

Human and AI Editing Tool Use Among Online Professional Practice/Applied Practice Doctoral Students:

Implications for Academic Integrity Policies

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ABSTRACT

The purpose of this qualitative study was to explore online professional practice doctoral students' and recent graduates' (2022-2025) use of editing software, GenAI/ AI browser extensions, and human editors, examining their practices and institutional policy perspectives. Using Lentz's (2024) ethical authorship framework, researchers analyzed 29 participant responses. Four themes emerged: Foundational Academic Excellence and Support, Innovative Learning and Development, Quality Assurance and Professional Growth, and Inconsistent Institutional Practice and Ethical Oversight. Findings identified distinct functional purposes and five commonalities across editorial resources. Participants strategically employed different resources while maintaining authorial agency and critical judgment, yet reported widespread inconsistency in faculty guidance, revealing significant governance gaps. GenAI tools provided social-emotional support for isolated online learners. Participants demonstrated ethical authorship consciousness and opposed blanket prohibitions, advocating instead for comprehensive institutional guidelines. Results challenge traditional academic integrity frameworks and recommend program-level policies informed by ethical authorship principles.

KEYWORDS

academic writing, Artificial Intelligence (AI), ethical authorship, Generative Artificial Intelligence (Gen AI), doctoral education, online learning, editorial tools

Academic Integrity

The rapid development of online doctoral programs has introduced a distinctive focus on the unique experiences of online doctoral writers (Jiang et al., 2021; Werse, 2021; Werse et al., 2022) and the core activity of writing (Macfarlane et al., 2014; Salman et al., 2024). The form in which scholars publish knowledge has undergone a considerable transformation over time, from the exclusively oral presentation and defense of ideas to the creation of hand-written manuscripts, to print monographs and journal articles published in serial issues, and currently, to highly specialized electronic databases and online journals (Lentz, 2024). Each medium has shaped the knowledge scholars produce. Many researchers indicated that artificial intelligence (AI) is moving knowledge transmission into a new era, already refashioning the work doctoral students complete and thus the development of the knowledge economy (Abbasi et al., 2024; Bharadwaj et al., 2024; Lentz, 2024; Nordling, 2023; Nyaaba, 2023; Uzun, 2023; Walczak & Cellary, 2023) adding a new voice to the growing interest in academic integrity issues (Macfarlane et al., 2014). Universities and faculty need to respond to the challenges presented to doctoral

writing by AI to ensure academic integrity and the best outcomes for their doctoral students (Krienert et al., 2024; Salman et al., 2024).

The diffusion of Large Language Models (LLM) such as Open AI's GPT-5, Google's PaLM1 and 2, and Bard, Llama (Meta), Gemini (Google), Firefly (Adobe), Bing and Copilot (Microsoft), and MM1 (Apple), generate contextually relevant, coherent, and grammatically sound text (Abbasi et al., 2024; Barrett & Pack, 2023; Nguyen et al., 2024; Walczak & Cellary, 2023). Generative Artificial Intelligence (GenAI), GPT-5, the newest at the time of writing, launched in August 2025, now serves between 800 million to 1 billion weekly active users, presenting a series of ideological struggles within academia (Barrett & Pack, 2023; Lampropoulos et al., 2023; Sullivan et al., 2023; Yeo, 2023). The transformative impact of AI in academia has been met with varying levels of enthusiasm and concern among different stakeholders in higher education (Barrett & Pack, 2023). For example, some institutions have responded by banning the technology outright (Yang, 2023), while others have introduced student guidelines (Salman et al., 2024). In research conducted by Barrett and Pack (2023), 94.1% of faculty in public universities reported not having a policy regarding the use of AI.



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Academic integrity is widely used as a proxy for the conduct of students, notably in relation to plagiarism and cheating (MacFarlane et al., 2024). Defining what the word *integrity* means is complex. This study draws on the English definition of integrity, derived from the Latin words *integer* and *integritas*, meaning whole. For this paper, *academic integrity* is defined as the values, behavior, and conduct of an individual in academia.

Within the context of professional practice educational doctoral programs, the Carnegie Project on the Education Doctorate (CPED) provides guidance for understanding academic integrity that extends beyond compliance to ethical leadership development. CPED's guiding principles state that the professional practice doctorate is framed around questions of equity, ethics, and social justice to address complex problems of practice. This positions ethical integrity not merely as rule following but as a core professional value intrinsic to scholarly practice and stewardship of the profession. For online professional practice doctoral students navigating GenAI tools, CPED's emphasis on preparing scholar practitioners who can 'think, perform, and act with integrity' (Shulman, 2005, as cited in CPED, n.d.) provides essential guidance for making ethical authorship decisions. The explicit integration of ethics into program design suggests that academic integrity concerns in the AI era must be addressed through comprehensive program-level approaches rather than individual student responsibility alone (CPED, n.d.).

Implementing a program-level approach to academic integrity requires a thorough understanding of the complex factors, both individual and systemic, that influence doctoral students' ethical decision-making. Research on academic integrity has identified multiple factors that influence students' engagement in unethical academic behavior, including incentive structures, available opportunities, individual rationalization, and external pressure (Anitha & Sundaram, 2021; Krienert et al., 2024). Additional contributing factors include students' perception of peer behavior, ambiguous assignment guidelines, and the perceived necessity of achieving high grades.

In the context of emerging AI technologies, a 2024 faculty survey conducted by the *Chronicle of Higher Education* revealed significant concerns regarding the integration of AI into higher education (McMurtrie, 2024). Faculty respondents expressed apprehension that AI adoption would undermine three critical areas: academic integrity, students' development of critical thinking, and writing competency and creativity capacity. These faculty concerns regarding AI's potential threat to academic integrity find empirical support in the systematic review conducted by Chen et al. (2025). In Chen et al.'s analysis of 243 peer-reviewed studies on GenAI user attitudes, published from 2019 onward, revealed that students themselves are overwhelmingly concerned about academic integrity. Maintaining academic integrity in the age of AI emerges as a shared concern across both faculty and student populations.

A national survey conducted by Bharadwaj et al. (2024) of over 3,000 higher education administrators, instructors, and students identified institutional anxiety regarding AI's implications for academic integrity as a primary concern among stakeholders. Bharadwaj et al.'s national survey results support previous research by Maphosa and Maphosa (2023), who conducted a bibliometric analysis and topic modeling study examining the trajectory of AI research in higher education, and found that after analyzing 304 research studies, none of the analyzed studies specifically addressed AI in doctoral students' scholarly writing. The authors argued that the rapid integration of AI technologies in higher

education required ongoing investigation. Krienert et al. (2024) and Yeo (2023) highlight the paucity of empirical research exploring online students' understanding of appropriate academic integrity-oriented behavior and recommend exploring student perceptions regarding the ethical implications of GenAI tool usage.

Research on how doctoral students perceive and address Human and GenAI ethical concerns remains limited, leaving significant gaps in understanding the viewpoints of emerging academic professionals who may shape future educational policies and technologies (Shih et al., 2021). Existing studies often overlook doctoral students' perspectives, whose insights are crucial for anticipating ethical challenges as AI evolves in educational contexts (Kong et al., 2023; Shih et al., 2021). The research in this paper aims to cover the gap by acquiring doctoral students' perspectives on AI ethical concerns and providing higher-education policymakers with empirical data on whether and how online professional practice doctoral students are using editors—Human and GenAI—and how this may impact the writing process and academic integrity.

LITERATURE REVIEW

Academic Writing: The Key to Doctoral Success

Writing is a fundamental skill that is necessary for academic and professional development. Weak writing ability can result in less learning and negatively impact professional success (Graham et al., 2020; Nguyen et al., 2024; Salman et al., 2024). Ciampa and Wolfe (2019) and Rafi and Moghees (2023) pointed out that the quality of a doctoral program's capstone, generally the dissertation, is assessed through the doctoral candidate's academic writing skills, which, according to Rugg and Petre (2004), consists of comprehending, analyzing, elaborating, synthesizing, mind mapping, ordering, articulating, clarifying, editing, criticizing, structuring, and sense-making. For many *All But Dissertation* (also known as ABD) doctoral students, the writing of the manuscript (rather than the required research) is the stumbling block to graduation (Ciampa & Wolfe, 2019; Rafi & Moghees, 2023).

In recent years, doctoral students have used automated writing evaluation tools such as Grammarly or Criterion to provide corrective feedback during the revising and editing phases of the writing process (Barrett & Pack, 2023). Some institutions actively encourage doctoral students to use Grammarly by giving them access to a free institutional account, which provides services in basic grammar, spelling, punctuation, and advanced analytics such as word counts and readability (Ding & Zou, 2024; Fitria, 2021). Epe et al. (2024) explored how Grammarly influenced university students' academic writing experiences—using a quantitative approach, they assessed student perceptions regarding Grammarly's usefulness and ease of use. Data from 325 respondents across various academic departments indicated that the use of Grammarly enhanced productivity and saved time, although significant variations were observed across different departments, suggesting that departmental context influenced students' views on Grammarly (Epe et al., 2024).

In a global postdoc survey by Nordling (2023), 63% of respondents used GenAI to refine text, and 22% stated that it had changed how they analyzed data. One-third of the postdoctoral researchers said that AI chatbots had changed how they wrote a paper. Nordling (2023) noted that the fields with the highest reported chatbot use were engineering (44%) and social sciences (41%), while postdocs in the biomedical and clinical sciences were less



likely to use AI chatbots for work (29%). Harfe (2025) observed that chatbot sophistication is rapidly advancing. To illustrate the chatbot evolution, Harfe created a final assignment for a science course, which, when submitted to a chatbot in 2022, AI could not adequately answer the assignment questions. However, by 2023, the same chatbot successfully completed the assignment questions. While it remains debatable whether increased student submissions contributed to the chatbot's improved performance, Harfe emphasized that faculty must anticipate that students will use chatbots to assist with assignment writing and should develop teaching strategies accordingly.

The disparity in adoption rates between students and faculty, with 59% of students reporting regular use compared to 36% of faculty, suggests a widening technological divide that carries significant implications for doctoral education (Bharadwaj et al., 2024; Boyd & Harding, 2025). The writing landscape in doctoral programs has already been impacted, presenting dissertation committees with the challenge of distinguishing between the doctoral candidate's writing and AI-generated content (Uzun, 2023). The challenge is compounded by AI's capacity to intentionally mimic human/academic writing style, evading detection by existing plagiarism identification tools, particularly as newer generative AI models continue to evolve (Uzun, 2023). Furthermore, the accessibility of AI tools may obscure their full scope for many doctoral students who may be unaware that AI assistance extends beyond basic grammar checkers, such as Microsoft Editor, to include predictive text generation, grammar, and writing style refinements like clarity, conciseness, formality, and vocabulary, and offers suggestions to enhance content (Nyaaba, 2023). The growth in AI's capabilities has necessitated critical examination of traditional educational models and andragogical frameworks within doctoral education (Boyd & Harding, 2025; Nyaaba, 2023; Zhai, 2022).

AI and the Authorship Question

Academic literature exists that debates AI as having authorship (da Silva, 2023; da Silva & Tsigaris, 2023; Davis & Taczak, 2024; Hosseini et al., 2023), and the idea of naming LLMs as authors is also debated (Hosseini et al., 2023; Hwang et al., 2025). Navigating authorship when human writers collaborate with LLMs for personalized content poses challenges to who the author is: the human who entered their criteria into the AI tool, or the AI tool itself (Draxler et al., 2024; da Silva & Tsigaris, 2023). Some authors likened AI contributions to ghostwriting, which involves using text produced by someone else without credit (Draxler et al., 2024). In the academic fields of medicine, ghostwriting is common, as is writing political speeches and autobiographies (Draxler et al., 2024).

In two empirical studies by Draxler et al. (2024), 126 participants revealed that they seldom disclosed that AI authored their personalized AI-generated texts in writing. When Draxler et al. (2024) compared human and AI ghostwriters, the results revealed that human writers attributed authorship to themselves more often when writing with AI support. Hosseini et al. (2023) and Jenkins and Lin (2023) argued that when LLMs make substantial contributions similar to human contributions, LLMs should be credited as the author. Peh and Saw (2023) also supported the author's transparency in disclosing their use of LLMs when used for the creation of information and publication. Meanwhile, using and crediting LLMs as authors to assist with writing research papers such as dissertations and theses is an ethical concern for universities,

publishers, and editors (O'Leary, 2023). O'Leary (2023) explained that LLMs such as ChatGPT could generate ideas for literature reviews and survey papers. Therefore, O'Leary (2023) and Jenkins and Lin (2023) agreed that writers must verify the policies on crediting LLMs as authors for research proposals, dissertations, and theses with their academic institutions.

To address the challenge of transparency and academic integrity between students and faculty when students use AI in their writing assignments, companies are creating new technologies. Grammarly launched a program called Authorship, which uses web-browser-based text categorization to show faculty where the student's writing originated (Grammarly for Education, n.d.). Authorship categorizes text written by the student as typed, edited, AI-generated, and copied from AI or online sources (Grammarly for Education, n.d.). Meanwhile, the AI detection report produced by Turnitin uses algorithmic logic to highlight and estimate percentages of AI-generated text that likely originated from an LLM and GenAI text and was revised using an AI-paraphrased tool or word spinner (Turnitin, n.d.). AI detection algorithms employed by vendors such as Turnitin have been shown to lack accuracy in determining whether text is AI-generated (Grammarly, 2024). Additionally, Turnitin restricts access to its AI-generated report to faculty, excluding students from reviewing the results (Turnitin, n.d.). Meanwhile, the Grammarly Authorship report is available to the faculty and students for transparency (Grammarly for Education, 2025).

Ethical Authorship

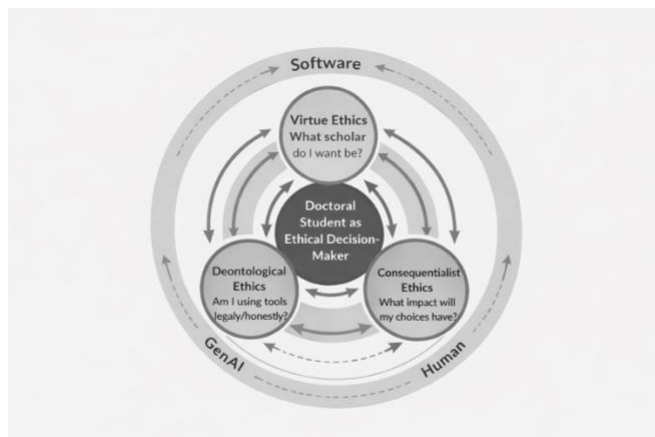
The ethical authorship framework was defined by Lentz (2024) as discourse that "positively reflect[s] an author's values and that create[s] ethical, clear, complete, transparent, and audience-centered communication" (p. 597) informed both the design of the research instrument and the analysis of the findings in several ways: (1) the questions were structured around the core tenets of ethical authorship, (2) the framework provided an analytical lens for participant responses, and (3) the framework helped identify the boundaries doctoral students draw between acceptable editorial assistance and compromised authorship.

Theoretical Foundations

The ethical authorship framework is grounded in three philosophical traditions that guide authors' decision-making about editorial tool usage (Figure 1). Lentz (2024) argued that ethical authors consider how they want to represent themselves, and what type of scholar they aspire to be (virtue ethics): whether they are using AI content in ways that are legal and honest (deontological ethics) and what consequences their writing might have on their audience if they have not used AI appropriately (consequentialist ethics). In the ethical authorship process, doctoral students as active decision-makers retain control over editorship and authorial agency regarding the content they choose to present as their own.

Ethical authorship is appropriate for this study as it acknowledges the role of AI in academic writing while focusing on human agency and moral responsibility. The framework recognizes that doctoral students face genuine ethical dilemmas that require ongoing reflection and judgment, unlike frameworks that focus solely on detection or rule compliance.

Figure 1. Ethical Authorship Decision-Making Framework for Editorial Tool Use



Academic Integrity and AI-Assisted Dissertation Editing

Scholarly peer-reviewed literature is limited to non-existent in using human editors for graduate dissertations. Depending on the doctoral student's academic editing needs, the editing options are either proofreading, copyediting, or content editing. Costs are dependent on the editing services requested. Given the availability and widespread use of AI tools such as Grammarly, doctoral students must be careful that the human editor they hire is not using AI to edit their writing, which could cause them to violate ethical authorship rules and their university's academic integrity policy. Although numerous non-scholarly articles and blogs discussed the benefits of hiring a human editor versus using AI writing assistance tools, many human editors are now using AI tools. Aljuaid (2024) stated that AI can assist with grammar and style, but human academic editors provide the expertise that AI tools cannot generate.

A case emerging from professional practice doctoral education illustrates the complexity of AI-assisted editing and academic integrity enforcement. A doctoral candidate, following committee guidance to engage professional editing services subsequently faced allegations of academic integrity when their Turnitin AI Detection Report revealed high AI-generated text and word-spinner percentages. Upon investigation, the student stated they had contracted a human editor for dissertation revision, but they were unaware that the editor was using AI. Critically, the editor had not disclosed their use of AI-assisted technologies to their client.

In Leung et al.'s (2023) literature review, the authors described best practices for the use of AI tools among human editors, peer reviewers, and authors, emphasizing that editors have an ethical obligation to disclose their use of AI programs to their clients. Such a disclosure is important in doctoral education, where students must ensure their edited dissertations comply with their university's academic integrity policy (Leung et al., 2023).

In summary, Section 1 focuses on the form and format of academic writing, the challenges of AI-generated content, the question of authorship and originality, the ethical authorship framework, and AI-assisted dissertation editing. Section 2 presents the methods for data collection and analysis, along with the demographic characteristics of the online professional practice doctoral. Section 3 discusses the findings. Section 4 offers practical

and theoretical implications of the study, while Section 5 identifies the need for future research. Section 6 consists of recommendations grounded in the research findings. Concluding remarks are provided in the last section of the paper.

Method

This general qualitative study employed a questionnaire-based methodology to explore online professional practice/applied practice doctoral students' perspectives regarding the utilization of editing tools throughout the doctoral writing process. The questions were comprised of four discrete sections: *Use of Editing Software*, *Use of GenAI/AI Browser Extensions*, *Use of a Human Editor*, and *Policy and Ethical Considerations/Recommendations*, and were operationalized through the theoretical framework of Lentz's (2024) ethical authorship process. The design was constructed to answer the research question: How do online professional practice doctoral students conceptualize and navigate human and generative AI editing interventions in their scholarly writing process?

Study Design

This study was conducted following ethical standards and approved by Franklin University's Institutional Review Board. A purposive convenience sampling method was used to recruit study participants. The sampling approach was appropriate due to the specialized nature of the target population and the need to reach a specific group. The study was advertised on the researchers' social media sites, along with emails sent to current and former professional doctorate students and faculty. A snowball sampling technique was employed. Although snowball sampling may introduce selection and homogeneity biases (Pajo, 2018), it enabled access to a relevant sample that met the study's criteria, helping ensure the sample accurately represented this population.

In the literature, an appropriate sample size for qualitative studies ranges from one to 50 participants (Sharma et al., 2024); however, there is consensus that saturation is a widely accepted method for determining rigor in sample size (Hennink & Kaiser, 2022). Thirty participants who were currently in an online professional practice/applied doctorate program or had graduated between 2022-2025 met the study's initial participation criteria. Of these respondents, 96% ($n=29$) identified using editing software (e.g., GenAI, Grammarly) or a Human Editor (e.g., writing center tutor, professional editorial service) in their doctoral writing. Data saturation was reached when no new information was presented to answer the research question, resulting in the sample being capped at 29 participants.

Demographics

Table 1 shows the demographic characteristics of the participants. Of the 29 questionnaire respondents, the majority identified as female, 84.6% ($n=22$), while male-identifying respondents constituted a much smaller proportion at 20.7% ($n=6$). One respondent (3.4%) indicated using both she/they pronouns and was counted in both the female category and the non-binary category, which is why the percentages sum to more than 100%.

Table 2 reports on the race and ethnic characteristics of the participants. The data showed that 10.3% ($n=3$) identified with multiple racial/ethnic categories, indicating mixed or multiple ethnicities. Among the less frequently represented groups were

Hispanic, Latino/a/x, or of Spanish origin, and Asian, each at 6.6% ($n=2$). In comparison, Native Hawaiian or Other Pacific Islander and American Indian or Alaskan Native each represented 3.3% (1 respondent each). Since respondents were allowed to select multiple categories, the percentages sum to more than 100%.

Table 1. Demographic Characteristics of Participants

Gender	n	%
Women	22	84.6
Men	6	20.7
Non-binary	1	3.34

Table 2. Race/Ethnic Characteristics of Participants

Race	n	%
American Indian Alaskan Native	0	0
Asian	2	6.9
Black or African American	10	34.5
Multiple Races	3	10.3
Native Hawaiian or Other Pacific Islander	1	3.5
White	14	48.3
Ethnicity		
Hispanic, Latino/a/x, or of Spanish Origin	2	6.9

Figure 2 reports the participants' age group, and Figure 3 shows household income levels. Most participants fell in either the 40-49 age group or the 50-59 age group, with two-thirds of respondents having a reported income higher than \$100,000-\$149,000, and one-third having a reported income less than \$100,000.

Figure 2. Age Group of the Participants, by Percentage

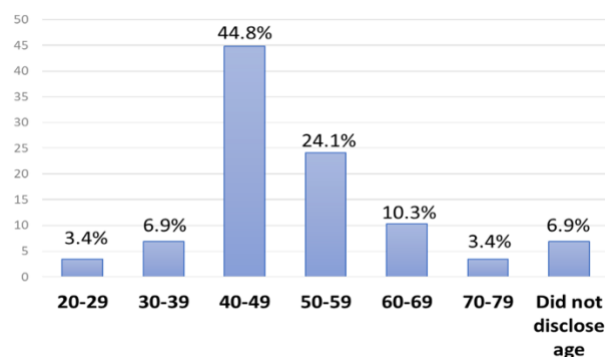
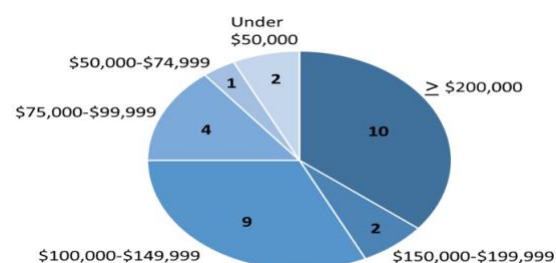


Figure 3. Participant's Household Income



DATA COLLECTION AND ANALYSIS

The online questionnaire contained a combination of closed-ended and open-ended questions. An expert validation was conducted with eight current or graduated online students in professional practice/applied practice doctorates to enhance the validity and trustworthiness of the instrument. Two questions were revised. The final questionnaire was available for 38 days for responses and took an average of 20 minutes to complete.

The results of the closed-ended questions were counted, and the results tabulated. Using Bingham and Witkowsky's five-phase process (Bingham, 2023) as a framework for the thematic analysis, the open-ended responses were first separated into the four sections of the questionnaire—the three editorial approaches to academic writing support and policy/ethics. Coding included a combination of inductive and deductive coding methods, but varied slightly from the order presented by Bingham (2023), in that the inductive coding techniques (open, in vivo, values, and holistic) were interspersed recursively with the deductive coding (using constructs from the theoretical framework), rather than being done sequentially. The open-ended questions were independently coded by each researcher and then reconciled based on an inter-rater reliability (IRR) process similar to Cole's (2024).

Memoing and bracketing occurred throughout, and inductive category formation (Mayring, 2019) was used to develop the initial categories. The AI feature in the Dovetail (n.d.) data analysis platform was also incorporated into the coding and IRR processes, and was particularly useful during the development of the 14 categories and initial themes. To minimize the potential for both algorithmic bias from use of the AI feature and implicit bias from the human researchers, use of the IRR process and constant comparison between the human- and AI-created codes, categories, and themes, and the participants' words continued throughout the categorization and theme development.

Through recursive thematic analysis integrating both inductive and deductive coding approaches, four overarching themes emerged. While initial analysis suggested that participants employed each editorial tool type (editing software, GenAI extensions, and human editors) for functionally distinct purposes, consistent patterns of ethical reasoning emerged reflecting participants' application of virtue, deontological, and consequentialist ethics (Lents, 2024) as they maintained authorial agency across various editorial contexts, and developed individual frameworks in response to institutional ambiguity.

FINDINGS

Four thematic categories emerged from the analysis: foundational academic support (Theme 1), innovative learning practices (Theme 2), quality assurance mechanisms (Theme 3), and institutional ethical oversight (Theme 4), each derived from distinct question clusters examining different aspects of academic writing support and AI integration (Figure 4).

Figure 4. Mapping of Instrument Components to Emergent Themes



Theme 1: Foundational Academic Excellence and Support

When responding to this section, the participants focused on using editing software to establish core competencies and create supportive learning environments. Their use of editing software was centered around building fundamental writing skills, improving efficiency and productivity, ensuring accessibility for diverse learners, integrating institutional resources, leveraging technology for enhanced learning outcomes, and achieving doctoral-level standards. The participants' overarching goal in using editing software was to create a solid foundation for academic success through comprehensive support systems. For example, P2 stated, "I use it to catch mistakes mostly that are grammar related. Sometimes, I do not use their suggestions depending on the context. If it suggests a rewording, I often do not like the way they reworded it, so I reword it myself." P25 described the learning opportunities this way: "The immediate feedback from the software serves as an educational tool, helping me recognize recurring mistakes and improve my writing skills over time", and P17 "appreciate[d] the feedback received because it gives me insights on how to restructure my text so that it is easier to read." From an ethical perspective, these doctoral students emphasized the importance of using editing software as a tool, rather than a creator, and emphasis on critical thinking is evident when P14 commented, "[r]eading each suggestion is important, and I don't autocorrect or accept all of the edits. At times, I will look at the improvements to sentence tone, such as passive voice, but generally I make a note in my document and will determine later in my next proofread how I might change the tone. I find that Grammarly is a great editing tool, but it is a tool and should not replace my writing."

Theme 2: Innovative Learning & Development

When responding to this section, participants emphasized creative approaches to intellectual growth along with comprehensive skill development. Their use of GenAI and AI browser extensions revolved around fostering creative and intellectual development, curating and developing quality content, integrating research methodologies, promoting interactive and collaborative learning experiences, taking a holistic approach to academic and life integration, serving as a catalyst for academic acceleration, and implementing universal design principles. The focus was on transformative learning experiences that moved beyond traditional approaches. For example, P10 noted that "Generative AI came into play only when I hit an absolute standstill for my assignments. I

never felt the need to utilize generative AI to do my work for me, only to supplement and provide clarity on it", while P17 described using "GenAI when I needed to understand the content of information in my coursework better. I ask questions to give me a better understanding of the subject matter. It often points me to alternative sources to learn more. I also have bounced my content ideas off of AI." Several participants used GenAI in a collaborative way—P2 "used it as a jumping board", P23 "created outlines that I then used to expand my writing and ideas", and P17 "bounced my content ideas off of AI". P2 shared: "In rural communities, there are generally not a lot of people who do upper-level education or research. It is a lonely process. This software was more like having someone to chat with who could give you some ideas."

Theme 3: Quality Assurance & Professional Growth

Central to this theme were the mechanisms for maintaining and improving academic standards while fostering professional development. Participants found that human editors helped when implementing multi-layered quality assurance systems, providing faculty-guided professional development, incorporating human insight and expert judgment, maintaining ethical standards and academic integrity, refining academic style and voice, encouraging collaborative feedback and peer engagement, supporting conceptual development and content mastery, and ensuring technical precision and mechanical excellence. Human editors provided most benefit in the areas of continuous improvement and professional development, as evidenced by P13's response, "Human editors can offer a fresh pair of eyes to help identify and correct any grammatical mistakes and typos, and offer advice on content flow and paragraph structure, improving the written quality and clarity of my work", and P5's experience that "They were invaluable in providing how the content would be read and understood by a vast but general audience." P23 noted, "Peer reviewers can identify points of clarification that tools such as AI generators and text editors can't. Peer review considers not only grammar and sentence structure but also the complexities surrounding context and tone, which provides a critique of the overall feel of writing that AI and text generators fail to identify", which was supported by P25 "The editor provided valuable feedback on the organization and logical flow of my arguments, ensuring that each section transitioned smoothly and that my thesis presented a cohesive narrative."

Theme 4: Inconsistent Institutional Practice & Ethical Oversight

The questions in this section dealt with the broader institutional framework, policy considerations, and ethical dimensions of academic work. In this theme, participants highlighted systemic issues and governance challenges, calling for leaders and policies to:

- Address inconsistent faculty guidance and communication issues
- Recognize the imperative for proper training and guidance
- Navigate academic integrity tensions and concerns
- Identify policy awareness and knowledge gaps
- Tackle policy development and implementation challenges
- Consider accessibility and equity requirements



- Balance quality enhancement with appropriate control measures, and
- Manage individual ethics within institutional frameworks.

Participants accepted the inevitability of GenAI, and many saw potential benefits that could be ethically balanced with the proper guidance from the institution. According to P22 and P17, “It’s part of life now” and “GenAI is a part of our culture”. P24 suggested, “Universities should adopt inclusive, transparent policies that recognize both the value and limits of editing tools. Policies should define acceptable use of tools like Grammarly, AI writing assistants, and translation software. Offer training for students and faculty on how to ethically integrate such tools into research and writing.” P25 noted that “Access to assistive technologies is transformative for students with disabilities, enabling equitable participation in academic endeavors. When appropriately integrated, these tools can enhance the quality of academic writing by providing necessary support without compromising the integrity of the work. However, without clear policies and faculty training, misunderstandings can arise...”.

Participants were clear in their perceptions that doctoral-level work should be original, and that policies and programs should promote and ensure that; for example, P3 suggested that guidance be “...centered around ensuring that the tools are being used as a support tool and not being used to ‘do the work’”, continuing, “...that’s where a strong defense come into play for doctoral candidates. It should be evident when a student has been so immersed in their work that they can speak to the work, key researchers, concepts, etc.. with ease vs. not having that immediate connection due to the use of tools”. A recommendation from P18 was to “Explain, demonstrate, discuss what the abilities and limitations are of each tool. Allow students to experience the development of academic work with AI assistance so that they are able to recognize when it may be unintentionally being incorporated in their future work”.

Participants’ recommendations reflect an understanding that, as developing scholars, they need to enhance their capacity to make ethically sound decisions about GenAI use. Despite this shared emphasis on developing ethical decision-making capacity rather than imposing rigid rules, there were differing opinions on how restrictive the policy guidance should be, with P16 exhorting use of Grammarly “without restrictions”, and P5 calling for limiting use of editing tools to content structuring and restricted for content generation.” However, there was consensus on the need for training and clear guidance. P7 suggested institutions “provide examples in the form of scenarios or case studies that demonstrate what constitutes acceptable and unacceptable use of these tools, and P11 felt that “Policies should be open and understand how these types of things can be used to advance a student’s work and not hinder them by eliminating their use completely”. P11 underscored the need to “collect data from diverse perspectives on the [sic] use of editing tools to make informed decisions that drive policy development.”

Key Differences and Commonalities Between the Editorial Approaches

There were notable patterns in the different ways that these participants used the three different editorial resources—Editing Software-GenAI/AI Browser Extensions, and Human Editors—and the expectations or outcomes they sought from each. The editorial

resource patterns fell into four groupings and are presented in Figure 5 below:

- Focus – the predominant way participants used each editorial resource,
- Approach – how the participants went about engaging with or using each resource,
- Primary Goals – what specific skills or outcomes the participants hoped to gain from the use of each resource, and
- Level –complexity or sophistication of writing tasks that each editorial resource addressed.

Figure 5. Differences Between the Three Editorial Resources

Editing Software (Q. 6-7) • Focus: Foundational support and core competencies • Approach: Technology-enhanced solutions for basic writing skills • Primary Goals: Time efficiency, productivity enhancement, accessibility, and institutional integration • Level: Fundamental writing skills and mechanical excellence
Generative AI/AI Browser Extensions (Q. 12-13) • Focus: Innovative and transformative learning approaches • Approach: Creative and intellectual development through AI assistance • Primary Goals: Content development, research integration, interactive learning, and holistic academic integration • Level: Advanced creative and analytical capabilities
Human Editor (Q. 18-19) • Focus: Quality assurance and professional development • Approach: Expert human judgment and personalized guidance • Primary Goals: Multi-layered quality assurance, faculty-guided development, style refinement, and collaborative feedback • Level: Professional-grade standards with human insight

As shown in Figure 6, there were five commonalities between the ways participants described how and why they used each of the three editorial approaches. Irrespective of the editorial resource being used, participants consistently endeavored to maintain academic integrity, enhance writing quality, develop professionally as scholars, and navigate inadequate institutional guidance. This pattern suggests that the ethical and practical challenges doctoral students face transcend the specific editorial resource being used, pointing instead to broader systemic needs within doctoral education. Institutions must develop comprehensive frameworks that address these common concerns across all forms of editorial assistance.

When viewed through Lentz’s (2024) ethical authorship framework (Figure 7), these commonalities demonstrate how participants applied the three philosophical dimensions across all editorial approaches. In terms of virtue ethics, participants used each resource to develop their scholarly identity, though editing software built foundational independence, GenAI facilitated creative exploration and content, and human editors provided disciplinary guidance. From a deontological perspective, all three approaches demanded transparency decisions and ongoing evaluation of what constituted “their own work.” Participants considered not only immediate quality improvements but also long-term learning outcomes, professional skill development, and their responsibility to the scholarly community. This tri-dimensional ethical reasoning occurred regardless of whether students were correcting grammar, generating ideas, or refining arguments—suggesting that ethical

authorship is less about the specific tool and more about the deliberative process doctoral students employ when seeking editorial assistance.

Figure 6. Commonalities Across the Three Editorial Resources

Academic Integrity Participants expressed that while all three editorial approaches require navigating ethical standards and academic integrity, each presents distinct challenges.
Quality Enhancement All three editorial approaches enhanced academic writing quality, though through different mechanisms: Editing software through efficiency and accessibility AI through innovation and content development Human editors through expert judgment and refinement
Professional Development All three editorial approaches contribute to academic and professional growth, supporting students in developing their scholarly writing capabilities. Participants consistently emphasized active decision-making, critical evaluation of suggestions, drawing personal boundaries around acceptable assistance, and distinguishing between tool-as-aid versus tool-as-creator.
Institutional Need for Comprehensive Guidance All three editorial approaches require clear policy communication, recognition of different tools serving different functions, support for ethical decision-making rather than prohibitions, and scenario-based guidance addressing real dilemmas.
Accessibility Participants noted that all approaches could be used to address the need to support diverse learners, by balancing accommodation with authentic assessment.

Figure 7. Key Commonalities Viewed Through an Ethical Authorship Lens

Virtue Ethics: Scholarly Identity Formation Each editorial approach contributes to participants' development of scholarly identity and professional values, though through different mechanisms: - Editing software: Supports foundational skill development and independence - GenAI/AI extensions: Facilitate intellectual exploration and creative problem-solving - Human editors: Provide guidance in disciplinary conventions and expert judgment Across all editorial approaches, participants emphasized retaining authorial agency and critical judgment as central to their scholarly identity.
Deontological Ethics: Transparency and Academic Integrity Participants navigate ethical standards and integrity requirements with all three editorial approaches, expressing commitment to honest, legal tool usage: - Each approach requires disclosure decisions about the extent and nature of assistance - Participants demonstrate awareness of institutional policies (despite perceived gaps) - Concern for authentic intellectual ownership extends beyond plagiarism avoidance - All approaches demand ongoing evaluation of what constitutes "their own work."
Consequentialist Ethics Dimension: Quality Enhancement and Audience Impact Each editorial approach serves to improve academic writing quality and considers effects on multiple stakeholders: - Immediate consequences: Enhanced clarity, accuracy, and professional standards - Learning consequences: Building long-term capabilities versus immediate correction - Community consequences: Maintaining scholarly discourse integrity - Professional consequences: Developing transferable skills for future practice

DISCUSSION

Recent program graduates (2022-2025) and current students in a professional practice/applied doctorate program provided insights that reflect the broader doctoral community's engagement with an editor (editing software/ Human editor/ GenAI/AI browser extension) during the writing process. The findings suggest not merely a technological shift in academic writing support but a fundamental reconceptualization of authorship and agency. Study participants do not view the three editorial resources as competing options, but rather as a discrete resource addressing different dimensions of the doctoral writing process.

Participants consistently emphasized their retention of agency and critical judgment, even while acknowledging substantial reliance on editorial tools, and expressed concern with authentic intellectual ownership that extends beyond mere plagiarism avoidance. This finding resonates with Lentz's (2024) conceptualization of ethical authorship, wherein students must navigate questions rooted in moral philosophies about self-representation, legality, and audience impact. However, the doctoral students in this study accept technological and human assistance while simultaneously drawing boundaries around what constitutes their genuine intellectual contribution. Participants' ethical reasoning about authorship and assistance indicates that explicit instruction in ethical authorship frameworks should be embedded throughout doctoral curricula, not relegated to one-time academic integrity workshops. This finding aligns with a recent study by Zipf and Petricini (2025), who concluded that AI literacy education should address ethical considerations as well as skills development. Doctoral students need ongoing opportunities to practice ethical decision-making about tool usage in authentic contexts with faculty guidance.

An unexpected but significant finding emerges in participants' descriptions of GenAI as providing social-emotional support alongside technical assistance. The significant finding of using GenAI for support socially, emotionally, and technologically suggests that for online doctoral students, GenAI may be facilitating intellectual engagement and also filling an emotional void, which raises questions relating to the nature of authorship and whether institutional policies recognize this social-cognitive function. While doctoral students in the study employ human editors when they require an editor who understands disciplinary conventions and audience expectations, evaluates argument structure and narrative flow, and provides guidance that builds long-term capabilities rather than simply correcting immediate errors, they may turn to GenAI for immediate dialogue mirroring the conversation that on-site doctoral students may have. The distinction between human editors and GenAI suggests that GenAI serves a different relational function than human editors.

Crucially, the data suggests a widespread perception of inadequate institutional guidance and policy around editorial tool usage. Institutions must develop comprehensive policies that provide clear guidance while respecting disciplinary differences and diverse student needs. The need for clear and comprehensive institutional policies aligns with a recent study by Boyd and Harding (2025), who also suggest that institutions provide solid guidance and procedures for the use of GenAI tools. Participants' responses reveal not merely a desire for clearer policies but a significant governance gap that leaves doctoral students facing complex ethical issues without adequate institutional support. The inconsistency in faculty guidance, noted by multiple participants, creates an environment of ambiguity



that places an unfair ethical burden on individual students. Rather than calling for blanket prohibitions or unrestricted permissions, respondents advocated for scenario-based guidance (P7), tool-specific policies that recognize functional differences (P24), and data-driven policy development informed by diverse stakeholder perspectives (P11).

RECOMMENDATIONS

Recommendations for Practice

Considering the findings from this investigation into using an editor (editing software/ Human editor/ GenAI/AI browser extension) in online doctoral programs, several practical recommendations emerged that align with the ethical authorship process. The recommendations are grounded in ensuring that online doctoral students are ethical authors of all their writing and that this ethical approach is built into their moral core.

First, universities should develop consistent, comprehensive policies governing the use of editing software, human editors, and GenAI/AI browser extensions across all programs, ensuring that policies are accessible, iterative, visible, and consistently communicated by all faculty. The approach of such policies should be guiding rather than prohibitive, recognizing that different tools serve different functions within the doctoral writing process. Additionally, policies must address the socio-cognitive dimension of GenAI usage for online students.

Second, active ethical training (as opposed to a passive Word document or PowerPoint presentations) should be a course requirement for all doctoral students, ideally embedded throughout the program. This training should include opportunities to analyze case studies, ethical dilemmas, authorial agency, and intellectual authorship to ensure an established baseline. Concurrent faculty training is essential to develop the instructor's capacity to mentor students in ethical authorship practices.

Third, doctoral programs should intentionally create opportunities for the growth of an informal academic community (e.g., virtual writing groups, peer review partnerships, and regular intellectual exchanges). As access to all editors increases, monitoring and regulating editorial services becomes an individual responsibility grounded in ethical authorship principles, but this individual responsibility can only be exercised effectively within a supportive institutional framework that provides clear policy guidance and ongoing developmental support.

Fourth, conduct a qualitative study on how doctoral students are affected by ethical authorship and academic integrity concerns and violations when hiring human editors who use AI tools to edit their dissertations.

Limitations and Recommendations for Research

All research brings certain limitations, and qualitative studies in particular carry limitations on transferability. While the study achieved demographic diversity, institutional characteristics (e.g., public vs. private) were not collected; consequently, the findings from this study may not represent broader populations of applied doctoral students or dissertation students in other institutional contexts. Future research should examine how institutional contexts and program designs may influence doctoral students' ethical decision-making regarding editorial tool usage.

Subsequent research should seek to overcome the limitations noted in the current study by first extending the sample size, as this will provide greater representation of the doctoral student body and reduce any response bias. Second, comparative studies examining undergraduate, master's, and doctoral students could add to our understanding of ethical authorship practices and inform appropriate intervention. Third, longitudinal research tracking whether doctoral students who receive explicit ethical authorship training demonstrate different decision-making processes than those without such training. Finally, research might explore whether GenAI usage correlates with an enhanced sense of belonging in online doctoral programs, scholarly competency, and development.

CONCLUSION

This study contributes significantly to the ethical authorship literature by demonstrating how Lentz's (2024) framework helps to explain the complex decision-making process made by online doctoral students navigating editorial tools in the AI era. The findings reveal that the study's participants embody the three philosophical foundations of ethical authorship in practice. Virtue ethics is evidenced by considering the kind of scholar-practitioner they aspire to be, deontological ethics is applied by seeking to use editorial resources legally and transparently, and consequential ethics is demonstrated by evaluating the potential impact of their choices on their academic practice. Study participants' reliance on editorial tools while retaining agency and critical judgement demonstrates Lentz's core principle and reflects an internalized ethical framework developed largely through individual decision-making rather than institutional guidance.

However, the study also reveals a critical gap between theory and practice. The framework's emphasis on transparency and communication cannot be fully realized when study participants report widespread inconsistency in faculty guidance and policy clarity. Further, the description of GenAI providing social-emotional support alongside technical assistance suggests that ethical authorship in the online doctoral context encompasses aspects beyond those theorized by Lentz (2024). The ethical authorship frameworks must evolve to address not just the technological capabilities of AI tools, but also their relational dimension.

Pathways Toward Institutionalized Ethical Authorship

Our findings demonstrated that online professional practice/applied practice doctoral students engage in ethical reasoning about editorial tool use. To navigate complex ethical issues confidently, doctoral students require clear policies and training (ethical decision-making frameworks). Moving Lentz's (2024) ethical authorship principles from individual responsibility to institutional practices requires universities to scaffold the three-part ethical reflection process while recognizing that doctoral students cannot independently make ethical-authorship decisions. Guiding policies should:

1. Operationalize virtue ethics through scenario-based examples that help doctoral students develop ethical scholarship
2. Embed deontological ethics by implementing active, embedded ethical authorship training throughout doctoral

programs that clarifies legal and honest tool usage through concrete guidelines rather than abstract principles

3. Address consequential ethics by providing comprehensive faculty development to ensure consistent messaging about how editorial tool choices affect the academic community and their own scholarly development.
4. Recognize the social-cognitive dimension by intentionally designing community-building structures that address isolation while helping doctoral students distinguish between AI companionship and authentic scholarly support.
5. Cultivate resource literacy that helps doctoral students strategically navigate available editorial resources while maintaining the authorial agency and transparency that ethical authorship requires.

As AI tools become increasingly embedded in everyday devices, the window for proactive institutional response is narrowing. Doctoral education in the AI era demands that universities move beyond reactive policymaking toward thoughtful integration strategies that balance technological innovation and human judgment. Lentz's ethical authorship framework can provide the theoretical foundations for this work if institutions systematically commit to guiding doctoral students through the ethical complexities of GenAI-assisted writing.

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