

“I don’t want to become a scientist”: undergraduate nursing students’ perceived value of course content

AUTHORS

Dr Melanie Birks

PhD, RN, MEd, BN, FRCNA
Associate Professor, Learning and Teaching Education
Research Centre
CQUniversity, Noosa, Noosaville, QLD, Australia.
m.birks@cqu.edu.au

Dr Robyn Cant

PhD, MHSc, GradDipHEd
Research Fellow, School of Nursing and Midwifery,
Monash University, Churchill, Victoria, Australia.

Dr Mohammad Al-Motlaq

PhD, MBS, RN, BSN
Assistant Professor, School of Nursing, Hashemite
University, Kingdom of Jordan.

Ms Janet Jones

RN, RM, BNsng, MCIn Mid
Lecturer, School of Nursing and Midwifery, Monash
University, Gippsland Campus, Victoria, Australia.

KEY WORDS

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ABSTRACT

Background

In the development and delivery of pre-registration baccalaureate nursing programs, universities must address both the needs of industry and the registering authorities that regulate health professional practice. Balanced with this, providers of education at this level also wish to deliver an experience to students that they both value and enjoy.

Objective

This paper describes the findings of a study examining these factors in the first year of four pre-registration programs at a rural campus and outreach centre of one Australian university.

Design

A descriptive, exploratory survey was employed in this research, which is drawn from a larger study into entry pathway, success and academic experience.

Results

Results indicate that students found units such as fundamental nursing subjects and law most enjoyable and valuable. Units with a sociological foundation were considered less enjoyable and valuable. Overall, students recognised the value of the bioscience units while contrarily not expressing enjoyment of this aspect of their studies.

Conclusions

These findings have implications for nurse educators in respect of the content and delivery of pre-registration nursing programs. As first year students, the participants may have been focused on learning fundamental nursing tasks, lacking an understanding of the breadth of knowledge required for their professional role. Future research into aspects of nursing studies found to be most valuable may provide a different perspective if conducted in the period post graduation.

INTRODUCTION

Universities constantly strive to develop programs that are relevant and significant. Where courses lead to a vocational qualification, such as occurs in the health care professions, there exists an additional need to ensure adequate preparation of professionals that meet both industry needs and the requirements of registration and other professional bodies. In addition, tertiary education providers seek to ensure that the experience of education for the student is both enjoyable and valuable. This paper presents findings of research involving nursing students undertaking pre-service studies at one rural Australian university. Participants were asked to rank the perceived enjoyment and value of units completed in both first and second semester of their first year of study. An understanding of these factors can guide nursing faculty in the delivery of course content to ensure students' appreciation of units of significance to their future professional role.

BACKGROUND

The literature shows that integration of knowledge into practice is a difficult transition for many nursing students (Baxter and Boblin 2008). Learning most often takes place by a 'reception learning' process of factual presentations allowing new concepts and propositions to be developed (Novak 2006). This process is assisted when concrete experience or activities are provided as these can help develop depth of understanding. However, it is well recognized that the ways in which students learn consists of various cognitive styles and these individual preferences influence a learner's approach to perception, acquisition and processing of information (Noble et al 2008). Thus, it is a challenge to always meet the learning needs of every student.

Modern curricula are delivered by various modes of study to assist students to achieve their learning objectives. While there is no doubt that institutions of higher learning evaluate programs regularly as a quality assurance measure, few studies have been published in the accessible body of evidence. Little in particular is known about Australian conditions.

Salamonson and Lantz (2005) found high nursing student satisfaction in New South Wales with a hybrid learning model for delivery of a pathophysiology unit which included classroom tutorial and prescribed web-based learning activities. Jordan (1994) considered the importance of bioscience in nursing curricula specifically. Her subsequent research (Jordan et al 1999) would further examine this aspect of nursing studies, finding that students, while describing this component as the "hardest of all" (p. 217) ultimately considered bioscience more valuable than did their lecturers. Hughes (2005) explored nursing students' attendance at college-based lectures in North America and noted lower attendance for less popular subjects such as ethics, law and social policy. This paper aims to redress the lack of literature on this topic by examining undergraduate nursing students' perceptions of the value and enjoyment of units of study in the first year of their course.

METHODS

Data presented in this paper are drawn from a larger study conducted over the academic year in four undergraduate courses (Bachelor of Nursing; Bachelor of Nursing/Bachelor of Midwifery; Bachelor of Nursing Rural Health Practice and the alternative entry Diploma of Tertiary Studies) in two locations (the main campus and an outreach satellite centre). These programs share a number of common units, particularly in the first year of study.

The aim of the broader study was to compare student career trajectory and success relative to entry pathway and other demographic data. Three surveys were administered over the course of the first year of study, with students completing the brief survey on the first day of each semester and in the final week of the academic year. Data from the first round survey has been reported elsewhere (Birks et al 2010). The data presented and discussed in this paper were collected during the second and final rounds of the study. Students were asked to rank the units they found most and least enjoyable and those they considered to be the most and least valuable in

the semester they had just completed. Opportunity was also provided for additional comments to be made should the students wish to justify or explain their choices.

RESULTS

Total enrolments in first semester for all courses combined were 163. One hundred and five students responded to the survey following the completion of first semester, with 69 returning surveys administered at the end of second semester. Tallied responses with illustrative comments are presented in the following section. Numerous comments were made by respondents, with those presented in the following discussion selected to represent issues relating to enjoyment and value of unit content. Comments made by respondents that relate to process of delivery are not relevant to this discussion and will be incorporated into course revision and quality assurance processes.

Semester 1

Table 1 summarises the students' responses to questions about which unit of study they found most enjoyable and which they found least enjoyable in their first semester of study. The introductory nursing unit *Perspectives of Health and Wellness* was overwhelmingly reported as the most enjoyable unit. No students indicated that this was the least enjoyable unit.

It was easy to understand and it was very enjoyable because it was hands on.

It was involved, fun and interesting. I was learning things [that] interested me.

It had practicals that I enjoyed and I feel by doing this unit I'm working towards my goal.

As the first practical subject, this unit exposes students to introductory concepts of health assessment and fundamental nursing skills such as assessment of vital signs and maintenance of hygiene. This factor is reflected in figures indicating that only a small percentage of students found it the least valuable, with half the responding students finding it to be the most valuable unit.

...because it's what I want to do!!

I felt I learnt a lot in the labs, which then helped me to understand other elements in other units.

It was probably the essence of doing a nursing course.

In spite of often being a challenging unit for students, the bioscience subject *Human Structure and Function* was found by around a quarter of the responding students to be the most enjoyable unit.

LOVE anatomy and physiology: fascinating, challenging, detailed, intricate.

Challenging but rewarding.

I can find out and know clearly the structure and function of the human body. It attracts me and motivated me to study more and put more effort into future work.

Conversely, 17% of respondents reported finding the bioscience unit least enjoyable:

It was so hard!

Very hard material to learn and understand.

So much content... so little time.

This unit provides fundamental knowledge of anatomy and physiology, supporting the basic skills introduced in the nursing unit, with 29% of respondents acknowledging its significance to nursing practice by recognising it as most valuable:

...because it is important. Knowledge is needed.

It tied most subjects together.

Despite the relatively high appreciation of the importance of foundational scientific knowledge, a minimal number of respondents considered this unit to be least valuable.

Information was too in-depth and would be irrelevant in the workforce.

The sociological subject *Nursing, Society and Culture* received no positive responses from students who participated in the survey. This unit introduces the nurse's role in the broader healthcare context and provides an overview of social determinants of health

including the influence of culture. Ethical concepts are also introduced. No students found it most enjoyable, with more than half identifying it as their least enjoyable unit.

[The] content of material wasn't very engaging.

It is just the nature of the unit, however, it is still a good unit and have learned lots; probably can include a more practical aspect of this knowledge to make the unit more interesting.

More than a third of respondents also found this unit of study to be least valuable.

I don't feel as though I could use a lot of the content covered.

A lot of the course was generally common sense.

I just couldn't see the relevance.

While a few of the responding students found *Professional Communication* enjoyable and valuable, a relatively large proportion (20%) found it least valuable. This subject introduces concepts of communication within a developmental psychology framework.

[I] just didn't find the point in the subject.

Mostly common knowledge. Already knew most of it.

This subject seemed irrelevant to nursing.

Most students enrolled in the first year of their course undertook the units discussed above during this semester of study. A small number of students indicated other units in their responses that were not core or recognised units, shown in table 1 by the category "Other".

Table 1: Students' ratings of units of study at the end of Semester 1 (frequency and valid percentage, n=105)

Unit of study	Most enjoyable n(%)	Most valuable n(%)	Least enjoyable n(%)	Least valuable n(%)
Perspectives of health and wellness	72 (69.9)	50 (54.3)	0.0	3 (4.4)
Human structure and function	26 (25.2)	29 (31.5)	17 (20.0)	2 (2.9)
Professional communication	2 (1.9)	4 (4.3)	8 (9.4)	20 (29.4)
Nursing, society and culture	0.0	0.0	54 (63.5)	37 (54.4)
Other	3 (2.9)	9 (9.7)	6 (7.1)	6 (8.9)
Total	103	92	85	68

Students' choice of *Perspectives of Health and Wellness* as the *most enjoyable* and *most valuable* unit was confirmed statistically when crosstabulated (using the Chi-square test for independence) with other unit results ($\chi^2=14.2$; $p<0.0001$). *Nursing Society and Culture* was the least enjoyable and least valuable unit ($\chi^2=8.74$; $p<0.005$) with significant positive correlations between both value and enjoyment). Thus, both value and enjoyment of units were positively associated in the minds of students.

Semester 2

Students' perceptions of value and enjoyment of units in the second semester of study are summarised in table 2. In this study period, more than half the participating students identified the law unit

Legal Issues and Concepts as most enjoyable. The popularity of this unit was reflected in the respondents' comments:

It was different to anything else I have studied before and I know little about it.

Very interesting – enjoyable to learn and study.

I found it great and practical to what we are studying.

The timing of this unit in the second semester of the course ensures an introduction to legal concepts prior to the first clinical placement. This unit of study introduces students to basic concepts of law relevant to their practice seeing the majority of students also indicating that it was most valuable.

It was good to learn early on in the course what our legal responsibilities, etc., are. I think this will benefit us in placements next year.

Gave me a greater understanding of what legal responsibility I will have as a nurse.

You never want to be sued or lose the ability to practice as a nurse if you are found negligent. Waste of four years study otherwise.

Once again the nursing unit was relatively popular with the responding students, with more than a quarter indicating that it was the most enjoyable for them. *Health Assessment and Clinical Practice* extends knowledge of physical assessment and prepares students for extended clinical practicum through the introduction of more advanced clinical skills. In this unit students are also exposed to their first clinical block.

It was the most practical unit, which reminds you why you're doing all the theory involved in this course.

Practical and relevant – greatly enjoyed clinical placement.

Only a third of the responding students also identified this unit as being most valuable; a lower percentage than for the nursing unit in first semester. Nonetheless, it was clear that these students appreciated the practical value of this unit:

It is the most relevant, and it's where we learn all our skills.

We are actually putting in practice what we have come to unit to do.

Gave me a chance to feel like a real nurse with clinical placement.

The second bioscience unit *Human Structure and Function 2* proved less popular with participating students in the second semester of their course. This subject continues the study of anatomy and physiology commenced in the previous semester. Nearly one third found the unit least enjoyable.

Too much information (overload) for me.

Sheer volume of information needed to be absorbed in such a short time.

I don't want to become a scientist.

While the percentage of students who found this science unit 'most valuable' was reduced compared to the previous semester, there were nonetheless those that identified it as important.

...challenging, but vital.

[We] need to know A & P to understand how disease processes work and what to expect [and the] nursing care needed.

More than half the responding students found the Indigenous unit, *Indigenous Health and Wellbeing* least enjoyable. Many students also felt that this unit was least valuable, perhaps due to the historical and political context within which Indigenous health issues are explored. As with other units not perceived to be directly related to nursing, students were more likely to question its relevance.

Learned a lot of stats that will not have a huge bearing on my work. Would have preferred to learn more about traditional Aboriginal culture.

Although it was interesting I didn't see its value in helping me to be a better nurse.

I have no desire to be a remote [or] regional nurse.

Table 2: Students ratings of units of study at the end of semester 2 (frequency and valid percentage, n=69)

Unit of study	Most enjoyable n (%)	Most valuable n (%)	Least enjoyable n (%)	Least valuable n (%)
Legal issues and concepts	37 (53.6)	29 (42.0)	0.0	2 (2.9)
Health assessment and clinical practice	18 (26.1)	21 (30.4)	0.0	0.0
Human structure and function 2	6 (8.7)	11 (15.9)	22 (31.9)	8 (11.6)
Indigenous health and wellbeing	3 (4.3)	1 (1.4)	36 (52.2)	36 (52.2)
Other	5 (7.2)	7 (10.1)	7 (10.1)	6 (8.7)
None	0.0	0.0	4 (5.8)	17 (24.6)
Total	69	69	69	69

The category “Other” in table 2 once again includes units not core or recognised in this period of study. In addition to the definitive responses, four students (5.8%) wrote “none” when asked which units were least enjoyed, while 17 students (24.6%) also wrote “none” when asked which units were least valuable; a situation that had not occurred in the previous semester.

Legal Issues and Concepts was confirmed as both the most enjoyable and most valuable unit when crosstabulated with other unit results ($\chi^2=24.2$; $p<0.0001$). Alternatively, *Indigenous Health and Wellbeing* was the least valuable and least enjoyable ($\chi^2=35.8$; $p<0.0001$) with significant positive correlations between both value and enjoyment. Units perceived as valuable were also perceived as enjoyable, and vice versa; the least valuable being associated with being least enjoyable. These associations held true for both semester 1 and semester 2 units of study.

DISCUSSION

There is a lack of published information available related to nursing students perceptions of the most enjoyed or valued units of study in their pre-service programs. It may be that many universities have evaluated course curricula and these results remain unpublished. While it would appear logical that strong relationships would exist between subjects considered most enjoyable and most valuable, as was evidenced in the results, this is not always the case. We found, similar to the findings of Jordan et al (1999), that while science was considered difficult, heavy and hard to understand by a number of students, it was also rated as the most valuable by many. This indicated an appreciation of the relevance and merit of the information even though it wasn't their most enjoyable unit of study. Those students who enjoyed the science subject may have done so because the information was an expansion of what they already knew. Those who enjoyed this unit least may have entered the course straight from school or may have lost interest in the sciences, or else lacked the foundational knowledge to make sense of new material (Novak 2006).

Gallagher (2007) believes that students' preconceptions about what they think is the nature of nursing determines the value they see in the theories presented to them. The most popular unit in first semester was that related to nursing work where the content was more closely linked to what could be seen as the work of nurses. Students were more able to visualise themselves in the role of the nurse as evidenced by their comments about “doing things” and being “hands on”. The second nursing subject was also one of the most valued and enjoyed units in the following semester, being the only one that included clinical practice where students assumed the role of the nurse in a visible way. Rush et al (2009) found a significant increase in the way the students saw themselves as belonging to the nursing profession following their clinical exposure. As one would expect, these students in the current study joined the course in order to be nurses and therefore appreciated and enjoyed the opportunity to experience the practical aspects of the profession. Students who had already been exposed to nursing may have expressed a preference for other subjects because they were not enrolled in the nursing unit or because they were already familiar with the content and were looking for new territory to master.

Research by Hughes (2005) found that students tend to dislike certain subjects such as ethics and social policy, a fact reflected in this research where respondents felt that units related to sociology and communication were common sense and did not add to their knowledge base in a meaningful way. It may be that at this early stage in their education students don't see the significance of sociology to nursing practice. Furthermore, the Indigenous unit was rated the least enjoyable and least valuable subject in second semester. The highly focused area of this unit may have resulted in this unit being seen as particularly complex and might require a more advanced degree of sociological understanding than can be expected of first year students. As a result of similar feedback in standard university evaluations, this unit has since been moved to the second year of study.

Hughes (2005) also identified law as another unpopular subject however it was rated as the most enjoyable in second semester in our study, displacing the nursing unit. As a different area of enquiry, yet still presented in the context of nursing, it may be that law is seen by students to be both interesting and relevant. Leners et al (2006) found that as their professional values developed, students' focus became centred on the hidden, broader aspects of nursing practice such as team participation and interaction. This may explain why students indicated 'none' for the least enjoyable/valuable unit in second semester and thus the results indicate they had an increasing appreciation of the value of curriculum content.

Limitations and recommendations

The relatively small number of students available in the enrolled cohorts reduced the number of participants available for inclusion in this study: a factor aggravated by the reducing number of respondents in each round reported here. It was difficult to apply some statistical tests due to the small numbers in some categories, for example tests of correlations between ratings of units and students final scores on these. Although a longitudinal, prospective research design is the best way to ensure access to sequential groups, future research should utilise a larger sample in order to enable more accurate analysis of various subgroups and allow more precise calculations of correlations. The educational impetus to continuously improve curricula is likely, however, to result in changes within units of study that would permit only trends to be tracked in relation to the various versions of units over time. An additional limitation of this study relates to the fact that, while most students followed a common enrolment pathway, not all students were enrolled in all units.

Perceived or actual poor performance or difficulty in completing academic requirements may have coloured students' enjoyment and valuing of units. Future research with an increased qualitative component would enable evaluation of this aspect of students' experience. Given the relationship

established between value and enjoyment in this research, it may also be interesting to explore what significance this association has for educators. To what extent does enjoyment influence perceptions of value? Does perceived value, as was indicated in the nursing skills units, ensure an enjoyable experience for students? How can educators capitalise on this relationship to enhance the educational experience and student outcomes?

Most students of nursing courses have little true understanding of the qualified professional role. Research may thus be warranted with graduates 1-2 years post course completion as such a study may give a different picture of units considered most valuable to nursing and midwifery practice.

CONCLUSION

This study has provided a picture of pre-registration nursing students' perceptions of the value and enjoyment of various units studied in the first year of their education. Findings indicate a clear association between subjects they perceived as focusing on improving their skills towards achieving their professional nursing role and those units being both valued and enjoyed. By second semester of their first year of study, more mature opinions were apparent as they ascribed greater appreciation of other units of study allied to nursing. Further research is warranted with pre-service nursing students to more fully explore perceptions of the value of course content necessary for competency development. Such research could also identify students' understandings of how studies are related to their future professional nursing role. Increasing an appreciation of the significance of course content will ultimately enhance the experience of students in this important stage of their undergraduate education.

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