

Enhancing Interior Design and Staff Experiences in Academic Workspaces through Design Thinking

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Abstract:

This study investigates the application of the design thinking methodology to enhance the quality and functionality of a staff room in an academic institution. Through a participatory design approach, the study engaged academic staff in focus group discussions to understand their needs, frustrations, and aspirations. Data were further supported by visual documentation of the space, observational analysis, and iterative prototyping phases. A series of interventions were proposed and implemented using the available furniture and spatial resources, with feedback loops incorporated at each stage to refine solutions collaboratively. The design thinking process—empathize, define, ideate, prototype, and test—was employed not just as a methodology, but as a mindset to promote inclusive and human-centered spatial improvement. Findings demonstrate significant enhancements in staff comfort, privacy, and functionality, as well as increased usage and spatial engagement. The intervention created a more cohesive environment, aligning with principles of user-centered interior design. Ultimately, this research highlights the transformative potential of design thinking in educational workplace settings. It contributes to the growing discourse on participatory design within interior environments, showcasing how collaborative design can directly improve employee satisfaction, well-being, and productivity in academic contexts.

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References:

- 1- Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2015). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, 89, 118–133. <https://doi.org/10.1016/j.buildenv.2015.02.013>
- 2- Bertolotti, F., Di Norcia, M., & Vignoli, M. (2018). Service design principles for organizational well-being: Improving the employee experience through design thinking. *Design Management Journal*, 13(1), 54–67.
- 3- Brenner, W., Uebernickel, F., & Abrell, T. (2016). *Design thinking as mindset, process, and toolbox*. Springer.
- 4- Brown, T. (2009). *Change by design: How design thinking creates new alternatives for business and society*. Harvard Business Press.
- 5- Charles, D. (2022). Institutional transformation through design thinking: Systems-level change in education. *Design Management Review*, 33(1), 14–22.
- 6- Cousins, B. (2018). Design thinking: Organizational learning in VUCA environments. *Academy of Strategic Management Journal*, 17(2), 1–9.
- 7- Cuque, L. M., & Mattar, J. (2021). The use of design thinking to develop corporate skills and competencies. *Journal of Innovation Management*, 9(1), 24–36.
- 8- Dorst, K. (2011). The core of 'design thinking' and its application. *Design Studies*, 32(6), 521–532. <https://doi.org/10.1016/j.destud.2011.07.006>
- 9- Dunne, D. (2018). Implementing design thinking in organizations: An exploratory study. *Journal of Organization Design*, 7(1), 16. <https://doi.org/10.1186/s41469-018-0030-7>
- 10- Graf, S., & Etimm. (2020). Design thinking for strategizing? – A critical literature review. *Strategic Design Research Journal*, 13(1), 8–19.
- 11- Indergård, K., & Hansen, G. K. (2023). The impact of workplace design on academic staff: A systematic literature review. *Journal of Interior Design*, 48(4), 113–131.
- 12- Lee, F., Maul, J., McCabe, C., et al. (2023). Understanding design approach of the workplace

- through value creation and satisfaction. *International Journal of Social Science and Humanity*, 13(5), 354–362.
- 13- Leurs, B., van Kuijk, J., & Bonnema, G. M. (2020). A design thinking perspective on healthcare: An overview. *Design for Health*, 4(1), 1–21. <https://doi.org/10.1080/24735132.2020.1714020>
 - 14- Lor, R. (2017). Design thinking in education: A critical review of literature. *Journal of Learning Design*, 10(2), 1–14.
 - 15- Luck, R. (2018). What is it that makes participation in design participatory design? *Design Studies*, 58, 1–8. <https://doi.org/10.1016/j.destud.2018.05.002>
 - 16- Matthews, J. (2021). Design thinking and workplace innovation interface. *The Design Journal*, 24(3), 275–289.
 - 17- Razzouk, R., & Shute, V. (2012). What is design thinking and why is it important? *Review of Educational Research*, 82(3), 330–348. <https://doi.org/10.3102/0034654312457429>
 - 18- Royalty, A., & Shepard, S. (2018). Mapping and measuring design thinking in organizational environments. *Academy of Strategic Management Journal*, 17(1), 1–10.
 - 19- Sailer, K., Pomeroy, R., & Haslem, R. (2015). Data-driven design: Using data on human behaviour and spatial configuration to inform better workplace design. In A. Marcus (Ed.), *Design, user experience, and usability: Users and interactions* (pp. 105–116). Springer. https://doi.org/10.1007/978-3-319-20898-5_10
 - 20- Sanders, E. B.-N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4(1), 5–18. <https://doi.org/10.1080/15710880701875068>
 - 21- Seifried, J., & Wasserbaech, C. S. (2021). Design thinking in leading European companies—Organizational and spatial issues. *Journal of Corporate Real Estate*, 23(2), 139–154.
 - 22- Smith, J., Lee, R., & Thomas, H. (2021). Impact of workplace redesign on academic staff performance and well-being. *Journal of Environmental Psychology*, 75, 101600. <https://doi.org/10.1016/j.jenvp.2021.101600>
 - 23- Tsen, K. (2023). Codesign facilitation for workforce satisfaction. *CoDesign*, 19(4), 411–430. <https://doi.org/10.1080/15710882.2023.2255463>
 - 24- Veitch, J. A., Charles, K. E., Farley, K. M. J., & Newsham, G. R. (2007). A model of satisfaction with open-plan office conditions: COPE field findings. *Journal of Environmental Psychology*, 27(3), 177–189. <https://doi.org/10.1016/j.jenvp.2007.04.002>
 - 25- Vischer, J. C. (2008). Towards an environmental psychology of workspace: How people are affected by environments for work. *Architectural Science Review*, 51(2), 97–108. <https://doi.org/10.3763/asre.2008.5114>
 - 26- Zhang, X., Liu, C., & Cang, X. (2017). Research on the effect of design thinking on enterprise sustainable innovation ability and team performance. *International Journal of Innovation Science*, 9(3), 215–228.
 - 27- Zimring, C., & Reizenstein, J. (1980). Post-occupancy evaluation: An overview. *Environment and Behavior*, 12(4), 429–450. <https://doi.org/10.1177/0013916580124001>

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