



Booklets

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Title: Collaborative digital platforms to strengthen institutional communication in technological higher education: Case of Instituto Tecnológico de Lázaro Cárdenas

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Introduction

- Institutional communication is essential for efficiency and cohesion in technological higher education institutions.
- Instituto Tecnológico de Lázaro Cárdenas (ITLAC) faced insufficient and ineffective communication channels, leading to administrative delays, information duplication, and low community participation.
- The growth in enrollment and academic programs highlighted the need to modernize communication systems, moving beyond traditional channels (printed circulars, sporadic emails, physical bulletin boards).
- Literature indicates that lack of integrated digital systems causes information fragmentation and low participation.



Methodology

- Qualitative approach: instrumental case study at ITLAC.
- Participants: 50 educational stakeholders (teachers, administrators, students, staff, parents, and community representatives).
- Techniques: semi-structured interviews, open-ended questionnaires, and participant observation.
- Phases:
 - Participatory diagnosis (3 months)
 - Collaborative design (2 months)
 - Phased implementation (4 months)
 - Formative evaluation (2 months)
- Methodological triangulation and ethics: informed consent, confidentiality, and feedback of findings.



Results

Identified limitations

- Fragmented communication channels (email, WhatsApp, circulars, bulletin boards, meetings).
- Vertical, one-way communication with limited feedback.
- Important information often communicated with little advance notice.
- Disconnection from the external community and limited strategic engagement.

Technological barriers

- Limited use of advanced digital technologies.
- Lack of digital skills, time constraints, insufficient infrastructure, skepticism, and limited institutional support.



Results

Facilitating conditions

- Positive attitude toward improving communication (88%).
- Previous positive experiences with technology.
- Committed leadership.
- Basic technological infrastructure.

Proposed model

- Integrated ecosystem of digital platforms (Google Workspace, Moodle, website, and social media).
- Redesigned communication flows and institutional protocols.
- Differentiated training program.
- Permanent digital transformation committee and institutionalization mechanisms.



Results

Impact

- 65% reduction in communication delays.
- 58% increase in teacher participation.
- 72% improvement in perceived transparency.
- 45% increase in community engagement.



Conclusions

- Communication deficiencies are systemic and require technological, organizational, and cultural intervention.
- Digital transformation is feasible in resource-limited contexts if accompanied by training and support.
- Success depends more on facilitating conditions than on technology itself.
- Collaborative platforms can democratize institutional governance.
- Recommendations: participatory diagnosis, ecosystem approach, continuous training, phased implementation, and institutional policies for sustainability.





References

Banco Mundial. (2021). *Momentos decisivos: La educación superior en América Latina y el Caribe*. Banco Mundial. <https://doi.org/10.1596/978-1-4648-1014-5>

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.

Cabero-Almenara, J., Romero-Tena, R., & Palacios-Rodríguez, A. (2021). Evaluación del desempeño docente en la formación virtual: Ideas para la configuración de un modelo. *Revista Iberoamericana de Educación a Distancia*, 24(1), 261-279. <https://doi.org/10.5944/ried.24.1.27206>

Castells, M. (2010). *The rise of the network society* (2nd ed.). Wiley-Blackwell.

Chapleo, C. (2022). Barriers to internal branding in universities: Analysis of the gap between theory and practice. *Journal of Marketing for Higher Education*, 32(1), 97-114. <https://doi.org/10.1080/08841241.2020.1825030>

Chen, L., & Zhang, R. (2022). Digital transformation in higher education: A systematic review. *Educational Technology Research and Development*, 70(4), 1215-1242. <https://doi.org/10.1007/s11423-022-10120-w>

Creswell, J. W., & Poth, C. N. (2021). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Flick, U. (2018). *An introduction to qualitative research* (6th ed.). SAGE Publications.

Fullan, M. (2020). *Leading in a culture of change* (Updated ed.). Jossey-Bass.

García-Aretio, L. (2021). COVID-19 y educación a distancia digital: Preconfinamiento, confinamiento y posconfinamiento. *RIED. Revista Iberoamericana de Educación a Distancia*, 24(1), 9-32. <https://doi.org/10.5944/ried.24.1.28080>

García-Martínez, I., Fernández-Batanero, J. M., Cobos-Sanchiz, D., & Luque de la Rosa, A. (2023). Technology adoption in higher education teachers: The role of digital competence and technology acceptance. *Education and Information Technologies*, 28(7), 8783-8805. <https://doi.org/10.1007/s10639-022-11544-3>

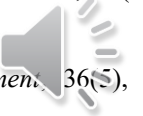
Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE*, 15(5), e0232076. <https://doi.org/10.1371/journal.pone.0232076>

Holmes, A. G. D. (2020). Researcher positionality: A consideration of its influence and place in qualitative research. *Shanlax International Journal of Education*, 8(4), 1-10. <https://doi.org/10.34293/education.v8i4.3232>

Kumar, V., & Singh, A. (2022). Digital communication in higher education: Impact on student engagement and satisfaction. *International Journal of Educational Management*, 36(5), 789-806. <https://doi.org/10.1108/IJEM-08-2021-0321>

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

Martínez, M., García, B., & Mondragón, E. (2023). Resistencia al cambio tecnológico en universidades públicas mexicanas: Un análisis multinivel. *Revista Mexicana de Investigación Educativa*, 28(96), 123-149.





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