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# Pre-registration nursing students' experiences of learning: a qualitative thematic analysis

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# Abstract

### BACKGROUND

Nursing student attrition remains a focus for Australian higher education providers and requires consideration of ways to improve pre-registration nursing students' course completions. Understanding pre-registration nursing students' experiences across their educational journey is essential to improving learning environments, student satisfaction, and course completion.

### OBJECTIVE

To explore pre-registration nursing students' experiences of learning during their education journey.

### DESIGN

Qualitative thematic analysis.

### DATA SOURCES

Preregistration nursing students' narrative comments in an anonymous survey aimed at identifying elements influencing satisfaction with the learning journey. A survey was conducted online in late 2023.

### RESULTS

Nursing students from four universities in four Australian states (N = 241) provided 525 textual comments. Analysis identified five themes (i) 'Experience of learning in university', (ii) 'Assessment and feedback', (iii) 'Commitment to learning', (iv) 'Perceived stressors' and (v) '(in)flexible curriculum'. Many students reported positive engagement with their university learning environment and were satisfied with teaching and resources. A minority described some experiences that challenged learning. These related to managing work-life balance impacted by perceptions of excessive, insufficient, or poorly organised curriculum content, and stressors in clinical placement. Reported inconsistencies in course design, the expected volume of learning and the impacts of 'flexible' education delivery should be heeded and remedied.

### CONCLUSION

This study highlights both positive and challenging aspects of pre-registration nursing students' learning experiences. Ongoing evaluation and monitoring of nursing education service delivery by education providers, funders, and regulatory bodies are essential to improving student experience, supporting course completion, and strengthening the future nursing workforce.


# 1 INTRODUCTION

The quality of education in the tertiary education sector is an issue of interest to industry and governments that provide funding for education. Government and institutional surveys of the student experience aim to monitor performance and maintain a high quality of service delivery, while also informing strategies to enhance the student experience. In Australia, the National Student Experience Survey reports students' feedback, including ratings of undergraduate nursing students' satisfaction (1) whereas in other countries, such as the United Kingdom, the National Student Survey includes a student satisfaction measure (2, 3). Student satisfaction reflects a student's subjective assessment of the overall education experience (4).

# 1.1 BACKGROUND

High levels of student satisfaction have been associated with student retention, while a lack of satisfaction negatively impacts student retention and can affect course completion rates (2). Low completion rates may adversely impact a university's global ranking, which is a significant concern as higher rankings are often associated with increased student enrolments and revenue generation. There is an urgent need to ensure nursing students complete their nursing qualification and transition into the nursing workforce, particularly as the World Health Organisation continues to predict a global nursing shortage (5). One way to overcome the shortage is to continue to grow the number of nursing graduates internationally, including in the Western Pacific region and in Australia.

Research in nursing has largely focused on surveys to rate student satisfaction using purpose-developed instruments (6, 7) while neglecting conceptual approaches and the students' perspectives, although some studies do offer descriptive insights into student experiences. The authors (8) conducted a descriptive study of nursing students in the Netherlands to describe the students' reality and coping. When student expectations were not met, disappointment made students consider leaving their program. These authors found that lecturers and mentors have a role in protecting and guiding students through their program to prevent student attrition. In Singapore, an interview study of nursing students echoed these findings, in particular, confirming the importance of peer and mentor support to facilitate clinical learning (9). An interview study with Australian nursing students (10) found that students are satisfied with their learning when they envision a valued learning journey that includes the social contexts of the self, the university, and the nursing workplace.

Understanding how students experience learning environments is essential to improving educational service delivery and supporting nursing workforce sustainability. The current study will help fill a research gap by informing educators and institutions of the principal educational barriers and enablers experienced by nursing students, reported from the students' perspectives.

# 1.2 AIM

To explore pre-registration nursing students' satisfaction with learning during their education journey.

This information may be of value to inform providers, disciplinary regulators and higher education funders alike on how student learning experiences may be improved.

# 2 METHODS

The data source for this qualitative study was student responses to open-text questions included in a survey of factors that influence nursing students' satisfaction with their learning journey. The research question addressed was:

What are nursing students' experiences of learning during their education journey?

Data were collected between July and September 2023 using the Higher Education Service Quality (HESQUAL) (Nursing) survey (11). The survey was administered online to a convenience sample of pre-registration nursing students studying at four different universities in four Australian states. A total of 241 students responded to the open-text questions and comprised the current sample. The data was stored on a protected shared drive with access limited to the listed researchers.

The survey comprised two sections: quantitative items, which required responses on a rating scale, and three open-text questions. This study reports responses to the open-text questions:

Q1 Please feel free to comment on your experience of learning at university.

Q2 What is the most difficult part of learning at your university?

Q3 What aspect of your learning journey provided the most assistance for your learning in university?

## 2.1 Ethical review

Multisite ethical approval for the study was granted by Federation University Australia (Ethics approval, Project no. 2023-061). Participation was voluntary. Participants were provided with an information statement (online), and consent was implied by completing the anonymous survey.

## 2.2 Data analysis processing

A thematic analysis of students' open-text comments was conducted. The authors' experience with qualitative nursing research enabled a rigorous inductive and deductive qualitative analysis based on discussions between authors and attention to author reflexivity (12). One author (RC) conducted initial inductive coding with all textual comments downloaded in full and tabulated in a Word document. To achieve data reduction, the second and third authors (SG, OG) individually read and re-read the comments, then grouped them into topics that emerged from the text. Code words were applied to each group to represent broader ideas. Discussion between authors confirmed appropriate codes before collapsing the codes into themes that relate to the research questions. In a final step, the themes and verbatim data were discussed and agreed upon by all authors and translated into a results section. This broad approach enhanced rigour by promoting reflexive and transparent researcher decisions. The SRQR

checklist: Standards for Reporting Qualitative Research: A Synthesis of Recommendations (13) guided reporting.

# 3 RESULTS

There were 525 textual comments from 241 nursing student participants. The comments represented viewpoints from over two-thirds of participants and all comments were included in the analysis. Most students (90%) were female; overall, the median age group was 31–40 years, with a range of 'under 21' to 'over 51' years. The students were from universities in four Australian states, with the majority enrolled in Victoria and Western Australia. Study modes were either on-campus, or flexible delivery which was described as a mix of distance learning with online sessions and/or blended learning). Most responses were from students enrolled in on campus mode (22/31). As shown in Table 1, there were comments from students in each year level, enabling an in-depth analysis.

The first open-text question invited responses about participants' overall experiences; many of these comments were repeated in the later questions. Of the three question items, most comments (41%) related to question two, seeking the most difficult experiences, followed by 32% of responses to question three, which explored the experiences that offered the most assistance for learning.

Table 1
Distribution of students' textual responses by university course year

| Item | Year 1 (n (%)) | Year 2 (n (%)) | Year 3 (n (%)) | Total (n (%)) |
|---|---|---|---|---|
| Q1 General comment | 50 (36.0) | 72 (51.8) | 14 (1.0) | 139 (26.5) |
| Q2 Most difficult | 71 (32.7) | 88 (40.6) | 55 (25.3) | 217 (41.3) |
| Q3 Most assistance | 61 (36.1) | 66 (39.0) | 48 (28.4) | 169 (32.2) |
| TOTAL | 182 (34.7) | 226 (43.0) | 117 (22.3) | 525 |

Thematic analysis revealed wide variations in students' learning experiences. Five themes that emerged regarding nursing students' experiences were: (i) 'Experience of learning in university', (ii) 'Assessment and feedback', (iii) 'Commitment to learning', (iv) 'Perceived stressors' and (v) '(in)flexible curriculum'. Each theme is described in the context of the relatable research question and designation of the participant's year level.

## 3.3 Theme 1: Experience of learning in university

The commentary related to experience of learning showed that nursing students are commonly concerned with curricula and the teaching quality. This applied regardless of study mode. Experiences that reflected positive learning were plentiful, as represented here:

“excellent teaching and flexible timetable” (Year 1).

“great learning environment” (Year 1).

“the content and lecturers are amazing” (Year 2).

“learning resources were great” (Year 2).

Other students shared sentiments of more challenging aspects of their study:

“online tutorials far too large to learn from” (Year 1).

“poor experience owing to poor course organisation …” (Year 2).

“lecture material is lacking enough information or is far too in-depth to be able to retain” (Year 3).

“there is nothing [learnt] that is usable in the real world” (Year 3).

The benefits to personal development of learning at university were evident, as reported here by one student:

“coming to uni was a turning point for me, I can express myself and feel very confident” (Year 1).

## 3.4 Theme 2: Assessment and Feedback

The second theme emerged as the analysis drilled down into participants’ overall experience and discovered many comments about their experiences of assessment and feedback. This component of teaching quality underpins students’ course advancement, but most comments reflected students’ critique of inhibiting elements. There were many challenges documented about how to understand the assessment instructions (possibly resulting from a lack of clear assessment guidelines).

“assessment description very confusing and not to the point, and very disorganised” (Year 1).

“I feel as though what is set out in the assessment criteria vs what’s in the rubric doesn’t always align” (Year 3).

The student below was referring to exams as assessments:

“we need to understand anatomical and physiological structures but having to learn and memorise information is not what I would call an academically sound method of teaching” (Year 1).

Another student highlights on-campus clinical examinations that use the objective structured clinical examination (OSCE) approach:

“OSCE [is] not a real-life situation and makes students feel so overwhelmed…making mistakes. In real life they wouldn’t” (Year 2).

Across all year levels there were experiences of receiving contradictory, inconsistent, or ambiguous feedback.

“inconsistent feedback between units” (Year 1).

“no feedback…so you don’t know where you can improve… directions are ambiguous” (Year 2).

“what one marker comments favourably on, another will take away marks for the same work” (Year 3).

One student identified a deficit and was able to access assistance through the university's study support services:

“I struggled to meet the expectations of academic writing in my assignments… the academic skills resources and access to learning advisors were invaluable, helping me improve my writing and overall academic performance” (Year 2).

Excerpts such as this one above that reflect individual agency and commitment to learning led to the identification of a third theme.

## 3.5 Theme 3: Commitment to Learning

This theme offers insight into students' personal organisation and strategies that students applied to engage in and complete their studies.

“The workload combined with my full-time job as well as other commitments outside of my study [is difficult]. But the uni has been good with helping me work out a balance” (Year 1).

“[I’m managing] Juggling family, working commitments and study all together” (Year 2).

Some students shared ways they remained committed to learning despite work-life challenges.

“I am grateful for the online lectures, it allows me to work and study” (Year 1).

“Peer review assistance provides the best support while preparing assignments” (Year 1).

“Learning Advisors has been a great support in getting back into academic writing” (Year 1).

Students planned for study, involving their social support networks:

“letting family know I have to study, or preparing myself for clinical placement” (Year 2).

Thus, existing relationships and new ones formed between students and their peers, and with lecturers and other staff via various communication methods, were seen as assisting learning and likely could reinforce commitment to study.

Many of these experiences were related to the commitment required to complete clinical learning while on placement, alongside the classroom-based learning program.

“incredibly stressful trying to perform at placement facilities while managing ongoing attendance requirements and assessments” (Year 2).

“placements together with continuation of weekly modules, assignments, tasks and lectures are overwhelming me” (Year 2).

The many comments relatable to stressors of studying illuminated a fourth theme.

## 3.6 Theme 4: Perceived Stressors

These verbatim contributions differ from those challenges included in previous themes. This comment comes from a student with recognition of prior learning as an Enrolled Nurse who experienced repeated skills competency assessments as an annoying inconvenience:

“[I’m] constantly reassessed on skills we are already professionally credited with and practicing in the workplace” (Year 2).

This next remark from a student with life experience serves as a reminder that many students are at risk of succumbing to their stressors:

“very daunting experience for a mature age student, [but] managing OK” (Year 1).

The impact of financial stress was evident throughout the responses.

“I have some big 5–6 week placement blocks coming up and I am still unsure how I will cope financially” (Year 2).

This student showed that university supports may help students manage stressors and perhaps even to thrive:

“as an international student I have received tremendous support from the staff to help me cope. I will definitely recommend it to friends and family” (Year 3).

As identified, there are many stressors and some relate directly to the mode of learning, as presented in the final theme.

## 3.7 Theme 5: (In)flexible curriculum

This theme reflects students’ varied expectations due to the mode of learning they faced. Some expectations of flexible learning were not met.

“a ‘flexible’ course but… we had to attend online classes at a set time. Defeats the purpose of flexible” (Year 1).

“this course is meant to be flexi online but it isn't very flexible when you have to be online for a lecture at a certain time and this [attendance] is part of your final grade” (Year 1).

Such experiences were challenging for students, as portrayed here:

“they changed the flexible delivery making it mandatory to engage in tutorials and complete Moodle [learning] activities within the week thus making it harder for me to manage my studies, home life and work …” (Year 2).

“the word flexible is not that at all, and the new word, blended, is not mean[ing] flexible, which again is not what I signed up for” (Year 2).

Alternatively, some students experienced flexible learning as facilitating learning:

“the flexible nature of the course and being able to tailor my study around work and family commitments and study was convenient to me” (Year 3).

“I study online and have traveled for work from NSW through QLD, SA, VIC and the NT during the last 3 years; for me it was an excellent choice!” (Year 3).

Thus, students perceived the course curriculum as positive when this suited their lifestyle and work-life balance.

The narrative student comments described above contribute to a greater understanding of how nursing students experience their learning during the university programme of study.

# 4 DISCUSSION

This study explored nursing students’ experience of learning at university. The authors wanted to understand what elements influence students’ satisfaction in order to enhance their learning experience. Students were invited to comment on their overall learning journey, including academic preparation and clinical learning/practical skills development. The five themes identified reflect both positive aspects that facilitated learning and issues that could be considered inhibitors to learning. These are discussed next relative to the study aim.

The first theme, ‘Experience of Learning in University’, shows most students were positively engaged and satisfied, reporting “excellent teaching”, a “great learning environment” and “good resources”. Insights into challenges were also shared; inconsistencies in learning content (either too much or too little) and poor course organisation were commonly cited. The participants’ perception of “poor course organisation” meaning is not entirely clear from the survey responses; however, one interpretation could be that the course was lacking in meaning and structure.

Studies of nursing and healthcare students’ learning in university show that educational frameworks are useful in structuring meaningful content that students rate positively. Participants in our study were

studying both on campus and online. Frameworks known to enhance nursing student satisfaction with learning in these environments include the flipped classroom approach that combines online and classroom learning (14), Transformative Learning Theory that can enhance preparation for practice (15) and Kolb's experiential learning theory for structuring learning in practice (16).

Regarding the issue of how much content to include, researchers (17) suggests that teachers tend to overthink how much content is meaningful and relevant, resulting in courses with too much content for students to grasp. A better approach suggested by Sutherland (18) is for educators to work with learners to "uncover" the content together, rather than addressing predetermined content. Further, educators who are organised and appear familiar and comfortable with the learning content are mostly favoured among nursing students (18).

Poor course organisation was alluded to in participants' comments that "assessment and feedback were ambiguous", "assessment description was very confusing", and was "disorganised". This highlights the importance of providing students with constructive and timely feedback to assist with advancing their knowledge and skills development.

The second theme, 'Assessment and feedback,' highlighted respondents' experiences. Many reported that no feedback was provided, or the feedback was inconsistent and often misaligned with the marking rubric. Some researchers (19) argue that feedback that is delayed, lacks specificity and is misaligned to assessment requirements has the effect of disengaging students. They state that assessment feedback needs to be of high quality and relevant to the assessment criteria to engage students. Results reported here identify this as of key importance for nurse educators.

Others (20) argue that assessments should be viewed for learning, *not of learning*. They suggest the use of multiple assessments as a meaningful way to focus on assessing transferable competencies, rather than individual assessment of skills. Still others (21) further argue that active learning approaches improved nursing students' learning experiences. The transformative and experiential learning frameworks mentioned earlier are active learning approaches.

The third theme, 'Commitment to learning' shows the ways students suggested they planned to manage their work-life-study balance. This smallest theme was important to include, confirming that students do plan to make time for study, preparing dedicated study time and study work areas and seeking family support for these initiatives. However, participants' comments quickly turned to the need to manage the stress of the study.

There were more than 20 statements confirming the negative impact of managing their studies, including that of reduced family finances during clinical placements. These were grouped together in a fourth theme, 'Perceived stressors'.

Stress and anxiety are known to impact undergraduate nursing students disproportionately (22). Clinical placement is a learning period during which anxiety is exacerbated (15). Whilst this information is not

new, there is currently a renewed interest in enhancing university students' well-being (23) and reducing the financial stress of placements for healthcare profession students (24). Further, student retention may be impacted through dissatisfied, stressed and financially poor students leaving their studies, and this is at a time when Australia's nursing workforce is striving to attract more people to the profession (25, 26). As well as the negative impact of attrition on students and society, there is a financial loss to the university (27). These are key issues both for universities and for nurse education.

It is now timely to remind nursing and other practice-based professions that work-life-study balance extends to the financial implications of completing placements. Universities and key stakeholders must implement targeted supports to address these issues and facilitate timely course completion.

The fifth and final theme identified was *'(in)flexible learning'*. This draws attention to participants' satisfaction when they encounter differing modes of study. Although most comments came from students studying on campus (23/31), respondents also noted that courses were delivered online or in blended formats (on-campus with online tutorials), commonly described as 'flexible'. Some students felt dissatisfied when they were led to believe the course delivery would be flexible, but then encountered different interpretations of the terminology by the education provider. Students indicated that access issues inhibited their learning, as compulsory face-to-face and online tutorials were required and attendance was, at times, linked to assessment outcomes. It could be also that students have misinterpreted the meanings of the terminology used, or perhaps education providers may need to describe each of the course delivery methods more clearly. We also considered that some students may have encountered online learning as a temporary solution to the recent pandemic and are now being forced back to face-to-face learning as providers rethink course delivery modes. Students' direct comments revealed a plethora of viewpoints about accessible learning that could assist educators in improving students' learning experience.

These findings highlight responsibilities beyond individual institutions to broader governance of nursing education and point to the role of regulators and funders in assuring the quality of educational service delivery. Although regulatory standards emphasise curriculum compliance and outcomes, evidence indicates that students' experiences of learning, particularly in placement-based and flexible models, vary considerably and influence engagement and completion (28, 29). Monitoring student experience data has been shown to inform improvements in clinical learning environments and may reduce attrition by enhancing support and consistency (30). Together, this suggests a need for regulatory and funding bodies to attend explicitly to students' educational experiences alongside curriculum standards.

## 3.8 *Limitations*

This study has several limitations. As a qualitative study involving nursing students from Australian universities, the findings are not intended to be empirically generalisable and should be interpreted within the context of the study setting. The data were derived from narrative responses to three survey questions, which may not fully capture the breadth or complexity of students' educational journeys.

Although a systematic and rigorous analytic approach was used, including independent coding and agreement between authors, the potential for bias inherent in self-reported data cannot be excluded.

# 5 CONCLUSION

This study reports the qualitative findings of a survey that explored Australian nursing students' experiences of learning during their education journey in university. Five themes identified were 'Experience of learning in university', 'Assessment and feedback', 'Commitment to learning', 'Perceived stressors' and '(in)flexible curriculum'. Our discussion illuminates the student narratives and offers valuable insights into pre-registration nursing students' learning journey. The findings suggest how nursing students' experiences may be improved through better communication with educators and higher education providers. Suggestions for improvement include the construction of assessments that are aligned to learning objectives and have clear assessment instructions; regular feedback; more support with work-life-study challenges, including financial support during compulsory clinical placements and better explanation of expectations around flexible learning options.

RECOMMENDATION FOR FUTURE RESEARCH

Future research incorporating methods such as focus groups may allow deeper exploration of experiences and enable comparison across student groups. This may contribute to further strategies to enhance their satisfaction and ultimately support student retention.

# Declarations

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Authors contributions

All authors meet the authorship guidelines for this manuscript.

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Conflict of interest

The authors declare they have no conflicts of interest.

Consent to participate

Return of the survey was implied as consent from the participants, as indicated in the Plain language information statement.

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Ethics statement

This study received Ethical approval from all participating higher educational institutions. Details redacted for blinded review.

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