

Research Article

TRACING THE CAREER TRAJECTORIES OF DOCTOR OF EDUCATION (Ed.D.) GRADUATES: EVIDENCE FROM A STATE UNIVERSITY IN THE PHILIPPINES

Received: June 11, 2023

Revised: October 28, 2023

Accepted: November 27, 2023

Joje Mar Sanchez^{1*} Michelle Mae Olvido² and Remedios Bacus³

^{1,2,3}Cebu Normal University, Philippines

*Corresponding Author, E-mail: sanchezj@cnu.edu.ph

Abstract

This tracer study sought to describe the career trajectories of graduates of a state university's Doctor of Education (Ed.D.) program in Central Visayas, Philippines. The study utilized online surveys and focus group discussions for data collection from 104 graduates who completed the program from 2017 to 2022. Descriptive and thematic analyses were employed to derive significant insights from the results. The findings revealed that the graduates were passionate about teaching and the doctorate program and exhibited positive attributes such as working with less supervision and being committed to excellence. They also acquired quality skills, including critical thinking and research skills, and were promoted and assigned to management roles, as well as received awards on instruction and research. Furthermore, qualitative feedback from employers highlighted the graduates' outstanding work performance, ethics, and leadership. The graduates recommended flexible teaching and updated program curricula focusing on research, publication, and current trends and issues. The study concluded that the Education doctorate program of the state university produced quality graduates who excelled in teaching in their respective institutions. Further research could be done in other settings by looking into the possible effect of the doctorate program graduates on the alumni, students, faculties, and communities, as well as on their contributions to domestic and international educational practices policies.

Keywords: Doctor of Education, Career Trajectories, Philippines

Introduction

Every higher education institution aims to produce competent and highly qualified graduates in all its degree programs. One way to ascertain the quality of graduates is to determine their employability and performance after graduation. According to Badiru and Wahome (2016), information obtained from graduates can immensely improve the institution's curriculum and services. Constant curriculum review integrating

the inputs from the graduates' whereabouts can accommodate changes in the global economy and demands from actual and even potential employers. According to Albina and Sumagaysay (2020), schools must continuously examine their program offerings and instructional practices to help students develop the desired learning capabilities. Such competency-based training has been the focus of many types of research that center on developing total quality management competence (Mónica Martínez-Gómez et al., 2018; Sohel-Uz-Zaman; Anjalin, 2016; Avila, 2015).

Aware of what the world of work requires, higher education institutions that offer graduate education programs have to give educational instruction that allows the graduates to adapt to the emerging needs of society as they continue to expand and improve in their various career stages. For the adequacy of activity in the graduate education program is contributing to the quality of work in the workplace, an audit of skills and application of competencies acquired is pivotal in realizing the synergy between teacher education institutions and the labor market represented by both public and private basic and higher education institutions.

In the Philippines, the Doctor of Education (Ed.D.) program offerings are primarily designed for educational practitioners and school leaders who seek to enhance their expertise, knowledge, and skills in their respective fields of specialization. These programs often have a practitioner-oriented approach, blending theoretical knowledge with practical applications to address real-world challenges in the Philippine education system. The terminal requirements include a comprehensive examination after completing the coursework and a dissertation which involves conducting original research that contributes to the existing knowledge in the field.

The duration of the Ed.D. program varies depending on the higher education institution and the student's pace of study. It typically takes around three to four years of full-time study to complete the program. Upon completion, the graduates can pursue diverse career paths as school administrators, principals, superintendents, educational consultants, researchers, policymakers, curriculum developers, or university professors, among others.

Tracing the career trajectory or the progression of the Ed.D. graduates' career over time involves analyzing the advancements they have in their professional journey in terms of the positions they hold, the level of responsibility they assume, and the impact they make in education. This trajectory includes career promotions, changes in roles and designations, and transitions to different sectors, such as administration, curriculum development, or academia.

Hence, this graduate tracer study for the Doctor of Education (Ed.D.) graduates of the College of Teacher Education (CTE) in a state university in Central Visayas, Philippines, was conceptualized. This study sought to describe the trajectories of the graduates from 2017 to 2022. The researchers looked into personal and employment characteristics which could be the basis for the TEI's initiatives to maintain curriculum relevance.

Literature Review

Graduate tracer studies are conducted to track the current background of the graduates of a certain institution or degree program (Pentang et al., 2022). In the Philippines, many teacher education institutions conduct tracer studies to check the whereabouts of their graduates. Studies like those of Cuadra et al. (2019), Abana et al. (2021), Pacleb-Ulanday (2021), and Pentang et al. (2022) traced the graduates of Bachelor of Elementary Education (B.E.Ed.). Whereas, the studies such as those of Cuadra et al. (2019), Reusia et al. (2020), Cornillez et al. (2021), Pacleb-Ulanday (2021), and Pentang et al. (2022) tracked the graduates of Bachelor of Secondary Education (B.S.Ed.) in both public and private college institutions. However, there are only a handful of studies that focus on the graduate education programs of teacher education institutions.

Bueno (2017) conducted a descriptive survey design to trace the employability and productivity of the graduates of Ed.D., Master of Arts in Education (M.A.Ed.), Master of Arts in Language Teaching (M.A.L.T.), Master of Arts in Science Education (M.A.S.Ed.), and Master of Arts in Religious Education (M.A.R.Ed.) program in a private higher education institution. This related study highlighted that the graduates who occupied supervisory positions, acquired relevant skills like human relations, information technology, and research skills, and manifested values in the workplace such as creativity, professional integrity, and nationalism. Hence, the study concluded that the graduate school had nurtured and embraced the quality of education as evident in their graduates.

Another study by Dela Cruz (2022) traced the graduates of M.A.Ed. and Master of Science in Education (M.S.Ed.) in a state higher education institution using a descriptive research design. The study findings revealed that the graduates had a very high employability rate, very high application of the competencies in their workplace, and very high assessment of their graduate programs. The graduates suggested offering terminal programs and improving the facilities in the institution. With this, the study recommended continuous capability-building of the faculty and periodic review of the curriculum. These recommendations can make the graduate programs more responsive and relevant to the teaching field.

Sumande et al. (2022) conducted a tracer study on the graduates of Master in Education Management and Doctor in Education Management using an exploratory mixed method of research. The research team has found out the reasons for enrolment in the graduate school (e.g., personal development, career growth, work promotion, university's good reputation), challenging experiences (e.g., dissertation writing, stressful academic requirements, working while studying, long weekend travel), and impact (career-boosting, professional networks, fulfillment, theory-to-work impact). Quantitative results showed a very high impact of the program on the graduates' academic profession, learning efficiency, people skills, critical thinking, and among others.

A recent study by Sanchez et al. (2023) traced the graduates of the master's programs in teacher education in a center of excellence. The graduates became better after receiving the master's degree as they attained crucial attributes, developed complex skills, and were promoted to a higher teaching rank. The graduates suggested that the institution employ flexible and integrative learning embedded with

certifications, trends, and issues. To conclude, the institution has helped the master's graduates to become proficient teachers and workers in their teaching stations.

Research Conceptual Framework

One of the ways to evaluate the effectiveness of the Ed.D. program's curriculum in preparing graduates for leadership roles in education is to look into the personal and employment characteristics of its graduates. These characteristics may indicate the program's relevance in preparing the students for leadership roles and other positions suited for the area of their specialization. The conceptual framework is presented in Figure 1.

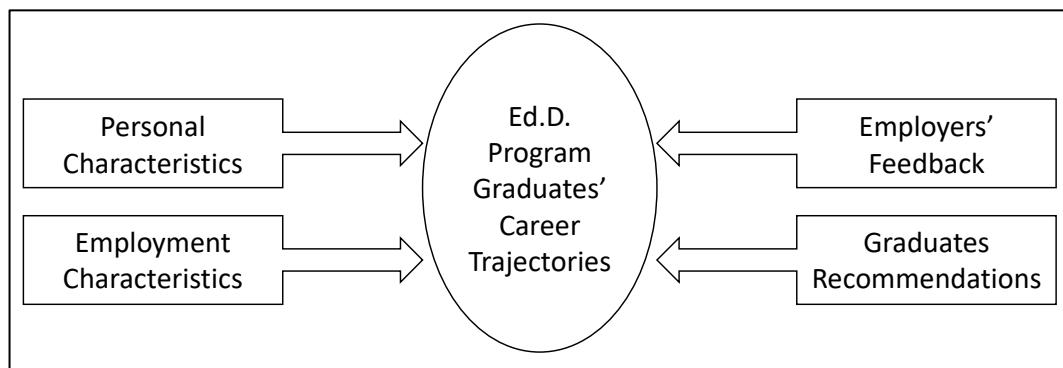


Figure 1 Research conceptual framework

As reflected in Figure 1, the personal and employment characteristics coupled with the employers' feedback and graduates' recommendations can trace the career trajectories of the Ed.D. program graduates of the state university. The insights obtained from evaluating the graduates' characteristics may help teacher education institutions with informed decisions on how best to design and implement Ed.D. programs that meet the needs of students and the ever-evolving education sector. Identifying the program's strengths and areas for improvement will not only enhance support for graduates' professional development but also ensure curriculum alignment with industry demands.

Research Methodology

Research Context

This study employed a descriptive design to look into the trajectories of the Ed.D. graduates from the education college of a state university in Central Visayas, Philippines. One hundred four graduates (80.62%) from 2017 up to 2022 across different specializations participated in the study, with 20 agreeing to join the focus group discussions (FGD). Personal and employment characteristics were identified from graduates of these specializations: Early Childhood Education, Educational Management, English Language Teaching, Filipino Language Teaching, Alternative Learning Systems, and Science Education.

Research Instruments

There were two validated instruments for the study. Firstly, the researchers used a researcher-made survey instrument, focusing on the items about their personal and employment characteristics. The personal characteristics include the reasons for pursuing the doctorate degree program and attributes attained after graduation. The employment characteristics are institutions connected with, the current position, attained competencies useful in the current work, position or designation after graduation, and awards and distinction. The tool was mainly based on the Commission on Higher Education's graduate tracer study and some variables were obtained from the tracer studies of Reusia et al. (2020) and Toledo et al. (2013).

The other instrument was the structured guide for conducting the FGD. This guide collected qualitative responses regarding the graduates' employer feedback and program recommendations, giving in-depth insights from the Ed.D. graduates. This FGD tool followed the process recommended by van Eeuwijk and Angehrn (2017).

The aforementioned tools were subjected to a rigorous validation process, ensuring tool quality and reliability. The tools underwent expert review, pilot testing, and refinement based on the results of the two prior processes. These processes ensure that the tools collected accurate and meaningful data for the present study.

Data Gathering and Analysis

The data were gathered in a chronological sequence. Firstly, the researchers sought pertinent permissions, including securing approval from the college dean and informed consent from the Ed.D. graduates to adhere to the ethical standards of research. After completing the research permissions, the researchers proceeded to the next phase of the study. They administered the survey questionnaire online through Google Forms. The online responses were downloaded as an Excel file for later analysis.

The third phase of the study was the conduct of FGD. In this study, the researchers conducted a total of four FGD sessions, each comprising five participants. During the said sessions, the researchers facilitated and guided the discussions to ensure that each participant was given the opportunity to be involved in an open and honest discussion. The present study followed the recommended FGD process by van Eeuwijk and Angehrn (2017).

The data from the surveys and FGDs were analyzed. The survey results were analyzed through descriptive analysis, mainly using frequency and percentage in Jamovi software version 2.3.21. The thematic procedure by Braun and Clarke (2008) examined the FGD transcripts, following the six steps of generating codes, meanings, and themes.

Results and Discussion

Personal Characteristics

In this tracer study, the individuals' motivations for seeking doctoral degrees and the qualities they obtained as a result of doing so were taken into account. Universities offer doctorate programs to teachers who

finished their master's level education. Some master's graduates stop while others pursue further through enrolling in a doctorate program.

Reasons for Pursuing the Doctorate Degree Program

The reasons why the master's graduates still pursue doctorate programs are shown in Table 1.

Table 1 Reasons of the graduates pursuing the doctorate program (N=104)

Reason	Frequency	Percentage
Strong passion for my profession	78	74.70%
Promotion and career advancement	61	58.70%
Educational verticalization	51	49.30%
Status and prestige of the profession	25	24.00%
Professional development	14	13.30%
Availability of the course offering	12	12.00%

According to Table 1, the graduates have pursued their respective doctorate programs because of their passion for their profession (74.7%). They also sought the program bearing in mind promotion and career advancement (58.7%) and educational verticalization (49.3%). Other reasons include status and prestige (24.0%), professional development (13.3%), and availability of the course offering (12.0%). Their reasons cohered with the findings of Ng et al. (2011) that teachers have been attracted to become doctorate holders because of several factors, including opportunities, personal characteristics, and relevance. Kowalcuk-Waledziak et al. (2017) summarized these as personal motives and professional development. Furthermore, Ceglie (2019) determined the desire to provide better teaching service, value, and opportunities as motivations in pursuing the degree. Hence, the program graduates clearly understood their goals and the necessary drive to succeed in their careers.

Attributes Attained after Graduation

The graduates attained specific attributes after obtaining the doctorate. The characteristics achieved by the graduates are shown in Table 2.

Table 2 Attained attributes by the graduates (N=104)

Attributes	Frequency	Percentage
Worker with less supervision	75	72.00%
Committed to excellence	75	72.00%
Self-reliant and resilient	72	69.30%
Researcher	69	66.70%
New knowledge generator	53	50.70%
Informed judge on complex issues	50	48.00%

Attributes	Frequency	Percentage
Quick thinker	40	38.70%
Innovative and creative	7	6.70%
Risk-taker	4	4.00%

Most graduates became workers with less supervision who are also committed to excellence (72.0%) and self-reliant and resilient (69.3% and 66.7%, respectively). They also increased their capability as researchers (66.7%) and new knowledge generators (50.7%). They enhanced their judgment over complex issues (48.0%) and improved their thinking (38.7%). Other attributes include being innovative and creative (6.7%) and being a risk-taker (4.0%). These results may be because the curricular offerings optimized their use of critical and creative thinking and leadership skills. Kowalcuk-Wałędziak et al. (2017) said these attributes positively impact themselves, student learning outcomes, and the working environment. Ultimately, Hramiak (2017) indicated that doctoral studies had affected teachers' personal and professional lives. Overall, the doctorate program has successfully prepared graduates for leadership roles in their respective fields.

Employment Characteristics

The job characteristics of the graduates are essential to any tracer research because they reveal how the doctorate program has affected their ability to perform other duties and their ability to teach.

Institutions Connected With

Teachers can be described by the organization to which the graduates are currently linked, presented in Table 3.

Table 3 Institutions of the doctorate graduates (N=104)

Reason	Frequency	Percentage
State university	82	78.70%
Public basic education	14	13.30%
Private higher education	4	4.00%
State college	3	2.70%
Private basic education	3	2.70%

Most of the graduates are connected with state universities (78.7%), while the rest are associated with public basic education (13.3%), private higher education (4.0%), state college (2.7%), and private basic education (1.3%). In other words, Ed.D. graduates are connected with higher education institutions. HEIs require their faculty to study further to provide tertiary-level students with better, updated, and quality education. Courses at this level are specialized. Hence, further education is needed to continue providing quality education. A doctorate in education is vital to teachers involved in higher education (Robinson & Hope, 2013). With a small percentage of graduates employed in private schools and state colleges, there is room for

improvement in promoting the doctorate program to these sectors and making the program more relevant to the needs of these sectors.

Current Position

A graduate's present teaching position can provide information about their job description, just like the organization where they work. The respondents' current positions in their institutions are shown in Table 4.

Table 4 Current positions of doctorate graduates (N=104)

Position	Frequency	Percentage
Department Chair	24	22.70%
Instructor	22	21.30%
Associate Professor	21	20.00%
Assistant Professor	18	17.30%
Dean or Director	8	8.00%
Teacher I, II, or III	7	6.70%
School Principal/ Administrator	4	4.00%
Master Teacher	4	4.00%

Table 4 shows that doctorate graduates hold higher positions, such as department chair (22.7%) and dean or director (8.0%) in higher education. There are instructors (21.3%) among the graduates, which may be the case because of their recent entry to HEIs. Moreover, the graduates occupy higher academic ranks, such as associate professors (20.0%) and assistant professors (17.3%). Other teaching positions are from basic education, such as entry teachers (6.7%), master teachers (4.0%), and school principals (4.0%). These results suggest that most graduates hold administrative positions or high academic ranks. These positions need the doctorate levels to adhere to the standards of the universities and elevate academic ranks. Ceglie (2019) associated the doctorate program with promotion and designation opportunities. Due to this further professional education, teachers become leaders (Hunzicker, 2017). As these graduates found teaching and leadership roles in higher and basic education, the doctorate program has contributed to the education sector in various ways.

Attained Competencies Useful in the Current Work

The current investigation also looked into the competencies that doctorate program graduates obtained that they considered significant and useful in their current career stage (Table 5).

Table 5 Attained competencies useful in the graduates' current work (N=104)

Competency	Frequency	Percentage
Critical thinking skills	80	77.30%
Research writing skills	80	77.30%
Communication skills	72	69.30%
Human relation skills	69	66.70%
Problem-solving skills	57	54.70%
Intercultural and international communication	15	14.70%

As shown in Table 5, most of the graduates gained critical thinking and research writing skills (77.3%) as well as communication (69.3%), human relations (66.7%), and problem-solving skills (54.7%). Moreover, 14.7% of the graduates attained intercultural and international communication. They achieved these competencies due to the research environment of the doctorate program. Skills development and enhancement are vital in doctoral education (Parker, 2012). These skills are present during the research process; hence the research experience at the doctoral level is one of the best outcomes of doctorate education (Ceglie, 2019). In summary, the doctorate program has become relevant to the professional growth of graduates as they acquire high-ordered thinking skills and become more diverse and interconnected with others.

Promotion/ Designation after Graduation

In addition, the opportunities for career advancement are one of the significant impacts of graduating with a doctorate (Table 6).

Table 6 Promotion/designation of doctorate graduates after graduation (N=104)

Status	Frequency	Percentage
Promoted/ Designated	55	53.30%
Not Promoted/ Not Designated	49	46.70%

Similar percentages were observed concerning promotion or opportunity to be designated after graduation. This result means that not all graduates were promoted immediately after graduation. Specific assessment cycles (e.g., NBC cycle 7) are done within specific periods and the number of years in basic education. Doctorate graduates may have been promoted or designated before and during their doctoral education. Nevertheless, promotion is one opportunity to continue doctorate-level education (Ceglie, 2019). This result is a reminder that obtaining a degree program does not guarantee immediate career advancement but requires continuous professional growth and development.

Awards and Distinctions

The study also looked into the categories of awards given to the doctorate program graduates, as outlined in Table 7.

Table 7 Awards and distinction of the doctorate graduates (N=104)

Award	Frequency	Percentage
Excellence in Research	22	21.30%
Excellence in Instruction	21	20.00%
Loyalty Awards	14	13.30%
Excellence in Extension	11	10.70%
Excellence in Leadership	11	10.70%

Table 7 shows that doctorate graduates received awards primarily for research (21.3%) and instruction (20.0%). Other awards are loyalty awards (13.3%) and excellence in extension and leadership (10.7%). These awards show that doctorate education has provided them with a mechanism to improve themselves in research, instruction, extension, and leadership. These are some fruits of the labor of finishing the degree (Ng et al., 2011; Kowalcuk-Wależdziak et al., 2017; Ceglie, 2019). In general, the graduates contribute to the field of education, signify their commitment to their respective institutions, and exhibit leadership qualities in community outreach programs.

Employers' Feedback

The employers from various institutions shared their feedback on the Doctor of Education graduates' work performance, work ethics, and other attributes of a teacher leader and researcher. Analysis of the responses led to three themes: outstanding performance, improved work ethics, and empowerment as leaders and researchers.

Theme 1: Outstanding Work Performance

The smooth functioning of a school as a learning community and social institution is contingent upon the quality of work performance of its teachers as internal education stakeholders. To be assessed as having outstanding work performance means the graduates of the program have delivered impressive accomplishments in their work, as evidenced by the extraordinary quality, timeliness, and efficiency of work. Thakur (2019) pointed out that proactive behavior in all areas of responsibility, contextual performance, and enhanced task management contribute to outstanding performance resulting in the desired quality of life. Other contributing factors include motivation (Forson et al., 2021), positive leadership (Ángeles López-Cabarcos et al., 2022) while Paz (2021) succinctly categorized the personal, school, learner, and community-related factors affecting teaching performance.

The school administrators expressed how completing the doctoral program has positively changed them into becoming better teachers and program leaders. The graduates' outstanding performance is evident by their high rating in the Individual Performance Review (for tertiary) and Results-based Performance Management system (for basic education teachers), with an 'outstanding' score, their observed resourcefulness, retaining the designations for several academic years, the positive comments from the students, results from special assignments, and the sterling performance in instruction.

Theme 2: Improved Work Ethics

Work ethics is critical in the teachers' professional and personal lives. Over the years, the school administrators observed how their teachers' ethical stance governed their instruction and assessment practices. They have embodied the commitment to excellence and have become better stewards of their students. Such attributes of work ethics are consistent with the exit institutional outcome of being a mission-driven worker.

Teachers' interaction with their students, colleagues, administrators, and parents manifests their improved work ethics. Guo (2022) cited the urgency of looking into the professional ethics of teachers toward quality education in the new era. With this, there should be comprehensive reform in education as teachers' role is pivotal as facilitators of learning. Habib (2019) explored this relationship between teachers' professional ethics and social intelligence, while Sahin et al. (2021) revealed the meaning and ethical teacher behaviors. These include respect and the importance of teaching performance, developing healthy relationships among students and other stakeholders, and sustaining excellence in discharging their duties.

Theme 3: Empowered as Leaders and Researchers

The competencies acquired in the program have afforded the teachers opportunities to hone their leadership, research writing, and communication skills. Upon program completion, where a dissertation was one of the terminal requirements, the teachers have become research-oriented. They have led groups of teachers to conduct action research, as required in the DepEd's annual results-based performance management system. However, the findings of Samosa (2021) found that school teachers' limited participation in research-related activities.

The employers' feedback is supported by the exploratory study of Nadelson et al. (2020) on the leadership role of the K to 12 teachers as they navigate teaching and learning challenges, making them identify the leaders in them. Regarding research culture and productivity, the employers and school administrators believed that after their teachers graduated from the doctoral program, they successfully influenced their colleagues to engage in research. Others have already published their research, while some are into collaborative research undertakings. While many basic education teachers are not doing research, DepEd has initiatives to develop a research culture by looking into their productivity regarding the research agenda. The research skills obtained from the university were strengthened with the research caravan initiated by the regional offices (DepEd Order no. 39, s. 2016) on adopting the Basic Education Research Agenda (BERA).

Graduates' Recommendations

Doctorate graduates provided feedback on how the doctor of education in CNU may be improved to cater to the current needs of the students and trends in society. These responses were analyzed, and four themes emerged: flexible teaching, updating the curriculum and library resources, research and publication, and integrating current new educational trends.

Theme 1: Flexible Teaching

Graduates shared that doctorate education needs to be more independent; hence, professors must be flexible in teaching. The students must be exposed to various means of conducting the topic in hand and choices, especially in assessment. Various ICT tools may be used to help implement flexible teaching. Corpuz et al. (2022) cited the flexibility components of time, content, instructional approach and resources, entry requirements, and delivery. Moreover, ICT-adeptness in teaching content, class interaction, and teaching forms is essential for successful instructional delivery. Several studies support such findings in using ICT for flexible teaching and creating flexible classrooms before and during the pandemic. Dayagbil et al. (2021) identified a trajectory of flexible learning delivery and technology in teaching and learning. With the current setup, higher education institutions must provide more flexibility through new technologies in teaching (Muller & Mildenberger, 2021) and learning adaptability (Santiago et al., 2021).

Theme 2: Updating the Curriculum and Library Resources

Another theme is the need to update the curriculum and library resources. Graduates mentioned that some courses in the curriculum are a repetition of the subjects in the previous masters level. Aside from this, they also suggest that library resources be updated and become more accessible to them. The library is essential because this is their primary place to get readings and information for their research works.

With the ever-changing educational landscape, Li et al. (2021) purported the need to modify teaching strategies toward the students' acquisition of critical competencies. More than ever, the practical work of curriculum design has to be emphasized across education levels. While revisiting the program curriculum, the course syllabus may be enriched by utilizing relevant, recent, and updated library resources. Literature shows the pivotal role of libraries and how academic libraries contribute to the student's school success and that the library has the potential to impact students' educational path (Soria et al., 2017; Abumandour, 2020; Mahwasane, 2017). Thus, curriculum updating and innovation as an offshoot of curriculum review is deemed necessary to make the graduate at par with those who complete their programs in other institutions.

Theme 3: Research and Publication

Though research has become part of the life of doctorate graduates, there is still a need to look into the research and publication aspect of the doctoral program. New research designs and clarifications on conventional designs are recommended. It is also suggested that professors introduce them to the IMRAD format to assist and guide students when they publish in reputable journals.

The teacher's attitudes toward scientific research and competence were explored (Celebi, 2021; Anub, 2020). With the findings on enhancing the teachers' competence, several recommendations were advanced by researchers who looked into teachers' competence and research engagement. Rubi (201) stressed how motivation propelled teachers to continue researching amid the challenges and recommended having research capability programs to engage the teachers. This idea aligns with the tenet that research nowadays is vital for developing countries. Henceforth, the teachers' research productivity, measured by their completed research and publication, contribute to their professional development.

Theme 4: Current Trends and Issues

Lastly, they said their specializations' current trends and issues should be highlighted. They recommend integrating these trends and issues to update them with what is happening around them. Trends in the sciences, early childhood, educational management, and languages should be highlighted as they cascade what they know to their students. This recommendation is essential to make the curriculum more relevant and responsive to workplace demands. Vreuls et al. (2022) averred that authentic curricula could only be attained with responsive curriculum development characterized by adaptability and flexibility. This development requires foresight thinking and awareness of the many issues besetting every program delivery.

Conclusions

The study traced the career paths of Ed.D. graduates from a state university in the Philippines and found that they pursued the program for various reasons, including a passion for their profession and career advancement. Graduates displayed various skills, including critical thinking, research writing, communication, and problem-solving. They held higher positions in education and received awards for research and instruction. The study recommends updating the curriculum and library resources, conducting research, and keeping up with current trends. The Ed.D. program equips graduates with the skills to be effective educational leaders and researchers, contributing to its improvement in the Philippines.

Suggestion

The tracer study suggests that institutions that offer Ed.D. Programs should update curricula and library resources to address contemporary trends and concerns. Students and teachers should be encouraged to research and publish their findings, Ed.D. To better respond to the changing needs of the educational system, graduates should receive training in flexible teaching methods. Finally, universities should keep helping graduates develop in their careers by giving them chances to be promoted and given new titles.

Replicating the study in other Philippine colleges or nations may be one of the study's future directions to determine whether the findings hold in various settings. Additionally, more investigation into the effects of the Ed.D. could be done on the alumni, students, faculties, and communities, as well as on their contributions to domestic and international educational policies. Future studies may also look into

the difficulties that Ed.D. students encounter and how recent graduates have overcome these difficulties in their separate careers.

Acknowledgments

The researchers would like to thank the doctorate program graduates in the Philippines for their voluntary participation in the study, leading to a more comprehensive understanding of graduate education.

References

- Abana, A. S., Ramos, A. B., Gumarang Jr., B. K., & Tarun, J. Z. (2021). The graduates tracer study: bachelor of elementary education program. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(10), 918-927. <https://doi.org/10.11594/ijmaber.02.10.09>
- Abumandour, E. T. (2019). Public libraries' role in supporting e-learning and spreading lifelong education: a case study. *Journal of Research in Innovative Teaching & Learning*, 14(2), 178–217. <https://doi.org/10.1108/JRIT>
- Albina, A. C., & Sumagaysay, L. P. (2020). Employability tracer study of Information Technology Education graduates from a state university in the Philippines. *Social Sciences & Humanities Open*, 2(1), 100055. <https://doi.org/10.1016/j.ssaho.2020.100055>
- Ángeles López-Cabarcos, M., Vázquez-Rodríguez, P., & Quiñoá-Piñeiro, L. M. (2022). An approach to employees' job performance through work environmental variables and leadership behaviours. *Journal of Business Research*, 140, 361–369. <https://doi.org/10.1016/j.jbusres.2021.11.006>
- Anub, C. D. (2020). Senior High School Teachers' Research Competence and Satisfaction with Facilities and Resources. *International Journal of English Language Studies*, 2(3), 08–24. <https://doi.org/10.32996/ijels.2020.2.3.1>
- Avila, L. (2015). Total quality management (TQM) practices of school administrators in relation to school performance among teacher education institutions in the Province of Quezon. *4th International Research Conference on Higher Education*, 879–890. <https://doi.org/10.18502/kss.v3i6.2426>
- Badiru, E., & Wahome, M. (2016). Conducting graduate tracer studies for quality assurance in East African universities: A focus on graduate students voices on quality culture. *Journal of Education and Practice*, 7(6), 174-181.
- Bueno, D. C. (2017). Ascertaining the curriculum relevance of the graduate school through tracer study in a Philippine private higher education institution. *JPAIR Multidisciplinary Research*, 28, 72-88. <https://doi.org/10.7719/jpair.v28i1.502>
- Ceglie, R. (2019). Initial motivations of doctoral education students. *Journal for the Advancement of Educational Research*, 13(1), 20–31.

- Celebi, M. (2019). Investigation of the attitudes and competencies of teachers in project schools towards scientific research in a developing country. *Journal of Teacher Education and Educators*, 10(1), 99–125.
- Cornillez, E. E. C., Caminoc, S. R. T., Basas, B. R., Militante, B. T., & Paler, R. R. (2021). Tracer study of teacher education graduates of the Eastern Visayas State University-Tanauan Campus, Philippines. *European Journal of Education and Pedagogy*, 2(3), 186-193. <https://doi.org/10.24018/ejedu.2021.2.3.143>
- Cuadra, L. J., Aure, M. R. K. L., & Gonzaga, G. L. (2019). The use of tracer study in improving undergraduate programs in the university. *Asia Pacific Higher Education Research Journal*, 6(1), 13-25.
- Dayagbil, F. T., Palompon, D. R., Garcia, L. L., & Olvido, M. M. J. (2021). Teaching and Learning Continuity Amid and Beyond the Pandemic. *Frontiers in education*, 6. <https://doi.org/10.3389/feduc.2021.678692>
- Dela Cruz, J. L. (2022). Tracer study of graduate school graduates of a state higher education institution in the Philippines from 2016-2020. *International Journal of Education & Literacy Studies*, 10(2), 149-154. <http://dx.doi.org/10.7575/aiac.ijels.v.10n.2p.149>
- Forson, J. A., Ofosu-Dwamena, E., Opoku, R. A., & Adjavon, S. E. (2021). Employee motivation and job performance: a study of basic school teachers in Ghana. *Future Business Journal*, 7(1). <https://doi.org/10.1186/s43093-021-00077-6>
- Guo, Y. (2022). Research on the path of improving teachers' professional ethics in the context of the new era. *International Journal of Education and Humanities*, 4(2), 34–36.
- Habib, H. (2019). Professional ethics among college teachers in relation to social intelligence." *Shanlax International Journal of Education*, 7(4), <https://doi.org/10.34293/education.v7i4.575>
- Hramiak, A. (2017). The impact of doctoral studies on personal and professional lives. *WBL e-Journal International*, 7(1), 20–39. <https://doi.org/10.1002/curj.155>
- Hunzicker, J. (2017). From teacher to teacher leader: A conceptual model. *International Journal of Teacher Leadership*, 8(2), 1–27.
- Kowalcuk-Waledziak, M., Lopes, A., Menezes, I., & Tormenta, N. (2017). Teachers pursuing a doctoral degree: motivations and perceived impact. *Educational Research*, 59(3). <https://doi.org/10.1080/00131881.2017.1345287>
- Li, Y., Zhang, X., Dai, D. Y., & Hu, W. (2021). Curriculum Innovation in Times of the COVID-19 Pandemic: The Thinking-Based Instruction Theory and Its Application. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.601607>
- Mahwasane, N. (2017). The influence of school library resources on students' learning: a concept paper. *International Journal of Educational Sciences*, 17(1-3), 190-196. <https://doi.org/10.1080/09751122.2017.1305739>
- Nadelson, L. S., Booher, L., & Turley, M. (2020). Leaders in the Classroom: Using Teaching as a Context for Measuring Leader Identity. *Frontiers in Education*, 5. <https://doi.org/10.3389/feduc.2020.525630>

- Ng, S. F., Muhd, N. M. N., Rahman, K. A., & Ismail, N. (2011). Influential factors to pursue doctorate degree in Malaysia. *Procedia- Social and Behavioral Sciences*, 15, 2028-2032.
<https://doi.org/10.1016/j.sbspro.2011.04.048>
- Pacleb-Ulanday, M. L. (2021). Tracer study and employability skills acquisition of teacher education graduates. *Psychology and Education*, 58(4), 1678-1683.
- Parker, R. (2012). Skills development in graduate education. *Molecular Cell*, 46(4), 377-381.
<https://doi.org/10.1016/j.molcel.2012.05.003>
- Paz, R. M. (2021). Factors Affecting Teachers' Performance in Public Elementary Schools in Schools Division of City of Meycauayan, Bulacan. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(11), 1095-1205. <https://doi.org/10.11594/10.11594/ijmaber.02.11.10>
- Pentang, J. T., Perez, D. R., Cuanan, K. H., Recla, M. B., Dacanay, R. T., Bober, R. M., Dela Cruz, C. E., Egger, S. P., Herrera, R. L., Illescas, C. M., Salmo, J. M., Bucad, M. L., Agasa, J. V., & Abaca, N. A. (2022). Tracer study of teacher education graduates of Western Philippines University- Puerto Princesa Campus: basis for curriculum review and revision. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(3), 418-431. <http://dx.doi.org/10.11594/ijmaber.03.03.12>
- Reusia, D. H., Rogayan, D. V., & Andres, K. P. (2020). Science education graduates of a state university from 2008-2018: a tracer study. *The Normal Lights*, 14(1), 56-79. <https://doi.org/10.56278/tnl.v14i1.1496>
- Robinson, T. E., & Hope, W. C. (2013). Teaching in higher education: Is there a need for training in pedagogy in graduate degree programs? *Research in Higher Education Journal*, 1-11.
- Sanchez, J. M. P., Abella, R. C., Cadosales, M. N. Q., Olvido, M. M. J., & Boholano, H. B. (2023). Exploring the professional development pathways of graduates from the master's programs in education: inputs for curricular enhancement. *Jurnal Pendidikan Progresif*, 13(2), 817-832.
<http://dx.doi.org/10.23960/jpp.v13.i2.202351>
- Santiago, C., Ulanday, ML, Centeno, Z., Bayla, M., & Callanta, J. (2021). Flexible learning adaptabilities in the new normal: e-learning resources, digital meeting platforms, online learning systems and learning engagement, *Asian Journal of Distance Education*, 16(2), 38-56.
<https://doi.org/10.5281/zenodo.5762474>
- Sohel-Uz-Zaman, A. S. Md., & Anjalin, U. (2016). Implementing total quality management in education: compatibility and challenges. *Open Journal of Social Sciences*, 4(11), 207-217.
<https://doi.org/10.4236/jss.2016.411017>
- Soria, K. M., Fransen, J., & Nackerud, S. (2017). The impact of academic library resources on undergraduates' degree completion. *College & Research Libraries*, 78(6), 812.
- Sumande, C. T., Comuyog, M. L., Bactasa, M. F., Aribon, M. A., & Rural, J. D. (2022). A tracer study of graduate programs: evidences of college of educations' commitment in transforming lives. *Journal of Positive School Psychology*, 6(4), 5074-5087.

- Thakur, R., & Sharma, D. (2019). A study of impact of quality of work life on work performance. *Management and Labour Studies*, 44(3), 326–344. <http://dx.doi.org/10.1177/0258042X19851912>
- Toledo, Z. M. G. U., Sualibio, M. F. M., Boral, Z. P., Asuncion, Q. O., & Belecina, R. R. (2013). A tracer study of the PNU graduates of the BSMT and BSE Math programs from 1985-2010. *The Normal Lights*, 7(2), 79-96.
- Vreuls, J., Koeslag-Kreunen, M., van der Klink, M., Nieuwenhuis, L., & Boshuizen, H. (2022). Responsive curriculum development for professional education: Different teams, different tales. *The Curriculum Journal*, 33(4), 636–659. <https://doi.org/10.1002/curj.155>