

Faculty role in support of student scholarly dissemination

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ABSTRACT

Background: Academic universities across all countries hold faculty accountable to some degree for scholarship/dissemination, teaching, and research. In concert with these expectations, student-faculty scholarly collaborations present with challenges, barriers, opportunities, and benefits to and for both parties. Time requirements, student and faculty writing skills, communication of expectations, and ethical considerations for engagement and authorship are common themes noted in the literature.

Purpose: This paper's perspective explores the intricacies of the nurse faculty role in support of undergraduate and graduate nursing student scholarly writing with an emphasis on dissemination in peer-reviewed journals.

Findings: Nursing literature addresses the need for scholarly writing and dissemination around the following areas: general writing needs and academic requirements, strategies to advance student or faculty writing competence, nursing program specific challenges, institutional support, faculty productivity focused articles, writing for publication specific articles and student-faculty collaboration articles.

Conclusions: Scholarship collaboration in the form of student-faculty partnerships can be a rewarding experience. Faculty benefit from forming solid and often lasting relationships, and students benefit from mentorship and satisfaction of seeing their academic work as contributing to the science of nursing. When these opportunities are acknowledged and planned out with clear role expectations and guidelines in place, faculty gain additional experience in manuscript development and students gain solid writing skills that come from practice.

Key Words: Scholarly writing, Nursing students, Faculty-student collaboration

1. INTRODUCTION

It is well cited in the literature that academic universities across all countries hold faculty accountable to some degree for scholarship/dissemination, teaching, and research.^[1-4] While there may be other criteria that determine career progression and promotion (e.g., service), scholarship and dissemination are ongoing endeavors that are essential for tenure/tenured track faculty. Boyer's scholarship model is accepted across university disciplines as a model for interpreting and translating the complex meaning of scholarship

within faculty tracks and ranks.^[5] Boyer^[5] acknowledges that research, often called the scholarship of discovery, takes center stage in early career academic life, but the conversations about other forms of scholarship are crucial to fields in health care such as nursing. Nursing programs may hire instructors, clinical instructors, clinical professors, and DNP or PhD prepared professors with varying levels of expected knowledge advancement. In general, universities are beginning to recognize the value of scholarship of integration, scholarship of application, and scholarship of teaching and

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learning^[5] with some obligations of faculty to contribute to at least one of these areas based on their educational degrees and their clinical expertise. Each of these four domains serve a role in the field of nursing and offer faculty and students opportunities to contribute to the mission and vision of their colleges or universities.

The purpose of this paper is to explore the intricacies of the nurse faculty role in support of undergraduate and graduate nursing student scholarly writing with an emphasis on dissemination in peer-reviewed journals. An equity-infused mindedness lens was used in crafting the content for this paper by addressing the unique and common factors within each nursing program level: Baccalaureate of Science in Nursing (BSN), Master of Science in Nursing/Master of Nursing (MSN/MN), Doctor of Nursing Practice (DNP), and Doctor of Philosophy in Nursing (PhD). This equity lens explores the writing and research expectations of nursing programs, faculty/student opportunities for dissemination, barriers to faculty and student scholarly writing, ethical considerations, strategies used by nursing programs, and faculty and institutional support needed to promote the diversity of levels of scholarship. Thus, our discussion in this paper is focused on addressing the potential for inequity in student outcomes as there are multiple opportunities to develop faculty-student scholarly collaborations across all program levels. Colleges of nursing and faculty who focus solely on PhD publication opportunities miss valuable opportunities for students and faculty to engage in scholarship at other program levels.

2. SCHOLARLY COMMUNICATION EXPECTATIONS BY PROGRAM LEVEL

Scholarship expectations and writing skills vary amongst nursing programs. Nursing curriculums for each level of program (undergraduate and graduate) set the main outcomes and learning objectives. Nursing students gain writing skills through written assignments. Oral and written communication skills are honed through class or community presentations, poster presentations and research projects, or topic explorations into gaps in knowledge about nursing-related topics. Nursing faculty can assess student's writing or oral communication skills and to offer feedback, provide opportunities to remediate their assignments, and offer writing resource referrals to build strong and confident literacy skills.^[6,7] Yet, the facilitation of student scholarly writing is hindered by nursing programs that often do not have clear benchmarks for student scholarly writing. In addition, nursing curriculum designs may not include an intentional scaffolding of writing skills with the goal to learn through practice, and systematic guidance.

2.1 Undergraduate Nursing Students

There are several internal and external influences of scholarly communication within the BSN program level. One of the underlying assumptions for a BSN program is that at a minimum, nursing students will develop appropriate and effective levels of oral and written communication skills.^[6] The American Association of Colleges of Nursing (AACN) Essentials document describes Domain 4 (Scholarship for Nursing Discipline) as "(t)he generation, synthesis, translation, application, and dissemination of knowledge to improve health and transform health care"^[8] (p.10). Under Domain 4.1e, there is the explicit directive to participate in scholarly inquiry as a team member, and 4.1g notes that entry-level nursing students should communicate scholarly findings.

Scholarly writing development also requires development of gaining skills in conducting a literature search, critiquing, organizing, synthesizing, and then actually writing up the findings of their project or paper. Academic writing skills are the basic steps required for course assignments.^[9] Yet, writing skills can vary, especially at the undergraduate level in which students are required to only take an English and/or writing course. Writing becomes part of the nursing curriculum as a form of communication.^[6] Scholarly writing development requires student nurturing with consistent feedback from faculty along the journey.^[10] Scholarly writing takes on another meaning when one examines the complex tasks in the writing process of learning another writing style (for example: American Psychological Association [APA]) versus Modern Language Association (MLA in English courses). Students who do not speak English as a first language may need additional assistance from faculty to 1) find support services and 2) work closely on assignments in order to develop scholarly writing skills.

The larger question for this paper is the role of faculty in mentoring and nurturing BSN students in scholarly writing for publication or some other form of dissemination. Faculty mentorship of students is defined as providing guidance and direction in some defined area based on experiences or level of expertise with the purpose of supporting the student through a particular learning process. Mentorship is relationship based and seen as a process of guiding the personal development of an individual with lesser experience. Faculty therefore have an opportunity and a responsibility to serve as mentors to students to prepare them for the writing and dissemination/publication processes.

Faculty teaching at the BSN level may demonstrate varying degrees of competence in scholarly writing and APA formatting, thus adding to confusion for students as they write assignments across the curriculum.^[8] Efforts can be

made to hold writing workshops and to invite BSN faculty to participate on writing projects to improve skills that can be applied to teaching scholarly writing. Additionally, programs and projects that pair BSN students with faculty who have expertise in scholarly writing can provide an opportunity to explore research from conception to completion, manuscript preparation, and dissemination. These strategies would prepare students to develop the writing skills necessary to participate in the advancement of nursing practice and discipline as they assume a nursing career and provide the catalyst for future knowledge inquiry.^[9,11]

2.2 Graduate nursing students

Considering Boyer's model of scholarship,^[5] expectations vary considerably based on the nursing graduate program. Scholarship of discovery is generally the aim of PhD programs with a research focus. Scholarship of teaching, integration, or application may be a focus for MN/MSN and DNP programs. Expectations of faculty scholarship are influenced by the academic institution's mission, level of research involvement (i.e., research-intensive universities), faculty experiences with publishing, institutional support for faculty and students, and faculty mentorship of students. In considering the promotion of publication by faculty, barriers have been identified in the literature such as time, resources, and confidence.^[12] These same barriers exist for graduate nursing students who need to develop a plan for writing for publication.^[11]

The challenge for graduate nursing students is in receiving faculty mentorship^[1,13-16] and gaining writing skills.^[17-20] As we address scholarship through the lens of Boyer's model,^[5] we will explore the implications for MN/MSN, DNP, and PhD students. This section will discuss the unique competencies, expectations, and opportunities for graduate nursing students to develop skills in scholarly writing and dissemination of new knowledge across the programs.

2.3 Scholarly writing at the master's level

Master's programs (MN/MSN) may include nurse practitioner tracks, education, leadership, informatics, or a variety of specialty-focused areas. Master's-prepared nursing students generally have a final course that focuses on either the thesis or non-thesis or scholarly project route.^[20] Literature is sparse about MN/MSN students' dissemination of nursing knowledge and actual role in creating new knowledge through research. At the MN/MSN level, a thesis encapsulates the scholarship of discovery through research. The non-thesis or scholarly project serves as opportunities for scholarship of integration or application. Some universities may provide an option of either format where students and

their faculty chair or advisor make the selection based on professional and academic goals. Much is written across the program levels about scholarly writing and students' abilities to assess and use evidence-based knowledge in clinical practice; however, little is known about the overall value to the nursing profession of faculty mentorship with master's-prepared nursing students in writing for publication. Master's-prepared nurses are employed in a variety of settings. In the clinical or community setting, there are opportunities to identify a clinical problem and develop it into an academic project. If the results of the project lead to a change in policies or procedures that can impact patient care, patient or staff safety, or improved outcomes, then this scholarship of integration can be developed into a potential manuscript, poster presentation or conference presentation. While scholarly writing may be an expectation for a master's program, the effectiveness of program curriculum to foster knowledge, skills, and positive attitudes surrounding the writing process is not well-documented.^[19,20] Thus, having explicit program outcomes that speak to the AACN^[8] competencies for advanced practice about dissemination remains a challenge to all Master's in Nursing programs.

MN/MSN scholarly writing and research expectations

Master's-prepared nursing students are held to the standards and competencies as reflected in the AACN or other national guidelines that drive pedagogical frameworks for Master's programs with courses designed to acquire new skills and knowledge. Students often demonstrate synthesis of knowledge with written assignments. At the very least, master's-prepared nursing students may have a culminating project, thesis, or other scholarly evidence of program expectations and nursing specialization which can be opportunities to develop an expectation for scholarly dissemination or manuscript development. Kennedy et al.^[14] note in the International Academy of Nursing Editors (INANE) survey that PhD and DNP students were more likely to submit papers for publication than students in master's programs despite nearly similar sample sizes in all three programs. Expectations at the program level may not be clear and explicit to students and faculty with respect to dissemination. It would be inconceivable for a graduate nursing program to not hold students to certain writing standards such as ability to utilize appropriate search strategies, synthesis of evidence-based peer-reviewed research, formatting, and professional writing styles.

2.4 Doctoral programs

Doctoral programs may vary but generally aim to prepare students for either professional doctorates, such as the Doctor of Nursing Practice (DNP) degree, or research doctorates such

as the Philosophy of Science in Nursing degree. Research- and practice-focused doctoral program competencies and program outcomes emphasize the importance scholarly writing; however, many doctoral students and some faculty do not possess adequate writing skills to contribute to the generalizable or larger body of knowledge in the discipline, or faculty may have limited publication experience.^[7,21] Several challenges may exist in the attempt for doctoral students to share their knowledge through publication, including poor scholarly productivity and writing skills which were found to be minimal at the graduate level.^[21] This is congruent with Yancey's^[22] observation that a significant challenge exists in preparing nurse scientists. Conn et al.^[23] further remind us that even students with strong writing skills may still find it challenging to adjust to the style of writing required in a doctoral program.

Golde and Walker^[24] emphasized that the real focus of doctoral education is to "prepare stewards of the discipline" with the goal to "generate new knowledge. . . and responsibly transform those understandings through writing" (p. 5). It is also important to note that scholarly writing should go beyond the goal of submission to nursing journals; a genuine effort should be made to assist developing scholars who use their research knowledge to advance the nursing profession.^[22,25] In addition to these expectations, doctoral students also benefit from developing strategies such as time management and effective communication to help them improve their skills as nurse scholars.^[23]

Closely related to the issues surrounding the development of scholarly writing is the limited availability and support from experienced mentors. Hence, faculty who have strong research experience and mentored doctoral students needed to go beyond simply offering to help students develop their writing ability.^[23] Faculty follow-through was deemed a crucial component of successful students. This can imply active engagement of a faculty member in the editing, submission, revision, and overall scholarship process. Such mentors should provide authorship opportunities during the academic program and support mentees during the process. It is obvious that the deficiency noted in graduate writing proficiency skills and faculty support is a major concern and needs to be concurrently addressed in graduate nursing education programming going forward. Student adherence to the expectations of the doctoral academic program is critical.^[23] For example, some doctoral programs require that a student's writing is assessed early in the program. Based on the results of the writing assessment, faculty can identify interventions to help students improve their writing and communication skills during the program.

2.4.1 DNP Program

DNP student needs and expectations vary depending upon institution/program requirements and what the student brings with them as far as foundational skills and competencies. Scholarly writing skills can vary from well prepared to diminished skills for lack of use, to never learned skills.^[26] It is the responsibility of faculty to serve as role models and advisors and to welcome students into the scholarly community.^[27-29] In addition, DNP students and their potential scholarship can act as an incentive for moving clinical practice knowledge into clinical practice action.^[30]

The DNP project team faculty advisor or committee chair is in a pivotal position to guide students as they build from foundation to final project. Through multiple revisions, the mentor or chair provides feedback and direction and assures that the final written project aligns with the oral presentation. The advisor or chair may also help make connections to professional opportunities for grants, fellowships, and other possibilities to disseminate the project work, including presentations and publications.

DNP projects are good sources of new information, evidence, or best practice that can be vital to advancing or transforming health care. The information in DNP projects can address gaps in the translation of knowledge into practice, provide information for replication of results, and promote better patient outcomes. Moving an academic paper from meeting course and program requirements to a publishable manuscript takes time and effort, including attention to authorship.^[31] Faculty mentors with publication experience can ease the process of preparing a manuscript for submission by preparing the student with author guidelines and assisting with navigation through the revision process. Only faculty who provide extensive intellectual subject matter should serve as co-authors; otherwise, they can be acknowledged as contributors in the manuscript.^[32]

2.4.2 PhD Program

The Doctor of Philosophy (PhD) degree in a nursing program is intended to produce researchers that advance nursing science by adding new knowledge to the nursing discipline and disseminating that knowledge for nursing practice. Writing skills at the PhD student level must include scholarly scientific writing and the ability to communicate research findings to appropriate audiences. Many PhD graduates go on to tenure-track positions in academia, where writing is an essential benchmark for promotion. Others may become researchers in clinical or community organizations, where research study, grant development, and management are key, as well as disseminating results to organization personnel and to the nursing discipline at large. Scholarly scientific

writing skill development is a multifaceted process that over time which involves reading, reflective thinking, critique, writing practice, communication, and much interaction with faculty.^[33] Therefore, nursing faculty in a PhD program assume the responsibility to teach and mentor students in research skills, scholarly scientific writing for dissertation research projects, and dissemination of research results, mostly through podium or poster presentations and journal articles.

Skills needed for scholarly scientific writing include the ability to write clear, succinct statements about a topic area of interest for an audience, an introduction and background of the topic, a statement about the purpose for the paper, and a discussion, following a recognized reporting format and a goal to present detailed data facts, results, or proposals. Students may come to a PhD program with writing skills developed in another graduate program and recognize these elements in a scientific paper. However, when exposed to new ways of thinking and writing at a scientific level, a PhD student may need assistance to begin to write as a nurse scientist, moving from “no longer just a consumer of knowledge (novice/student) but. . . also becoming both a consumer and producer of knowledge (scholar/scientist)”^[34] p.39. Mentoring and faulty support in writing are imperative for success.

Course faculty use many methods to move students to the writing level required to be a nurse scientist. Students in a PhD program start to develop these skills by reading published materials and writing papers in courses that eventually lead to their own published work as a dissertation. Use of institutional graduate writing centers are often used where writing experts can work one-on-one with students to strengthen skills. Students can partner with faculty on a manuscript and learn the manuscript writing and submission process before they submit their own manuscripts based on their work. PhD programs may offer a structured manuscript writing workshop to include PhD students, junior faculty, and accomplished faculty scholars.^[35] Grant writing courses give students opportunities to learn how to be succinct in their writing while gaining skills in grant development. Better preparation for writing of poster and other forms of presentation come through faculty mentorship.

Within the last ten years, many colleges have introduced the baccalaureate to PhD programs, thus admitting qualified students without a prerequisite of a master’s degree.^[36] Although students may come to PhD programs with prior writing skills at the graduate student level, the addition of baccalaureate-to-PhD programs has added a need for increased resources and teaching strategies to bring undergraduate students to higher skilled writing levels. It has been noted that writing habits of today’s undergraduate students

are formed through the use of electronic devices for texting and emails and the use of social media.^[22] The use of Power-Point lectures, online videos, web-based exams, and a focus on the preparation of undergraduate nursing students to pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN®)^[22] in colleges has also reduced the need for writing skills and, therefore, a complete assessment of student’s ability to write. Often then, when undergraduate students are admitted to a doctoral program, they are unprepared for scholarly writing. This becomes a significant challenge for faculty in a PhD program.

To provide access to writing resources for students coming from diverse backgrounds and programs, some institutions offer a writing course designed to move students from baccalaureate writing levels to a graduate level. Other institutions may recommend an online writing course to provide students with necessary foundational writing skills. Beginning and foundational graduate courses may offer process writing: a method to write a paper in many drafts to allow for paper organization through outlines, drafting and revising, and editing.^[37] Peer review within courses can be enlightening. Other assistance can come from working with faculty writing teams: groups of faculty members who work with each other to critique and assist in the finalization of manuscripts. Using how-to articles that detail writing a literature review^[38] can be useful, especially when discussed in seminars. These approaches can help move the student to a professional and scientific level of writing necessary for the PhD work to become a nurse scientist.

3. FACULTY/STUDENT OPPORTUNITIES FOR DISSEMINATION

Mentorship is critical when faculty are engaged with students in the dissemination process.^[32] The purpose of nursing articles should be the introduction of new information to the nursing field.^[39] At the BSN level, there is not an explicit directive to engage in scholarly dissemination in the form of manuscript development or other forms of dissemination. However, some universities offer an Honor’s College pathway for nursing students with the expectation that students engage in original research with a potential opportunity to submit for publication. In addition, some BSN courses may require posterior video presentations of assignment content to peers and faculty, as well as stakeholders in the community as a means for scholarly inquiry, communication, and dissemination.

In graduate programs, faculty support and guide students in the manuscript publication process.^[32] Faculty with publication expertise are critical to any publication process and often

have the ability to see potential avenues for dissemination A capstone project, for example, could be converted to written format based on a journal article requirement for dissemination.^[40] Student written assignments for their coursework could be considered for dissemination. For this to be possible, revisions to the scholarly writing would need to be made to fit the journal requirements and standards. The manuscript would need to be written in a way that is of interest to the general nursing field and not just their nursing faculty. The use of headings, page restrictions, and absence of a cover page are a few adjustments that students would need to make for a manuscript submission for dissemination.^[39]

3.1 Barriers to Faculty and Student Scholarly Writing

Scholarly writing and dissemination are essential components to nursing science. Dissemination of insights, new knowledge, and research to the broader profession is essential to advancing the nursing practice.^[22, 41, 42] A survey suggested that new college graduates lack proficiency with writing, critical thinking, and an ability to adequately analyze data. These skills are critical to nursing scholars^[22] as they learn to write for dissemination. There are several barriers to scholarly writing and dissemination for students. One such barrier is deficiency in knowledge regarding scholarly writing techniques. To be proficient at writing, a student must have a solid foundation to build upon. Regardless of the academic level (bachelor's, master's, or doctorate), writing experiences and abilities are unique to each individual who may require various levels of support to promote successful writing. Errors in writing can be classified as being writing mechanics, style, and format. The writing format most often used in nursing journals and in academia is APA style. Learning to write in APA format can be challenging to a student who has been used to a more informal style. Errors abound from deficiencies with grammar and verb usage, and lack of understanding about citations, reference lists, and the use of headings. The use of jargon, slang, or writing anecdotally are a second area of deficiency. Lastly, faculty who have little expertise with dissemination may not be skilled in APA format or require it in student coursework, and therefore are unable to help students with scholarly writing.^[7] Then again, journals may require formatting using other writing styles.

Another barrier to scholarly writing for both faculty and students is minimal support. Minimal support can present itself in many ways such as insufficient mentors or role models to support scholarly writing, insufficient support from work institutions, and time restraints dedicated to scholarly articles. Time is a limited resource and can be presented as personal factors, credit workload, and work-life balance for faculty and students.^[22, 43] There is an equity component in that all

students will require faculty time; however, not all time will be equal in amount based on institutional support.

3.2 Structured Opportunities for Collaboration

Structured opportunities can range from explicit course or program outcomes for students to publish or disseminate, to expectations of faculty benchmarks for promotion or annual review to explicitly engage in student-faculty scholarship endeavors. Student-faculty writing partnerships provide opportunities for students to collaborate with faculty who are experienced in the publication process and reduce student anxieties or fears of journal rejection.^[44] Such partnerships need to be nurtured and encouraged in all programs at all levels. For example, student-faculty writing partnerships at the baccalaureate level create positive and perhaps long-lasting relationships that may foster a desire and enthusiasm to continue with scholarly endeavors or even pursuit of an advanced degree.^[44] Faculty with expertise in scholarly writing and dissemination could offer to review potential student work that might be suitable for publication and assist with development of a written product as a way to foster that enthusiasm and also support faculty with fewer writing skills. Research is needed to examine if structured opportunities can be developed at the institutional or program level and what outcomes would result from explicit support for structured opportunities.

4. SUPPORT LEVELS

4.1 Student-Faculty Support

What role does the faculty play in supporting students and building their capacity for scholarly writing? How does this vary between undergraduate, master's, DNP, and PhD students? How closely do faculty work with students on their projects? Are faculty expected to be as involved in the writing phases such as copy-editing student writing, or should faculty use a more hands-off approach? Challenging questions such as these are often answered based on faculty experience or institutional support, yet formalized processes may not exist nor be clearly explicated in the literature.

Measuring faculty roles and student writing capacity building is not always formalized or explicit, but certainly may be incorporated into nursing programs' curriculum as a formalized expectation using AACN Essentials as the foundational guideline. The amount of time working with students is one variable that competes with faculty job responsibilities. The question of guiding students with clear timeline expectations or using structured or free-range styles of engagement is a personal choice and may vary based on past successes with faculty mentorship styles. Maintaining a consistent approach is encouraged by using structured contracts and role

expectations for both faculty and student. Formalizing the process can come in the form of faculty champions who are recognized as proficient experts in working with students, in faculty development opportunities by nursing programs, and in explicit faculty role expectations for varying levels of student-faculty scholarship support. Undergraduate and graduate student scholarly dissemination expectations should be grounded in curriculum design and program outcomes. Opportunities for student scholarship should be afforded to all students even if time is the variable-limiting factor that impacts both faculty and students. Local, state, or national conference presentations as well as structured, formalized manuscript development are other forms of student-faculty collaborative opportunities.

4.2 Institutional Support

Nurse scholars acknowledge scientific knowledge as a key element to expand the discipline. Faculty recognize that to support successful scholarship, a healthy work environment that values collaboration is essential. An environment that capitalizes on collective expertise to advance research or translation of research maximizes human capital for optimal outcomes. Faculty identify conflicting obligations as barriers to engaging in student scholarly work, including appointment workloads, personal research, and scholarship obligations for promotion.^[45,46]

With institutional support to reduce time constraints in these areas and resources such as writing workshops, barriers may be lifted, leading to a win-win-situation where all parties benefit. This becomes a circular process where the institution provides writing support and mentoring, and from this an increase in manuscripts, student acceptance into graduate programs and fellowships, and grant funding may be appreciated. Faculty, who benefit from institutional support, tend to achieve promotion faster than non-supported faculty.^[45] Institutional support mechanisms and structured strategies or initiatives contribute to a collaborative research/scholarly engagement environment, including a culture of teamwork based on mutual respect and success.^[2,47-50]

Additional institutional considerations include clear articulation of how research and dissemination align with mission, vision, and a strategic plan, clear expectations for faculty and students engaged in scholarship with regular review, and clarification of goals as faculty are promoted and students move forward in their education. For faculty, this includes expectations tied to promotion, and for students, this includes academic expectations tied to program progression, graduation, and professional engagement beyond graduation. Institutions need to manage available resources as good stewards and request measurable outcomes and metrics aligned

with scholarly work and clear evaluation standards. Faculty workload review is essential to leveraging faculty expertise and capacity. Also, there should be consideration of work with teaching assistants or research assistants with the team expanding research opportunities.

Institutions may need to provide tuition waivers and stipends to support research or project endeavors, library, writing support,^[48-50] and support for all students to have opportunities to participate, not just honors students, seniors, or graduate students. Institutions may need to develop concerted efforts to review budgets for infrastructure and space needs such as office supplies, computers, software, and long-term operational and maintenance costs. Finally, travel funding for professional development, training, presentation of scholarship and research, and networking needs to be factored into long-term planning. These considerations are closely aligned with academic freedom and ensuring a system is in place to support success in the development of student-centered nursing practice topics that are richly needed to advance the profession and provide an academic background for nursing students to be engaged in translational work with faculty as mentors.

5. NEXT STEPS

5.1 Authorship Considerations

Faculty and students discussing ethical considerations centered on authorship and contributorship, particularly faculty, student, and team-based scholarly writing, is crucial and can help with attributing appropriate author credit.^[7] This can also help to prevent authorship disputes; delays in submissions, manuscript revisions, resubmissions, and publications; or missed opportunities to communicate findings or engage in dissemination on improving health and transforming health care. Ethical considerations include student and faculty behavior in authorship practices, being a responsive/unresponsive author,^[51] quantity and quality of authorship,^[52,53] recognition of authorship contributor roles and accountability in the context of collaborative contribution,^[54] and order of authorship. It is not the journal editors' responsibility to sort out or handle authorship disputes.^[51]

One common problem includes professional behavior from students such as only seeking manuscript submission confirmation to meet a course assignment with no intention of completing the manuscript revision process.^[14] The time and resources involved in the editorial and peer review process can be extensive and may impact the review process of other authors. Another professional behavior problem is unethical authorship practices such as faculty expecting students to list them as a co-author despite not meeting authorship criteria.^[14] According to the American Academy of Nursing

Board of Directors, “Those in a position of power must respect the autonomy of others. An example of a breach of this principle would be abuse of power for personal gain, such as a faculty member requiring inappropriate authorship of student papers”^[55] (p.1). One of the key authorship criteria

is that faculty who are listed as authors would need to have made a significant contribution to writing or critically revising the paper.^[15,53] Early communication is key, and there are credible resources to aid communication (see Table 1).

Table 1. Authorship Resources

Source		Link
Type		
Contract agreements & worksheets	American Psychological Association	https://www.apa.org/science/about/psa/2015/determining-authorship
Contributor roles taxonomy	Brand et al. (2015)	https://onlinelibrary.wiley.com/doi/pdf/10.1087/20150211
Equal authorship contributions	National Library of Medicine	https://www.nlm.nih.gov/pubs/techbull/so17/so17_contrib_equal_author_pubmed.html
Authorship criteria	ICMJE (2021)	http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html
Predatory journals	Broome et al. (2021)	https://sigmapubs.onlinelibrary.wiley.com/doi/abs/10.1111/jnu.12696

In general, colleges and universities often have policies regarding students being first authors, in cases of student-led research and scholarly projects that meet program of study expectations. Other opportunities for authorship and contributorship include, for example, students collaborating with faculty on their research or scholarship or students inviting faculty on scholarly dissemination that is not required in their programs of study. Faculty and students need to build opportunities to engage in communication about authorship and contributorship as a part of professional development in team science. Authors should refer to the journal specific guidelines pertaining to guidance about equal authors and policies on the process, if any, and to convey clearly to the journal editors about equal authors, if applicable. Equal author contributions are not searchable in the PubMed database,^[51] and other researchers and scholars raise a similar library issue for other credible databases.^[56] Further guidance is needed to determine if or when it is proper, depending on the context, to consider equal contributions in student-faculty scholarly dissemination.

Faculty and students should consider an intentional strategy to prevent authorship disputes and unethical authorship practices. Faculty engaging in open discussions and having written agreements with students early on and routinely revisiting those agreements may be a helpful intentional strategy.^[15,57,58] Because authorship does not communicate what kinds of contributions were made by an individual to be an author,^[52] negotiating through open discussions and a written agreement can facilitate transparency of expectations from a faculty mentor and student in scholarly writing

and promote shared decision-making about dissemination. Resources include authorship agreement, authorship determination scorecard, authorship tie-breaker scorecard, and a publication contract. An authorship agreement is “a contract stating authorship order and includes brief descriptions of author contributions”^[57] (para 30). An authorship determination scorecard worksheet is used “to determine a numeric value for each author’s contribution”^[57] (para 3). An authorship tie-breaker scorecard worksheet is used to determine a numeric value for other authorship contributions that results in a tie.^[57] A publication contract would outline author roles in submitting a paper for publication.^[57] There are journals that request and publish information on contributions made by each author.

Another ethical consideration is the process of selecting a journal for submission. In recent years, attention has been drawn to predatory journals and the potential for predatory journals, or journals with “minimal publishing standards and unethical business practices. . . ,” to have a negative impact on scholarly dissemination^[59] (p.747). Academic librarians provide a resource to determine the suitability of journals to avoid either costly publication fees, or other pitfalls inherent in these journals.

5.2 Rejection and Resubmission

At what point does the faculty stop being a student’s faculty and mentor? For example, if a student completes their thesis, project, or dissertation, graduates from their nursing program, and then proceeds to submit manuscripts for publication, is the faculty expected to still be involved at this point? Are faculty responsible for coaching them through the manuscript

publication process—revising, resubmitting, and facing rejection? These are ongoing questions that may not have easy answers but, if communicated early in the student-faculty scholarship relationship, can be addressed.

One area that often concerns students is manuscript rejection. Manuscript rejection has been identified by published authors as part of the process or a bump in the road, certainly not an indicator of failure in scholarly writing. Faculty preparation of student authors for manuscript submission should include discussion about the disappointment of rejection, and how to work through this to use it as a launching pad for future acceptance. Reasons noted in editor comments are opportunities to improve writing, and with some effort an initially rejected manuscript can be reworked and resubmitted elsewhere and accepted for publication. It will be important to include discussion about how the manuscript fills a gap in the current literature or how the writing offers a new perspective on the topic. Reviewer comments should be closely examined with a faculty mentor who can provide further support and direction to revise and refine the document.

Scholarship collaboration becomes complicated when students in any program fail to submit works such as research that is part of a thesis or dissertation or scholarly project. When students, who may now have exited their program with a degree, do not engage with their faculty or committee members to move their work from the program requirement format to a manuscript format, then there is a missed opportunity for contributing to the science of nursing. Scholarly

writing can evolve over time, and early planning and understanding is needed to distinguish between writing to meet program expectations and to meet publication reporting standards.

6. CONCLUSION

Scholarship collaboration in the form of student-faculty partnerships can be a rewarding experience for both parties. This paper presents common themes, barriers, and opportunities for student-faculty partnerships by addressing the topic from the student-faculty perspective within each nursing program level. Faculty benefit from forming solid and often lasting relationships, and students benefit from mentorship and the satisfaction of seeing their academic work contribute to the science of nursing. When these opportunities are acknowledged and planned out with clear role expectations and guidelines in place, faculty gain additional experience in manuscript development, mentorship, and teamwork, and students gain solid writing skills that come from practice. Students also feel a sense of pride that their work and contributions to the nursing profession, patient care, or clinical practice is worthy of sharing with nurses and the health care community. This sense of pride also translates into a stronger scholarly writing self-efficacy process with potential for future scholarly contributions.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest.

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