

Pedagogical, Research, and Professional Development Training Needs of Allied Health Sciences Faculty

Jonalyn P. Santos^{*1}, Dindo V. Asuncion²

¹School of Health and Allied Sciences, University of Saint Louis, Tuguegarao City, Cagayan, Philippines

^{1,2}Center for Health Research and Development, University of Saint Louis, Tuguegarao City, Cagayan, Philippines

*Corresponding Author Email: jonalynsantos@usl.edu.ph

Date received: November 11, 2024

Date revised: January 8, 2025

Date accepted: January 31, 2025

Originality: 87%

Grammarly Score: 99%

Similarity: 13%

Recommended citation:

Santos, J., Asuncion, D. (2025). Pedagogical, research, and professional development training needs of allied health sciences faculty. *Journal of Interdisciplinary Perspectives*, 3(2), 392-396.

<https://doi.org/10.69569/jip.2024.0635>

Abstract. Assessment of the training needs of faculty members is an important step in ensuring that faculty development programs and activities will be aligned with the faculty's personal, communal, and cultural needs. This study assessed the training needs of the Bachelor of Science in Nursing, Medical Laboratory Sciences, and Pharmacy program faculty members of a Higher Education Institution in the northern part of the Philippines. The results of this study served as a basis for identifying seminars/training specifically tailored to the faculty's needs. This descriptive quantitative research was conducted among 42 full-time and part-time faculty members via an online survey using a structured questionnaire designed by the university research staff. The results showed that all allied health sciences faculty members have training needs or interests in pedagogy, research, and other professional attributes. Specific training topics on pedagogy include assessment and evaluation of learners, developing learners' critical thinking skills, and outcomes-based education. Training topics in research and innovation include analysis and interpretation of data, research mentoring, and the use of digital tools for research. Finally, training topics in other areas of professional attributes include work and personal life balance, stress management, health and wellness, and strategic planning.

Keywords: Allied health sciences faculty; Professional attributes; Research capability; Teaching skills; Training needs assessment.

1.0 Introduction

Higher Education Institutions (HEI) primordial aim is to provide their clients with the highest quality of education. To do so, HEIs must comply with set standards measuring their performance (Estacio et al., 2020). Faculty members play a vital role in ensuring quality education for students (Abouelenein, 2016; Boadu & Acquah, 2013). Faculty members are, therefore, expected to have mastery or competencies along the threefold function of HEIs: instruction, research, and community engagement. To ensure that faculty members are competent in these areas, educational institutions worldwide must pay great attention to faculty preparation and professional development. HEIs must assist faculty members in performing their responsibilities successfully by offering programs to improve faculty performance and create the proper working environment. continually (Abouelenein, 2016; Estacio et al., 2020).

An understanding of the individual professional development needs of the target faculty is required to plan current and relevant faculty development programs (Abdelkreem et al., 2020; Estacio et al., 2020). Efforts to

evaluate the needs of college-level faculty must be ongoing to ensure that gaps in their competency levels can be quickly found and correctly filled (Boadu & Acquah, 2013; Gao et al., 2022). Implementing appropriate training and seminars has been found to improve faculty competencies effectively. Moreover, the effectiveness of faculty development programs relies significantly on their relevance to the faculty's personal, communal, and cultural needs (Boadu & Acquah, 2013; Mahmud et al., 2019). Hence, the assessment of faculty members' training needs and interests is vital to implementing any faculty development program or activity.

As with any other field of discipline, the allied health sciences field is constantly evolving in response to continuous changes in the educational system, health care system, health research, and other factors that determine the needed competencies of health professionals (Abdelkreem et al., 2020). Health professionals have a wide area of expertise, especially in clinical, community, or occupational settings, but these professionals have limited training in teaching as it is not the focus of their discipline (Abdelkreem et al., 2020). Moreover, with the recent COVID-19 pandemic, allied health sciences education needed to adapt dramatically to a blended mode of lesson content delivery (Debnath et al., 2021).

The University of Saint Louis has also recently adopted blended learning. It is interesting to know the faculty's pedagogical needs, research and innovation needs, and other professional needs. While previous studies have explored faculty development needs in various disciplines, a dearth of research explicitly focuses on the unique needs of allied health sciences faculty, particularly in the context of recent educational shifts, such as the adoption of blended learning. Moreover, there is a need for a more in-depth analysis of how these needs align with the evolving landscape of healthcare and education. Thus, this study was conducted to assess the training needs of the School of Health and Allied Sciences faculty. The results of this study served as a basis for identifying seminars/training specifically tailored to the faculty's needs.

2.0 Methodology

2.1 Research Design

The study used the descriptive quantitative design with an online survey as the primary data-gathering method.

2.2 Research Locale

The research was conducted in a higher education institution located in Cagayan Valley, Philippines, particularly in the department offering allied health sciences programs.

2.3 Research Participants

The respondents of the study were the full-time and part-time faculty members of the university for the school year 2022-2023 who teach in the allied health sciences programs: Bachelor of Science in Nursing, Bachelor of Science in Medical Technology, and Bachelor of Science in Pharmacy.

2.4 Research Instrument

Data about training needs in the areas of pedagogy, research, and innovation and other relevant professional attributes/ skills were gathered using a structured questionnaire answerable using the 4-point Likert Scale (4-Very Important, 3-Important, 2-Somewhat Important, 1-Not at all important). The questionnaire consisted of 14 items regarding pedagogical needs, 8 items regarding research and innovation needs, and 9 items regarding other needs. The University Research and Development Center developed the questionnaire and validated by the University Research Council through face validation.

2.5 Data Gathering Procedure

An online survey was done to gather data. Approval from the university's administration was obtained before data collection. Data collection was done at the beginning of the school year 2022-2023 as this will serve as a basis for the professional development plan for the allied health sciences faculty. Mean was used to assess the needs of the faculty.

2.6 Ethical Considerations

The researchers adhered to ethical guidelines to ensure the ethical soundness of this research. They ensured the anonymity and confidentiality of the respondents, getting only the needed information for the profile. Informed

consent was obtained from the respondents; this was included in the first part of the online survey, so if they do not wish to participate, they will not proceed to the questionnaire per se. All information presented was generalized per the allied health sciences program to prevent the identification of the respondents.

3.0 Results and Discussion

As can be gleaned from Table 1, most allied health sciences faculty have been employed for less than 4 years and belong to the assistant instructor academic rank. This implies that most allied health sciences faculty members are at the novice level in terms of professional experience in teaching. Moreover, the majority of the faculty have full-time status and are either master's degree holders, have earned units in doctorate degrees, or are holders of a doctorate.

Table 1. Profile of Respondents

Variable	Frequency	Percent
Gender		
Male	15	35.7
Female	27	64.2
No. of Years in USL		
< 1 year	24	57.1
1- 3 years	11	26.1
4 - 6 years	4	9.52
≥ 10 years	3	7.14
Academic Rank		
Asst. Instructor	39	92.8
Instructor	3	7.14
Employment Status		
Full-time	32	76.1
Part-time	10	23.8
Educational Attainment		
Bachelor's Degree	9	21.4
With Master's Units	12	28.5
Master's Degree	15	35.7
With Doctoral Units	5	11.9
Doctorate Degree	1	2.38

Faculty members teaching allied health sciences programs in the Philippines typically have a blend of clinical and teaching experience, with a significant portion having 1-5 years of clinical experience and 6-10 years of teaching experience (Appiah, 2020). Their teaching experience is a strong predictor of the perceived quality of the nursing education program, highlighting the importance of employing experienced educators for continuous improvement (Armecin & Amparado, 2015).

Table 2 shows that the training needs of allied health sciences faculty in pedagogy cover all areas being assessed. The allied health sciences faculty, in this case, are composed of allied health professionals such as licensed nurses, medical technologists, and pharmacists. Pedagogy is not within the scope of their practice and professional preparation, which would explain their training needs in pedagogy.

Table 2. Training Needs in Pedagogy

Pedagogical Needs	Mean	Interpretation
Innovative classroom teaching approaches	3.79	Very Important
Using technology resources/tools to enhance teaching/learning	3.74	Very Important
Evaluation/assessment of learners	3.86	Very Important
Providing constructive feedback to learners	3.64	Very Important
Stimulating lifelong learning	3.71	Very Important
Use of LMS and other online learning platforms	3.43	Important
Test construction and evaluation	3.67	Very Important
Syllabus development	3.62	Very Important
Designing course learning modules	3.57	Very Important
Developing learners' critical thinking skills	3.83	Very Important
Outcome-based education	3.81	Very Important
Classroom management	3.67	Very Important
Designing service learning/experiential learning activities	3.71	Very Important
Effective communication techniques	3.74	Very Important

Priority is given to training activities that will enable the faculty to implement teaching-learning activities/ strategies and assessments/ evaluations that will help develop students' critical thinking skills. The development of critical thinking among students is considered a significant outcome for Higher Education Institutions (Cone et al., 2016; Gao et al., 2022; Reale et al., 2018). Critical thinking is an essential skill that allied health students must develop, as it will determine their capacity to make effective clinical decisions in their future practice. (Lee et al., 2017; Liu & Pásztor, 2022). The type of teaching-learning strategies implemented has been found to affect the development of critical thinking among students directly (Abrami et al., 2015; Liu & Pásztor, 2022). Teaching and learning strategies in allied health programs should, therefore, be designed to allow students to develop and apply critical thinking skills (Lee et al., 2017). Faculty are also faced with the additional challenge of delivering lesson content in a blended learning environment, which involves both online and limited face-to-face modalities. Online learning can be advantageous in fostering the development of critical thinking, but its implementation poses a significant challenge to educators (Gao et al., 2022; Tathahira, 2020). Hence, there is a need for relevant training in this area.

Table 3 shows that the allied health sciences faculty found all areas of research and innovation significant for training. The generation and dissemination of knowledge is one of the threefold functions of Higher Education Institutions (Rogayan & Corpuz, 2022). This may be done through the production of research or other creative/ innovative works. To produce quality research and creative outputs, faculty members must be well-trained in the different processes involved in research. As seen in the table, the training needs of allied health sciences faculty in research and innovation with the highest rank are those within the design and planning, analytic, and dissemination phases of the research process (Muiderman et al., 2022). The University Research and Innovation Office has implemented a research capability-building program since the school year 2020-2021, which mainly focused on the conceptual phase of the research process. Thus, this may explain the identified priority training needs for this school year. The allied health faculty is also interested in training students on using digital tools in research.

Table 3. *Training Needs in Research and Innovation*

Research and Innovation Needs	Mean	Interpretation
Research Mentoring	3.69	Very Important
Proposal writing in discipline research	3.67	Very Important
Conducting literature search	3.64	Very Important
Developing research designs and methods	3.69	Very Important
Data analysis and interpretation	3.74	Very Important
Writing a research manuscript	3.69	Very Important
Publishing in ISI/Scopus index journals	3.55	Very Important
Using Digital Tools in Research	3.69	Very Important

As can be gleaned from Table 4, allied health faculty members ranked health and wellness, balancing work and personal responsibilities, and strategic planning as their priority training needs along professional areas/ attributes outside pedagogy and research. Professional attributes are characteristics/ skills that are essential to educators to ensure preparedness for the demands, challenges, and obligations of teaching (Rusilowati & Wahyudi, 2020).

Table 4. *Training Needs in Other Professional Attributes*

Other Needs	Mean	Interpretation
Balancing work and personal responsibilities	3.86	Very Important
Stress Management	3.79	Very Important
Time Management	3.79	Very Important
Conflict Management	3.74	Very Important
Organizational Abilities	3.69	Very Important
Strategic Planning	3.86	Very Important
Policy Development	3.74	Very Important
Risk Management	3.71	Very Important
Health and Wellness	3.86	Very Important

These areas are equally important as technical skills like pedagogy and research. As allied health professionals, allied health faculty may have given the most significant importance in ensuring that they meet health and wellness needs and balancing work and personal responsibilities to carry out their functions as educators

effectively. Moreover, another area of highest importance that has been identified is strategic planning. Strategic planning is important in ensuring the quality of education offered by HEIs (Priyambodo & Hasanah, 2021). Therefore, this must be an area that faculty are skilled in or at least aware of to contribute to the quality of the university's education.

4.0 Conclusion

Based on this study's results, It can be concluded that allied health faculty members require relevant training to improve their pedagogical skills, research capability, and personal and professional training. The training areas of the highest importance, as assessed by the faculty, are learner evaluation and assessment, analysis and interpretation of research data, personal health and wellness, and balancing work and personal responsibilities. A comprehensive faculty development focusing on the identified priority training areas should, therefore, be developed to improve the capabilities of allied health sciences faculty members in research, pedagogy, and personal professional development.

5.0 Contributions of Authors

JPS, DVA – editing, writing, supervising,

JPS – data analysis

DVA- finalization of the manuscript for publications

6.0 Funding

This research has no internal/ institutional or external funding.

7.0 Conflict of Interests

The authors do not have any form of conflict of interest in the conduct of this study.

8.0 Acknowledgment

The authors would like to thank the faculty members of the School of Health and Allied Sciences, the University Research and Innovation Office, and the University of Saint Louis for their support in conducting and completing this study.

9.0 References

- Abdelkreem, E., Abo-Kresha, S. A., Ahmed, E. A., Ibrahim, D., Hemdan, S. B., & Abdellah, M. A. (2020). Need's assessment for faculty development at an Egyptian medical school: A triangulation approach. *International Journal of Community Medicine and Public Health*, 7, 1669–1679. <http://dx.doi.org/10.18203/2394-6040.ijcmph20201965>
- Aboueleenein, Y. A. M. (2016). Training Needs for Faculty Members: Towards Achieving Quality of University Education in the Light of Technological Innovations. *Educational Research and Reviews*, 11(13), 1180–1193. <https://eric.ed.gov/?id=EJ1106283>
- Abrami, P. C., Bernard, R. M., Borokhovski, E., Waddington, D. I., Wade, C. A., & Persson, T. (2015). Strategies for Teaching Students to Think Critically: A Meta-Analysis. *Review of Educational Research*, 85(2), 275–314. <https://doi.org/10.3102/0034654314551063>
- Appiah, S. (2020). Quality of nursing education programme in the Philippines: Faculty members perspectives. *BMC Nursing*, 19(1), 110. <https://doi.org/10.1186/s12912-020-00508-9>
- Armecin, S. C. N., & Amparado, M. A. P. (2015). Needs, Barriers and Interests in Nursing Research. *Journal of Research in Nursing*, 1(1). <https://tinyurl.com/443c577k>
- Boadu, K., & Acquah, B. Y. S. (2013). Training Needs Assessment of College of Education Tutors in the Central Region, Ghana. *International Journal of Humanities and Social Science*, 3(10), 247–254. <https://tinyurl.com/4h6vn496>
- Cone, C., Godwin, D., Salazar, K., Bond, R., Thompson, M., & Myers, O. (2016). Incorporation of an Explicit Critical-Thinking Curriculum to Improve Pharmacy Students' Critical-Thinking Skills. *American Journal of Pharmaceutical Education*, 80(3), 41. <https://doi.org/10.5688/ajpe80341>
- Debnath, M., Ojha, S., Niraula, A., & Sharma, D. (2021). Perceptions of Medical and Allied Health Students Towards Online Education during the COVID-19 Pandemic Phases and Its Future Impact in India. *Journal of European CME*, 10(1), 1993428. <https://doi.org/10.1080/21614083.2021.1993428>
- Estacio, Madeilyn B., Ramos, Belinda A., Ramirez, Rouel L., & Fulong, Lorna V. (2020). Training Needs Assessment of the Faculty of a University in Northern Philippines: A Cohort Study. *Salettinian Open Academic Review*, 2(1), 1–1. <https://www.ejournals.ph/article.php?id=16427>
- Gao, Y., Wong, S. L., Md. Khambari, M. N., & Noordin, N. (2022). A bibliometric analysis of online faculty professional development in higher education. *Research and Practice in Technology Enhanced Learning*, 17(1), 17. <https://doi.org/10.1186/s41039-022-00196-w>
- Lee, D. S., Abdullah, K. L., Subramanian, P., Bachmann, R. T., & Ong, S. L. (2017). An integrated review of the correlation between critical thinking ability and clinical decision-making in nursing. *Journal of Clinical Nursing*, 26(23–24), 4065–4079. <https://doi.org/10.1111/jocn.13901>
- Liu, Y., & Pásztor, A. (2022). Effects of problem-based learning instructional intervention on critical thinking in higher education: A meta-analysis. *Thinking Skills and Creativity*, 45, 101069. <https://doi.org/10.1016/j.tsc.2022.101069>
- Mahmud, K. T., Saira Wahid, I., & Arif, I. (2019). Impact of training needs assessment on the performance of employees: Evidence from Bangladesh. *Cogent Social Sciences*, 5(1), 1705627. <https://doi.org/10.1080/23311886.2019.1705627>
- Muiderman, K., Zurek, M., Vervoort, J., Gupta, A., Hasnain, S., & Driessen, P. (2022). The anticipatory governance of sustainability transformations: Hybrid approaches and dominant perspectives. *Global Environmental Change*, 73, 102452. <https://doi.org/10.1016/j.gloenvcha.2021.102452>
- Priyambodo, P., & Hasanah, E. (2021). Strategic Planning in Increasing Quality of Education. *Nidhomul Haq : Jurnal Manajemen Pendidikan Islam*, 6(1), Article 1. <https://doi.org/10.31538/ndh.v6i1.1138>
- Reale, M. C., Riche, D. M., Witt, B. A., Baker, W. L., & Peeters, M. J. (2018). Development of critical thinking in health professions education: A meta-analysis of longitudinal studies. *Currents in Pharmacy Teaching and Learning*, 10(7), 826–833. <https://doi.org/10.1016/j.cptl.2018.04.019>
- Rogayan, D. V., & Corpuz, L. N. (2022). Evaluating the Research Productivity of a State University in Central Luzon, Philippines: Basis for Policy Recommendations. *International Journal of Evaluation and Research in Education*, 11(1), 128–135. <https://eric.ed.gov/?id=EJ1341088>
- Rusilowati, U., & Wahyudi, W. (2020). The Significance of Educator Certification in Developing Pedagogy, Personality, Social and Professional Competencies. 446–451. <https://doi.org/10.2991/assehr.k.200225.095>
- Tathahira, T. (2020). Promoting students' critical thinking through online learning in higher education: Challenges and strategies. *Englisia: Journal of Language, Education, and Humanities*, 8(1), Article 1. <https://doi.org/10.22373/ej.v8i1.6636>