Measuring Writing Across the Curriculum in Nursing Education: The Role and Support of Learning to Write by Writing

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ABSTRACT

Multiple push and pull factors exert themselves on the planning, organization, and assessment of writing assignments across undergraduate nursing curricula. Such factors may lead to a lack of faculty awareness around the role, type, length, and evaluation of writing tasks. This report discusses one institution's efforts to understand Writing Across the Curriculum. Researchers analysed syllabi's written work requirements for all courses, classifying tasks by type, required length, relative difficulty, grade weight, and characterization by Bloom's Taxonomy level. Findings revealed unanticipated volumes and variance of writing genres and a largely scaffolded curriculum, despite lack of direct, top-down pre-planning. Reflection on the process uncovered what the authors term "Learning to Write by Writing" (LWW), an overarching descriptor not encompassed by Writing Across the Curriculum (WAC), Writing to Learn (WTL), or Writing in the Discipline (WID), and the critical role of Writing Centres in supporting LWW among faculty.

Background

> *We have way too much writing in our curriculum. Sometimes I wonder why I'm working so hard to grade these long academic papers when after graduation our students won't be doing this kind of writing anyway.*
>
> *Our students would benefit from more scholarly writing assignments. Aren't we supposed to be preparing them to write so they have the option of graduate studies in the future?*
>
> *Writing helps develop critical thinking in nurses. If anything, we need to add more writing assignments to our curriculum.*
>
> *I think our writing assignments are weighted too heavily towards academic issues like APA referencing guidelines. Is that really important in the long run?*
>
> *Do we actually* know *how much writing there is in our curriculum? Has anyone actually ever added the amount of writing up?*

Comments such as the above, presented here as composite paraphrases of ongoing discussions in the authors' institutional committees, may be familiar to nurse educators everywhere. While the issues may be easily recognizable to nursing faculty, achieving consensus on them is not. A wide divergence of opinion is typical on issues such as: the amount of writing that should be required for undergraduates; the types of writing tasks nursing students should be asked to do; the relative difficulty and importance of each type; and the weight of writing assignments relative to other graded components of nursing courses.

The authors of this study, while in discussion with the curriculum committee and while negotiating the divergence of opinion on writing amounts, types, and importance, realized a crucial preliminary step had been overlooked: we did not *know* how much writing there was in our undergraduate nursing curriculum. Without actual data on amounts, types, difficulty, and relative weight of writing assignments, how could we productively discuss what *ought* to be asked of our students? This article describes the process of how one institution, through a deliberate and measured process of data collection and analysis, examined the place of writing in its own undergraduate nursing curriculum.

Writing and the Nursing Profession

Scholarly, academic writing is an important skill for nurses as it is central to their work as clinicians, leaders, advocates, scholars, and educators, among other roles. Nursing professionals use written communication to document patient care (Jefferies et al., 2010), create patient educational materials (Mayer & Villaire, 2009), communicate effectively with other healthcare professionals who may not be directly involved in a patient's care, for legal and credentialing purposes (American Nurses Association [ANA], 2010), and to prepare manuscripts for publication (Oermann, 2023).

The need for nursing professionals to write, then, would naturally find its way back into the undergraduate nursing curriculum which prepares them for professional practice. Writing is widely affirmed to be an important element of undergraduate nursing curricula (Hawks et al., 2016) for several compelling reasons. First, writing is understood to be a means of teaching critical thinking skills (Naber & Wyatt, 2014) and to deepen understanding of nursing course content (Oermann, 2023). Second, scholarly writing supports clinical practice to ensure clear concise communication of patient care and treatment is documented (Jefferies et al., 2018). Clear documentation improves patient outcomes but also protects nurses (Jefferies et al., 2010). Third, reflective practice, an important professional skill for nurses, is also supported by writing: reflective writing has been shown to help students understand negative or challenging experiences, create self-awareness, and increase students' self-esteem (Bjerkvik & Hilli, 2019). Furthermore, nursing students need strong writing and communication skills to advance in the nursing profession. Therefore, writing for the purpose of advocacy, research, and representation are key reasons for embedding academic literacy and writing skills in the curriculum (Garvey et al., 2023; Hawks et al., 2016).

As an overall observation on the role of writing in nursing curriculum, Jefferies et al. (2010) assert:

> Written communication provides a much wider platform for the storage of knowledge because the work of memory and conservation is inherent in the written word. It provides nursing with a much greater repository of knowledge and enables the nurse to consider a far greater number of options when making a decision about the patient's condition or their care. (p. 213)

Despite its acknowledged importance in nursing practice, the implementation of writing in the undergraduate nursing curriculum is not always straightforward.

Push and Pull Factors on Writing in the Nursing Curriculum

Institutional policy in this study's setting supports the notion of Writing Across the Curriculum. However, the "policy" is limited to a single paragraph in the academic calendar and provides only vague guidance to instructors or students.

> The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where "substantial" amounts of writing in courses, and instructors "where appropriate", "can" and "should" utilize writing as "a factor" in the assessment of student work. Benchmarking of writing standards is equally ill-defined: students' writing abilities are expected to be "far above" those which they possessed at the commencement of their program of study.

In the absence of clearly delineated policy or demonstrable benchmarking, instructors may look to a variety of sources to interpret how writing "can" and "should" be implemented in assessing student work. Faculty may turn, for example, to: writing assignments in previous course syllabi, writing requirements from other institutions, lists of writing requirements in professional competency frameworks, personal beliefs about the efficacy of writing for student learning, student feedback on previous writing assignments, their like or dislike of grading written work, advice and guidance of trusted colleagues, what they themselves experienced as writing assignments when they were students, and many other sources. The typical lack of a clear model or framework for writing instruction within the nursing curriculum (Hawks et al., 2016) does little to provide clarity.

Research literature on the teaching of writing in the nursing curriculum is often classified under three streams: Writing Across the Curriculum (WAC), Writing to Learn (WTL), and Writing in the Disciplines (WID) (Troxler et al., 2011). WAC in postsecondary education arose from a belief that the teaching and evaluation of writing was not the sole responsibility of a language department per se, but a duty of instructors in all subject areas (Luthy et al., 2009). WTL refers to the practice of bringing freewriting, journaling, and similar reflective writing practices to other fields of study, to facilitate student reflection and learning (Melzer, 2014). WID focuses on preparing students to write for the discourse communities of their specific discipline (Bazerman & Paradis, 1991). The paraphrased comments in the introduction reflect elements of all three perspectives. A nurse educator who perceives their role primarily as preparing undergraduates for future clinical practice may de-emphasize WID scholarly papers, focusing more on WTL reflections on clinical experiences. In contrast, instructors of particular content areas, such as nursing theory, may structure course writing assignments with a clear WID focus. As will be discussed later, the researchers observed a form of writing instruction in our curriculum not completely encapsulated by any of these three classifications and so propose an umbrella descriptor: Learning to Write by Writing (LWW).

Another pull may be a "hidden curricula" at work in undergraduate nursing education, where the humanistic orientation of the nursing profession may indirectly discourage the use of the seemingly more "objective" focus of technical academic writing (Ahmed & El Hassan, 2023). This tension in nursing curricula between the "biomedical driven objectivism in academic writing" and the explicitly taught "relational, emotional, aesthetic values, and ways of knowing" may then be experienced by students, who learn implicitly from the hidden curriculum the "privileging of the biomedical-technical over the relational-holistic" (Mitchell et al., 2021, p. 2). However, shying away from academic writing, including its use of biomedical language and technical aspects of writing, may actually hamper nursing identity formation (Mitchell et al., 2020). A nursing instructor preparing writing tasks to assess students' learning will likely experience, consciously or unconsciously, this tension.

Setting of this Study

Our undergraduate, English-medium nursing program occurs in a Canadian transnational branch campus in a Gulf Cooperation Council nation. The institution offers a single faculty four-year Bachelor of Nursing (BN) program. Curriculum design, development, and implementation in undergraduate nursing education is context specific, and requires adaptive responses to the social, environmental, health, educational and professional entities it serves (Jager et al., 2020). This illustrates the underrecognized and incredible complexity of the registered nurse role and the depth and breadth of disciplinary knowledge required to prepare students for it. Benner et al. (2010) speak of nursing as a hybrid of many central attributes of other professions, highlighting the complex and multifaceted nature of nursing as a discipline. As such, nursing education and practice must embrace and advocate for transformative approaches that recognize the holistic nature of patient care, the integration of theory and practice, and the importance of interdisciplinary collaboration to align with rapid changes in practice.

Our nursing program is comprised of students (majority female) who are mostly ELL with numerous mother tongues (including Tagalog, Malayalam, Arabic, and others) who grew up and attended secondary school in the Gulf region. The nursing program has addressed the multi-faceted requirements of undergraduate nursing education by shifting from a traditional nursing curriculum to an original concept and competency-based curriculum. This shift, having begun in 2019 with implementation in 2020, was a move from the traditional siloing of nursing courses which may limit the development of clinical reasoning and judgement. A concept and competency-based curriculum allows for a deeper understanding of fundamental knowledge, creates opportunities to transfer skills across various contexts and settings, and reduces the recurrence of excessive content (Repsha et al., 2020). While developing and implementing the new curriculum, great care was taken to sequence and scaffold theory, lab, and clinical concepts across all four years. The curriculum begins with a focus on health and wellness and continues through the injury, illness, and disease trajectory. Constructivist and experiential teaching and learning are incorporated to facilitate critical thinking, clinical judgment, and decision-making to prepare graduates to address complex health issues in

constantly evolving and chaotic healthcare environments. In essence, a curriculum was created by which faculty knew what to teach and how to teach it.

In the new curriculum, writing was intentionally framed in the following ways: WAC serves as an overarching framework and LTW (direct explicit instruction in academic and disciplinary genres) is delivered in two courses, taken by students during the first year. The first course introduces academic writing from the genres of narrative, critical, and essay writing including how to cite sources, develop arguments, and read critically. The second course builds on the first to include specific disciplinary writing, incorporating academic and information literacy, conventions, style, research, and evidence. In subsequent semesters, the approach to writing is best described as WTL. WTL tasks of various types are assigned as components of course grades. Students receive feedback on the content of their writing, as well as the writing itself (with variance dependent on individual instructors), with writing task complexity increasing throughout the four-year program.

The aim of this paper is to describe the process undertaken by the research team to understand the role and place of writing in the institution's undergraduate nursing curriculum, to report on the findings of our inquiry, and to reflect upon the wider implications of these findings.

Methods

The researchers—a senior nursing instructor, a writing specialist, and a teaching and learning specialist—were tasked by an academic committee to consider the role of writing in the undergraduate nursing curriculum. We set a target for completing our analysis within a semester and met weekly over 10 weeks. The team began by assembling all previous course outlines, for all four years of the undergraduate program. The first preliminary task was to determine inclusion and exclusion criteria. For example, group oral presentations, with accompanying presentation slides, were a means of assessment common to multiple courses. Would the presentation slides therefore be considered "writing" in our analysis?

The research team came to an interpretive consensus that a learning task would be considered a writing assignment for the purposes of analysis if: a) the assignment's *grade* counted toward the final mark for the course and b) the assignment's *description* indicated that writing made up a portion of the assignment grade. For example, if a group oral presentation on a research topic called for presentation slides to be included but did not explicitly specify whether the slides would be part of the assignment grade, we excluded the presentation from analysis. Conversely, we included those group oral presentations that explicitly noted that the slides would be graded for content, adherence to referencing style, etc.

In our view, this is an important distinction to highlight in our analysis, in that expectations for academic writing may actually be layered in an assignment that appears to focus exclusively on oral skills (see Table 1). Ironically, this layering of technical writing within a seemingly more informal

assessment of learning may, knowingly or unknowingly, reinforce the hidden curriculum with its preferential hierarchy of technical writing over more humanistic elements of the nursing curriculum.

Table 1. Selected "Hidden" Writing Requirements Embedded in Oral Tasks

Task	Type of task	"Hidden" Graded Writing Requirements
Group presentation with PowerPoint slides for presentation	Visual summary with accompanying written statement	Slides are graded for APA, grammar, and correct referencing, including in-text citations. Multiple relevant sources are required and must be properly cited.
Concept map	Visual summary with accompanying written statement	Maps are graded for inclusion of relevant resources and proper citation. Proper grammar, spelling, and fluency of language are also graded.

The team began the data collection process with the creation of a spreadsheet (see Table 2) with the following headings:

- Writing Learning Task (WLT);
- Course Type (whether the WLT occurred in a Theory, Lab, or Clinical course);
- Weight of the WLT in the overall grade of the course;
- Weight of all WLTs in the overall grade of the course;
- Type of WLT (e.g., guided reflection; scholarly paper; reflective report)
- Word Count requirement of the WLT
- Relative Difficulty of the WLT (labelled by the research team as *Introduced*, *Developing,* or *Advanced*, compared to the progression of difficulty in the overall degree program (Harden, 2001; Li-Sauerwine & King, 2019); and,
- Bloom's Taxonomy (assigned by the research team as either *Remember*, *Understand*, *Apply*, *Analyse*, *Evaluate*, *Create*) (Marzano & Kendall, 2008).

Table 2. Selected Examples: Writing Learning Task Data Collection

Course	Semester (Year / Term)	WLT	Course type	Weight	Weight (all WLTs)	WLT type	Word count	Relative difficulty	Bloom's Taxonomy
NURS2XX	Y1/T1	Reflection	Theory	20%	60%	guided reflection	500	Introduced	Understand
NURS3XX	Y2/T1	Clinical practice evaluation tool	Clinical	100%	400%	goal setting exercise	100	Introduced	Understand
NURS3XX	Y2/T2	Research critique	Theory	30%	60%	guided critique	750	Introduced	Evaluate
NURS4XX	Y3/T1	Daily clinical worksheet	Clinical	100%	400%	guided reporting	500	Developing	Apply
NURS4XX	Y3/T2	Scholarly paper	Theory	25%	50%	critical analysis	1000	Advanced	Evaluate
NURS5XX	Y4/T1	Annotated bibliography	Theory	30%	80%	annotated bibliography	1000	Advanced	Analyse
NURS5XX	Y4/T1	Practice Formative Feedback Tool	Clinical	100%	400%	reflective report	not given	Advanced	Evaluate

There are at least two potential limitations to this study. First, the researchers drew exclusively upon written descriptions of WLTs in course outlines. While a review of syllabus content is a useful method of understanding the role of writing across a curriculum, the syllabus ultimately presents an incomplete picture of how course material is actually delivered by instructors (Stanny et al., 2015). Further research into instructor perspectives and classroom practices would supplement the findings presented here.

Second, the categorization of relative difficulty and levels of Bloom's Taxonomy were assigned by the researchers. We acknowledge the inherent subjectivity of this process. However, the research team has considerable expertise in curriculum design, scaffolding, and assessment. Furthermore, the researchers followed principles of interpretive consensus (Rodham et al., 2015) while assigning relative difficulty to writing tasks.

Results

Table 3 illustrates the amount of writing required, on average across the curriculum, and the relative weight of writing within the total graded components of the course.

Table 3. Word Requirements and Relative Weight of Writing as a Percentage of Course Total Grade

	Year	Number of WLTs	Word count requirement specified (%)	Average word requirement	Average weight (all WLTs) (%)*
	1	18	33%	567	53%
	2	22	55%	508	34%
	3	26	54%	718	51%
	4	11	45%	630	63%
Average		**19**	**47%**	**606**	**50%**

*Weights of writing in clinical courses are omitted from calculations (see explanation in the footnote of Table 2 - footnote 3).

Figure 1 presents the writing requirements according to the type of course. As might be expected, nursing theory and elective courses require the largest number of writing tasks; however, we find it notable that even courses heavily oriented to nursing practice (clinical and lab) also utilize writing as a means of assessing students' learning.

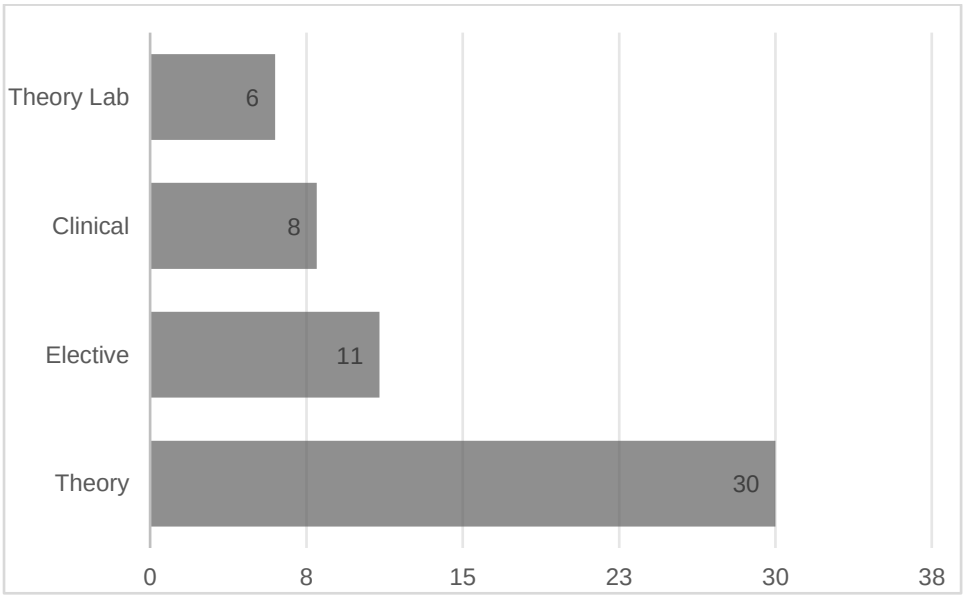

Figure 1: Writing Learning Tasks by Course Type

In Figures 2 and 3, we observe the progression, over program duration, of the relative difficulty of WLTs. Figure 2 illustrates, by cohort year, the percentage of writing assignments that are

considered *Introduced*, *Developing*, or *Advanced* relative to other WLTs across the program. It can be seen that *Introduced* dominates writing tasks in Year 1, then gives way to *Advanced* concepts by Year 4. Similarly, Figure 3 shows how lower levels of Bloom's Taxonomy are represented in writing tasks from the earlier years of the program, while evidence of higher-order learning *(Create, Evaluate, Analyse*) features in the writing assessments from the upper years. As will be discussed further in the Discussion section, this scaffolded progression of relative difficulty seems to have occurred independently from the processes of deliberate, centralized curriculum planning.

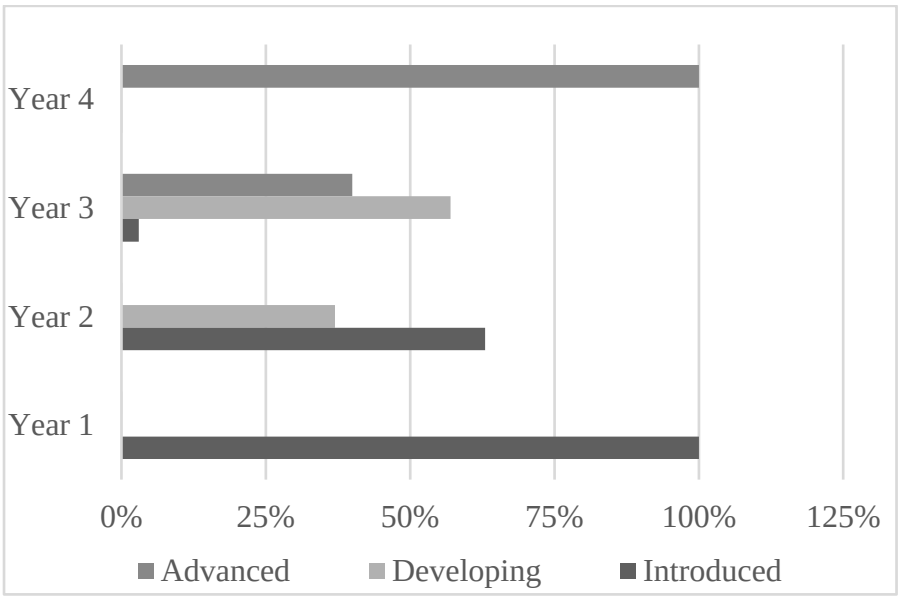

Figure 2: Relative Difficulty of Writing Learning Tasks by Cohort (%)

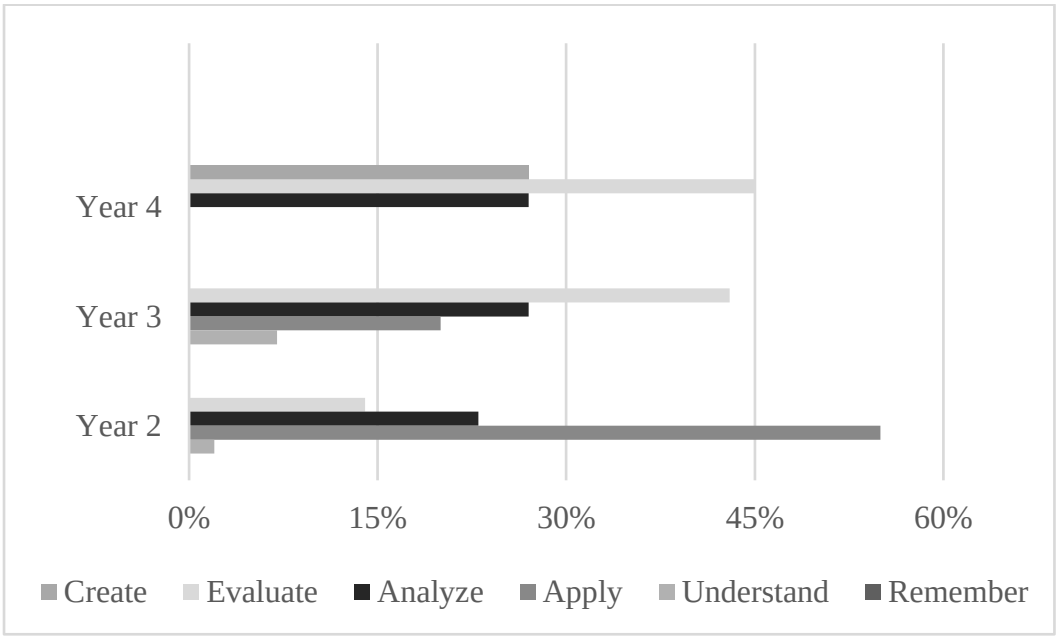

Figure 3: Progression of Writing Learning Tasks Assessed by Bloom's Taxonomy, by Cohort (%)

Finally, we note that in analysing the raw number of each type of writing assignment across the undergraduate curriculum, the largest type by far was those WLTs considered reflective in nature (see Figure 4).

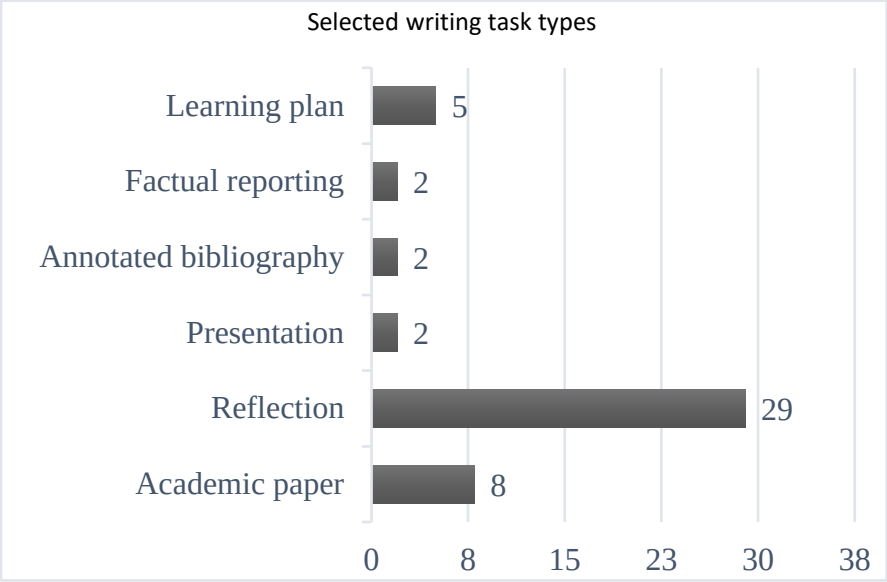

Figure 4: Writing Learning Task Types

Discussion and Recommendations

In considering the results of the data collection and analysis in light of the research questions, several observations became prominent. We present these here as findings, as iterative reflections for our own syllabus planning, and as recommendations for readers to consider as they evaluate WAC in their own settings.

Types and Amount of Writing

To begin with, the data analysis highlighted a larger than anticipated amount of writing being done in our curriculum, underscored by a surprising (at least to us) amount of writing required in clinical documents and reflections. However, post-presentation discussion with faculty revealed a belief that if a written learning task was not a scholarly paper, as prevalent in theory and elective courses, it did not constitute "writing", perhaps affirming the observation of Mitchell et al. (2021) regarding a hidden curriculum of the "objective" and technical over the humanistic. Countering this, however, was the observation that when sheer numbers of writing assignments are considered across the curriculum, reflective writing far outnumbers any other type. While these may be called different names by instructors (e.g., guided reflection, reflective report) the task description in the course outline indicates a reflective orientation, focused on reviewing experience to positively inform future practice (Bulman et al., 2012). The apparent disconnect between faculty views of "real" writing as academic research papers accompanied by a heavy use of reflective writing in actual teaching practice, warrants further study.

Scaffolded Curriculum

The researchers were also pleasantly surprised to see that, by and large, the curriculum indicated a general progression of WLTs, from *Introduced* in the early courses of the curriculum, to *Developing* and *Advanced* in the upper years. Similarly, WLTs categorized as reflecting the lower levels of Bloom's Taxonomy (*Remember*, *Understand*) generally occurred at the beginning of the program, while higher order levels like *Evaluate* and *Create* were by and large reserved for the upper year courses. This progression is particularly noteworthy in that when undertaking the shift to a concept-based curriculum, no deliberate attention was paid by the curriculum designers to scaffolding the sequence of the writing tasks from lower to upper years, neither in terms of relative difficulty nor by elements of Bloom's Taxonomy. Interestingly, this scaffolding seemingly happened independently of deliberate, centralized, "top-down" design and planning. This may well highlight the benefits of "bottom-up" curriculum design (Cummings et al., 2005) where individual instructors recognize, embody, and enact the role of a particular course within the larger curriculum, identify the current knowledge base of their students, and then sequence learning tasks accordingly.

Learning to Write by Writing (LWW)

As acknowledged previously, the institution's curriculum reflects elements of WAC, WTL, and WID. Yet, through an iterative, reflective process in the data collection and analysis for this study, the researchers observed that how writing is actually presented, taught, and learned in our curriculum is not fully encompassed by any of these three categories. We propose an overarching, umbrella descriptor, Learning to Write by Writing (LWW), which in our view more aptly characterizes the process. We understand LWW to be a continuous, spiralling, but non-linear, feedback loop, ever-increasing in complexity; student writers absorb elements of writing (such as cohesion and coherence, style and mechanics, grammar and vocabulary, audience and purpose, conventions and genres) through both explicit and implied means. Also important to LWW is the (often indirect) input that writers absorb through reading and observing in the discipline, and through the nursing community of practice.

The following example, while fictitious, has been observed regularly by all three researchers in their observations of how students' writing process is enacted in our institution. Rawan is a hypothetical second-year undergraduate nursing student. Like much of the multilingual student body in this transnational branch campus, Rawan self-identifies English as her additional, rather than her first, language. A course in which she is enrolled requires her to submit a guided critique of research literature, a "genre" (Hyland, 2007) of writing task with which she is entirely unfamiliar. Rawan begins by clarifying potential topics with her instructor, then follows up by querying her friend, a third-year student who previously completed a similar assignment, on prospective strategies. She draws upon Google searches for similar writing assignments and uses ChatGPT-3.5 for ideas around the structure and cohesion of research critiques. She also reviews the institution's Learning Commons guides to find information or a template that fits the assignment. She selects and reads

several peer-reviewed articles for her research critique while making mental notes about the structure and word choices of academic writing. Rawan then makes an appointment at the institution's Writing Centre to consult with a Writing Specialist about the assignment description and rubric and to receive input on help crafting an outline. She is now ready to begin the research and writing process and draws upon the automated feedback from Grammarly and Microsoft Word to revise her English usage.

After a draft is completed, Rawan makes another appointment with the Writing Specialist, who makes suggestions—with detailed rationale—on a range of issues regarding cohesion, coherence, clarity of argument, mechanics of usage, matters of APA referencing, and alignment with the grading rubric. The Writing Centre at our university (at the time of writing) is staffed by two Writing Specialists. Both Writing Specialists are experienced teachers with an M.Ed specializing in writing and English language instruction and have extensive experience working with EAL students in multiple post-secondary institutions in the Middle East and Asia.

While making the suggested revisions, Rawan continues ongoing discussions with classmates who are also completing this learning task, and they share strategies and approaches. Rawan may also make an appointment with the instructor during the regularly scheduled office hours and receive the instructor's on-the-spot feedback regarding several aspects of her draft, which Rawan takes on board, before another visit to the Writing Specialist for concluding feedback regarding adherence to the rubric, APA formatting, and clarity of thought. Following the submission of the final version of her learning task to the instructor, Rawan receives a grade referencing the rubric, along with the instructor's written feedback.

Starting from virtually no knowledge of this type of writing task, Rawan has Learned to Write by Writing: a non-linear process of composing, drafting, receiving and taking onboard feedback from multiple human and machine sources, reading in the genre of the writing task, and then composing some more. Rawan will repeat this LWW process in sub-genres of writing new to her, with increasing task complexity, throughout her four-year degree program.

Faculty and Student Writing Support

The important role of Writing Centres in providing student access to the multiliteracies of higher education is well established (Clarence & Dison, 2017), having been shown to assist in multiple aspects of student benefits such as improved grades (Tiruchittampalam et al., 2018), enhanced motivation (Nordlof, 2014), increased self-efficacy as writers (Babcock & Thonus, 2018), and inculcation of higher order elements of writing (Henson & Stephenson, 2009), among others (Pleasant et al., 2016). However, much less is understood about the role of Writing Centres in providing direct support for *faculty*. Our iterative reflections on the data and subsequent discussions with faculty underscored the critical role, consistently enacted in actual process, that the Writing Centre plays in our institution, not just in assisting students through the LWW process, but supporting faculty in the teaching and assessment of WAC as well. It is not uncommon for nursing

educators, though experts in nursing content areas, to point out that they are "not writing teachers" which may, at times, express an underlying internal conflict about their own self-efficacy as writers, and/or the role of writing in the nursing profession (Mitchell, 2018).

The importance of collaboration between Writing Centres and faculty is well established (Mckay & Simpson, 2013). However, our findings point beyond collaboration to the importance of Writing Centres in offering direct support to faculty in their work as writers. The Writing Centre in our context, despite its primary mission as student success, directly assists *faculty* writing in several critical (if underrecognized) ways. The Writing Centre receives appointments from faculty looking for assistance in constructing effective rubrics to assess student writing and is asked to conduct faculty workshops on rubric design, a Writing Centre function which we recognize may be atypical in that a single faculty institution lends itself to enhanced access to writing support services. Instructors seek the Writing Centre's feedback on academic papers faculty intend to submit for publication and may be invited to participate as co-authors; their role in identifying and utilizing discipline-specific written expression is highly valued. Course syllabi and institutional policy documents are often reviewed and proofread by the Writing Centre team for clarity of expression and grammatical and lexical accuracy. Instructors regularly initiate consultations with Writing Centre staff regarding written assignments and their grading, as well as issues of academic integrity such as APA referencing, plagiarism, and the ethical use of generative software tools in student writing. The Writing Centre team regularly provides their disciplinary expertise to the institution as members of various curriculum and program committees.

In sum, it is evident that the Writing Centre in the setting of this study plays a central role in supporting WAC, WTL, WID, and LWW for *both* students *and* faculty. We assert that nursing education as a whole would benefit from further research into ways Writing Centres build student and faculty capacity.

Conclusion

The importance of writing in undergraduate nursing programs has been highlighted throughout this article and broader academic research. The significance of how much writing, where writing occurs, and how it is taught in the curriculum led the authors of this paper to many discoveries that we encourage other nursing programs to enact. Reviewing the amount of writing assignments and instruction of how to write clearly demonstrated to us that learning to write in our undergraduate curriculum is accomplished primarily by writing: Learning to Write by Writing. This process also revealed how writing was scaffolded across the curriculum, the varying types of writing tasks, and the sheer volume of writing assignments required. This transformative experience fed back positively to the continual appraisal process of written assessment strategies, giving a much better understanding of the volume and types of writing required in theory, lab, and clinical courses. However, this discovery process raised for us an important question: if indeed students are primarily

learning to write by writing, do they have sufficient support to do so? In this regard, the critical role of writing centres and writing support faculty was underscored.

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