International Journal of Advanced Research
in Arts, Science, Engineering & Management

INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.028

Exploring Library Activities, Learning Spaces, and Challenges Encountered towards the Establishment of a Learning Commons

Vanessa Gay R. Liabor[1], Virgina P. Mollaneda[2]

Faculty of College Arts and Sciences, Negros Oriental State University, Philippines[1]

Department of Library, University of Southern Philippines Foundation, Philippines[2]

ORCID: 0009-0000-8466-5744[1]

ABSTRACT: Academic libraries in Philippine state universities are evolving from traditional book-centric facilities into dynamic learning environments aligned with 21st-century educational demands. This study explores student library usage, preferred learning spaces, and institutional challenges to assess the feasibility of transitioning to a Learning Commons model. Anchored in a mixed-methods research design, quantitative data were collected from 300 students across five state universities, while qualitative insights were drawn from interviews with library staff. Results show that students frequently use libraries for academic tasks such as assignment completion, group work, and reference consultations. However, they face critical barriers, including poor internet connectivity, insufficient digital resources, and a lack of flexible collaborative areas. These limitations underscore the need for spatial and technological reforms in library infrastructure. The study concludes that adopting the Learning Commons model offers a strategic solution—enhancing student engagement, fostering digital literacy, and promoting collaborative, technology-supported learning. Policy implications and actionable recommendations are provided to guide academic institutions in redesigning libraries into inclusive, future-ready learning hubs.

KEYWORDS: learning commons, academic libraries, Philippine state universities, library activities, digital transformation, collaborative learning

I. INTRODUCTION

Academic libraries in Philippine state universities are undergoing a paradigm shift in response to the rapidly changing needs of 21st-century learners. No longer confined to their traditional role as quiet study areas and book repositories, libraries are increasingly expected to function as dynamic, multifunctional spaces that promote collaboration, digital engagement, and active learning (Beneyat-Dulagan & Cabonero, 2023; Flores & Mendoza, 2023; University of Makati Library, n.d.). This evolution mirrors a global movement in higher education toward blended and student-centered learning environments, where space design and access to digital tools play a critical role in learning outcomes.

At the heart of this transformation is the concept of the Learning Commons—a strategic library model that integrates flexible learning areas, technology hubs, and collaborative zones to support a variety of academic tasks. Studies like those of Blummer and Kenton (2017) have established that learning commons environments enhance student engagement and foster academic success. Within the Philippines, institutions such as the University of Makati have pioneered this shift by investing in technology-rich learning spaces that respond to students' evolving academic and digital needs (University of Makati Library, n.d.).

Despite these advances, current literature and institutional reports reveal a notable gap in empirical research that explores how library activities, space preferences, and infrastructure challenges interact within the specific context of Philippine state universities. While existing studies (e.g., Beneyat-Dulagan & Cabonero, 2023; Flores & Mendoza, 2023) highlight usage patterns and emerging space demands, few provide an integrated assessment that informs the feasibility and institutional readiness for adopting a full-scale Learning Commons model.

This study addresses that gap by investigating how students use academic libraries, what types of spaces they prefer, and what challenges they encounter, both from the student and staff perspectives. It further examines the institutional limitations that may impede the successful transition to a Learning Commons framework. By using a mixed-methods approach, this paper aims to generate actionable insights that can inform strategic library redesigns,

strengthen institutional development plans, and support the transformation of academic libraries into inclusive, future-ready learning environments.

II. LITERATURE REVIEW

Academic libraries worldwide are undergoing rapid transformation, transitioning from traditional knowledge repositories into active, learner-focused environments. Central to this change is the emergence of the Learning Commons model, which combines digital access, flexible learning spaces, and collaborative technologies to create dynamic academic environments (Blummer & Kenton, 2017; DeVille-Holly, 2024). This shift is grounded in constructivist learning theory, which emphasizes that students learn more effectively through social interaction, self-directed exploration, and contextual engagement (DeFrain & Cox, 2022).

Studies have consistently documented the positive impact of learning commons on student engagement and academic performance. For example, DeVille-Holly (2024) compared graduate and undergraduate students' perceptions of redesigned library spaces, finding significant improvement in engagement metrics when collaborative zones and modular furniture were introduced. Similarly, Estrada et al. (2023) demonstrated that access to both physical and digital resources in Philippine academic libraries significantly enhances student learning outcomes. These findings align with international literature that emphasizes flexible, technology-enhanced learning environments as essential in modern higher education (Hsu, Chin, & Yau, 2022).

However, several debates and gaps persist in the literature. First, while many studies highlight the benefits of the Learning Commons model, few critically examine its institutional feasibility in resource-constrained contexts, such as state universities in developing countries. Alenzuela (2022) calls for more localized studies that assess infrastructural readiness and cultural adaptability of digital library transformations in Southeast Asia. Second, most existing research is facility- or design-centered, lacking sufficient focus on student experiences and learning behaviors within these transformed spaces (Balicat, 2025).

Furthermore, while developed institutions have made substantial investments in library innovation, public higher education institutions in the Philippines often face budgetary limitations, weak internet infrastructure, and a shortage of skilled personnel (Beneyat-Dulagan & Cabonero, 2023). These institutional constraints call into question whether best practices adopted in the Global North are directly transferable to the local context without adaptation.

This study aims to fill these gaps by providing a comprehensive examination of student library activity, spatial preference, and challenges from both user and staff perspectives. By exploring these themes in the specific context of Philippine state universities, this research contributes a context-sensitive framework for transitioning to Learning Commons environments—one that acknowledges local resource limitations while proposing strategic pathways for innovation and institutional growth.

III. METHODOLOGY

This study employed a mixed-methods research design to obtain a comprehensive understanding of library usage patterns, preferred learning spaces, and the challenges encountered by students and library staff in selected state universities across the Philippines. The integration of both quantitative and qualitative approaches enhanced the validity and richness of the findings.

Quantitative Phase

Quantitative data were collected through an online structured survey administered to a total of 300 students. Participants were randomly selected from five state universities strategically located across Luzon, Visayas, and Mindanao to ensure regional representation. The questionnaire was designed to capture data on the frequency of library visits, types of academic activities performed within the library, preferred learning space configurations, and perceived barriers to effective library use. The survey items were pilot-tested for clarity and reliability before full deployment. Data from the surveys were analyzed using descriptive statistics, such as frequency distribution and percentage rankings, to determine prevailing trends and patterns.

Qualitative Phase

To supplement the quantitative findings, semi-structured interviews were conducted with 10 library staff and administrators from the same institutions. Participants were purposively selected based on their direct involvement in managing library services and facilities. The interviews explored institutional practices, observed student behaviors, resource limitations, and readiness for Learning Commons implementation. Responses were transcribed and subjected to thematic analysis, using open coding and clustering techniques to identify recurring themes and institutional challenges.

Ethical Considerations

Participation in the study was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality were assured throughout the data collection and analysis process. The research was conducted in compliance with institutional ethical standards and data protection guidelines.

Scope and Limitations

The study focused on state universities only and did not include private institutions or community colleges. While the results offer valuable insights, generalizability may be limited to similar institutional contexts within the Philippines. Additionally, the scope did not include a full architectural or budgetary feasibility analysis for Learning Commons implementation.

IV. RESULTS AND DISCUSSION

Library Activities and Usage Patterns

One of the central objectives of this study was to identify how students utilize library spaces in state universities. Survey findings revealed that a substantial majority—86% of respondents—visited the library on a weekly basis. Among the most common academic activities conducted were working on assignments (92%), consulting printed reference materials (74%), and participating in group discussions (68%) (see Figure 1). These responses underscore the multifunctional role of libraries—not only as quiet study areas but also as collaborative environments essential for academic success.

The data confirms findings by Beneyat-Dulagan and Cabonero (2023), who emphasized the importance of libraries in supporting students' academic routines, and aligns with Flores and Mendoza's (2023) observation that academic tasks increasingly demand a blend of individual and group learning environments. Student comments in open-ended survey responses reflected appreciation for the library's peaceful atmosphere and access to diverse resources, yet also called for modernized, more adaptive spaces for group-based work.

"I love the silence of the library, but it lacks rooms where we can meet and collaborate without disturbing others," said one student from Visayas.
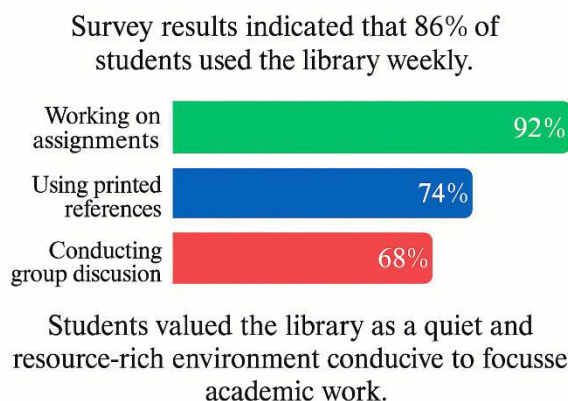

Figure 1. Survey Results

Learning Space Preferences

A key aim of the study was to determine student preferences for learning environments. As shown in Figure 2, the majority of students (60%) preferred group tables and collaborative zones, followed by quiet reading areas (30%), and digital or online spaces (10%). These preferences reflect a shift from traditional silent study norms toward more dynamic, social, and technology-enhanced learning behaviors.

These results mirror trends reported by DeVille-Holly (2024), who found that collaborative and hybrid learning spaces significantly enhance student engagement and motivation. The findings also echo insights from Hsu, Chin, and Yau (2022), who emphasized that space diversity within academic libraries supports different learning styles.

From the qualitative interviews, library staff noted that while students demand more collaborative space, most library layouts remain fixed and compartmentalized. One staff member observed:

"We see more group-based study behavior, but the physical layout of our library was not designed for that—it's still very traditional."

This disconnect between user behavior and spatial configuration suggests the need for redesigned infrastructure, grounded in the Learning Commons model, to accommodate contemporary learning demands.
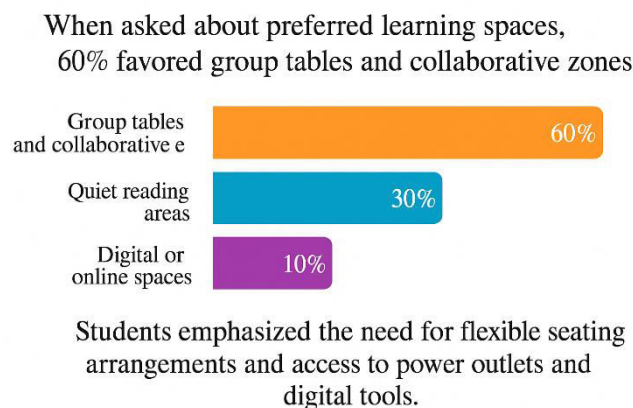

Figure 2. Respondents Response

Challenges and Constraints in Library Utilization

As outlined in Table 1, several recurring challenges were identified that hinder optimal library use. These included limited seating and study space during peak hours, poor internet connectivity, and restricted access to online databases and e-books. These issues directly affect the quality of academic engagement and learning within library environments.

From the perspective of library staff, two institutional challenges stood out: budget constraints that limit technological upgrades, and a for staff. These challenges align with concerns raised by Alenzuela (2022), who emphasized the gap between infrastructure readiness and expectations for digital learning lack of digital training environments in Southeast Asian universities.

"We have the vision for a Learning Commons, but we lack the funds and personnel training to implement it," remarked one librarian from Luzon.

This highlights a critical institutional gap: while student needs are evolving, support systems for transformation remain underdeveloped. Without targeted investment and professional development, the shift toward a full-scale Learning Commons will remain aspirational.

Table 1. Major Challenges Encountered in Library Use

Challenge	Description
1. Limited seating and study space	Inadequate number of seats and study areas during peak library hours
2. Poor Wi-Fi connectivity	Unstable or slow internet access affecting digital research and communication
3. Lack of access to online databases and e-books	Limited digital resource subscriptions or outdated platforms
4. Budget limitations	Insufficient funding for upgrading facilities and acquiring modern resources
5. Lack of training in digital tools	Library staff need further professional development on modern technologies
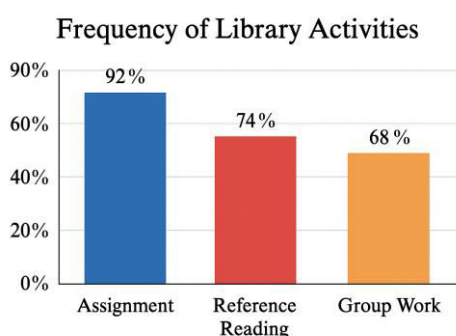
Figure 3. Frequency of Library Activities

As shown in Table 2, the data on students' preferred learning spaces highlights the diversity of learning needs and preferences among respondents. A majority of students (60%) favored group tables and collaborative zones, which facilitate peer interaction, group discussions, and teamwork—essential components of active learning. Meanwhile, 30% of students preferred quiet reading areas, which support individual study and deep concentration. A smaller portion, representing 10% of respondents, indicated a preference for digital or online spaces, emphasizing the growing demand for access to technology, internet connectivity, and digital resources.

These preferences reflect the evolving role of academic libraries, where a one-size-fits-all design no longer meets the expectations of the student body. The need for hybrid and flexible learning environments—those that integrate physical, collaborative, and digital spaces—has become increasingly apparent.

The graphical representation of these findings is illustrated in Figure 4, which visually depicts the proportion of students preferring each type of learning space. This visualization provides a clearer understanding of the demand for specific library arrangements and can guide administrators and librarians in prioritizing space reconfiguration and infrastructure development.

Table 2. Preferred Learning Spaces of Students

| Learning Space Type	Percentage of Respondents	Description
Group tables and collaborative zones	60%	Spaces that support group work, discussions, and peer collaboration
Quiet reading areas	30%	Individual study areas suited for focused reading and research
Digital or online spaces	10%	Areas equipped with computers, internet access, and digital research tools
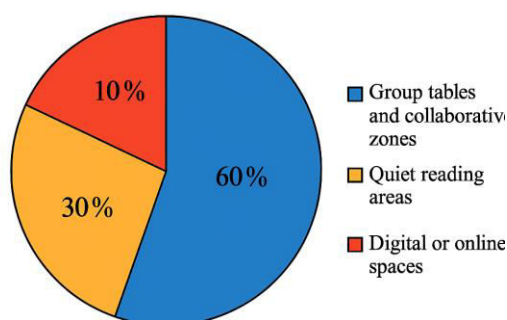
Figure 4. Preferred Learning Spaces

Interpretation and Theoretical Linkages

The findings of this study reinforce the constructivist learning paradigm, which posits that knowledge is constructed through active engagement, collaboration, and social interaction. The preference for collaborative zones and dissatisfaction with outdated library infrastructures suggest a misalignment between current library environments and modern pedagogical needs.

The shift in spatial preference and library behavior among students points to a paradigm transition—from transactional resource use to experiential, process-oriented academic engagement. This supports Blummer and Kenton's (2017) assertion that libraries must evolve from service providers into learning facilitators through space reconfiguration and digital integration.

Overall, the findings illustrate a critical insight: while students and staff both recognize the value of academic libraries, their full potential is hindered by outdated designs, technological limitations, and institutional constraints. The data suggests a growing demand for libraries that support blended learning, collaboration, and digital engagement—key elements of the Learning Commons model. Addressing these challenges through infrastructure, policy, and professional development will be essential for transforming libraries into inclusive, future-ready academic spaces.

V. CONCLUSION

The findings of this study clearly demonstrate that students in state universities actively and consistently utilize library facilities as integral spaces for a range of academic activities, including completing assignments, conducting research, accessing reference materials, and participating in group discussions. This consistent usage underscores the library's enduring relevance as a cornerstone of the academic ecosystem in higher education institutions. However, despite the evident importance of library spaces, the study also reveals that students face several pressing challenges—chiefly, spatial limitations, such as insufficient seating and lack of designated collaborative zones, as well as technological deficiencies, including poor internet connectivity and limited access to online academic resources.

These limitations significantly hinder students' ability to maximize the benefits of library use, especially in an era where digital access and collaborative learning are becoming essential components of academic success. In this context, the study affirms the transformative potential of adopting a learning commons model. Such a model reimagines the library as a multifunctional, student-centered environment that blends traditional services with innovative, technology-enriched learning spaces.

By integrating features such as flexible and modular furniture for collaborative learning, dedicated zones for quiet study, high-speed wireless connectivity, and access to extensive digital databases and e-books, academic libraries can substantially elevate the quality of support they provide to students. This reconfiguration not only enhances student engagement but also aligns with the pedagogical shift toward blended and independent learning strategies.

Ultimately, the adoption of a learning commons model positions libraries as active contributors to institutional goals—supporting academic performance, fostering critical thinking, and promoting lifelong learning among students. This strategic transformation is crucial in ensuring that state university libraries remain responsive, inclusive, and future-ready.

VI. RECOMMENDATIONS

Based on the study's findings, the following recommendations aim to address the spatial, technological, and institutional challenges faced by state university libraries. These proposed actions support the transition toward a more responsive, inclusive, and future-ready learning commons environment:

1. Redesign library infrastructure to include collaborative zones, technology hubs, and flexible learning spaces.
2. Invest in high-speed internet connectivity and expand access to online academic databases.
3. Provide staff training on digital tools and resource curation to support hybrid learning environments.
4. Engage student input in the planning and design of learning commons spaces to ensure usability and relevance.
5. Encourage institutional partnerships and funding support for library modernization projects.

ACKNOWLEDGMENT

REFERENCES

1. Alenzuela, R. C. (2022). Knowledge is no longer shelved: Openness of the Oriental Institute of the Czech Academy of Sciences. Nazarbayev University. https://sites.google.com/view/reysa-alenzuela/about/publications
2. Al-Kindi, S., & Al-Suqri, M. N. (2020). Impact of academic library services on students' success and performance. Library Philosophy and Practice. https://www.researchgate.net/publication/344170619_IMPACT_OF_ACADEMIC_LIBRARY_SERVICES_ON_STUDENTS_SUCCESS_AND_PERFORMANCE
3. Balicat, J. D. C. (2025). Library services utilization: Evaluating availment for optimal efficiency. International Journal for Multidisciplinary Research, 7(3). https://www.ijfmr.com/papers/2025/3/44307.pdf
4. Beneyat-Dulagan, M. T., & Cabonero, D. A. (2023). Exploring library activities, learning spaces, and challenges encountered towards the establishment of a learning commons. Evidence Based Library and Information Practice, 18(1), 3–23. https://doi.org/10.18438/eblip30164

5. Blummer, B., & Kenton, J. M. (2017). Learning commons in academic libraries: Discussing themes in the literature from 2001 to the present. New Review of Academic Librarianship, 23(4), 329–352. https://doi.org/10.1080/13614533.2017.1366925

6. DeFrain, E., & Cox, A. M. (2022). Academic libraries in the crowded informal learning space ecosystem. College & Research Libraries, 83(1), 2–20. https://crl.acrl.org/index.php/crl/article/view/25264/33134

7. DeVille, S. D. (2020). The influence of library spaces on student engagement (Doctoral dissertation, Florida Gulf Coast University). ProQuest Dissertations & Theses Global. https://search.proquest.com/openview/77d46fadfd109e033011162f77e23838/1?cbl=18750&diss=y&pq-origsite=gscholar

8. DeVille-Holly, S. D. (2024). Library space design to promote student engagement: A comparison of graduate and undergraduate students. Journal of Access Services, 21(2), 1–30. https://doi.org/10.1080/15367967.2024.2316699

9. Estrada, C. Y. E., Gutierrez, F. V. O., Valdez, M. G., & Alenzuela, R. C. (2023). Enhancing academic success through utilization of library resources in a public university in the Philippines. Asia Pacific Journal of Social and Behavioral Sciences, 21, 71–83. https://apjsbs.buksu.edu.ph/index.php?journal=APJSBS&page=article&op=view&path%5B%5D=351

10. Flores, R. A., & Mendoza, M. D. (2023). An assessment of discussion room usage and student preferences in academic library spaces. Qualitative and Quantitative Methods in Libraries, 14(1), 45–60. https://www.qqml-journal.net/index.php/qqml/article/view/900

11. Hsu, C. H. C., Chin, D. C. W., & Yau, O. K. T. (2022). Usage of informal learning spaces among students from academic units with versus without dedicated buildings on campus. Journal of Learning Spaces, 11(1). https://files.eric.ed.gov/fulltext/EJ1359061.pdf

12. James, P. (n.d.). The library space as a learning space. My Professional Portfolio. https://petrajamesportfolio.wordpress.com/what-i-have-learnt-from-this-course/the-library-space-as-a-learning-space/

13. University of Makati Library. (n.d.). Library Learning Commons. Retrieved June 4, 2025, from https://www.umak.edu.ph/library/

14. DeFrain, E., & Hong, M. (2020). Interiors, affect, and use: How does an academic library's learning commons support students' needs? Evidence Based Library and Information Practice, 15(2), 42–69. https://doi.org/10.18438/eblip29677erudit.org

15. Wei, Q., Zhang, J., Wang, P., Jin, X., & Fan, M. (2024). Augmented library: Toward enriching physical library experience using HMD-based augmented reality. arXiv. https://arxiv.org/abs/2408.06107arxiv.org

16. Paul, S., & Chauhan, S. (2024). Enhancing accessibility in special libraries: A study on AI-powered assistive technologies for patrons with disabilities. arXiv. https://arxiv.org/abs/2411.06970arxiv.org

17. Paul, S., Chauhan, S., & Pal, A. K. (2024). Empowering library users: Creative strategies for engagement and innovation. arXiv. https://arxiv.org/abs/2411.02993arxiv.org

18. Patel, A. B., Batcha, M. S., & Ahmad, M. (2021). Impact of Web 2.0 technologies on academic libraries: A survey on affiliated colleges of Solapur University. arXiv. https://arxiv.org/abs/2102.11413arxiv.org

19. Beagle, D. (2011). From learning commons to learning outcomes: Assessing collaborative services and spaces. EDUCAUSE Center for Analysis & Research. https://web.archive.org/web/20140512221515/https://net.educause.edu/ir/library/pdf/ERB1114.pdfen.wikipedia.org

20. Bennett, S. (2008). The information or the learning commons: Which will we have? Journal of Academic Librarianship, 34(3), 183–187. https://doi.org/10.1016/j.acalib.2008.03.001en.wikipedia.org

21. Birdsall, W. F. (2010). Learning commons to communicative commons: Transforming the academic library. College & Undergraduate Libraries, 17(2–3), 234–247. https://doi.org/10.1080/10691316.2010.489065en.wikipedia.org

22. Heitsch, E. K., & Holley, R. P. (2011). The information and learning commons: Some reflections. New Review of Academic Librarianship, 17(1), 64–77. https://doi.org/10.1080/13614533.2011.539096en.wikipedia.org

23. Somerville, M. M., & Harlan, S. (2008). From information commons to learning commons and learning spaces: An evolutionary context. In B. Schader (Ed.), Learning commons: Evolution and collaborative essentials (pp. 1–36). Chandos Publishing.en.wikipedia.org

24. Woo, E., Serenko, A., & Chu, S. (2019). An exploratory study of the relationship between the use of the learning commons and students' perceived learning outcomes. Journal of Academic Librarianship, 45(4), 413–419. https://doi.org/10.1016/j.acalib.2019.05.003en.wikipedia.org

25. Holmgren, R. A. (2010). Learning commons: A learning-centered library design. College & Undergraduate Libraries, 17(2–3), 177–191. https://doi.org/10.1080/10691316.2010.489065en.wikipedia.org

26. Stark, M., & Samson, S. (2010). Organized spontaneity: The learning commons. College & Undergraduate Libraries, 17(2–3), 260–272. https://doi.org/10.1080/10691316.2010.489067en.wikipedia.org

27. Oblinger, D. G. (2006). Challenging traditional assumptions and rethinking learning spaces. EDUCAUSE Review, 41(4), 14–27. https://er.educause.edu/articles/2006/1/challenging-traditional-assumptions-and-rethinking-learning-spacesen.wikipedia.org

28. Freund, L. S. (2012). Services in the information commons: Meeting the needs of student users in academic libraries. In D. M. Mueller (Ed.), Meeting the needs of student users in academic libraries (pp. 1–22). Elsevier.en.wikipedia.org

IJARASEM

ISSN

INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

निस्केयर
NISCAIR

International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)