guiding question was whether programs with higher faculty competence or commitment also displayed greater documented readiness for accreditation.

Methods

Design and Setting

The source study used a descriptive-correlational, cross-sectional design during academic year 2011-2012. It covered non-accredited information technology programs in state universities and colleges located in Aklan, Antique, Capiz, Guimaras, Iloilo, and Negros Occidental. The supplied dissertation lists 31 campus programs. This article is a secondary reappraisal of the dissertation's reported aggregate statistics; the participant-level dataset was not available for reanalysis.

Participants and Units of Analysis

The faculty-level sample comprised 154 directors, department chairs, full-time faculty members, and part-time faculty members. The dissertation described this group as approximately 80% of the target population. Participants were predominantly male (62%), held a baccalaureate degree as their highest completed qualification (73%), had eight years or less of teaching experience (74%), and served as instructors or part-time instructors (90%). The program-level sample comprised 31 campus programs, each represented by one director or information technology department head who completed the readiness checklist. Accordingly, faculty was the unit for competence and commitment, while campus program was the appropriate unit for readiness and cross-construct correlations.

Measures

Computer-technology competence was measured using an 86-item instrument adapted from Saud (2005). Its eight domains covered computer operations; setup, maintenance, and troubleshooting; word processing and desktop publishing; spreadsheets and graphing; databases; networking; telecommunications; and media communications. Responses ranged from 1 to 5, with 4.21-5.00 interpreted in the dissertation as very high.

Organizational commitment was measured with a 30-item questionnaire adapted from Libutaque (2003). Items addressed institutional pride, willingness to serve, identification with the institution, cooperation, extra-role effort, professional development,

and intention to remain. Responses used a five-point frequency scale; scores from 4.21 to 5.00 were classified as very high.

Accreditation readiness was assessed using the 2011 AACCUP Preliminary Survey Instrument for Area II - Faculty. The checklist addressed academic qualifications and experience; recruitment, selection, and orientation; faculty adequacy and loading; rank and tenure; faculty development; professional performance and scholarly work; salaries, benefits, and incentives; and professionalism. One program head completed the checklist for each campus. Scores of 4.21-5.00 were interpreted as highly ready and 3.41-4.20 as ready. The dissertation states that adapted standardized instruments were used, but it does not report internal consistency, interrater reliability, construct validity, or details of the adaptations.

Procedure and Ethics

The dissertation reports that permission was obtained from the graduate-school director and from the participating school administrators before questionnaires were distributed. It also states that respondents were assured of confidentiality. No research-ethics committee name, approval number, consent form, or data-retention statement appears in the supplied document. These details must be verified by the author and reported in accordance with the requirements of the target journal.

Analytic Strategy for This Reappraisal

The original means, standard deviations, test statistics, and probabilities were transcribed from the dissertation. Ninety-five percent confidence intervals for competence and commitment were calculated from the reported faculty-level summary statistics. For readiness, the six provincial subgroup counts, means, and standard deviations were pooled using standard formulas, producing an unweighted program-level estimate across 31 campus programs. This approach honors the one-checklist-per-program design. Pearson correlations were retained as reported; their probability values are consistent with an analytic sample of approximately 31 programs. Fisher-transformed 95% confidence intervals were calculated using n = 31. Subgroup tests in the dissertation were treated as exploratory because numerous comparisons were made without adjustment and

some readiness analyses appear to duplicate a campus score across faculty members.

Results

Table 1

Primary Descriptive Results

Construct	Unit (n)	M	SD	95% CI	Band
Competence	Faculty (154)	4.551	0.449	[4.479, 4.622]	Very high
Commitment	Faculty (154)	4.675	0.327	[4.623, 4.727]	Very high
Readiness	Program (31)	4.347*	0.580*	[4.135, 4.560]*	Highly ready

**Reconstructed from the six provincial program-level summaries. M = mean; SD = standard deviation; CI = confidence interval.*

Descriptive Findings

Faculty members rated both their computer-technology competence and organizational commitment near the upper end of the five-point scales. Competence averaged 4.55 (SD = 0.45), and commitment averaged 4.67 (SD = 0.33). Both confidence intervals remained entirely within the dissertation's “very high” category. These estimates describe self-perception and should not be interpreted as scores from direct performance tests.

The program-level readiness estimate reconstructed from the six provincial summaries was 4.35 (SD = 0.58; 95% CI [4.13, 4.56]), falling within the “highly ready” band. The dissertation also reports an overall readiness mean of 4.4590 and gives two different standard deviations (0.51402 in the narrative and 0.57950 in the table). Because the latter standard deviation is reproduced exactly by pooling the 31 program-level provincial summaries, this article uses the reconstructed program-level estimate and treats the reported 4.4590 value as a potentially faculty-weighted or duplicated estimate that requires verification against the raw data.

Correlational Findings

Accreditation readiness was not significantly associated with aggregated faculty competence (r = -0.075, p = .687) or aggregated faculty commitment (r = 0.104, p = .579). The confidence intervals were wide and included effects in both directions. The data therefore do not support the claim that programs were more ready for accreditation merely because their faculty reported greater technical competence or stronger organizational commitment.

Table 2

Program-Level Correlations with Accreditation Readiness

Correlate	r	Reported p	95% CI for r	Decision
Aggregated faculty competence	-0.075	.687	[-0.418, 0.287]	Not significant
Aggregated faculty commitment	0.104	.579	[-0.260, 0.442]	Not significant

Note. Confidence intervals were calculated using n = 31 program units, consistent with the collection of one readiness checklist per campus program and with the reported probability values.

Exploratory Group Differences

The dissertation reported higher organizational commitment among faculty older than 30 years than among younger faculty, t(152) = -2.618, p = .010. It also reported differences by academic rank for competence, Kruskal-Wallis H(2) = 6.697, p = .035, and commitment, H(2) = 11.297, p = .004, with higher mean ranks among professors than among instructors and part-time instructors. Other tested differences in faculty competence and commitment by sex, educational qualification, teaching experience, and province were not statistically significant. These results are exploratory: the original analysis did not report post hoc comparisons, effect sizes, assumption checks, or correction for multiple testing. Readiness comparisons across faculty demographics are not emphasized because a single program-level readiness score cannot be treated as 154 independent faculty observations.

Discussion

The historical evidence presents a useful contrast. Faculty members perceived themselves as highly competent with computer technologies and strongly committed to their institutions, and program heads rated most faculty-area accreditation requirements as available. Yet neither faculty competence nor commitment was associated with accreditation readiness at the program level. In practical terms, individual “skill” and “will” did not explain whether the documentary and organizational conditions for accreditation were in place.

This pattern is conceptually plausible. Accreditation readiness is an institutional configuration of policies, evidence, staffing, workload, development systems, incentives, scholarly outputs, and coordinated implementation. A technically confident faculty member may work in a program with incomplete records, insufficient staffing, weak promotion systems, or limited institutional support. Conversely, a program may assemble documentary requirements even when individual faculty members vary in their technical confidence. Weiner's (2009) theory is relevant here: readiness depends on collective judgments about task demands, resources, and situational conditions, not only on individual attachment or capability.

The findings also illustrate why the level of analysis matters. Faculty competence and commitment are individual attributes, whereas accreditation readiness was represented by one checklist per campus program. A valid test of organizational readiness should either aggregate faculty perceptions after demonstrating within-program agreement or measure institutional conditions directly and analyze programs as clusters. The original correlation probabilities align with a 31-program analysis, but the dissertation does not document the aggregation procedure. A contemporary replication should predefine the multilevel model and report intraclass correlations, within-group agreement, and between-program variance.

The very high competence rating must be interpreted within its historical instrument. Several items assessed technologies common at the time, including FTP, Gopher, videocassette equipment, and

desktop publishing. Such capabilities were relevant in 2011-2012 but do not cover the contemporary breadth of teacher digital competence. Current frameworks emphasize the purposeful integration of technology with pedagogy, curriculum, assessment, ethical practice, inclusion, data responsibility, collaboration, and continuous professional learning (Falloon, 2020; UNESCO, 2018). Thus, the score is a baseline for its era, not evidence that faculty are presently prepared for cloud platforms, learning analytics, cybersecurity, artificial intelligence, hybrid teaching, or other later developments.

The high scores may also reflect ceiling effects and common self-report biases. Reviews of higher-education digital competence research have called attention to the field's dependence on self-assessment and to the need for stronger designs and performance evidence (Basilotta-Gómez-Pablos et al., 2022; Peters et al., 2022). A faculty member's confidence can be informative, but direct tasks, teaching artifacts, classroom observations, student-learning evidence, and external review would provide a more defensible assessment. Similarly, readiness ratings supplied by program heads should be verified against documentary evidence rather than treated as an audit result.

Implications for Quality Assurance Practice

For information technology programs preparing for accreditation, the results support an integrated readiness strategy. First, institutions should conduct an evidence-based gap analysis against the current instrument rather than rely on global impressions of readiness. Second, faculty-development plans should connect digital skills to curriculum design, assessment, ethics, research, and student outcomes. Third, program leaders should assign ownership, timelines, and verification standards for every required policy and record. Fourth, staffing, loading, rank, tenure, incentives, and scholarly-work systems should be reviewed as structural conditions, not treated as personal faculty shortcomings. Finally, readiness should be monitored with a dashboard of verifiable indicators and subjected to internal mock review before external survey.

These recommendations align with the outcomes-based quality-assurance direction formalized by CHED in 2012 and elaborated in its subsequent handbook. Quality is demonstrated through coherent

systems and outcomes, not simply through the existence of inputs (CHED, 2012, 2014). The historical study therefore remains useful less as proof that particular programs are ready today and more as evidence that human capacity and institutional readiness should be measured separately and then deliberately connected.

Conclusion

In 2011-2012, faculty members in the surveyed Western Visayas state-university and college information technology programs rated their computer-technology competence and organizational commitment very highly. Program-level readiness also fell within the study's highest descriptive band, although the exact overall estimate is affected by inconsistencies in the dissertation. Neither competence nor commitment was associated with readiness across the 31 programs. The central implication is that accreditation is an organizational accomplishment: capable and committed faculty are valuable, but they do not substitute for verified policies, resources, documentation, coordination, and quality-assurance systems. The evidence should be treated as a historical baseline and replicated using current standards, direct measures, raw data, and multilevel methods before it informs present accreditation decisions.

References

Accrediting Agency of Chartered Colleges and Universities in the Philippines. (2011). Preliminary survey instrument: Area II - Faculty.

Basilotta-Gómez-Pablos, V., Matarranz, M., Casado-Aranda, L.-A., & Otto, A. (2022). Teachers' digital competencies in higher education: A systematic literature review. International Journal of Educational Technology in Higher Education, 19, Article 8. https://doi.org/10.1186/s41239-021-00312-8

Commission on Higher Education. (2012). Policy-standard to enhance quality assurance in Philippine higher education through an outcomes-based and typology-based QA (CHED Memorandum Order No. 46, Series of 2012).

Commission on Higher Education. (2014). Handbook on typology, outcomes-based education, and institutional sustainability assessment. https://legacy.ched.gov.ph/wp-content/uploads/Handbook-on-Typology-Outcomes_June-20-version.pdf

Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. Educational Technology Research and Development, 68(5), 2449-2472. https://doi.org/10.1007/s11423-020-09767-4

Lagon, R. M. C. P. (2012). Competence, commitment, and readiness for accreditation of faculty members of the non-accredited information technology programs of SUCs [Unpublished dissertation]. West Visayas State University.

Libutaque, M. (2003). Planning and development program of state universities and colleges in Region VI and its influence on institutional productivity and commitment of the administrators [Unpublished doctoral dissertation]. University of Iloilo.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. Human Resource Management Review, 1(1), 61-89. https://doi.org/10.1016/1053-4822(91)90011-Z

Peters, M., Elasri-Ejjaberi, A., Martínez-Argüelles, M.-J., & Fàbregues, S. (2022). Teacher digital competence development in higher education: Overview of systematic reviews. Australasian Journal of Educational Technology, 38(3), 122-139. https://doi.org/10.14742/ajet.7543

Saud, M. S. (2005). Computer technology competencies perceived as needed by vocational and technical teachers in Malaysia [Doctoral dissertation, The Ohio State University].

UNESCO. (2018). UNESCO ICT competency framework for teachers (Version 3). https://unesdoc.unesco.org/ark:/48223/pf0000265721

Weiner, B. J. (2009). A theory of organizational readiness for change. Implementation Science, 4, Article 67. https://doi.org/10.1186/1748-5908-4-67