

Scholarly writing

Effects of a programme to advance scholarly writing

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DNP faculty may not themselves be prepared to mentor students for doctoral-level writing

SUMMARY

Background: Scholarly writing, although central to the completion of doctoral studies, is often not supported by systematic teaching/learning approaches that specifically help students to convey scholarship through writing. The purpose of this project was to promote writing as an essential component of scholarship, provide opportunities for students to develop a self-awareness of confidence in writing and challenges to writing, and to improve writing competence.

Methods: An innovative set of peer-supported interventions was embedded within a core foundational course in a Doctor of

Nursing Practice (DNP) programme during the first academic semester as part of a continuing quality improvement process to improve DNP student writing. The first curriculum innovation was a substantive writing assignment, in which students exchanged papers with a classmate and were required to critique both writing conventions (e.g. criteria such as punctuation and citation) and structural and thesis-driven aspects of writing (e.g. criteria such as clarity, organisation and the use of paragraph leading sentences). Students then read their papers aloud, without hesitation while reading, in order to identify any discrepancies between the written words and

the audible 'plain language' that would be necessary to enhance clarity. The second innovation was an optional writing workshop in which students received coaching from interdisciplinary mentors and from their peers. Results: Evaluation of the implementation of this innovation suggests that mentorship, peer support and the use of commonly spoken language may be useful tools for improving the writing competencies of DNP students.

Discussion: Students with broad diversity in writing competency, including low levels of proficiency, benefitted from a writingenriched curriculum given at the start of the course of study.

INTRODUCTION

lear and effective communication, especially in the form of scholarly writing, is a fundamental competency for nursing scholars who seek to advance the profession. This is particularly true for Doctor of Nursing Practice (DNP) students who will serve as clinical leaders and educators of the nursing workforce (Box 1)

Students arrive in graduate education programmes with a wide range of writing competencies. These students may also be challenged by a gap in time from their last academic or scholarly writing experience. Scholarly writing, although central to the completion of the DNP degree, is often not supported by systematic teaching or learning approaches that specifically help students to convey scholarship through writing. In addition, DNP faculty members may not themselves be prepared to mentor students for doctoral-level writing.

The purpose of this project was to promote writing as an essential component of scholarship, provide opportunities for students to develop a self-awareness of writing confidence and writing challenges, and to improve writing competence. In order to do this, we provided opportunities for students to improve these skills. In this paper, we present the results of a curriculum evaluation that was conducted following the completion of the course by 18 DNP students.

METHODS

A writing-enriched curriculum, including an intraprofessional writing review (with nursing classmate peers) and interprofessional mentorship (with individuals from various academic disciplines), was developed in spring 2016 with support from the university's writing resource centre. The curriculum was embedded within a core foundational course in the DNP

Box 1. Doctor of Nursing Practice (DNP): educational pathways and workforce roles

The DNP is designed for nurses seeking a terminal degree in nursing practice, and offers an alternative to research-focused doctoral programmes. DNP curricula build on traditional master's programmes by providing education in evidence-based practice, quality improvement and systems leadership. The DNP is emerging as the entry-into-practice requirement in the USA for nurses who serve as advanced practice registered nurses (APRNs), including Nurse Practitioners, Clinical Nurse Specialists, Certified Nurse-Midwives and Certified Registered Nurse Anesthetists. Source: http://www.aacnnursing.org/News-Information/Fact-Sheets/DNP-Fact-Sheet

programme at a university school of nursing (SON) during the first academic semester of 2016. The peer-supported interventions were chosen from among many writing improvement strategies described in the literature because of easy implementation, even by faculty members who lacked confidence in providing traditional writing instruction.²⁻⁴

Instruments

Two instruments were developed for the evaluation of the intervention. The first instrument was a scoring rubric that was designed to measure student writing competency. The rubric consisted of a five-point scale (ranging from 'needs improvement' to 'proficient') that evaluated each of five components of writing: clarity, organisation/ logic, thesis development, readability and citation/reference formatting. The scoring rubric was applied before and after the writing intervention.

The second instrument was an end-of-course qualtrics® survey developed for dissemination to the students to gather writing self-awareness data. The survey consisted of six inquiry items (five items, each formatted on a Likert-like scale scored from 1 to 5 points, with one open-ended short answer) plus course evaluation items. Inquiry items evaluated student awareness of writing as a component of scholarship, and a self-awareness of writing confidence and challenges.

Innovations

Two writing assignments were developed in conjunction with faculty members at the university's writing centre, using established writing coaching methods. 5-9 The first intervention (intraprofessional peer review) was a required and graded component of a substantive writing assignment. For this assignment, all enrolled students (n = 18) exchanged papers with a classmate and were given 1 week to critique both writing conventions (punctuation and citations) and structural and thesis-driven aspects of the writing (clarity, organisation and the use of paragraph leading sentences) using the 'new comment' and 'track change' features of Microsoft Word. This assignment culminated in a 'read aloud' activity, where original papers were returned and comments reviewed. Authors were then challenged to read a section of their own original writing aloud, without hesitations while reading, in order to identify discrepancies between the written words and the audible 'plain language' that would be necessary to enhance the clarity.

The second intervention (intraprofessional peer mentorship) was an optional workshop that was timed to occur after class during a scheduled oncampus day of the hybrid programme, and several days before a high-stakes written assignment was due. Four student tutors from the writing centre provided 2 hours of mentor-guided group learning in the SON. Fifteen of the

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writingenriched
course

18 enrolled students chose to participate in this optional mentorship opportunity. These 15 students were divided into groups of three or four. During the group session, students successively received a block of uninterrupted time with the tutor to discuss their draft written assignment. Other students were invited to listen to the session but were not permitted to interrupt.

RESULTS

The design, implementation and evaluation of the writing-enriched curriculum received exempt status from the institutional ethics board because the processes were part of continuing educational quality improvement activities. Publication of de-identified data, including anonymised comments, are included

in that exemption, in compliance with university policy.

The intervention was evaluated by comparing nine randomly selected paired versions of a writing assignment. A draft version and a final version were scored according to the rubric by an outside evaluator, who was blinded to whether the author had participated in any mentorship activity of any type or to any degree. In this case, all students had participated in mandatory peer review and had access to a variety of university-based writing support resources. Five students had additionally taken advantage of the optional interprofessional peer mentorship writing workshop.

Writing competence

The rubric used in the beforeand-after comparisons offered 25 possible points across the five writing dimensions. The lowest pre-intervention score achieved was 11.5, with a highest score of 19.5; an average of 3.16-3.55 per dimension, which was labelled as 'developing, but sufficient' on the scoring rubric. Two papers were assigned a rating of 4 on the rubric in two of the five scoring categories, but no paper was assigned a level 5 ('proficient') on any individual category or as an overall score.

Post-intervention scores achieved were 12.5 (lowest) to 23.5 (highest), with averages ranging from 3.52 to 3.88 across the five dimensions of the rubric (Table 1). A consistent pattern of score improvement across the five scoring categories was noted for

Table 1. Scores assigned according to rubric prior to and following interventions
to improve writing skills

Student	Pre*	Final**	Pre	Final	Pre	Final	Pre	Final	Pre	Final	Pre	Final	Increase in score		
		1		2		3		4		5	Tot	al			
No mentor intervention															
A1	3.5	4	3	4	3.5	4	3.5	3.5	3.5	4	17	19.5	2.5		
A2	3.5	3.5	3	3.5	3	3.5	3.5	3.5	3	3	16	17	1		
A3	3.5	3.5	3.5	3.5	3	3.5	3	3	3	3	16	16.5	0.5		
A4	2	2	2	2	2	2	2	3	3.5	3.5	11.5	12.5	1		
											Average increase 1.25				
Received mentorship															
B1	3	4	3	4.5	3	4	2	4.5	3.5	4.5	14.5	21.5	7		
B2	3.5	4.5	3	4.5	3	4	4	4.5	4	5	17.5	23.5	6		
В3	3.5	4	3.5	4	3.5	4	4	4.5	4	4.5	19.5	21	1.5		
B4	3.5	4	3.5	4	3.5	4	3.5	4	4.5	4.5	18.5	20.5	2		
B5	3.5	4	3.5	4.5	3.5	4.5	3	3.5	3	3	16.5	19.5	3		
Average score (nine students)	3.27	3.72	3.11	3.83	3.11	3.72	3.16	3.77	3.55	3.88	16.33	19.1			

Average increase 3.0

^{*}Score assigned according to rubric on first version of the written paper.

^{**}Score assigned according to rubric on final version of the written paper submitted following completion of all required and optional interventions.

all but one of the nine paired papers, written by a student in the group who did not participate in the optional interprofessional intervention. The overall increase in scores among the group of four students who had not participated averaged 1.25 points. In contrast, the group of five students who had taken advantage of the additional opportunity for interprofessional mentorship demonstrated an increase of 3.9 points in the overall score.

Writing as an essential component of scholarship

Two end-of-course survey questions addressed the degree to which students associated writing proficiency with successful scholarship. Nine students reported perceiving writing as only moderately important in nursing scholarship prior to course enrollment (mean 4.3). Students uniformly perceived writing as highly important to scholarship at the end of the writing-enriched course (mean 4.9).

Self-awareness of writing confidence and writing challenges

Two end-of-course survey questions addressed writing self-awareness. Thirteen students reported their writing as insufficient for academic success prior to course enrollment (mean 3.4). Students overall reported an improvement towards writing sufficiency during the writing-enriched course (mean 4.2). Students were also asked to describe personal writing challenges, identified during the course, in response to an open-ended question (Box 2).

DISCUSSION

Writing competency scores reflected only a modest improvement; nevertheless, we believe that the development of student writing self-awareness is an indicator of programme success.

Box 2. Student, faculty member and tutor reflections on issues encountered in the writing process

Students

- Making sure my content is clear, with good leading sentences and transitions.
- My challenge is brainstorming and getting started.
- To find a way to convey the point without making it personal less 'my' and 'I'.
- If I don't know the material, it's obvious in my writing that I don't understand it.

Faculty members

- Students can't write.
- How did they get through the masters' programme?

Student tutors

- Some of the students put down their writing before I even looked at their work. I clarified that there's no shame in mistakes; mistakes help us improve.
- It was an excellent experience. I'd be delighted to have the opportunity again.
- I noticed that many of them had errors of a similar nature, so as they listened to the first one or two students being tutored, they started to make corrections to their own papers.
- The most common writing challenge that I encountered were transitions between ideas in a paragraph. The students seemed to jump from one idea to next in some paragraphs rather than adhering to a smooth flow. While the style of writing was not entirely abrupt, I do think that transition sentences were a big point that we worked on and which positively influenced the paper in a holistic way.

Our enriched writing curriculum provided an opportunity for students to explore and improve their writing performance, to increase writing self-confidence and to develop strategies that can be used by individuals for improving written documents over their professional lifetime. ¹⁰ Importantly, students developed writing self-awareness, and grew to better appreciate the value of effective writing in promoting clinical scholarship.

The anecdotal comments received from DNP students expressed a favourable endorsement for essentially all of the elements of the programme. The workshop format of small student groups, with one student coached in the presence of others who remained silent, received particularly favourable remarks. These

comments, and the students' participation in optional workshops, suggests that they are interested in improving their writing competencies. Anecdotal comments from DNP tutors and faculty members were also positive regarding the added value of the small group workshops and perceptions of improvements in writing competence (Box 2).

We found that well-structured class assignments and clear rubrics to support writing expectations, supported by the peer review intervention, were foundational to the writing-enriched DNP curriculum. We believe that 'read aloud' and the encouragement to use commonly spoken words and phrases (naturally spoken language) were also perceived as achievable, and

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Interprofessional student mentors can play an important role in fostering DNP student competency and confidence in writing

thereby embraced by both faculty members and students.

Limitations

The findings of this quality improvement project suggest that mentorship, peer support and the use of commonly spoken language may be useful tools for improving writing competencies in DNP students; however, the findings cannot be generalised beyond this small sample.

Project leaders could not control for the many self-sought writing resources and sources of support used by students, including any independent use of the tutors from the writing centre, viewing open-access internet tutorials and purchasing papers.

CONCLUSIONS

Interprofessional student mentors can play an important role in fostering DNP student competency and confidence in writing and can provide feedback to faculty members for syllabi enhancements to support writing outcomes. DNP students with broad diversity in writing competency, including low levels of proficiency, can benefit from a writing-enriched curriculum offered within a core first-year course. Peer-supported interventions can also be leveraged to support improvement in scholarly writing among faculty members, as some faculty members may lack confidence in providing traditional writing instruction.

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