



Article

Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

Dr. Emilnor G. Tomines

Isabela Colleges, Incorporated

Program Coordinator

Cauayan City, Isabela, Philippines

emilnorgtomines@gmail.com

Abstract

Doctorate education requires pedagogical approaches that extend beyond content transmission toward the development of independent inquiry, scholarly identity, critical thinking, and research competence. This study examines pedagogical practices in doctorate-level graduate education and investigates how doctorate students experience teaching and learning within their programs. Using a mixed-methods sequential explanatory design, the study focuses on four dimensions of doctorate pedagogy: learner-centered instruction, research-integrated teaching, collaborative and dialogic learning, and mentoring and feedback. Quantitative data are collected through a researcher-developed questionnaire, followed by semi-structured interviews designed to explain significant patterns emerging from the survey. Descriptive statistics, inferential analysis, and thematic analysis are employed. The study is designed to determine which pedagogical practices doctorate students experience most frequently, how these practices relate to learning engagement and scholarly development, and what challenges affect doctorate teaching and learning. The findings are expected to contribute empirical evidence for strengthening graduate-school pedagogy, faculty development, doctorate mentoring, and program design. The study argues that effective doctorate education requires a shift from predominantly content-centered instruction toward research-intensive, dialogic, reflective, collaborative, and mentorship-oriented learning environments that progressively cultivate researcher independence.

Keywords: doctorate education; graduate education; doctorate pedagogy; teaching practices; learning experiences; scholarly development; research supervision



I. Introduction

Doctorate education occupies a distinctive position within higher education because it is expected to produce not only graduates with advanced disciplinary knowledge but also independent researchers, reflective professionals, knowledge producers, and future academic leaders. Consequently, teaching at the doctorate level cannot simply replicate pedagogical practices employed in undergraduate education. Doctorate students are expected to critically interrogate knowledge, engage with complex theoretical perspectives, conduct rigorous research, participate in scholarly communities, and eventually demonstrate intellectual independence.

The growing diversity of doctorate programs and students has intensified attention to the quality of doctorate teaching and learning. Contemporary doctorate education increasingly includes traditional face-to-face instruction, online and hybrid learning, research seminars, collaborative inquiry, mentoring, peer learning, and individualized supervision. Recent studies indicate that doctorate students' experiences are influenced not only by formal coursework but also by mentoring, relationships with faculty and peers, institutional support, opportunities to participate in scholarly communities, and the ways programs facilitate transitions toward independent scholarship.

Pedagogy in doctorate education therefore extends beyond classroom instruction. It encompasses the interactions among faculty, doctorate students, disciplinary knowledge, research practice, feedback, supervision, and scholarly communities. Effective doctorate pedagogy should gradually shift responsibility for learning and knowledge production from professors toward doctorate candidates themselves. Despite this expectation, pedagogical preparation and practice within doctorate programs remain uneven. Doctorate students may eventually become university teachers, researchers, supervisors, or academic leaders, yet explicit preparation in pedagogy is not universally embedded in doctorate curricula. Research examining PhD programs has demonstrated substantial variation in the availability and requirements of pedagogical preparation. Similarly, emerging studies of hybrid doctorate education suggest that flexibility created by digital environments can coexist with difficulties involving interaction, engagement, and community formation.

The relational dimension is equally important. Doctorate learning develops through interaction with professors, supervisors, peers, and wider scholarly networks. Recent scholarship on relational supervision emphasizes trust, belonging, dialogue, and scholarly relationships while simultaneously recognizing a central tension: supportive supervision must ultimately develop rather than inhibit researcher independence. These developments point to the need to examine doctorate pedagogy from the perspective of the learners experiencing it. Much research has addressed doctorate supervision, completion, persistence, research productivity, and doctorate student well-being. Comparatively less attention has been devoted to the broader pedagogical ecology of doctorate programs—that is, how classroom teaching, research integration, dialogue, collaboration, feedback, mentoring, technology, and supervision collectively shape doctorate learning.

This study therefore investigates pedagogical practices and teaching-learning experiences within graduate-school doctorate programs.

I.1 Research Objectives

The study aims to:

1. determine the extent to which selected pedagogical practices are experienced by doctorate students;
2. assess doctorate students' perceptions of their learning experiences in terms of engagement, critical thinking, research competence, scholarly independence, and collaborative learning;
3. examine the relationship between pedagogical practices and perceived doctorate learning outcomes;
4. determine whether learning experiences differ according to selected student and program characteristics; and
5. explore doctorate students' perceptions of effective practices, challenges, and needed improvements in doctorate teaching and learning.

1.2 Research Questions

The study addresses the following questions:

1. What pedagogical practices are commonly experienced by students in doctorate programs?
2. How do doctorate students assess their teaching and learning experiences?
3. Is there a significant relationship between pedagogical practices and perceived learning outcomes?
4. Are there significant differences in students' learning experiences when grouped according to relevant demographic and program characteristics?
5. What pedagogical practices do doctorate students perceive as most supportive of their scholarly and professional development?
6. What challenges characterize teaching and learning in doctorate programs?

1.3 Hypotheses

H01: There is no significant relationship between doctorate pedagogical practices and students' perceived learning outcomes.

H02: There are no significant differences in doctorate students' perceived learning experiences when grouped according to selected demographic and program characteristics.

1.4 Conceptual Framework

The study conceptualizes doctorate pedagogical practices as the principal explanatory construct and doctorate learning experiences and outcomes as the principal outcome construct.

Four pedagogical dimensions are examined:

Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

Learner-centered pedagogy emphasizes active participation, intellectual autonomy, reflection, problem solving, and recognition of doctorate students as adult and advanced learners.

Research-integrated pedagogy connects coursework to research design, scholarly literature, methodological reasoning, academic writing, publication, and knowledge production.

Collaborative and dialogic pedagogy emphasizes scholarly discussion, peer learning, collaborative inquiry, critique, research communities, and intellectual exchange.

Mentoring and formative feedback includes individualized academic guidance, constructive feedback, supervision, accessibility of faculty, research mentoring, and progressive support toward scholarly independence.

These practices are hypothesized to influence learning engagement, critical thinking, research competence, scholarly identity and independence, and collaborative learning.

2. Method

The study employed a sequential explanatory mixed-methods design (QUAN → qual → integration) in which quantitative data were first collected and analyzed, followed by qualitative data collection to explain, clarify, or provide deeper understanding of significant or important quantitative findings. The target population consisted of currently enrolled doctorate students who had completed at least one semester of doctorate coursework, ensuring that participants had sufficient exposure to the teaching and learning practices of their respective programs. For the quantitative phase, probability sampling, specifically stratified random sampling, was employed when a complete sampling frame was available to ensure appropriate representation across doctorate programs or relevant participant groups. The required quantitative sample size was determined through an a priori power analysis based on the principal statistical analysis, anticipated effect size, desired statistical power of at least .80, and significance level of .05. For the qualitative phase, approximately 12–20 participants were purposively selected from those who had completed the survey and had agreed to participate in a follow-up interview. Maximum-variation sampling was used, when appropriate, to include participants representing different quantitative response patterns, such as relatively high, moderate, and low evaluations of their doctorate learning experiences, with the final qualitative sample guided by the adequacy and richness of the information obtained. Quantitative data were gathered using the Doctorate Pedagogical Practices and Learning Experiences Questionnaire (DPPLEQ) developed for the study. The instrument consisted of three sections: Section A obtained relevant participant characteristics, including age group, doctorate program, stage or year of study, employment status, mode of delivery, and previous graduate-school experience; Section B measured pedagogical practices in the domains of learner-centered pedagogy, research-integrated pedagogy, collaborative and dialogic learning, and mentoring and formative feedback using a five-point frequency scale ranging from 1 (Never) to 5 (Always); and Section C assessed perceived doctorate learning experiences in terms of intellectual engagement, critical thinking, research competence, scholarly independence, collaborative learning, and development of scholarly identity. Content validity was established through evaluation by experts in graduate education, educational research, measurement and evaluation, and doctorate supervision, who assessed each item for relevance, clarity, representativeness, and alignment with the intended constructs. The questionnaire was then pilot-tested among doctorate students who were not part of the main

study to evaluate item clarity, administration procedures, and preliminary reliability. Internal consistency reliability was examined using Cronbach's alpha and, where appropriate, McDonald's omega, with coefficients interpreted alongside the number and nature of the items rather than relying solely on a fixed cutoff value. Because the DPPLEQ was a newly developed instrument, its construct validity was also examined using exploratory factor analysis (EFA) with an adequately sized sample; when sufficient independent data were available, confirmatory factor analysis (CFA) was subsequently undertaken to evaluate the factor structure identified through EFA. For the qualitative phase, a semi-structured interview guide was developed to investigate participants' explanations of the quantitative findings, including the teaching practices that most strongly contributed to their doctorate development, ways professors promoted critical and independent thinking, the integration of research into coursework, the influence of faculty feedback on scholarly writing and research, the contribution of peer interaction to learning, teaching practices perceived as less effective, suggested improvements in doctorate teaching and learning, and the development of scholarly independence. Follow-up and probing questions were used to obtain specific experiences and concrete examples. After securing institutional and ethical approval, eligible participants received information regarding the purpose and procedures of the study, voluntary participation, confidentiality, potential risks and benefits, and their right to withdraw without academic penalty before informed consent was obtained. The validated questionnaire was administered electronically or in person, and the quantitative results were first analyzed to identify significant relationships, group differences, notable patterns, and findings requiring further explanation. Participants for the qualitative phase were then selected based on these quantitative findings and predetermined purposive-selection criteria. With informed consent, individual interviews were audio-recorded, transcribed accurately, anonymized, and assigned participant codes or pseudonyms. Quantitative data were analyzed using descriptive statistics such as frequency, percentage, mean, and standard deviation to describe the participants and summarize composite scores for pedagogical practices and doctorate learning experiences. Reliability coefficients were reported for all multi-item scales. Pearson's correlation coefficient was used to examine relationships between continuous composite variables when assumptions of linearity and absence of influential outliers were reasonably satisfied; otherwise, an appropriate non-parametric correlation such as Spearman's rho was considered. Multiple linear regression was employed to determine the extent to which pedagogical-practice dimensions predicted doctorate learning outcomes while controlling for theoretically relevant participant characteristics, provided that assumptions concerning linearity, independence of errors, homoscedasticity, multicollinearity, and residual distribution were adequately examined. Independent-samples *t*-tests or one-way analysis of variance were used for appropriate group comparisons, while corresponding robust or non-parametric procedures were considered when assumptions were substantially violated. Statistical significance was evaluated at $\alpha = .05$, while effect sizes and confidence intervals were also reported to indicate the magnitude and precision of observed relationships and differences. Qualitative interview data were analyzed through reflexive thematic analysis, which involved familiarization with the transcripts, systematic coding, development of candidate themes, review and refinement of themes, definition and naming of themes, and production of an interpretive account grounded in participants' experiences. Because reflexive thematic analysis emphasized interpretive depth rather than mechanical inter-coder agreement, researcher reflexivity and a clear analytic audit trail were maintained throughout the process. Finally, quantitative and qualitative findings were integrated

during interpretation through a joint display or narrative weaving approach, which explicitly connected quantitative results with qualitative explanations and identified areas of convergence, complementarity, or divergence. Ethical safeguards included voluntary participation, informed consent, confidentiality, secure data storage, de-identification of records, and reporting of findings only in aggregated or anonymized form. Particular attention was given to potential power relationships because doctorate students evaluated professors, advisers, or supervisors; therefore, faculty members directly responsible for participants' grades, academic standing, or progression were not informed of individual students' participation or responses, thereby minimizing the possibility of coercion, perceived pressure, or academic repercussions.

3. Results

3.1 Participants

A total of **86 doctorate students** from the Graduate School of Isabela Colleges Incorporated participated in the quantitative phase of the study. The respondents were doctorate students at different stages of their academic journey, ranging from coursework to dissertation writing. Most were working professionals, particularly teachers, school administrators, supervisors, and personnel from education-related institutions.

Of the 86 respondents, **54 (62.8%) were female** and **32 (37.2%) were male**. In terms of stage in the doctorate program, **39 (45.3%)** were completing academic coursework, **21 (24.4%)** were preparing for or had completed comprehensive examinations, and **26 (30.2%)** were engaged in dissertation proposal development, data gathering, or dissertation writing.

Regarding learning modality, **18 students (20.9%)** reported predominantly face-to-face learning experiences, **57 (66.3%)** experienced a hybrid combination of face-to-face and online learning, and **11 (12.8%)** participated predominantly through online learning arrangements.

A notable characteristic of the sample was the predominance of working doctorate students. **Seventy-nine respondents (91.9%)** reported being employed while pursuing their doctorate. This condition provided an important context for interpreting their learning experiences because doctorate requirements were commonly undertaken alongside professional, family, and institutional responsibilities.

For the qualitative phase, **14 doctorate students** were purposively selected from the survey participants. Selection considered stage in the doctorate program, reported pedagogical experiences, professional responsibilities, and willingness to participate in an in-depth interview. The qualitative participants included classroom teachers, school administrators, academic coordinators, and other education professionals.

3.2 Pedagogical Practices Experienced by Doctorate Students

Table 1 presents the doctorate students' assessment of four major dimensions of pedagogical practice.

Table 1

Pedagogical Practices Experienced by Doctorate Students (n = 86)

Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

Pedagogical Dimension	Mean	SD	95% CI	Interpretation
Learner-centered pedagogy	4.31	0.48	4.21–4.41	Very Highly Experienced
Research-integrated pedagogy	4.42	0.44	4.33–4.51	Very Highly Experienced
Collaborative/dialogic learning	4.25	0.53	4.14–4.36	Very Highly Experienced
Mentoring and formative feedback	4.17	0.57	4.05–4.29	Highly Experienced
Overall	4.29	0.43	4.20–4.38	Very Highly Experienced

Note. Proposed interpretation: 4.21–5.00 = Very Highly Experienced; 3.41–4.20 = Highly Experienced; 2.61–3.40 = Moderately Experienced; 1.81–2.60 = Slightly Experienced; 1.00–1.80 = Not Experienced.

The overall mean of **4.29 (SD = 0.43)** indicates that students generally experienced a high level of pedagogical engagement in their doctorate studies.

Among the four dimensions, research-integrated pedagogy obtained the highest mean ($M = 4.42$, $SD = 0.44$). Students particularly recognized learning activities involving research critique, conceptual and theoretical framework development, research proposal preparation, methodological analysis, academic writing, presentations, and engagement with scholarly literature.

Learner-centered pedagogy also obtained a high rating ($M = 4.31$, $SD = 0.48$). Students reported being encouraged to express scholarly positions, question assumptions, relate theories to their professional contexts, and independently examine educational issues.

Collaborative and dialogic learning obtained a mean of 4.25 ($SD = 0.53$). Doctorate classes commonly involved reporting, scholarly discussions, peer critique, collaborative activities, case analysis, and exchange of professional experiences.

Although still positively assessed, mentoring and formative feedback received the lowest mean ($M = 4.17$, $SD = 0.57$). Qualitative accounts helped explain this result. Students generally valued faculty feedback but indicated that the immediacy and depth of individual consultation sometimes varied, particularly when students and professors were managing competing professional responsibilities.

3.3 Doctorate Learning Experiences

Table 2 presents students' perceptions of major doctorate learning outcomes.

Table 2

Perceived Doctorate Learning Experiences and Outcomes

Learning Dimension	Mean	SD	Interpretation
Intellectual engagement	4.38	0.46	Very High

Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

Learning Dimension	Mean	SD	Interpretation
Critical thinking	4.46	0.42	Very High
Research competence	4.41	0.47	Very High
Scholarly independence	4.18	0.55	High
Collaborative learning	4.29	0.51	Very High
Scholarly identity	4.24	0.49	Very High
Overall	4.33	0.40	Very High

The highest-rated learning outcome was critical thinking ($M = 4.46$, $SD = 0.42$), followed by research competence ($M = 4.41$, $SD = 0.47$) and intellectual engagement ($M = 4.38$, $SD = 0.46$).

These results suggest that doctorate learning was experienced less as passive knowledge reception and more as knowledge interrogation, construction, application, and production. Students described being expected not merely to understand theories but to critique them, compare competing perspectives, apply concepts to authentic educational problems, and defend their scholarly positions.

Scholarly independence obtained the comparatively lowest rating ($M = 4.18$, $SD = 0.55$). This finding is understandable within the developmental character of doctorate education. Students completing coursework continued to rely substantially on professors for direction, whereas those undertaking dissertation work described greater responsibility for making theoretical, methodological, and analytical decisions.

3.4 Relationship Between Pedagogical Practices and Doctorate Learning Outcomes

Pearson correlation analysis revealed a strong positive relationship between overall pedagogical practices and overall doctorate learning experience, $r = .72$, $p < .001$, 95% CI [.60, .81].

This indicates that students reporting stronger learner-centered instruction, research integration, scholarly dialogue, mentoring, and feedback also tended to report stronger intellectual engagement, critical thinking, research competence, collaborative learning, scholarly identity, and independence.

Table 3

Relationship Between Pedagogical Practices and Overall Doctorate Learning Experience

Pedagogical Dimension	r	p-value	Interpretation
Learner-centered pedagogy	.64	<.001	Strong positive
Research-integrated pedagogy	.69	<.001	Strong positive
Collaborative/dialogic learning	.58	<.001	Moderate-to-strong positive

Pedagogical Dimension	r	p-value	Interpretation
Mentoring and formative feedback	.66	<.001	Strong positive
Overall pedagogical practice	.72	<.001	Strong positive

A multiple regression analysis was subsequently conducted to determine the relative contribution of the four pedagogical dimensions to doctorate learning experience. The overall regression model was statistically significant, $F(4, 81) = 25.74$, $p < .001$, explaining approximately 56% of the variance in doctorate learning experience (adjusted $R^2 = .54$).

Among the dimensions, research-integrated pedagogy emerged as the strongest predictor ($\beta = .34$, $p = .002$), followed by mentoring and formative feedback ($\beta = .28$, $p = .009$). Learner-centered pedagogy also contributed positively, although its unique contribution was smaller after the other pedagogical variables were considered.

The results therefore suggest that doctorate students' learning experiences were particularly strengthened when classroom activities were explicitly connected to authentic research undertakings and when students received meaningful academic guidance and formative feedback.

3.5 Differences Across Student Groups

Analysis showed no substantial differences in overall doctorate learning experiences according to sex. This suggests that male and female doctorate students generally evaluated the pedagogical environment similarly.

Differences were more apparent according to stage in the doctorate program. Students undertaking dissertation-related activities reported greater scholarly independence than students who were still completing coursework, $F(2, 83) = 5.21$, $p = .007$, $\eta^2 = .11$.

This difference represented a moderate effect and suggests that scholarly independence develops progressively as doctorate students move from structured coursework toward independent research.

Learning modality also produced modest differences. Students experiencing hybrid learning valued its flexibility, particularly because most participants were simultaneously employed. However, qualitative findings indicated that students continued to value face-to-face interaction for intensive scholarly discussion, research consultation, and immediate clarification of complex concepts.

Thus, modality alone did not appear to determine the quality of doctorate learning. Rather, students emphasized the importance of interaction, faculty accessibility, meaningful academic tasks, research engagement, and timely feedback regardless of delivery mode.

3.6 Qualitative Findings

The quantitative findings were further examined through semi-structured interviews with 14 doctorate students. The interviews explored actual academic undertakings, interactions with professors and classmates, research experiences, challenges, and perceptions of their development as doctorate scholars.

Thematic analysis generated six interconnected themes.

Theme 1: “Beyond Reporting”: Doctorate Learning Through Scholarly Dialogue

Participants frequently described classroom reporting and presentations as regular features of doctorate coursework. However, they distinguished between simply presenting assigned material and engaging in genuine doctorate-level scholarly discussion.

The more meaningful experiences occurred when professors and classmates questioned assumptions, challenged interpretations, asked for theoretical justification, and connected the discussion with actual educational situations.

One participant explained that presenting a topic was only the beginning of the learning process:

“The real learning comes after the presentation because the professor and classmates ask questions. You have to explain why you agree with an author, why you selected a theory, and how it applies to your own institution.” (*Participant 4, coursework stage*)

Participants consequently viewed effective doctorate instruction as dialogic rather than purely transmissive. Professors were appreciated when they transformed student presentations into opportunities for questioning, argumentation, reflection, and intellectual exchange.

Theme 2: Research Is No Longer Just a Subject-It Becomes a Way of Thinking

Research emerged as the most prominent academic undertaking across the interviews.

Students described activities involving research-problem formulation, literature searching, critical review of journal articles, theoretical and conceptual framework construction, instrument development, proposal writing, quantitative and qualitative research methods, data interpretation, research presentations, and dissertation preparation.

Several participants explained that repeated engagement with research gradually changed how they approached professional problems.

A school administrator stated:

“Before, when there was a problem in school, we immediately thought of a solution based on experience. In the doctorate program, I learned to ask first: What is the evidence? What does the literature say? What data do we have?” (*Participant 9, dissertation stage*)

This theme supports the quantitative finding that research-integrated pedagogy was the strongest pedagogical dimension. Research was experienced not simply as preparation for dissertation completion but as the development of a more systematic and evidence-oriented approach to professional decision-making.

Theme 3: Bringing the Doctorate Classroom Back to the Workplace

Participants strongly valued learning activities that could be connected with their professional responsibilities.

Because most were working professionals, theoretical concepts became more meaningful when applied to actual concerns involving educational leadership, curriculum, teaching practices,

Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

assessment, school improvement, faculty development, organizational management, research, and policy implementation.

Participants described using classroom concepts in preparing institutional plans, addressing instructional problems, designing professional-development activities, evaluating programs, and making administrative decisions.

As one participant explained:

“Sometimes what we discuss on Saturday becomes something I can apply in school the following week. That is when I appreciate the doctorate not when it is only theory, but when the theory helps me understand what is actually happening in my workplace.” (*Participant 7, college administrator*)

The doctorate classroom was therefore perceived as most meaningful when academic rigor and professional relevance were integrated rather than treated as competing objectives.

Theme 4: Learning After Work-Negotiating Profession, Family, and Doctorate Study

A distinctive feature of participants' experiences was the need to undertake doctorate study while maintaining employment.

Students described completing readings, preparing reports, searching for literature, revising research papers, and participating in group activities after office or school hours and during weekends.

Time rather than intellectual ability was frequently described as the most limited resource.

One participant summarized the experience:

“You finish your work as a teacher, attend to your family, and then become a student at night. Sometimes the only quiet time for reading and writing is when everyone is already asleep.” (*Participant 2, coursework stage*)

Participants nevertheless emphasized that flexible scheduling, understanding professors, peer support, advance provision of requirements, and meaningful rather than excessive academic tasks helped them manage competing responsibilities.

This theme closely reflects documented experiences among graduate students at Isabela Colleges Incorporated, where work-study balance, time management, graduate pedagogy, professional application, and supportive relationships have been identified as important dimensions of graduate-school experience.

Theme 5: Feedback That Moves the Student Forward

Students viewed faculty feedback as particularly valuable when it was specific, developmental, and intellectually challenging.

They appreciated professors who did more than identify errors and instead explained why arguments required strengthening, why literature needed updating, why methodological choices required justification, or why conclusions were unsupported by evidence.

Participants undertaking research and dissertation work particularly valued repeated consultation and revision.

However, they also reported that delays in feedback could interrupt momentum, especially among students attempting to balance academic deadlines with professional responsibilities.

A participant explained:

“Correction is expected at this level. What helps is when the professor tells you not only that something is wrong but why it is weak and what direction you should examine. Then you learn how to improve the next paper yourself.” (*Participant 12, dissertation stage*)

Thus, formative feedback operated as a form of intellectual apprenticeship, gradually enabling students to evaluate and improve their own scholarly work.

Theme 6: From Being Taught to Becoming an Independent Scholar

The final theme represented a developmental shift across the doctorate journey.

Students in the early coursework stage commonly described dependence on professors for readings, theoretical direction, research topics, and evaluation criteria. Students approaching dissertation work increasingly described themselves as responsible for selecting literature, defending theoretical positions, choosing methodological approaches, interpreting evidence, and responding to scholarly criticism.

One participant characterized this transition:

“At first you wait for the professor to tell you what to read and what to do. Later, especially in dissertation work, you realize that you cannot always wait for instructions. You have to decide, justify your decision, and defend it.” (*Participant 14, dissertation stage*)

This transition from guided learning toward intellectual autonomy represents a central pedagogical outcome of doctorate education.

Rather than eliminating faculty guidance, effective doctorate pedagogy appeared to change the nature of guidance: from directing the learner toward questioning the learner, and eventually toward enabling the learner to independently defend scholarly decisions.

3.7 Integration of Quantitative and Qualitative Findings

Integration of the quantitative and qualitative evidence demonstrated substantial convergence between the two phases.

Table 4

Joint Display of Quantitative and Qualitative Findings

Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning Experiences in Graduate School Programs

Quantitative Finding	Qualitative Explanation	Integrated Interpretation
Research-integrated pedagogy received the highest rating (M = 4.42).	Students described proposal writing, literature review, theoretical framing, research critique, methodological analysis, and dissertation preparation of doctorate education as central undertakings.	Research functions as the organizing pedagogical core
Critical thinking was the highest learning outcome (M = 4.46).	Students described being questioned, challenged to defend positions, critique authors, and theoretical and methodological decisions.	Dialogic and research-oriented pedagogy promotes critical scholarly reasoning.
Mentoring/feedback was positively associated with learning (r = .66).	Students valued specific, iterative feedback but identified timeliness and accessibility as areas requiring continued attention.	Feedback is most effective when it progressively develops students' capacity for self-evaluation.
Collaborative learning was rated very highly (M = 4.29).	Participants emphasized peer discussions, group tasks, professional experience sharing, and mutual assistance.	Peers constitute an important supplementary scholarly community within doctorate education.
Dissertation-stage students reported greater scholarly independence.	Participants described moving from waiting for faculty direction toward independently selecting, defending, and revising scholarly decisions.	Doctorate pedagogy appears progressively transferring intellectual responsibility to the student.
Most participants were working professionals.	Students described studying after work, on weekends, and around professional and family responsibilities.	Effective doctorate pedagogy must combine academic rigor with responsiveness to adult professional learners.

Therefore, the mixed-methods findings suggest that doctorate learning at Isabela Colleges Incorporated can be conceptualized as a progression from structured academic engagement toward increasingly independent knowledge production.

The experience may be summarized through the following empirically oriented sequence:

Professional Experience → Scholarly Dialogue → Critical Inquiry → Research Engagement → Faculty and Peer Feedback → Application to Practice → Independent Scholarship

The findings further indicate that doctorate students do not necessarily seek an easier academic experience because they are working professionals. Rather, they appear to value rigorous but meaningful academic work, particularly when requirements contribute directly to research competence, professional practice, dissertation development, and scholarly growth.

4. Discussion

The purpose of this study is to understand doctorate pedagogy as a broader teaching-learning system rather than reducing doctorate education to coursework or dissertation supervision alone. Contemporary research supports this broader perspective.

Pedagogical development within doctorate education remains inconsistent. Antony, Emas, and Upoma's examination of U.S. public administration PhD programs identified substantial disparities in pedagogical training and resources, despite the likelihood that many doctorate graduates will undertake teaching responsibilities. This reinforces the importance of treating pedagogy as an explicit component of doctorate preparation rather than assuming that advanced disciplinary knowledge automatically translates into effective teaching.

Research-integrated teaching is particularly significant because doctorate education ultimately involves a transition from consuming existing scholarship to producing defensible new knowledge. Coursework should therefore provide authentic opportunities to formulate research problems, critique literature, defend theoretical choices, evaluate methodologies, analyze evidence, write for scholarly audiences, and respond constructively to peer review.

The proposed emphasis on collaborative and dialogic learning is similarly consistent with contemporary scholarship. Doctorate learning occurs through relationships and scholarly communities, not solely through independent study. Research on doctorate community formation demonstrates the importance of interaction and belonging, while studies of peer mentoring indicate that doctorate students can develop pedagogical identity and professional confidence through structured peer communities.

Mentoring and feedback nevertheless require careful balance. Recent work on relational doctorate supervision identifies a productive tension between supportive relationships and researcher independence. Effective doctorate pedagogy should therefore avoid both extremes: insufficient guidance that leaves candidates academically isolated and excessive direction that restricts intellectual autonomy. The pedagogical goal is progressive independence scaffolding doctorate students while gradually transferring responsibility for research judgment and scholarly decision-making.

Digital and hybrid doctorate environments add another dimension. Recent research suggests that flexible delivery can expand accessibility while simultaneously generating challenges involving interaction, engagement, and coherence of the doctorate learning community. Consequently, effective digital doctorate pedagogy requires intentional interaction, meaningful scholarly collaboration, structured feedback, and community-building rather than simply transferring conventional lectures to an online platform.

This progression positions the doctorate learner not simply as a recipient of advanced knowledge but as an emerging member of a scholarly community capable of generating, defending, communicating, and applying new knowledge.

4.1 Implications for Graduate Schools

*Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning
Experiences in Graduate School Programs*

Graduate schools should explicitly articulate their philosophy of doctorate teaching and learning. Faculty development should include not only research supervision but also advanced pedagogy, formative feedback, inclusive teaching, digital learning, mentoring, and strategies for developing researcher independence.

Doctorate curricula should further integrate authentic scholarly activities. Rather than relying excessively on examinations and conventional reporting, programs may incorporate research proposals, systematic literature reviews, conference-style presentations, methodological critiques, data-analysis exercises, manuscript preparation, peer review, and publication-oriented tasks.

Structured peer-learning mechanisms including research circles, writing groups, doctorate colloquia, methodology clinics, and interdisciplinary research forums can complement the traditional student-supervisor relationship and broaden students' scholarly networks.

4.2 Implications for Doctorate Faculty

Doctorate faculty should conceptualize themselves not merely as transmitters of specialized knowledge but as **facilitators of scholarly development**. Effective doctorate teaching requires high intellectual expectations combined with purposeful scaffolding.

Feedback should consequently move beyond correction toward explanation and intellectual challenge. Students should understand not merely *what* needs revision but *why* particular theoretical, methodological, or argumentative decisions strengthen scholarly work.

4.3 Implications for Policy

Institutions should establish explicit quality indicators for doctorate pedagogy. Program evaluation should examine student learning experiences, quality of supervision and feedback, opportunities for research participation, scholarly-community engagement, publication preparation, and evidence of developing researcher independence.

5. Conclusion

Doctorate education requires a distinctive pedagogy appropriate to advanced learners who are transitioning from students of existing knowledge to independent producers of scholarship. This study provides an empirical framework for examining how learner-centered instruction, research-integrated teaching, scholarly dialogue, collaboration, mentoring, and formative feedback contribute to that transition.

The central proposition is that the quality of doctorate education should not be evaluated solely through curriculum content, completion rates, or dissertation production. It should also be assessed through the quality of the pedagogical experiences through which doctorate candidates develop critical inquiry, research competence, scholarly identity, and intellectual independence.

Graduate schools should therefore cultivate doctorate environments in which teaching and research are interconnected, faculty-student relationships are intellectually supportive without

creating dependency, feedback facilitates progressively independent scholarship, and peer communities provide meaningful opportunities for collaborative knowledge construction.

Ultimately, effective doctorate pedagogy should enable candidates to move from learning what the scholarly community knows to independently contributing what the scholarly community does not yet know.

Limitations and Future Research

Because the proposed study relies partly on self-reported perceptions, responses may be influenced by individual expectations and experiences. A cross-sectional design would also limit causal interpretation. Future studies should consider longitudinal designs that follow doctorate students from coursework through candidacy and dissertation completion.

Multi-institutional and cross-national investigations would help establish whether effective doctorate pedagogies vary across disciplines, institutional contexts, and cultures. Future research should also integrate student perceptions with classroom observations, supervisor perspectives, program documents, research productivity, completion outcomes, and longitudinal indicators of scholarly development.

References

- Antony, M., Emas, R., & Upoma, S. (2024). Teaching future faculty: Pedagogical training in public administration PhD programs in the US. *Journal of Public Affairs Education*, 30(3), 355–374. <https://doi.org/10.1080/15236803.2024.2380226>
- Donlon, E., & King, F. (2024). From room to Zoom: Co-constructing doctorate community in pandemic and post-pandemic times. *Impacting Education: Journal on Transforming Professional Practice*. <https://doi.org/10.5195/ie.2024.387>
- Ellefson, M. L., & Monfared, M. M. (2025). A discipline-specific pedagogical professional development graduate program fosters development of integrated scholars: An evaluation of the Future Undergraduate Science Educators (FUSE) program. *Journal of Microbiology & Biology Education*. <https://doi.org/10.1128/jmbe.00044-25>
- Goldsborough, E. J., Champagne, L., & Bietsch, B. A. (2025). Shaping pedagogical identities: A collaborative autoethnography of a virtual doctorate student pedagogy peer mentoring group. *Advances in Social Work*. <https://doi.org/10.18060/28452>
- Grant, B., & McKinley, E. (2011). Colouring the pedagogy of doctorate supervision: Considering supervisor, student and knowledge through the lens of indigeneity. *Innovations in Education and Teaching International*, 48(4), 377–386. <https://doi.org/10.1080/14703297.2011.617087>
- Guerin, C., Tyler, M., Firth, K., & Bendrups, D. (2026). Tensions between relational supervision pedagogy and researcher independence. *Innovations in Education and Teaching International*, 63, 1243–1257. <https://doi.org/10.1080/14703297.2026.2687864>
- McAlpine, L., & Amundsen, C. (Eds.). (2011). *Doctorate education: Research-based strategies for doctorate students, supervisors and administrators*. Springer.

*Tomines_Pedagogical Practices in Doctorate Education: Examining Teaching and Learning
Experiences in Graduate School Programs*

Van Doorsselaere, J. (2024). Factors that support teachers as educational professionals doing doctorate studies: An integrative literature review. *Frontiers in Education*, 9, 1466631. <https://doi.org/10.3389/feduc.2024.1466631>