DIGITAL INSTRUCTIONAL LEADERSHIP AND FACULTY SATISFACTION IN ONLINE AND BLENDED LEARNING: THE MEDIATING ROLE OF ORGANIZATIONAL SUPPORT

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ABSTRACT*: The expansion of online and blended learning has increased the need for academic leaders who can guide digital pedagogy while ensuring that faculty receive adequate institutional support. Objective: To determine the levels of digital instructional leadership, perceived organizational support, and faculty satisfaction, and to test whether organizational support mediates the relationship between digital instructional leadership and faculty satisfaction. Methods: A quantitative descriptive-predictive study was conducted among 126 full-time and part-time faculty members from selected State Universities and Colleges in Zamboanga City during Academic Year 2024–2025. A validated 43-item survey measured digital instructional leadership, organizational support, and faculty satisfaction. Data were analyzed using descriptive statistics and partial least squares structural equation modeling. Results: Digital instructional leadership was demonstrated to a great extent (mean 4.12), organizational support was high (mean 4.10), and faculty satisfaction was very high (mean 4.29). The measurement model showed satisfactory convergent validity and reliability. Digital instructional leadership significantly predicted organizational support ($\beta=0.887$, $p=0.011$, $f^2=0.787$) and faculty satisfaction ($\beta=0.484$, $p<0.001$, $f^2=0.410$). Organizational support significantly predicted faculty satisfaction ($\beta=0.415$, $p<0.001$, $f^2=0.348$) and significantly mediated the leadership–satisfaction relationship (reported indirect $\beta=0.429$, $p<0.001$, $f^2=0.360$). Conclusion: Faculty satisfaction in digital teaching is strengthened when competent digital leadership is translated into visible institutional resources, autonomy, well-being support, recognition, and professional development.*

Keywords: digital instructional leadership; organizational support; faculty satisfaction; blended learning; structural equation modeling

INTRODUCTION

Online and blended learning have moved from emergency alternatives to enduring components of higher education. Their effective use depends not only on the availability of digital platforms but also on faculty capacity, pedagogical support, and leadership that can connect technology with teaching quality. Reviews of online teaching emphasize that instructors require sustained technical, pedagogical, and organizational assistance rather than one-time exposure to tools [1]. Faculty satisfaction likewise depends on institutional recognition, responsive support, manageable workloads, and confidence in online teaching systems [2].

The rapid institutionalization of flexible learning has also changed the work of academic leaders. Decisions about platform adoption, course standards, faculty development, data governance, and student support now intersect with ordinary instructional supervision. A leader may therefore be technologically knowledgeable yet still be ineffective if digital initiatives are not aligned with curriculum, faculty capability, and learner needs. Conversely, even well-supported faculty may experience frustration when expectations are unclear or when instructional decisions are separated from evidence about student participation and achievement.

Digital instructional leadership refers to the capacity of academic leaders to model effective technology use, guide instructional improvement, support professional learning, and use evidence to shape decisions. In the Philippine setting, school leaders' digital leadership has been associated with teachers' job satisfaction and readiness for technology-enabled work [3]. Transformational leadership further explains how a clear vision, intellectual stimulation, and individualized support can motivate faculty to engage with change [4]. In digital settings, leadership is therefore both technical and relational: leaders must understand learning technologies while creating the conditions in which faculty can experiment, collaborate, and improve.

Perceived organizational support describes the extent to which employees believe that their institution values their contributions and cares about their well-being [5]. Such perceptions are strengthened through fair treatment, supervisor support, adequate resources, recognition, and opportunities for development [6]. For faculty delivering online and blended courses, organizational support includes reliable learning management systems, access to digital resources, timely technical assistance, professional development, autonomy in instructional decisions, and policies that protect well-being. These resources can reduce the demands of digital teaching and reinforce faculty members' sense of professional worth.

Faculty satisfaction is an important outcome because it affects motivation, commitment, instructional innovation, and the sustainability of flexible learning. Job satisfaction reflects employees' evaluation of multiple work facets, including supervision, communication, autonomy, working conditions, and professional growth [7]. In online and blended teaching, satisfaction is particularly sensitive to instructional freedom, student engagement, technical and professional support, and work-life balance. Philippine higher education policy has encouraged institutions to establish flexible learning systems that protect academic quality while developing faculty and infrastructure [8]. However, fewer studies have examined digital instructional leadership, organizational support, and faculty satisfaction in one empirical model, particularly within State Universities and Colleges in Zamboanga City.

This study therefore assessed the extent of digital instructional leadership, the level of perceived organizational support, and faculty satisfaction in online and blended learning. It also tested four hypothesized paths: digital instructional leadership to organizational support, organizational support to faculty satisfaction, digital instructional leadership to faculty satisfaction, and the indirect effect of leadership on satisfaction through organizational support.

METHODS

Design and setting. The study used a quantitative descriptive-predictive design and partial least squares structural equation modeling (PLS-SEM). It was conducted during Academic Year 2024–2025 in selected State Universities and Colleges in Zamboanga City that were implementing online or blended instruction. The design described faculty perceptions and estimated the direct and indirect relationships among digital instructional leadership, perceived organizational support, and faculty satisfaction.

Participants and sampling. Eligible participants were full-time or part-time faculty members who were actively teaching at least one online or blended course. The source study used a multistage approach that first identified institutions with active digital learning systems and support mechanisms and then recruited qualified faculty across included academic units. A total of 126 valid responses were analyzed, exceeding the minimum sample estimated through a priori power analysis. Most respondents were Instructor I–III (79.4%); 50.8% held permanent appointments, and 53.2% had less than three years of teaching experience.

Sample adequacy. The a priori G*Power calculation used an assumed effect size of 0.415, an alpha level of 0.050, and power of 0.800, producing a minimum requirement of 76 respondents. The 126 valid cases exceeded this threshold. The source manuscript also reported post hoc minimum estimates of 36 using the inverse square root method and 23 using the gamma exponential method, further supporting the adequacy of the sample for the proposed PLS-SEM model.

Instrument. A structured 43-item questionnaire measured three latent constructs. Digital instructional leadership contained 10 items covering excellence in instructional practices and data-informed decision-making, aligned with technology leadership standards [9]. Perceived organizational support contained 13 items covering technical and infrastructure support, faculty voice and autonomy, and culture and well-being. Faculty satisfaction contained 20 items covering instructional autonomy and innovation, technical and professional support, work-life balance, and student engagement and feedback. Items were rated on five-point Likert scales. Content was reviewed by experts in educational leadership, instructional technology, and quantitative research; pilot testing assessed clarity and internal consistency.

Operationalization. Digital instructional leadership items asked whether leaders modeled effective technology use, provided feedback, promoted evidence-based digital teaching, communicated course expectations, recognized instructional excellence, and used institutional or learning analytics data. Organizational support items examined access to ICT facilities, learning platforms, technical and instructional design assistance, faculty participation, psychological safety, innovation, and work-life balance. Satisfaction items assessed freedom in course design, access to resources and training, schedule flexibility, stress management, student interaction, and meaningful feedback.

Data collection and ethics. Institutional permission and ethical clearance were secured before data collection. The questionnaire was distributed through an online survey link, and participation was voluntary. The survey explained the study purpose, the right to withdraw, and confidentiality protections. No personally identifying information was collected. Responses were stored in password-protected files and processed in accordance with the Philippine Data Privacy Act of 2012. Incomplete, inconsistent, and duplicate responses were screened before analysis.

Statistical analysis. Means summarized the three constructs and their dimensions. PLS-SEM using WarpPLS evaluated factor loadings, average variance extracted (AVE), Cronbach alpha, composite reliability, discriminant validity, model quality indices, direct paths, and the mediating effect. AVE values above 0.50 and reliability coefficients above 0.70 were considered acceptable. Discriminant validity was examined using the Fornell–Larcker criterion and heterotrait–monotrait ratios. Variance inflation factors were reviewed for collinearity, while average path coefficient, average R-squared, adjusted average R-squared, and Tenenhaus goodness-of-fit were used as global quality indicators. Direct and indirect path coefficients were interpreted together to determine the mediation pattern. Statistical significance was set at $p<0.05$.

RESULTS

The overall mean for digital instructional leadership was 4.12, interpreted as demonstrated to a great extent. Excellence in instructional practices (4.16) was rated slightly higher than data-informed decision-making (4.08). Perceived organizational support was high overall (4.10), with culture and well-being obtaining the highest domain mean (4.18), followed by voice and autonomy (4.09) and technical and infrastructure support (4.02). Faculty satisfaction was very high (4.29). Instructional autonomy and innovation ranked highest (4.37), followed by work-life balance (4.33), student engagement and feedback (4.32), and technical and professional support (4.13).

At the item level, leaders' modeling of effective technology use received the highest digital leadership rating (4.29), whereas institutional recognition and reward for digital instructional excellence received the lowest (4.06). Within organizational support, autonomy to choose appropriate digital tools and strategies was rated very high (4.32); access to an instructional designer or e-learning support team was the lowest-rated item (3.95). For faculty satisfaction, freedom to select platforms and adapt strategies to learner needs both obtained means of 4.40. The responsiveness of IT and

helpdesk support was the lowest satisfaction item (4.03), indicating a specific service area for improvement.

Table 1. Descriptive results

Construct/domain	Mean	Level
Digital instructional leadership	4.12	Great extent
Instructional practice	4.16	Great extent
Data-informed decisions	4.08	Great extent
Organizational support	4.10	High
Culture and well-being	4.18	High
Voice and autonomy	4.09	High
Technical/infrastructure	4.02	High
Faculty satisfaction	4.29	Very high
Autonomy and innovation	4.37	Very high
Work-life balance	4.33	Very high
Engagement and feedback	4.32	Very high
Technical/professional support	4.13	High

The measurement model demonstrated strong psychometric performance. Factor loadings ranged from 0.859 to 0.918 for digital instructional leadership, 0.743 to 0.921 for organizational support, and 0.720 to 0.884 for faculty satisfaction. AVE values were 0.812, 0.777, and 0.714, respectively. Cronbach alpha and composite reliability were 0.974/0.977 for digital instructional leadership, 0.976/0.978 for organizational support, and 0.979/0.980 for faculty satisfaction. The Fornell–Larcker criterion was satisfied, and all reported HTMT ratios were below 0.90. Model quality indices were also acceptable: average path coefficient=0.595 ($p<0.001$), average $R^2=0.773$ ($p<0.001$), adjusted average $R^2=0.770$ ($p<0.001$), average block VIF=4.386, average full collinearity VIF=4.688, and Tenenhaus goodness-of-fit=0.770.

Table 2. Structural model

Path	B	p	f^2	Result
DIL→POS	0.887	0.011	0.787	Significant
POS→FS	0.415	<0.001	0.348	Significant
DIL→FS	0.484	<0.001	0.410	Significant
DIL→POS →FS	0.429	<0.001	0.360	Significant

All four hypothesized effects were statistically significant. Digital instructional leadership showed a strong positive effect on organizational support and a substantial direct effect on faculty satisfaction. Organizational support also had a substantial positive effect on faculty satisfaction. The reported indirect effect through organizational support was significant. Because the direct leadership-to-satisfaction path remained significant after inclusion of the mediator, the pattern is consistent with partial mediation.

The effect sizes reported in the source manuscript were substantial for all structural paths. The model therefore explains faculty satisfaction through two complementary routes: a direct leadership route and an institutional-support route. In practical terms, faculty appear to respond both to the behavior of their academic leaders and to the systems, policies, resources, and climate through which those leadership priorities are implemented.

DISCUSSION

The study found favorable perceptions across all three constructs. Faculty viewed digital instructional leadership as consistently present, organizational support as high, and their satisfaction with online and blended teaching as very high. The strongest descriptive domain was instructional autonomy and innovation, indicating that faculty particularly valued freedom to select digital tools, adapt strategies, and design creative learning experiences. The lowest domain, although still high, was technical and professional support. This suggests that institutions had established workable digital systems but could still improve the responsiveness of help desks, access to instructional designers, and continuity of professional development.

The descriptive pattern also shows that satisfaction should not be reduced to technology availability. Faculty rated autonomy, flexibility, and student engagement more highly than technical support, suggesting that the experience of digital teaching is shaped by professional agency and the quality of human interaction. Self-determination theory proposes that autonomy, competence, and relatedness strengthen intrinsic motivation and well-being [15]. The high ratings for instructional freedom and meaningful student participation are compatible with this explanation. In distance education, instructor–learner, learner–content, and learner–learner interactions are also central to the quality of the experience [16]. Thus, digital systems are most valuable when they enable purposeful teaching and sustained engagement rather than merely transferring face-to-face routines to an online platform.

The strongest structural relationship was the path from digital instructional leadership to perceived organizational support. Faculty may interpret leaders' modeling of technology use, data-informed guidance, communication, and pedagogical assistance as concrete evidence that the institution values their work. This interpretation is consistent with transformational leadership, in which leaders create direction, confidence, and individualized support [4], and with organizational support theory, which emphasizes that actions attributed to institutional agents shape employees' beliefs about organizational care [5,6]. Philippine evidence similarly indicates that digitally capable and supportive leaders can strengthen teacher confidence and satisfaction during technology-mediated instruction [3].

Digital instructional leadership also had a significant direct relationship with faculty satisfaction. This finding supports studies showing that digital competence, system quality, and leadership support improve the effectiveness and satisfaction of educators in virtual environments [10,11]. Leaders who understand digital pedagogy can reduce uncertainty by clarifying standards, providing feedback, modeling good practice, and connecting faculty to appropriate resources. These practices are especially important for the present sample, which contained a high proportion of early-career instructors who may require structured onboarding and

mentoring as they develop both pedagogical and technological expertise.

Data-informed decision-making received a slightly lower mean than instructional modeling. This difference is important because learning analytics can remain underused even when an institution has an LMS or survey system. Leaders need data literacy to distinguish meaningful indicators from simple activity counts, interpret patterns within their academic context, and communicate findings without using analytics as punitive surveillance. Regular review of course evaluation data, student participation trends, assessment results, and support requests can help academic units target mentoring and resources more precisely. Faculty should also be involved in deciding which indicators are educationally useful and how they will be interpreted.

Organizational support significantly predicted faculty satisfaction. This result reinforces the proposition that employees respond positively when institutions provide resources, recognize contributions, and demonstrate concern for well-being [5,6]. Evidence from university settings has likewise linked stronger organizational support with job satisfaction, engagement, performance, and well-being [12,13]. In the present study, high ratings for culture, autonomy, and work-life balance indicate that supportive policies were not limited to hardware and software; they also involved trust, psychological safety, collaboration, and flexibility. At the same time, the comparatively lower ratings for technical support show that positive culture cannot fully substitute for timely operational assistance.

The work-life balance findings require a nuanced interpretation. Faculty reported that online and blended teaching offered flexibility in preparing, delivering, and evaluating courses, yet the item on managing responsibilities without excessive stress was comparatively lower. The job demands–resources model explains that flexibility, autonomy, and support can buffer workload demands, but they do not remove those demands entirely [17]. Institutions should therefore monitor after-hours communication, overlapping synchronous and asynchronous tasks, repetitive reporting, and the hidden time required to design digital materials. Clear response-time norms and realistic workload allocation can preserve flexibility without turning continuous connectivity into continuous availability.

The significant indirect path indicates that organizational support is one mechanism through which digital instructional leadership improves faculty satisfaction. Leadership becomes more meaningful when it is translated into visible systems: reliable platforms, training, instructional design assistance, participation in decision-making, recognition of digital teaching, workload safeguards, and well-being programs. The persistence of a significant direct path suggests partial mediation, meaning that leadership may also influence satisfaction through other processes, such as inspiration, trust, communication quality, and professional identity.

The findings have several practical implications for State Universities and Colleges. First, leadership development should combine digital literacy with instructional supervision, data use, change management, and faculty mentoring. Local evidence has identified strengths in visionary digital leadership but also areas requiring further development [14]. Second, institutions should formalize faculty participation in planning digital initiatives rather than consulting them only during implementation. Third, technical support should be organized around service standards, rapid response, and access to e-learning or instructional design specialists. Fourth, recognition and incentive systems should acknowledge innovation in digital course design, effective student engagement, and evidence-based improvement. Finally, flexible learning policies should protect work-life boundaries and monitor the workload created by continuous online availability, consistent with national expectations for sustainable flexible learning [8].

An integrated implementation strategy may be organized at three levels. At the leadership level, presidents, vice presidents, deans, and program chairs should be trained to articulate a digital learning vision, model sound practice, interpret instructional data, and provide developmental feedback. At the system level, ICT and digital learning units should guarantee reliable platforms, documented service standards, accessible instructional design support, and recurring capacity-building based on faculty needs. At the faculty-experience level, institutions should protect autonomy, include faculty in governance, recognize effective innovation, and provide well-being and workload safeguards. Monitoring should combine platform performance, support-response data, faculty satisfaction, and evidence of student engagement rather than relying on a single indicator.

This study should be interpreted within its limitations. Data were cross-sectional and self-reported; therefore, the structural paths indicate modeled associations rather than definitive temporal causation. The sample was confined to selected public higher education institutions in Zamboanga City and was dominated by junior faculty, which may limit transferability to private institutions, other regions, or more senior academic populations. The study also did not include leaders' perspectives, objective indicators of instructional quality, student outcomes, or qualitative narratives. Future research may use longitudinal or mixed-method designs, compare institutional types, and test whether employment status, rank, teaching experience, digital competence, or disciplinary field modifies the model.

CONCLUSION

Digital instructional leadership, perceived organizational support, and faculty satisfaction were all rated favorably among faculty teaching online and blended courses in selected State Universities and Colleges in Zamboanga City. Digital instructional leadership had significant direct relationships with both organizational support and faculty satisfaction, while organizational support significantly predicted satisfaction and mediated the leadership–satisfaction relationship. The findings indicate that institutions should develop digitally competent academic leaders and ensure that leadership commitments are converted into accessible resources, responsive technical and

professional support, faculty autonomy, recognition, inclusive decision-making, and well-being safeguards. These combined leadership and organizational conditions can help sustain faculty motivation and instructional quality in technology-mediated higher education.

DECLARATIONS

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