

# **Development of Accountability in Nursing Students**

**by**  
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## **Abstract**

Accountability is foundational to nursing ethics and professional practice; however, not all nursing students demonstrate this fundamental principle. A lack of accountability for practice can be a serious safety concern while limiting growth and development.

Through professional experience, I found some nursing students demonstrated a deficit in understanding and could not apply the concept in the clinical environment. Leading to the question, how does specialized education about the importance of accountability in the nursing profession develop a student's understanding of the principle? Followed by the query, will the curriculum enable the student to demonstrate improved accountability in case-based scenarios? Retrospective action research was conducted using first-year nursing students' artifacts of learning to gain insight into how the curriculum impacts their understanding and ability to apply accountability. Mixed method research was used to compare pre-and post-theory assessments, which demonstrated an increased understanding of the principle of accountability and improved ability to apply to practice.

**Keywords:** accountability; nursing student; professional practice; ethics

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# Introduction

Nursing professional standards require nurses to be accountable, meaning they are responsible for their actions, answerable for practice choices and act with honesty and integrity (Canadian Nurses Association [CNA], 2017). Accountability is foundational to nursing ethics and professional practice; however, not all nursing students demonstrate this fundamental principle. A lack of accountability can be a serious safety concern while limiting growth and development. For example, in the clinical setting, two students' actions compromised patient safety, one claimed accountability, and the other chose to point the blame elsewhere. The student demonstrating accountability was very upset about the risk they created for the patient and took action to prevent the issue from happening again. The other student blamed others and refused any accountability for their part of the problem. Since they did not accept the responsibility for their role, it is unlikely that learning occurred, and patients potentially remain at risk while under the student's care. This example demonstrates the importance of nursing students learning about accountability and understanding how to apply the principle to practice. Accountable practice increases patient safety and helps nurses utilize experiences where things do not go as planned to make improvements. There is no question about the importance of this ethical standard; the query is how nursing students understand accountability and are they able to apply the principle.

## Literature Review

Accountability is imperative to high-quality nursing practice and can be found as an articulated value by many nursing organizations and colleges (BC College of Nurses and Midwives [BCCNM], 2020; CNA, 2017; Davis, 2017; Kass & Faden, 2018; Krautscheid, 2014; International Council of Nurses [ICN], 2012; Leonenko & Drach-Zahavy, 2016; Milton, 2008). A review of peer-reviewed journal articles was completed using keywords, including accountability, responsibility, transparency, answerability, nursing, student, healthcare, and education. Articles that referred to student accountability for completing assignments and attending classes were excluded as they did not directly relate to applying the nursing value.

Despite accountability being a foundational component of nursing ethics and professional practice, there has been limited research into the development of accountability in nursing and healthcare students. There is also a significant research gap on accountability in nursing. Most peer-reviewed studies on the subject are outdated, so foundational documents such as the Canadian Nurses Association's Code of Ethics, International Council of Nurses, and British Columbia College of Nurses and Midwives Professional Standards were incorporated to fill the gaps. Date ranges for research were also extended to include the last 14 years in order to capture the most relevant literature. In addition, articles examining general theories of responsibility, answerability and transparency have been included, as they are vital aspects of accountability.

A theme that presented itself in the current literature is the ambiguous nature of the term accountability, as many students and nurses have differing ideas about the definition (Drach-Zahavy & Srulovici, 2019; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016; Milton 2008; Ort, 2016; Srulovici & Drach-Zahavy, 2017). Drach-Zahavy and Srulovici (2019), Leonenko and Drach-Zahavy (2016), and Srulovici and Drach-Zahavy (2018) identified that accountability was a three-part concept consisting of responsibility, transparency and answerability. Their studies found that nurses personal understanding of accountability significantly impacted how the professional standard was applied to practice. Ort (2016) found that many disciplines do not define accountability in the same way, creating ambiguity on the topic. Ort (2016) also explained that the

concept is often used interchangeably with responsibility in nursing. Krautscheid (2014) reviewed the literature and found that there was no consistency with the definition or language used to describe accountability in nursing. Without a clear explanation or understanding, the concept of accountability becomes more challenging for students and nurses to apply. The ambiguity surrounding the concept helps to identify the need for articulating in nursing education what accountability means and how it is applied to practice (Krautscheid, 2014). There are many inconsistencies in how nurses understand accountability (Leonenko & Drach-Zahavy, 2016). A lack of understanding the principle, makes it unlikely that a nurse or nursing student would be able to meet the standard of accountability. The different opinions about the definition of accountability may be due to the three aspects behind the concept (Krautscheid, 2014). Creating a clear understanding through additional education is imperative, as accountability is an essential value for nurses and nursing students to demonstrate.

According to the literature, the principle of accountability requires the nurse to be responsible, transparent, and answerable for all of their actions (BCCNM, 2020; CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; ICN, 2012; Kass & Faden, 2018; Leonenko & Drach-Zahavy, 2016; Ort, 2016; Srulovici & Drach-Zahavy, 2017). Many nursing organizations require that a nurse be accountable for maintaining knowledge, fitness to practice, proper documentation, as well as the safety of patients and self (BCCNM, 2020; CNA, 2017; Davis, 2017; ICN, 2012). These ideas about accountability lean heavily towards the definition of responsibility, but while it is an important aspect, there is more to the concept of accountability.

Answerability is another crucial facet to accountability, as nurses must own their actions and be willing to explain their activities to others. The idea of answerability is based on making rational judgements for actions taken (CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; Frederick et al., 2016; Leonenko & Drach-Zahavy, 2016; Shoemaker, 2011). Leonenko and Drach-Zahavy (2016), go on to explain that decisions should be based on society's established values. Answerability provides an expectation that supports ethical nursing practice. It requires a nurse or nursing student to provide justification for actions taken while providing care. Sound judgement is a critical attribute for a nurse to have. If a conflict of interest arises during care, the nurse must identify and work on a solution in the patient's best interest (CNA, 2017; Davis, 2017). Another way a nurse demonstrates answerability is by taking ownership of their role in any care,



most notably when there is an error. Answering for the error that occurred and working within the system to ensure safeguards can be put in place to prevent future mistakes. Answerability also refers to the justification of why care was not provided (CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; Frederick et al., 2016; Leonenko & Drach-Zahavy, 2016; Shoemaker, 2011). As autonomous professionals, nurses must make high-stakes decisions based on assessment and best practice, justifying their choices. In answerability, the explanation for decisions leads to the next aspect of accountability, transparency.

Transparency is another foundational facet of accountability found throughout the literature (CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; Kass & Faden, 2018; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016; Ort, 2016; Srulovici & Drach-Zahavy, 2017). The principle requires a nurse or nursing student to be open, honest, and communicate well (CNA, 2017; Frederick, 2016; Kass & Faden, 2018). This aspect of accountability deals with a nurse's moral obligation to their patients and, more broadly, to society. Transparency can be achieved through honest patient education, explaining procedures, and reasoning or describing a situation accurately. The close relationship between being answerable and transparent about the care provided ties these components together. It unfortunately also creates confusion as many nurses and students do not recognize them as separate aspects (Drach-Zahavy & Srulovici, 2019; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016). The concept of transparency is the aspect of accountability often not identified by those defining it, making it even more important to teach (Drach-Zahavy & Srulovici, 2019; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016). Transparent accountability should be taught throughout nursing education as a part of professional practice. A clear explanation identifying each facet and providing examples from practice to help students understand Krautscheid (2014) and Ort (2016) identified multiple ways the idea was understood, with most people thinking the word was interchangeable with responsibility.

In the literature, the concept of responsibility is described as being intertwined with the notions of answerability and accountability (Shoemaker, 2011). Thus, demonstrating how the close relationship between these ideas can add to confusion about the meaning. Shoemaker (2011) describes responsibility as a two-part notion, the first being responsible for "action or attitude" (p. 603). Secondly, the idea of being held accountable, which they tie to the idea of blame (Shoemaker, 2011). Hatch (2013),

identifies that having responsibility necessitates that a person or organization be answerable. Regulatory colleges such as BCCNM provide a means to standardize expectations and hold nurses accountable. Responsibility in healthcare is the belief that people should be held accountable for meeting accepted standards of conduct (BCCNM, 2020; CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; Hatch, 2013; Kass & Faden, 2018; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016; Ort, 2016; Srulovici & Drach-Zahavy, 2017). One challenge is that responsibility is not always easy to define in complex practice situations. It is essential that nurses clearly understand the concept so that they can meet the standards. Hatch (2013) also identifies that there must be mechanisms for reporting and that individuals must understand the concept if they are to report. Regulatory colleges set professional and practice standards and act on behalf of the public, investigating if a complaint arises.

For this study, accountability is defined as the professional standard by which nurses and nursing students demonstrate responsibility, take ownership of their actions, acting honestly and transparently. Accountable practice is vital due to the relationship between the value and patient safety. Davis (2017) and Krautscheid (2014) identified accountability as a critical factor in patient safety, as issues are identified, and the care team works on solutions to avoid potential adverse outcomes. Accountability ensures reporting of safety concerns so that interventions can be implemented. Safety was a common theme in the literature about accountability (BCCNM, 2020; CNA, 2017; Davis, 2017; Drach-Zahavy & Srulovici, 2019; Hatch, 2013; Kass & Faden, 2018; Krautscheid, 2014; ICN, 2012; Milton, 2008). The importance of patient safety in the nursing profession adds significance to the topic of accountability. It is crucial that the next generation of nursing professionals are taught the different ways to understand and apply this standard.

An issue identified in the study by Krautscheid (2014) regarding accountability in nursing education is that it is often a hidden curriculum. A hidden curriculum means the concept is embedded in the educational content without being clearly identified or examined (Krautscheid, 2014). The challenge of an unclear, multifaceted definition is likely part of why accountability is hidden within other content and not clearly explained to students. Lack of explanation poses a problem, as students often do not identify the concept and miss learning opportunities. Despite only one study identifying hidden curriculum as a challenge for teaching accountability, many others recognized the need

for nursing education to clearly define the concept (Davis, 2017; Leonenko & Drach-Zahavy, 2016; Ort, 2016; Srulovici & Drach-Zahavy, 2017). Krautscheid (2014) also identified that nursing instructors should demonstrate accountability in their interactions to help students better understand the concept. A significant research gap exists in teaching accountability in nursing education. There is no question that more research is needed to deepen our understanding of the topic.

Accountability is one of the most important nursing values that guide nursing practice in Canada and the world. Despite being a foundational component of ethical and professional behaviours, accountability remains largely misunderstood. The misconception about accountability or how to apply it in practice is likely related to the three facets. Many use the terms accountability and responsibility interchangeably; however, this is only one aspect. Accountability also requires nurses or students to be answerable for their actions and transparent in their role. Meeting all facets of this professional standard will ensure safe and quality patient care. Nursing educators need to explicitly define accountability and demonstrate the concept for students, as the current method of teaching the topic as a hidden curriculum is not very effective. Further research on accountability in nursing education is needed to fill the existing research gap.

## **Problem Statement**

Through my three years of experience as a nursing instructor, I identified that many students lacked a clear understanding of the concept of accountability. Without knowledge of the meaning or importance of the value, they could not apply accountability in practice, creating an unsafe environment for patients and missed learning opportunities for the students. Therefore, I set out to determine how including accountability as an unhidden curriculum within my teaching, may influence nursing students' understanding and practices of accountability.

## **Research Purpose**

The purpose of researching accountability in first-year nursing students is two-fold. Firstly, to investigate students understanding of what accountability means before and after the lesson. Secondly, determining if a specific curriculum that teaches the importance of accountability in nursing enables students to apply the principles to case-based scenarios more effectively. This research will also build on the Krautscheid (2014) study that identified the need for a clear definition of accountability in nursing education.

## Research Questions

How does specialized education about the importance of accountability in the nursing profession develop a student's understanding of the principle? How will the curriculum enable the student to demonstrate improved accountability in case-based scenarios?

# Research Process

## Methodology

Retrospective action research (Creswell, 2017) was used to analyze the students' learning artifacts and gain insight into how the curriculum impacted their understanding and ability to apply accountability. The study used an action research design to test changes made to the current curriculum in my classroom (O'Leary, 2017). This design was selected as I am testing changes made to the curriculum I am teaching. The cyclical manner in which action research is applied to test interventions lends itself well to answering the research questions developed (O'Leary, 2017). I also chose a retrospective design to minimize ethical concerns when studying students (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2018). The retrospective nature ensured that research did not begin until after the power dynamic of the teacher-student relationship had been dissolved.

## Design

As part of class participation, students had the opportunity to complete an optional pre-and post-assessment, answering in a sentence or two "what the word accountability means" and "why accountability might be important in nursing," as well as answering four multiple-choice case-based questions. The multiple-choice questions had students apply the principle of accountability to case-based scenarios based on their understanding of the subject (see "Appendix A"). The first time they completed the assessment was the week before the content was taught. The pre-assessment was done a week in advance to capture more accurate results, as some students prepare by completing readings in advance. I developed a curriculum for the Art and Science of Nursing class that incorporated new content about accountability. The lesson plan included providing a clear definition of the meaning of accountability with the three facets, discussing how it relates to nursing ethics and identifying why it is a professional standard as well as its impact on patient care (see "Appendix B"). Students were placed into groups to work through case studies with accountability themes, followed by a class presentation and discussion about the activity. Students were then asked to write a

post-assessment following the lesson, answering the same questions from the pre-assessment. These short activities were not graded and did not impact the student's academic or social standing within the course in any way.

## **Participants**

The potential study subjects were the 58 first-year registered nursing students taking my class, the Art and Science of Nursing, during the fall 2021 and spring 2022 semester at the College of New Caledonia in Prince George, B.C., Canada. Only the 44 students who completed both pre-and post-assessments were eligible to participate in this research project. Students from other instructors' Art and Science of Nursing classes were excluded from the study. From this group, three students volunteered to participate in the research and they were all from the spring 2022 class.

## **Procedures**

Ethics approval to complete this low risk research was received from the Simon Fraser Research Ethics Board (see "Appendix C") and the College of New Caledonia Research Ethics Board (see "Appendix D"). In late April, the Health Science administrative assistant sent an e-mail invitation and consent form to all first-year students using the listserv (see "Appendices E and F"). Three students responded via email over the next two weeks with consent to use their artifacts of learning in the study. Once consent was obtained, student pre- and post-assessments were taken off Moodle, the learning management system and analyzed using Microsoft Excel spreadsheets. Student identity was protected as the artifacts of learning were anonymized in the data set. I also ensured that all information was protected in a locked office, on a password-protected computer and coded to ensure confidentiality.

## **Ethical Considerations**

The power relationship was thoroughly considered as I was studying students from a class that I teach. As an instructor, I grade student assignments and assign final grades. The power dynamic involved has the potential to create risk for students (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada,



2018). The pre-assessment and post-assessment used to collect data were optional assignments within the class. The data was stored in a locked office on a password-protected instructor account on the Moodle learning system, where it remained until consent was provided. This assignment's completion or lack thereof did not impact the student's grades. No invitations were sent or research started until after the final grades were in for the semester to minimize the risk to students further. Once consent was obtained, data was anonymized, collated, organized, and secured using Microsoft Excel on a password-protected hard drive in a locked office. I used a third party to send the invite and obtain consent to minimize influence or perceived coercion.

## **Analysis**

A qualitative thematic analysis of the pre-and post-reflections examines how the curriculum changes students' understanding of accountability. A themed investigation of student perception about the role of accountability in nursing was completed to assess for changes in comprehension. Keywords were identified to help understand how the lessons impacted students' knowledge of the topic. A quantitative analysis was performed on each of the four pre-and post-test questions to investigate mean scores, descriptive statistics and how the curriculum changed the student's ability to apply the principles of accountability to case-based scenarios.

# Findings

In the quest to discover how specialized education about the importance of accountability in the nursing profession develops an understanding of the principle, students were asked to "describe what the word accountability means to you." Three students volunteered to participate in this research, and their answers from both assessments were studied. The initial response demonstrated a basic understanding of accountability, identifying the themes of responsibility for actions, admitting mistakes and not blaming others. Of the post-lesson responses, two out of three participants' answers showed growth in understanding with the addition of transparency, answerability, honesty, and responsibility for inaction to the original themes as represented in Table 1.

**Table 1**  
*Student responses to What does Accountability Mean?*

	Pre-assessment	Post-assessment
Responsibility for actions	✓✓✓	✓✓✓
Answerable		✓✓
Admitting mistakes	✓✓	✓✓
Transparent		✓
Honest		✓
Not blaming others	✓	✓

✓ represents response from one student

*Note. A comparison of the pre-assessment and post-assessment answers to "describe what the word accountability means to you."*

The second short answer question asked students "to describe why accountability might be important in nursing." Pre-assessment themes of trust, patient safety, the danger of errors and learning from mistakes. As represented in Table 2, the post-lesson assessments showed increased understanding for each participant, expanding themes to harm mitigation, responsibility for inaction and nurse improvement. Respondents also answered trust, patient safety and learning from mistakes with greater frequency. One student's pre-assessment response was "Accountability is very important in nursing because we are autonomous and trusted by our patients." The answer shows a beginners level of understanding. The same student's post-assessment response was

Accountability is very important in nursing because we are trusted to provide safe patient care and if a mistake happens it is important to admit that mistake so harm can be mitigated to our patient, and we can learn from the mistakes. We have to be accountable for our own practice and that includes any mistakes or decisions or inaction.

The comparison of the two shows significant growth and increased understanding. Demonstrating how the learning, builds on the foundation to include concepts of error reporting, harm mitigation, learning and responsibility for inaction.

**Table 2**

*Student responses to Why is Accountability Important in Nursing?*

	Pre-assessment	Post-assessment
Danger of errors	✓	✓✓✓
Trust	✓	✓✓
Learning from mistakes	✓	✓✓
Patient safety	✓	✓✓
Nurse improvement		✓✓
Harm mitigation		✓✓✓
Responsibility for inaction		✓

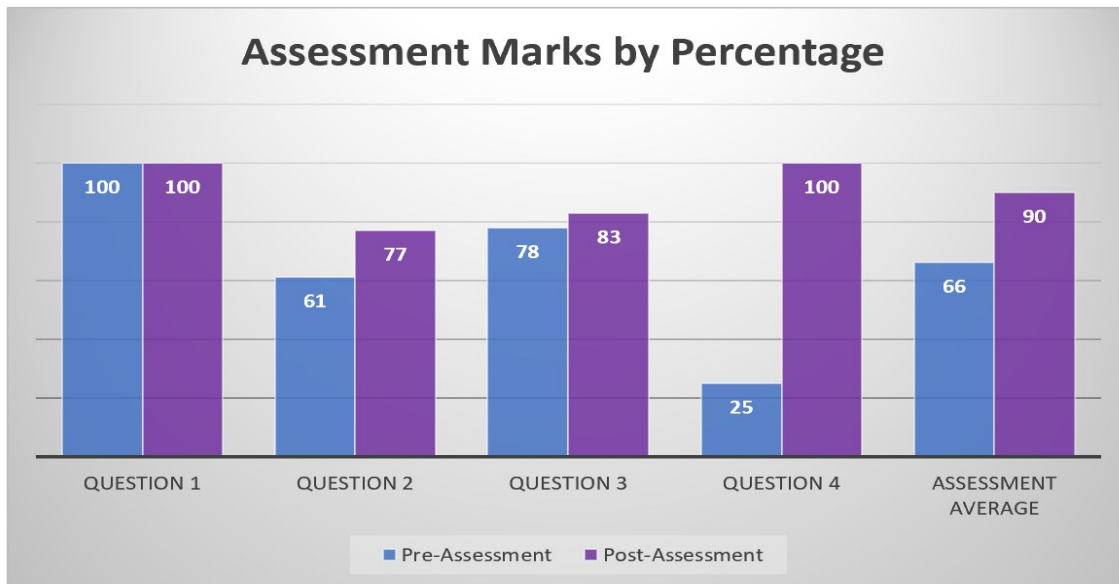
✓ represents response from one student

*Note.* Pre-assessment and post-assessment responses to "describe why accountability might be important in nursing?"

In an attempt to answer if the curriculum enabled students to demonstrate improved accountability in case-based scenarios, questions were developed considering the different facets of accountability (see "Appendix A"). The four case-based multiple-choice questions on the pre-and post-assessments had students apply the concept of accountability to nursing practice scenarios (See Figure 1).

Figure 1

Comparisson of pre- and post assessment multiple choice scores



*Note.* Bar chart representing average pre-and post-assessment scores. The average score on the pre-assessment was 66%. The 90% average on the post-assessment demonstrated a significant increase in the students' ability to apply accountability to practice. The first multiple-choice question had students apply accountability to an obvious patient safety concern. All participants received 100% on this question on both the pre-and post-test. The next question had students apply the concept of accountability to delegation and assessment of skill base. The average score on the pre-test was 61%. Students showed increased understanding, with a 16% rise in the average score after the enhanced lesson. The next question examined the students' application of accountability to the concept of performing unfamiliar skills. There was a 5% increase in the average, moving from 78% up to 83%. The final question has the students apply the concept of accountability to proficiency in nursing. The pre-test average was only 25% for this question, increasing four-fold to 100% after the lesson.

# **Discussion**

## **Significance of Study**

There is a significant gap in research on accountability, especially with respect to nursing education. This study contributes to the body of knowledge needed to fill the significant research gap that exists regarding understanding accountability as an ethical standard. It is one of only a few studies investigating accountability in nursing education. It may be the only research in recent times that examines the development of accountability in nursing students after curriculum enhancements. The research will help to inform how accountability as a professional practice is taught and understood in the nursing curriculum. The results will help inform changes in the quality of nursing education students receive in my nursing classes. The curriculum changes have the potential to benefit society by training accountable nursing professionals.

## **Limitations and Delimitations**

Since the subjects were students in my class, I was able to control the curriculum, the method in which the topic was presented and the assessment of learning. A delimitation of this study was the small sample size due to low response rate. Unfortunately, due to delays with ethics approval, invitations to participate were not sent out until after most first-year nursing students were on summer vacation. As few students continued using their college e-mail through the summer, only three participants volunteered to be included in the study. In the future, I would consider changing the timing of the invites to the following fall semester to capture a more significant number of participants. While my study only includes three subjects, as the instructor of this course, I see many parallel trends in the results.

The research on accountability in nurse training identified two themes; lack of clear definition and that it is often a hidden curriculum. My study used student assessments to examine if a clear definition and explicit curriculum, including case-based learning, would improve understanding and application through education.

Similar to the findings of earlier studies, responsibility is the primary way in which accountability was understood (Leonenko & Drach-Zahavy, 2016; Krautscheid, 2014;

Ort, 2016). The pre-assessment findings supported that the students' prior understanding centered on responsibility. The qualitative results of the thematic analysis demonstrated an increase in student understanding of accountability and its other facets in two out of three participants. The students whose answers demonstrated enhanced knowledge identified transparency, answerability and honesty, as well as responsibility for inaction.

Another improvement seen in the comparison was the growth of insight into why the standard is important in nursing. The findings show that specialized education about the importance of accountability developed the students' knowledge of the principle. Explicit descriptions within the curriculum with examples taken from practice helped to clarify student understanding. In the pre-assessment, students identified trust, patient safety and learning from mistakes as the reason that accountability is essential in nursing. Every student's post-assessment answer demonstrated improved understanding. They recognized the initial themes with greater regularity, and students identified that nurses are also responsible for inaction. Other new themes in the post-assessment were harm mitigation and nurse improvement, which are vital elements of patient safety. The literature identified that many nurses had gaps in their understanding of accountability (Davis, 2017; Drach-Zahavy & Srulovici, 2019; Kass & Faden, 2018; Krautscheid, 2014; Leonenko & Drach-Zahavy, 2016; Milton 2008; Ort, 2016; Srulovici & Drach-Zahavy, 2017). Potentially the explicit curriculum on accountability could be used by the regulatory colleges to provide nurses with continuing education on the topic.

The quantitative analysis of the assessments also showed that the lessons enabled the students to demonstrate improved accountability in case-based scenarios. Understanding the practical application is important as many students struggle to accept accountability in the clinical setting. With an increased understanding of all the ways that accountability should be applied in nursing practice, I am hopeful for a positive impact on the students' clinical practice.

## **Recommendation**

Despite the lack of statistically significant results, I believe that the enhanced curriculum adds value to the topic of accountability covered in the Art and Science of Nursing. I plan to continue using the new curriculum and share the content with other

instructors at the College of New Caledonia. I will also seek to publish my findings in hopes that this research becomes accessible to other nursing instructors and professionals. I believe that making accountability an explicit topic within nursing education is an important first step in creating nurses that consistently meet the standard. Further, I believe that the regulatory colleges would benefit from implementing continuing education courses using explicit curriculum about accountability. This would ensure that nurses understand all aspects of accountability and can meet this important professional standard.

## **Suggestions for Future Research**

However, the small participant group means that results may not be generalizable, and further research is needed. I would also be interested in studying the concept of application to clinical practice with students—a study to determine if the case-based learning from class translates into increased accountability in the clinical setting.

## Conclusion

The professional standard of accountability is vital to safe nursing practice. Despite the importance of this ethical principle, there is minimal current research on the topic. Available literature indicates that the word accountability is often used synonymously with responsibility, leading to a lack of understanding about other aspects. The concept of accountability being hidden within the curriculum and not clearly articulated was also identified in the research. My study demonstrated that clear definitions and case-based examples supported increased understanding of the principle and improved students' ability to apply accountability to scenarios. Recommendations going forward include utilizing explicit curriculum, sharing information with other educators and the creation of continuing education modules. Further research is needed to improve accountable practice in nursing and make healthcare a safe place for everyone in society.



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# Appendix A. - Pre-and Post Assessment Questions



## Development of Accountability in Nursing Students - Reflection and Quiz Questions

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**Student Pre-Reflection and Student Post-Reflection (the same questions will be used).**

In a sentence or two, describe what the word accountability means to you?

In a sentence or two, describe why accountability might be important to nursing?

**Student Pre-Quiz and Student Post-Quiz (the same questions will be used)**

1. A student nurse gets several servings of Ginger ale for her patient during her clinical shift. She realizes later in the shift that the patient is on fluid restrictions and should not have received any additional fluids. Her next actions should include... **(Select all that apply)**
  - a) Report the additional fluid to the nurses and her instructor
  - b) Continue providing her planned care
  - c) Blame the nurse as she should have told her about the restriction
  - d) Monitor the patient for fluid volume overload
  - e) Decide that it does not matter, as she saw a care aide providing patients' additional drinks
  
2. The nurse manager determines that a staff nurse is at the competent level of proficiency when providing client care. Which behaviors did the manager observe the staff nurse perform? **(Select all that apply)**
  - a) Discussing care needs with other team members
  - b) Engaging in active decision-making
  - c) Basing actions on long-term goals

- d) Organizing care priorities
  - e) Implementing actions based upon intuition
3. After restructuring care areas, the nurse realizes that clients admitted to her unit will require care that she is unfamiliar with providing. Which actions are the most appropriate by the nurse to ensure that quality safe care is provided to all clients?
- (Select all that apply)**
- a) Discuss client care needs with a nurse educator
  - b) Ask to be assigned to clients with familiar medical diagnoses
  - c) Request a transfer to another care area
  - d) Search for information on the Internet
  - e) Discuss unsafe working conditions with the director of nursing
4. The student nurse is assigned to work with a staff nurse when providing client care for the clinical experience. Which behaviors would only be exhibited by the nurse who is practicing at the expert level of proficiency? **(Select all that apply)**
- a) Focuses on urgent client care needs
  - b) Questions the impact of prescribed medication on other body systems
  - c) Walks into a room and immediately assesses lung sounds because the client did not "look right"
  - d) Determines that a new admission would need fluid monitoring and daily weights based upon visual inspection
  - e) Identifies judgments about client care needs

# Appendix B. - Lesson Plan



## Lesson Plan - Development of Accountability in Nursing Students

### Development of Accountability in Nursing Students - Lesson Plan

SUBJECT	TEACHER	COURSE	DATE
Accountability	Tara Green	NURS101	October 12, 2021

PHASES	TEACHER GUIDE	STUDENT GUIDE
INTRODUCTION	Lecture – What accountability is and the different application of the principles	<ul style="list-style-type: none"> <li>Active listening</li> <li>Contributing ideas</li> </ul>
STORY	A story about nursing student accountability followed by a class discussion about consequences for patients.	<ul style="list-style-type: none"> <li>Active listening</li> <li>Engaging in discussion</li> </ul>
CLASS BRAINSTORM	What words do you associate with accountability  Facilitate	<ul style="list-style-type: none"> <li>Brainstorming</li> <li>Engaging in discussion</li> </ul>
GROUP WORK	Organize the class into groups of 4 or 5. Have students work through case studies.	<ul style="list-style-type: none"> <li>Engage in the group case study</li> </ul>
CLASS DISCUSSION	How would each group respond to the case in an accountable manner?  Facilitate	<ul style="list-style-type: none"> <li>Engaging in discussion</li> </ul>

# Appendix C. – Research Ethics Approval SFU



## Minimal Risk Approval – Delegated

**Study Number:** 30000716

**Study Title:** Development of Accountability in Nursing Students

**Approval Date:** February 24, 2022

**Expiration Date:** February 24, 2023

**Principal Investigator:** Michelle Pidgeon

**SFU Position:** Faculty

**Faculty/Department:** Education

**Student Lead:** Tara Green

**SFU Collaborator(s):** N/A

**Research Personnel:** N/A

**External Collaborators from the College of New Caledonia:** Dana Armstrong, Grace Dyck

**Funder:** N/A

**Funding Title:** N/A

**Funding Number:** N/A

### **Document(s) Approved in this Application:**

- TCPS2 CORE Tutorial Certificate for Tara Green dated July 16, 2021
- Research Invitation Email, version 1 dated February 23, 2022
- Letter of Invitation and Consent Form, version 1 dated February 23, 2022

### **Document(s) Acknowledged in this Application:**

- Lesson Plan
- Reflection and Quiz Questions

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human participants.

The approval for this Study expires on the **Expiration Date**. **An Annual Renewal must be completed every year prior to the Expiration Date. Failure to submit an Annual Renewal will lead to your study being suspended and potentially terminated.** The Board reviews and may amend decisions or subsequent amendments made independently by the authorized delegated reviewer at its regular monthly meeting.

**This letter is your official ethics approval documentation for this project. Please keep this document for reference purposes.**

**This study has been approved by an authorized delegated reviewer.**

## Appendix D. – Research Ethics Approval CNC



### RESEARCH ETHICS BOARD

April 13, 2022

Tara Green  
Nursing Instructor  
CNC

**Re:** Application for CNC Ethics Approval  
'Development of Accountability in Nursing'

Dear Tara,

Thank you for your recent application for Ethics Approval from the CNC Research Ethics Board (REB). I **am delighted** to inform you that your application has been **APPROVED**.

The Approval Number for your research project is **EO-2022-0720-089**.

Should you have any questions, please contact the REB Administrative Assistant, Robyn O'Donnell. She can be reached by email at [REDACTED] or by phone at [REDACTED] ext. 5676. Please be sure to quote your Approval Number in any correspondence. Please notify the REB once your research is completed.

On behalf of the REB, I would like to extend our congratulations! We look forward to the results of your research.

Sincerely,

Paula Hayden, EdD  
Chair, Research Ethics Board

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## **Appendix E. - Third-Party Consent**

### Letter of Third-Party Consent

I, Dana Armstrong, Health Sciences Administrative Assistant at the College of New Caledonia, consent to act as a third party in the study, Development of Professional Accountability in Nursing Students. I agree to send a letter of invitation and consent to the first-year nursing students that completed the pre and post assessment during the fall 2021 and spring of 2022 of NURS101 via the list serve, on behalf of the researcher, Tara Green in Spring 2022 after final grades have been submitted.

Sincerely,

Dana Armstrong

# Appendix F. - Letter of Invitation and Consent



## Letter of Invitation and Consent Development of Accountability in Nursing Students

### Researcher:

Tara Green RN, MEd Candidate, Faculty of Education

### Purpose:

The purpose of researching accountability in first-year nursing students is to determine if a specific curriculum that teaches the importance of accountability in nursing and has students apply it will improve the student's application of the principle.

You have been invited to participate in this study in your role as a nursing student at the College of New Caledonia. I am interested in learning how specialized education about the importance of accountability in nursing develops a student's understanding of accountability? I will also be assessing if the specialized curriculum enables the students to demonstrate accountability in case-based scenarios?

This study will help to inform and guide further curriculum development about accountability, potentially benefitting students, healthcare employers, and the public.

### Study Procedures:

You are being invited to participate in this study that would involve using artifacts of learning that you completed in NURS 101. Specifically, an examination of key themes from your pre- and post-reflections about accountability will be studied, and the differences between pre- and post-assessment scores will be compared.

This is a **minimal risk study**; it uses artifacts of learning from a class that you have completed.

**Confidentiality.** All information gathered from Moodle will be anonymized, and all personal identifiers will be removed, ensuring your privacy. The data will be kept in a locked office and password protected on a computer hard drive. Only I, Tara Green, as a researcher and my faculty supervisor, Dr. Michelle Pidgeon, will have access to the data. Your confidentiality will be respected during this research project and in disseminating its results (at no time will your name or affiliation) be disclosed.

**Voluntary Participation.** There is no obligation to participate in this study. Your decision to participate (or not) will not be shared with anyone. There are no negative consequences for choosing not to participate in this research. Your decision on whether or not to participate in the study will not influence your grades in any coursework and will not affect your relationship with your teacher in any way. Once consent is provided to use artifacts of learning created in NURS 101, the data will be anonymized, at which time I will no longer be able to identify it as yours. This means that there will not be an opportunity to withdraw from the study at a later date.

**Data Storage.** Artifacts of learning and other information related to this research study will be kept on a password-protected personal computer. I will destroy the files after five years. The research

data will be used to create a poster presentation and report. After I complete all of my MEd degree requirements, I may use the research to publish in journals, present at conferences, or share with other nursing schools.

**Remuneration/Compensation.** For participating in this study, you will be given a \$5 gift card from your choice of Starbucks, Tim Hortons or McDonald's as a token of appreciation.

**Contact for information about the study.** If you have any questions about this project, please contact Tara Green RN. You may also contact Dr. Michelle Pidgeon, Faculty of Education.

**Contact for concerns about the study.** If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact the SFU Office of Research Ethics.

I will follow up to discuss this matter with you directly, either by e-mail or phone. If you have any questions about this project, please contact me.

Thank you for considering participating in this study about accountability development. Before you decide whether to participate, please take time to review the following information. If you have any questions or need additional information, please ask!

I, Tara Green, am conducting this research to explore student development of understanding and application of accountability. This will be done using artifacts of learning completed in NURS 101 during the fall of 2021. I am a student, and this research is being conducted as part of the requirements for the Masters in Educational Leadership program at SFU. Michelle Pigeon, Ph.D., is supervising this research.

I will present the results of this research in the form of a written report to my faculty supervisor, as well as a public poster session at the 2022 Summer Institute at SFU.

By e-mailing a reply that you consent, indicates that:

- You agree to participate in this research and to having your artifacts of learning included in the study.
- You understand that you are free to stop participating in this research at any time before the data is anonymized. At which point there will be no way to know which contribution was yours.