A MULTISOURCE SCIENTOMETRIC AND THEMATIC META-SYNTHESIS OF SAN PABLO COLLEGES' SCHOLARLY PERFORMANCE

Noemi L. Lunar
SPC Collegiate Faculty

Joseph Christian P. Gesmundo
SPC JHS Principal and Collegiate Faculty
Co-Author

Rochelle A. Carada
SPC Collegiate Faculty
Co-Author

Research performance in smaller higher education institutions cannot be adequately represented by publication counts or researcher rankings alone. This study examined the scholarly performance of San Pablo Colleges through a multisource scientometric and thematic meta-synthesis. Google Scholar served as the principal source of citation evidence, supplemented by Crossref, ORCID, AD Scientific Index, ResearchGate, Semantic Scholar, Philippine E-Journals, RePEc, publisher websites, institutional journals, and conference records. Publications and authors were included when their connection with the institution as administrators, faculty members, research personnel, students, graduate fellows, or institutional collaborators could be verified. Scientometric analysis examined citation-bearing profiles, citation concentration, recency, authorship participation, collaboration, and database visibility. Thematic synthesis organized the retrieved scholarship into research culture and capability; institutional quality and transformation; sustainability and social responsibility; educational innovation and digitalization; global citizenship and curriculum; language and literacy; accountancy, business, and financial well-being; health and psychological well-being; community engagement; and student-led and creative scholarship. Four publicly traceable citation-bearing profiles collectively displayed at least 148 author-profile citation instances. Approximately 95.3% were concentrated among the three most visible profiles, indicating strong individual performance but limited distribution of measurable impact. At least 82 citations in profiles with complete recency information occurred during the recent period, suggesting continuing scholarly momentum. The qualitative synthesis revealed a shift from isolated institutional studies toward interconnected research programs addressing organizational improvement, educational transformation, and community needs. Nevertheless, inconsistent author identities, incomplete affiliations, uneven repository coverage, and limited verified profiles constrain institutional visibility. The study proposes a Research Ecosystem Maturity Pathway integrating capacity, productivity, visibility, scholarly influence, utilization, and sustainability.

Keywords: institutional research ecosystem, research performance, scientometrics, scholarly visibility, thematic meta-synthesis

Introduction

Conventional bibliometric metrics—such as raw publication counts, citation totals, and international rankings—often provide an incomplete picture of research performance in smaller, teaching-oriented higher education institutions whose outputs include locally responsive studies, community evaluations, graduate theses, and creative works. While Google Scholar captures a broader range of these academic documents than selective databases like Scopus or Web of Science, its dynamic records, duplicate entries, and inconsistent metadata require triangulating researcher profiles, institutional affiliations, persistent identifiers, and local publication platforms. At San Pablo Colleges (SPC), scholarship has evolved steadily from early studies on faculty research attitudes and support needs toward a diverse portfolio spanning quality assurance, sustainability, educational innovation, AI, global citizenship, language, business, health, and community development—demonstrating that institutional performance is best understood as a collaborative ecosystem rather than a list of isolated, individually ranked scholars.

To bridge the gap between ranking-based analyses and a holistic understanding of SPC's scholarship, this descriptive study conducts a multisource scientometric and thematic meta-synthesis of publicly accessible, verifiable records through September 14, 2026, without pooling statistical effect sizes. Guided by the non-linear Research Ecosystem Maturity Pathway—which evaluates the interplay across six dimensions: capacity, productivity, visibility, scholarly influence, utilization, and sustainability—the investigation maps traceable outputs, analyzes citation concentration, identifies dominant and emerging research themes, and examines cross-stakeholder collaboration. Ultimately, the study aims to clarify how productivity, discoverability, influence, and practical application interact while pinpointing critical gaps in researcher visibility, metadata quality, and bibliographic coverage.

Method

Situated at San Pablo Colleges (SPC) in San Pablo City, Laguna, Philippines, this study employed a descriptive scientometric and thematic meta-synthesis design—rather than a statistical meta-analysis—to examine the institution's publicly visible research productivity, collaboration,

citation concentration, and developmental trajectory. Data were collected through September 14, 2026, using Google Scholar as the primary discovery and citation source, supplemented by Crossref, ORCID, ResearchGate, Semantic Scholar, Philippine E-Journals, institutional repositories, and backward/forward author tracing to verify publication details and institutional ties. Strict inclusion criteria ensured that records were formally connected to SPC through authorship, setting, or institutional platforms, while excluding unverified, duplicate, or incidental mentions; furthermore, institutional attribution was graded across four evidence levels (Levels A–D), and citation totals were kept strictly segregated by platform rather than pooled across databases.

The analysis progressed through five sequential stages: record identification and verification, deduplication, scientometric description, inductive thematic coding, and interpretive synthesis guided by the Research Ecosystem Maturity Pathway. To evaluate how citations were distributed across researchers without artificially deduplicating coauthored works, author-profile citation counts were treated as full-counting citation instances and analyzed using the Herfindahl–Hirschman Index (HHI) multiplied by 10,000, where higher scores indicate greater concentration among a few profiles. Relying exclusively on publicly accessible scholarly metadata without human participants, the study carefully avoided false attribution from name similarities and framed its quantitative findings as a time-specific snapshot of an evolving scholarly record.

Results and Discussion

The multisource search revealed a research community considerably larger than the one represented in researcher-ranking databases, and the analysis yielded four principal sets of results. First, institutional knowledge production operated through four overlapping authorship structures. Second, four publicly traceable citation-bearing profiles displayed at least 148 author-profile citation instances, which were highly concentrated among three profiles. Third, the retrieved scholarship formed ten thematic clusters that together suggest a shift from isolated institutional studies toward interconnected research programs. Fourth, six collaboration patterns connected administrators, faculty members, students, community partners, and external scholars. These results are discussed below in relation to the research objectives, with the Research Ecosystem Maturity Pathway serving as the interpretive frame.

Scale and Structure of Publicly Traceable Scholarship

Institutional knowledge production at San Pablo Colleges spans a broad community—including administrators, faculty, students, alumni, and external collaborators—operating through four overlapping authorship structures: administrative leadership research, faculty-led disciplinary work, faculty–student and adviser–graduate-fellow collaborations, and institutional or community program evaluations. While researcher-ranking databases like the AD Scientific Index capture only a small, visible citation-bearing tier, multisource tracing uncovers a much larger body of output whose public visibility remains uneven due to missing verified profiles and inconsistent institutional affiliations. Consequently, true institutional research performance cannot be judged solely by ranking lists or raw publication volume, which may mask gaps between production and discoverability; instead, it is best evaluated through the Research Ecosystem Maturity Pathway, which examines the interplay of productivity, visibility, influence, utilization, and sustainability.

Citation Profile and Concentration

Publicly traceable citation metrics reveal a highly concentrated scholarly structure at the institution, with four citation-bearing profiles generating at least 148 citation instances and the top three profiles alone accounting for 95.3% of that total (yielding a Herfindahl–Hirschman Index of approximately 0.306, or 3,060 on a 10,000-point scale). While available recent-period data from three profiles show at least 82 recent citations—indicating growing, active scholarly momentum rather than reliance solely on older publications—this visibility remains unevenly distributed across a few individual anchors rather than reflecting a lack of scholarship among other authors. Characteristic of an emerging research ecosystem, this pattern demonstrates both progress and structural vulnerability, underscoring the institutional challenge of leveraging these visible researchers for mentorship and collaboration to broaden citation uptake without leaving future performance dependent on a small group.

Research Culture, Institutional Quality, and Sustainability

From the synthesis of ten thematic clusters, the first three illustrate a cumulative progression in how the institution approaches research, organizational maturity, and sustainable development. The first cluster,

research culture and capability, established that while employees hold positive attitudes toward research, actual productivity depends on structural resources such as funding, mentoring, workload support, and publication assistance. Building on this foundation, the second cluster, institutional quality and transformation, traced a developmental sequence moving from employee innovation readiness and accreditation-driven quality assurance to broader organizational effectiveness. Finally, the third cluster, sustainability, positioned sustainable development as an overarching institutional lens linking governance, equity, education, and community participation with quality management, while highlighting the need to balance strong social and governance achievements with more measurable environmental initiatives.

Educational Innovation, Curriculum, and Language

Clusters four through six highlight how the institution advances pedagogical adaptability, civic-minded curriculum design, and foundational communication skills. The fourth cluster, educational innovation and digitalization, demonstrates a progression from pandemic-era hybrid learning continuity to generative AI, open educational resources, and design-thinking mindsets—underscoring that technological adoption must be paired with cognitive habits like risk-taking and ambiguity tolerance alongside ethical AI governance and equitable access. Building on curriculum renewal, the fifth cluster, global citizenship education, integrates Sustainable Development Goals (SDGs), gender mainstreaming, and student formation with Filipino nationalism and civic identity, showing that global responsiveness and local cultural grounding mutually reinforce one another. Finally, the sixth cluster, language and literacy—one of the institution's most citation-visible domains—explores English proficiency, reading and writing mechanics, oral communication, and technology-supported instruction, illustrating how strong communication competencies directly underpin academic achievement and learner preparedness.

Business, Health, Community, and Student-led Scholarship

Clusters seven through ten illustrate how institutional research extends into professional readiness, holistic well-being, community impact, and inclusive student scholarship. The seventh cluster, business, accountancy, and financial well-being, evolved from studying retail microfinance and

employee retirement planning toward examining learning modalities and graduating students' professional readiness. In the eighth cluster, health and psychological well-being, researchers explored student stress, burnout, resilience, and nursing education across interdisciplinary factors—alongside separately classified affiliated medical-center work on QR-code workplace learning. The ninth cluster, community engagement and extension, shifted focus from merely documenting civic-welfare and livelihood activities to evaluating their actual socioeconomic impact, demonstrating that skills training requires ongoing mentoring, capital access, and market support to yield sustained results. Finally, the tenth cluster, student-led and creative scholarship, highlights students and graduate fellows actively authoring studies on social and professional issues alongside humanities-based creative works like scripts and music, which should be categorized separately from peer-reviewed empirical articles in institutional reporting.

Collaboration and Knowledge Formation

The retrieved scholarship showed six collaboration patterns. Executive–research leadership collaboration connected strategic institutional decisions with empirical evidence; administrator–faculty collaboration linked policy, academic operations, and research implementation; faculty–student collaboration supported mentorship, authorship succession, and research formation; interdisciplinary collaboration combined education, business, psychology, health, culture, and technology; institution–community collaboration connected knowledge production with social and extension outcomes; and external scholarly collaboration broadened expertise, dissemination, and professional networks. The collaboration network demonstrated increasing connectivity but appeared to depend on a recurring core of productive researchers, so the institution has progressed beyond isolated authorship without yet achieving a fully distributed research culture. Faculty–student collaboration is an important strength because it promotes research mentoring, authorship succession, and broader institutional participation.

Cumulative Development, Breadth, and Fragmentation

The thematic synthesis revealed a meaningful progression in institutional research: early studies identified research-engagement limitations, and later work examined innovation readiness, quality

assurance, sustainability, resource allocation, and institutional transformation. Cumulative institutional research can produce a stronger evidence base than disconnected one-time assessments, so future investigations should explicitly use prior findings as baselines, measure changes over time, and evaluate whether recommended interventions produced intended outcomes. The scholarship also covered education, institutional management, sustainability, language, psychology, business, accountancy, health, technology, culture, and community engagement, a breadth that reflects the institution's multidisciplinary academic portfolio and responsiveness to local concerns. However, disciplinary breadth can become fragmentation when studies are not organized into sustained research programs. Closely related studies should be linked through shared conceptual frameworks, longitudinal designs, common datasets, and coordinated dissemination, because programmatic clusters are more likely than isolated articles to develop cumulative citation impact and recognizable institutional expertise.

Productivity, Visibility, and Utilization

A notable gap between research productivity and public visibility stems from technical and metadata barriers—such as inconsistent author names, missing institutional affiliations, unmerged duplicate records, inaccessible full texts, and limited adoption of ORCID, DOIs, and verified Google Scholar profiles—demonstrating that high publication output does not automatically translate into discoverability, citation influence, or practical utilization in policies and programs. Consequently, these findings must be interpreted within clear methodological boundaries: they represent a time-specific snapshot of verifiable records through September 14, 2026, rely on non-deduplicated author-profile citation instances and lower-bound recent citation estimates kept separate by platform, and exclude outputs lacking verifiable institutional ties. Ultimately, citation metrics offer useful yet incomplete evidence of scholarly performance and should be evaluated alongside research quality, real-world utilization, community impact, and institutional sustainability.

Conclusion

This study found that San Pablo Colleges possesses a broader research-producing community than is represented in international researcher-ranking systems, with scholarship generated by interconnected groups of administrators, research personnel, faculty members, students, graduate fellows, and institutional collaborators. Four traceable citation-bearing profiles collectively displayed at least 148 author-profile citation instances, an emerging external scholarly footprint, but influence was highly concentrated, with 95.3% of the displayed instances associated with three profiles and a concentration index of approximately 3,060. Available temporal indicators demonstrated recent citation momentum, although incomplete public data prevented the calculation of a complete institution-wide recent-citation rate. Institutional scholarship developed into ten identifiable clusters and showed cumulative progression from research readiness and engagement toward quality assurance, sustainability, resource allocation, visibility, and transformation. Faculty–student collaboration emerged as an important strength, whereas disciplinary breadth may lead to fragmentation unless related studies are organized into sustained research programs, and inconsistent author identities, incomplete profiles, uneven affiliations, and limited repository coverage created a productivity–visibility gap. The institution is therefore transitioning from a productivity-oriented research culture toward an emerging institutional knowledge ecosystem, although broader participation and stronger research infrastructure remain necessary. These conclusions describe a time-specific snapshot of publicly traceable evidence and are not a judgment of the quality of any individual scholar's work.

Recommendation

To close the gap between research productivity and public visibility, San Pablo Colleges is encouraged to establish a Research Impact Observatory featuring a continuously updated publication registry, an annual research census, and an interoperable open-access repository with standardized author names, institutional affiliations, ORCIDs, DOIs, and verified Google Scholar profiles. Institutional capacity can be further strengthened by leveraging highly visible researchers as mentors, creating a thesis-to-publication pathway for quality student work, and systematically tracking whether findings translate into revised policies,

curricula, and community interventions. Moving forward, future research should build on baseline institutional data through longitudinal and linked frameworks, address emerging priorities such as ethical AI use, digital equity, and measurable environmental sustainability, repeat multisource tracing over time to monitor progress, and classify creative works separately from peer-reviewed empirical articles in performance reporting.

References

Alvero, J. C. M. (2023). Integration of global citizenship competencies in general education courses in a higher education institution in Laguna, Philippines: Basis for curriculum innovation. Education & Learning in Developing Nations, 1(2), 86–93.

Barradas, J. A. C., & Lunar, B. C. (2023). Assessment of attitude, perceptions and actual engagement on research: Basis for training design development for San Pablo Colleges. Malaysian Mental Health Journal, 2(1), 29–35. doi:10.26480/mmhj.01.2023.29.35

Del Rosario-Raymundo, M. R. (2017). QR codes as mobile learning tools for labor room nurses at the San Pablo Colleges Medical Center. Interactive Technology and Smart Education, 14(2), 138–158. doi:10.1108/ITSE-02-2017-0015

Gesmundo, J. C. P. (2023). Level of awareness of graduate fellows on design thinking mindset: Basis for curriculum enhancement. Education & Learning in Developing Nations, 1(1), 38–42. doi:10.26480/eldn.01.2023.38.42

Gesmundo, J. C. P., Concordia, M. R. C., Reyes, M. T. P., Maravilla, J. V., Gutierrez, G. A. T., & Jainar, J. P. (2026). Effectiveness of the weekly homeroom hour in the holistic development of students in a private higher education institution in Laguna, Philippines: Basis for a homeroom curriculum map. Cognizance Journal of Multidisciplinary Studies, 6(7). doi:10.47760/cognizance.2026.v06i07.029

Gutierrez, G. A. T., & Gesmundo, J. C. P. (2023). Communicative language competence and English language usage of junior high school learners of San Pablo Colleges. World Languages, Literature and Cultural Studies, 1(1), 20–22. doi:10.26480/wllcs.01.2023.20.22

Harzing, A.-W., & Alakangas, S. (2016). Google Scholar, Scopus and the Web of Science: A longitudinal and cross-disciplinary comparison. Scientometrics, 106(2), 787–804. doi:10.1007/s11192-015-1798-9

Ilagan, A. A., Balitaan, G. A., Empalmado, F. C., & Reyes, O. A. (2019). Microfinance services and income allocation of retail entrepreneurs in San Pablo City, Laguna, Philippines. Malaysian E Commerce Journal, 3(1), 15–16. doi:10.26480/mecj.01.2019.15.16

Lunar, B. C., & Eala, C. M. C. M. (2023). Where are we and where are we going: Educational innovation initiatives in San Pablo Colleges. Education, Sustainability & Society, 6(2), 72–75. doi:10.26480/ess.02.2023.72.75

Lunar, B. C., Eala, C. M. C. M., & Perez, A. D. (2025). Sustainability initiatives as drivers of institutional effectiveness: Insights from San Pablo Colleges. Journal of Interdisciplinary Perspectives, 3(5), 52–62. doi:10.69569/jip.2025.014

Lunar, B. C., Gesmundo, J. C. P., Alvero, J. C. M., Roño, K. A. D. D., & Allic, C. M. (2023). Empowerment and socio-economic impact of livelihood trainings: A case of a private educational institution in Southern Luzon, Philippines. INTI Journal, 2023, Article 49. doi:10.61453/INTIj.202349

Lunar, B. C., Perez, A. D., & Eala, C. M. C. M. (2024). Probing practices, processes, and perspectives on quality assurance: Towards institutional sustainability. Business, Organizations and Society, 2(2), 75–84. doi:10.26480/bosoc.02.2024.75.84

Lunar, N. L., & Lunar, B. C. (2026). Mapping the research trajectory of San Pablo Colleges (2024–2026): A scientometric analysis of AD

Scientific Index rankings. Asian Journal of Integrated Management and Accountancy Studies. doi:10.66206/eh.ajimas.53

Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & Delgado López-Cózar, E. (2018). Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. Journal of Informetrics, 12(4), 1160–1177. doi:10.1016/j.joi.2018.09.002

Ortega, A. M., Velecina, J. V., & Lunar, B. C. (2021). Assessment of the Hybrid Education Learning Program (HELP) of the AHEAD Learning Platform of San Pablo Colleges. JPAIR Institutional Research Journal, 16(1), 133–143. doi:10.7719/irj.v16i1.748

Perez, A. D., & Lunar, B. C. (2025). Analyzing the relationship between research budget allocation and research output productivity in a private higher education institution. Cognizance Journal of Multidisciplinary Studies, 5(6), 351–365. doi:10.47760/cognizance.2025.v05i06.029

Portugal, M. P., & Ramos, A. A. (2025). Investigating student satisfaction across modalities: A comparison of learning modalities in the College of Business and Accountancy at San Pablo Colleges. Education & Learning in Developing Nations, 3(1), 2–8. doi:10.26480/eldn.eldn.01.2025.02.08

Reyes, O. A. (2024). Financial profile and attitudes towards retirement: Evidence from employees eligible for retirement. Malaysian Mental Health Journal, 3(2), 50–59. doi:10.26480/mmhj.02.2024.50.59

Roño, K. A. D. D. (2023). Nationalism and national identity among pre-service teachers at San Pablo Colleges. Education, Sustainability & Society, 6(2), 87–90. doi:10.26480/ess.02.2023.87.90

San Pablo Colleges. (n.d.). History, mission, educational philosophy, and institutional attributes. Retrieved from https://sanpablocolleges.edu.ph/history-of-spc