

Institutional Leadership Practices for Digital Transformation in Selected Private Higher Education Institutions in the National Capital Region

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ABSTRACT

This study examined six dimensions of institutional leadership for digital transformation in eight private higher education institutions in the National Capital Region, Philippines. Conducted from November 2025 to February 2026, the study employed an explanatory sequential mixed-methods design involving surveys of 329 faculty members and qualitative follow-up with eight administrators and 12 faculty members. Data were analyzed using descriptive statistics, Kruskal-Wallis tests, and thematic analysis. Infrastructure received the highest rating, while professional development received the lowest. No statistically significant differences were detected across institutions. Qualitative accounts highlighted technological investments, limited continuing training, and the development of data practices. Findings indicated a perceived imbalance between technological provision and sustained faculty support, underscoring the need for discipline-specific professional development.

INTRODUCTION

Digital transformation has become an important concern in higher education, requiring institutional leaders to align technology use with teaching, professional development, organizational processes, and decision-making. Its implementation involves changes in institutional culture and educational practices, as well as improvements in technological infrastructure. Castro Benavides et al. (2020) emphasized these interconnected dimensions, highlighting the importance of leadership and organizational change in advancing digital transformation within higher education institutions (HEIs). This perspective calls for examining how leadership supports the people and institutional conditions that enable digital initiatives to be implemented.

In Philippine private higher education, digital leadership has also been examined through the experiences of institutional leaders. Duterte (2025), in a qualitative study of Lasallian digital leaders, identified teacher empowerment, equitable digital access, feedback-informed planning, and distributed governance as important features of their leadership experiences. However, the study's specific institutional context also highlighted the value of further cross-institutional comparisons. These findings provided a basis for extending inquiry to faculty perceptions across selected private HEIs and examining the experiences underlying those perceptions.

The present study was motivated by the need to understand how institutional leadership for digital transformation was perceived and experienced in everyday academic work. Faculty members directly encountered leadership support through access to digital resources, opportunities for professional learning, encouragement of instructional innovation, and participation in institutional processes. Administrators offered a complementary perspective on the priorities and challenges involved in implementing these practices. Examining both perspectives allowed the study to investigate how institutional intentions were experienced in practice and to explain patterns that numerical ratings alone could not adequately describe.

The study contributed context-specific evidence from eight selected private HEIs in the National Capital Region. Its contribution lay in combining a comparison of faculty perceptions across institutions with qualitative explanations from administrators and faculty members. Using an explanatory sequential mixed-methods design, the study drew on quantitative responses from 329 faculty members, followed by qualitative accounts from eight school administrators and 12 faculty members. This approach extended understanding of institutional leadership by connecting perceived practices with the conditions, challenges, and enabling factors surrounding their implementation. It also provided an empirical basis for identifying priorities for leadership development and institutional support within the participating HEIs.

Specifically, the study assessed faculty members' perceptions of institutional leadership practices for digital transformation in terms of leading digital transformation, supporting innovative teaching and learning, providing professional development, creating a supportive institutional culture, managing resources and infrastructure, and using data for decision-making. It determined

whether these perceptions differed significantly across the eight participating private HEIs and subsequently explored administrators' and faculty members' accounts to explain the observed quantitative patterns, including the experiences, challenges, and enabling factors underlying the ratings and any differences identified across institutions.

LITERATURE REVIEW

Transformational Leadership Theory

Transformational leadership emphasizes a shared vision, encouragement of new ideas, and support for the development of organizational members. In higher education, this perspective helps explain how institutional leaders encourage faculty members to adopt digital practices, reconsider established teaching approaches, and participate in organizational change. It is particularly relevant to leadership practices involving instructional innovation, professional development, and a supportive institutional culture.

Research in higher education supported the connection between transformational and digital leadership. Antonopoulou et al. (2021) reported a positive association between these leadership approaches, indicating that stronger transformational leadership coexisted with greater implementation of digital leadership. Their findings highlighted the relevance of leadership behaviors alongside technological competence. However, this association did not establish that transformational leadership alone caused successful digital transformation.

In the Philippine context, Duterte (2025) explored the experiences of Lasallian digital leaders and identified teacher empowerment, trust-building, adaptability, and inclusive decision-making as important features of their practices. These findings complemented the emphasis of transformational leadership on developing people and supporting change. They also suggested the value of examining whether faculty members experienced leadership support in their everyday teaching and professional activities.

For the present study, transformational leadership offered an interpretive lens for examining faculty perceptions of institutional support for digital transformation. Its relevance was strongest in understanding how leaders communicated direction, encouraged innovative teaching, supported professional learning, and cultivated openness to change. The six leadership dimensions were examined as practices relevant to digital transformation rather than treated as a direct measurement of transformational leadership itself.

Institutional Theory

Institutional theory explains how organizational practices are shaped by established rules, professional expectations, and pressures for legitimacy. DiMaggio and Powell (1983) identified coercive, mimetic, and normative processes through which organizations within the same field could become increasingly similar. These processes involve responding to external requirements, adopting practices observed in other organizations, and conforming to professional norms. This perspective provides a possible

explanation for similarities in leadership practices among institutions operating within a shared educational environment.

Extending this perspective to digital transformation, Hinings et al. (2018) explained that digital innovations interact with existing organizational structures, practices, values, and beliefs. Their analysis emphasized that established institutional arrangements shape whether and how new digital arrangements gain acceptance. Consequently, institutions exposed to similar technological developments may integrate them differently into their existing operations.

Related literature also supported the examination of digital transformation across several institutional dimensions. Castro Benavides et al. (2020) identified technological, organizational, and social considerations in their systematic review of digital transformation in HEIs. Their findings supported an approach that considered leadership, people, institutional processes, and technology together. This broader perspective was relevant to examining professional support, institutional culture, resource management, and data use alongside digital teaching practices.

These perspectives provided reasons to examine both similarities and differences across the participating private HEIs. Shared expectations could encourage comparable practices, while institution-specific arrangements could produce different faculty experiences. The literature, therefore, justified cross-institutional comparison without establishing in advance which institutions would receive higher ratings. The present study extended this inquiry by connecting faculty assessments across eight private HEIs with qualitative explanations from administrators and faculty members

H1a: Faculty members' perceptions of leadership practices in leading digital transformation differ significantly across the eight selected private HEIs.

H1b: Faculty members' perceptions of leadership practices in supporting innovative teaching and learning differ significantly across the eight selected private HEIs.

H1c: Faculty members' perceptions of leadership practices in providing professional development differ significantly across the eight selected private HEIs.

H1d: Faculty members' perceptions of leadership practices in creating a supportive institutional culture differ significantly across the eight selected private HEIs.

H1e: Faculty members' perceptions of leadership practices in managing resources and infrastructure differ significantly across the eight selected private HEIs.

H1f: Faculty members' perceptions of leadership practices in using data for decision-making differ significantly across the eight selected private HEIs.

Conceptual Framework

The framework organized institutional leadership practices for digital transformation into six dimensions and was assessed through the perceptions of 329 faculty respondents. Institutional affiliation served as the grouping variable

for comparisons across the eight private HEIs. Following the quantitative analysis, qualitative accounts from eight school administrators and 12 faculty members were examined to explain the observed ratings and comparison results. The integration connected statistical patterns with participants' experiences, implementation challenges, and perceived enabling factors.

Transformational leadership and institutional theory provided complementary interpretive perspectives on these findings. The framework represented a comparative and explanatory inquiry; it did not posit a causal effect of institutional affiliation on leadership practices or directly measure digital transformation outcomes.

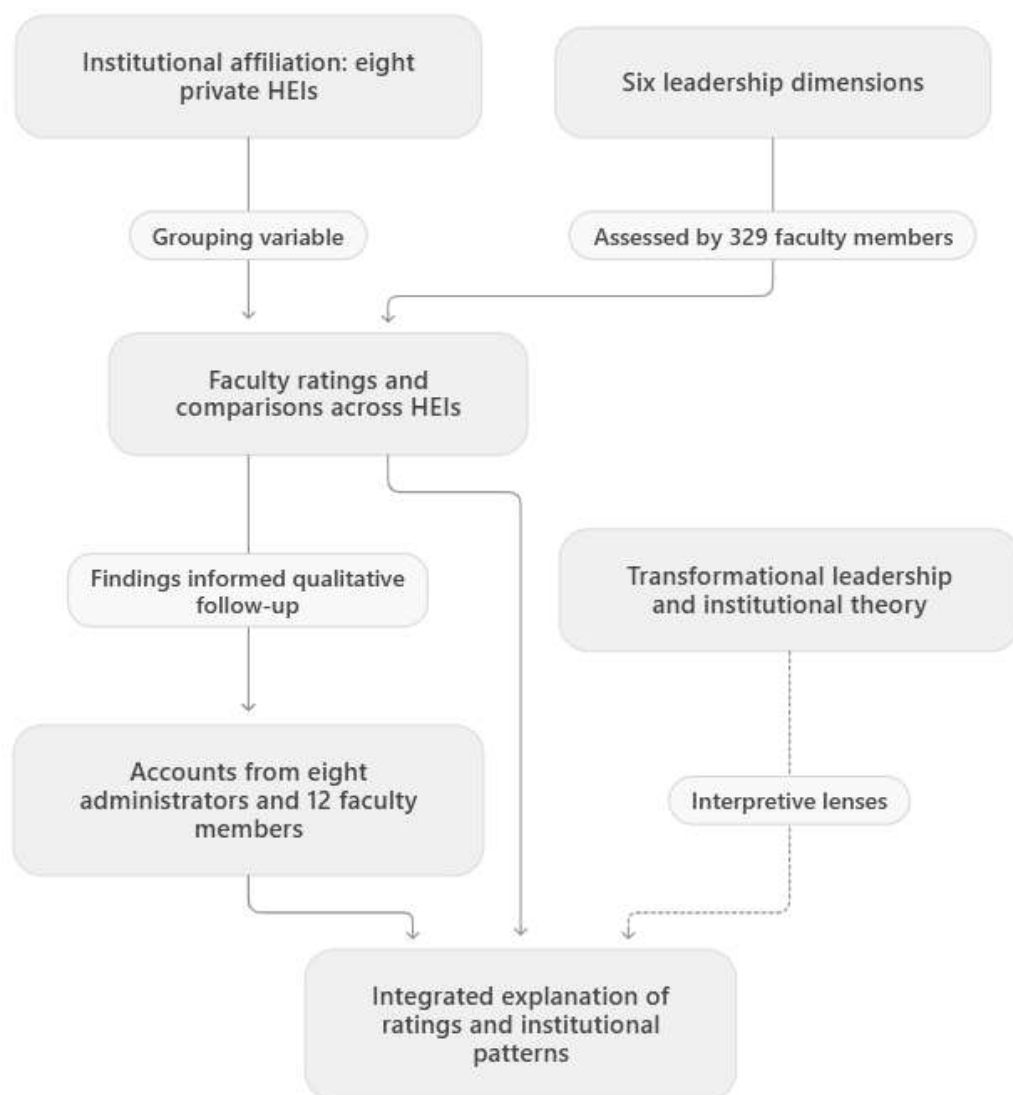


Figure 1. Conceptual Framework

METHODOLOGY

The study employed an explanatory sequential mixed-methods design to examine institutional leadership practices for digital transformation in eight selected private higher education institutions (HEIs) in the National Capital Region. Data were collected from November 2025 to February 2026. The

quantitative phase assessed faculty members' perceptions, while the subsequent qualitative phase explored administrators' and faculty members' experiences, challenges, and perceived enabling factors to explain the survey findings. Both phases were integrated during interpretation.

Quantitative data were collected using a researcher-developed questionnaire covering six dimensions: leading digital transformation, supporting innovative teaching and learning, providing professional development, creating a supportive institutional culture, managing resources and infrastructure, and using data for decision-making. Each dimension was represented by a single overall rating from each faculty respondent on a four-point scale. Four experts reviewed the instrument for content validity. It was subsequently pilot-tested with 32 participants, yielding a Cronbach's alpha of .76, indicating acceptable internal consistency.

The participating institutions were selected based on their willingness to join the study. Participants were purposively selected based on their experience: faculty members were required to have more than 3 years of teaching experience, while school administrators were required to have held their positions for at least 3 years. The Philippine Association of Authors, Researchers, and Educators, Inc., assisted in identifying and connecting with prospective participating institutions. The quantitative phase involved 329 faculty members. The qualitative phase involved eight school administrators and 12 faculty members who met the eligibility criteria. The qualitative faculty participants were recruited separately from the survey sample. Participation was voluntary, informed consent was obtained, and participants' identities and responses were kept confidential.

Means and sample standard deviations were calculated to summarize faculty ratings for each leadership dimension. Separate Kruskal-Wallis H tests were conducted to compare rating distributions across the eight institutions. Scores were ranked across groups; equal scores received average ranks, and the test statistics were corrected for ties. Statistical significance was assessed using the chi-square approximation with seven degrees of freedom at the .05 level. No post hoc comparisons were conducted because none of the omnibus tests were significant. Microsoft Excel was used for data encoding and preparation, and Jamovi for the initial statistical analysis. The reported descriptive statistics and Kruskal-Wallis results were subsequently recalculated in Python with SciPy and checked against the rank-based formula.

Qualitative responses were analyzed thematically through familiarization, coding, categorization, and theme development, with Taguette supporting the organization and coding of textual data. The qualitative findings were connected with the quantitative results by leadership dimension to explain the observed ratings, contextualize institutional patterns, and identify complementary or contrasting perspectives. Findings were interpreted within the context of the participating institutions.

RESEARCH RESULT

Faculty Perceptions of Institutional Leadership Practices for Digital Transformation

The quantitative phase examined the perceptions of 329 faculty members from eight selected private higher education institutions in the National Capital Region. Responses were summarized across six dimensions of institutional leadership practices for digital transformation. Table 1 presents the overall means, standard deviations, and verbal descriptions.

Table 1. Summary of Faculty Perceptions of Institutional Leadership Practices for Digital Transformation

Leadership Dimension	Mean	SD	Verbal Description
Leading digital transformation	3.16	0.443	Agree
Supporting innovative teaching and learning	3.08	0.406	Agree
Providing professional development	2.47	0.541	Disagree
Creating a supportive institutional culture	3.06	0.534	Agree
Managing resources and infrastructure	3.58	0.579	Strongly Agree
Using data for decision-making	3.18	0.495	Agree

Managing resources and infrastructure received the highest overall rating, with all three indicators rated Strongly Agree. Respondents expressed strong agreement on efforts to improve internet connectivity and digital infrastructure, expand access to technological resources, and allocate funding to support digital transformation. Providing professional development received the lowest overall rating and was the only dimension rated Disagree. Within this dimension, opportunities to attend training on technology and innovation received the lowest rating.

The remaining four dimensions were rated Agree overall. For leading digital transformation, the promotion of digital tools and online platforms received the highest assessment, while support for adopting new technologies received the lowest. In supporting innovative teaching and learning, respondents strongly agreed that leaders encouraged learner-centered and flexible teaching approaches, but disagreed that leaders motivated teachers to explore innovative strategies for digital transformation.

All indicators related to supportive institutional culture and data-informed decision-making were rated as Agree. Openness to change and innovation received the highest assessment within institutional culture, while encouragement of experimentation received the lowest. For data use, respondents rated the use of data and feedback to guide decisions more positively than the use of evidence and assessment results to inform institutional programs and interventions. These results identified professional development

and selected aspects of instructional innovation as areas receiving comparatively lower faculty ratings.

Differences in Faculty Perceptions Across Private HEIs

Table 2 summarizes the Kruskal–Wallis comparisons of faculty ratings across the eight participating institutions.

Table 2. Differences in Faculty Perceptions of Institutional Leadership Practices for Digital Transformation Across Eight Private HEIs

Leadership Dimension	Kruskal-Wallis H	df	p-value	Decision on Ho	Interpretation
Leading digital transformation	4.016	7	.778	Fail to Reject	Not Significant
Supporting innovative teaching and learning	5.716	7	.573	Fail to Reject	Not Significant
Providing professional development	4.107	7	.767	Fail to Reject	Not Significant
Creating a supportive institutional culture	10.142	7	.181	Fail to Reject	Not Significant
Managing resources and infrastructure	3.340	7	.852	Fail to Reject	Not Significant
Using data for decision-making	8.107	7	.323	Fail to Reject	Not Significant

No statistically significant differences were detected across the eight private HEIs in any leadership dimension. The p-values ranged from .181 to .852, and all six null hypotheses were not rejected. Although a supportive institutional culture yielded the largest H statistic, the result remained nonsignificant. The findings provided insufficient evidence that faculty rating distributions differed across institutions; they did not establish equivalence or identical leadership practices.

Table 3. Qualitative Explanations of Quantitative Findings on Institutional Leadership Practices for Digital Transformation

Quantitative finding	Theme derived from participant responses	Supporting quotation and participant code	Connection to the quantitative finding
Resources and infrastructure received the highest rating ($M = 3.58$, Strongly Agree)	Visible investment in digital infrastructure. Participants described institutional investments in computer laboratories,	"Our administration made it a point to overhaul the computer laboratories and secure enterprise LMS licenses right after the transition. Whenever we request projector upgrades or network stability, the management acts quickly." — Administrator 3	These accounts supported the high rating by describing visible investments and responsive infrastructure support. Faculty members' direct access to facilities

Quantitative finding	Theme derived from participant responses	Supporting quotation and participant code	Connection to the quantitative finding
	<i>connectivity, equipment, and learning management system (LMS) licenses.</i>	<i>"In terms of hardware and digital tools, we really cannot complain. The school invested heavily in physical infrastructure and digital licenses, which is why we see those facilities every day."</i> — Faculty Member 5	and digital tools provided concrete experiences underlying their favorable assessments.
Professional development received the lowest rating (M = 2.47, Disagree)	Limited continuity and specificity of professional learning. Participants described introductory training with limited follow-up, alongside financial and workload constraints on sustained professional development.	<i>"We get invited to introductory webinars on new software, but there is rarely follow-up training on how to integrate it effectively into our specific disciplines. It feels like compliance training rather than real capability building."</i> — Faculty Member 2 <i>"Our budget for faculty development is stretched thin. While we want to send everyone to specialized digital pedagogy certifications, financial constraints and heavy teaching loads make sustained training very difficult."</i> — Administrator 1	The accounts helped explain the low rating by distinguishing access to introductory activities from sustained, discipline-specific support. They identified limited funding, heavy teaching loads, and insufficient follow-up as constraints on professional learning.
Four dimensions were rated Agree (Leading digital transformation, Supporting innovative teaching, Supportive culture, Data decision-making; M = 3.06 to 3.18)	Support for innovation with uneven implementation of data use. Participants described openness to innovative teaching within institutional policies, while acknowledging that consistent use of	<i>"Our deans and department heads are very open to innovative teaching methods, like flipped classrooms or digital assessments, as long as we align with institutional policies."</i> — Faculty Member 8 <i>"We try to use institutional data – such as student engagement metrics and LMS analytics – to guide our curricular decisions,</i>	These accounts complemented the favorable ratings, particularly for instructional innovation, institutional culture, and data use. They also qualified those assessments by indicating that support for innovation

Quantitative finding	Theme derived from participant responses	Supporting quotation and participant code	Connection to the quantitative finding
	<i>institutional data remained developing.</i>	<i>though tracking them consistently across all departments remains a work in progress."</i> — Administrator 6	coexisted with incomplete implementation of systematic data monitoring.
No statistically significant differences were detected across the eight HEIs (All Kruskal-Wallis <i>p</i> -values > .05)	Perceived common pressures and transition experiences. Participants described shared financial pressures, demands for technological upgrading, and experiences of adapting to digital education.	"Whether in our institution or neighboring private colleges, we face the same challenges: tight budgets, faculty resistance to change, and the constant pressure to upgrade technology to stay competitive." — Administrator 4 "We all went through the same digital pivot during and after the pandemic. Our experiences with leadership support and resource allocation feel very similar because our institutional structures and student profiles are quite alike." — Faculty Member 11	These accounts suggested possible contextual explanations for the absence of detected differences. However, participants' perceptions of common conditions did not establish institutional equivalence or demonstrate that shared pressures caused the nonsignificant results.

DISCUSSION

Institutional Leadership Practices for Digital Transformation

The findings indicated that faculty members perceived leadership support for digital transformation most favorably in resource and infrastructure management, while professional development remained the weakest dimension. This pattern suggested uneven support across the technological and human dimensions of transformation. Participants' accounts of upgraded facilities, improved connectivity, and digital licenses helped explain the favorable infrastructure assessments. However, these investments coexisted with reported limitations in sustained professional learning. This distinction was consistent with Castro Benavides et al. (2020), who emphasized that digital transformation in higher education involved interconnected technological, organizational, and social changes. In the participating institutions, access to digital resources appeared more firmly established than the continuing support faculty members needed to integrate those resources into their practice.

The lower assessment of professional development was attributed to introductory webinars, limited follow-up, financial constraints, and heavy teaching loads. These experiences suggested that the availability of training did

not necessarily ensure its continuity or relevance to particular disciplines. Related Philippine research by Barrot et al. (2024) found that higher education teachers' experiences of online instruction varied according to available tools, institutional policies, pedagogical goals, and learner-related factors. Their findings reinforced the importance of context-sensitive support. For the participating private HEIs, the practical implication was to connect technology provision with sustained mentoring, opportunities for guided application, and professional learning responsive to faculty members' teaching responsibilities. The favorable assessments of digital leadership, instructional innovation, institutional culture, and data use indicated that respondents recognized supportive leadership practices in these areas. Nevertheless, the qualitative accounts showed that openness to innovation could coexist with incomplete implementation of systematic data monitoring. This finding was relevant to transformational leadership, particularly its emphasis on encouraging change and developing organizational members. Antonopoulou et al. (2021) reported a positive association between transformational and digital leadership in higher education. The present findings complement that perspective by suggesting that encouraging innovation requires ongoing organizational support to become embedded in routine academic practice. The study did not, however, directly test transformational leadership or its effects.

Comparisons Across Participating Institutions

The absence of statistically significant differences across the eight HEIs indicated that the analysis did not detect differences in faculty rating distributions. It did not establish that institutional practices, resources, or experiences were identical. Participants' descriptions of common financial pressures, technological demands, and pandemic-related transitions offered possible contextual explanations for the observed pattern.

Institutional theory provided a useful perspective on these shared experiences. DiMaggio and Powell (1983) explained how organizations within a common field could develop similar practices through external pressures, imitation, and professional norms. The participants' accounts were compatible with the possibility that shared sectoral conditions encouraged comparable institutional responses. However, the study did not directly measure these institutional processes, so they remained interpretive explanations rather than demonstrated causes of the statistical findings.

The nonsignificant comparisons also did not remove the need for institution-specific improvement. Hinings et al. (2018) emphasized that existing organizational arrangements shaped the acceptance and implementation of digital innovations. Thus, similar overall faculty assessments could coexist with different departmental practices, training arrangements, and implementation challenges. Institutional leaders would benefit from examining these local conditions when determining how to strengthen support for digital transformation.

Qualitative Explanations and Integration of Findings

The qualitative findings added explanatory depth by identifying experiences underlying the survey ratings. Visible infrastructure investments helped address favorable resource assessments, while limited follow-up training and competing workload demands raised concerns about professional development. Accounts from supportive academic leaders and developing data practices also qualified the generally positive ratings, showing that implementation remained incomplete in some areas. These explanations strengthened the interpretation of the quantitative findings without treating participant accounts as evidence of causation.

The emphasis on continuing faculty support also complemented Duterte's (2025) study of Lasallian digital leaders, which highlighted teacher empowerment, adaptability, trust-building, and feedback-informed planning. The present study extended this discussion by linking faculty ratings from selected private HEIs to administrators' and faculty members' explanations of implementation conditions. Its contribution was the identification of a perceived imbalance between visible technological provision and sustained professional support within the participating institutions.

These findings should be interpreted within the study's scope. Purposive sampling limited generalization beyond the participating HEIs, and self-reported assessments represented perceptions rather than direct measures of leadership effectiveness or student learning. The integrated evidence nevertheless identified a practical priority: aligning infrastructure investment with continuing faculty development, instructional support, and consistent use of institutional data.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that faculty members at the eight selected private HEIs perceived institutional leadership support for digital transformation positively across most dimensions, particularly in resource and infrastructure management. Professional development emerged as the principal area requiring improvement. The integrated findings suggested that visible investments in technology were not consistently accompanied by sustained, discipline-specific support for faculty members. Leadership commitment to digital transformation, therefore, needed to extend beyond resource provision to the continuing development of instructional capabilities and institutional practices.

No statistically significant differences in faculty perceptions were detected across the participating HEIs. This finding indicated insufficient evidence of differences, rather than of equivalence, among institutions. Qualitative accounts identified perceived common pressures and transition experiences that helped contextualize this result. The conclusions remained specific to the participating institutions and did not establish causal relationships between leadership practices and educational outcomes.

Based on these findings, institutional leaders should align digital infrastructure plans with funded, continuing faculty development programs. These programs should include discipline-specific workshops, mentoring, peer collaboration, and opportunities to apply digital approaches in actual teaching. Protected training time and manageable workloads should support participation.

Program evaluation should examine the application of acquired skills and the resulting instructional improvements, as well as attendance and completion.

HEIs should also strengthen the consistent use of institutional data by assigning clear responsibilities for reviewing learning management system analytics, student feedback, and other relevant evidence. Regular departmental reviews could connect these findings with instructional support and improvement plans. Existing infrastructure investments should be sustained through maintenance, accessible technical assistance, and periodic assessments of faculty and student needs.

Implementation should begin with an institutional needs assessment, followed by a coordinated plan specifying responsible offices, resources, timelines, and monitoring indicators. Collaboration among academic leaders, faculty development units, and information technology personnel would help align technological investments with teaching priorities. Future research should include broader institutional samples, longitudinal monitoring, and direct measures of teaching practices and student outcomes to examine whether improvements in leadership support are accompanied by sustained educational benefits.

ADVANCED RESEARCH

The study was limited to eight purposively selected private HEIs in the National Capital Region, which restricted the generalizability of its findings to other institutions and regions. Faculty ratings and participant accounts reflected perceptions and experiences rather than direct measures of leadership effectiveness, instructional quality, or student learning. The cross-sectional design also limited the ability to draw conclusions about changes over time and causal relationships. Although the qualitative phase provided explanations for the survey patterns, it could not establish the causes of the observed ratings or the absence of statistically significant institutional differences.

Future research could include more diverse institutional settings and, where feasible, employ probability sampling. Longitudinal studies could examine how leadership practices and faculty capabilities develop alongside digital investments. Classroom observations, institutional records, and student outcome measures could complement self-reported data. Further studies could also evaluate sustained, discipline-specific faculty development programs and examine how departmental conditions shape the implementation of institutional digital strategies.

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