

**Objective Structured Clinical Examinations as  
Summative Examinations for Assessing Clinical  
Readiness: Perspectives of Entry-level Nursing  
Students**

by  
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B.Sc.N., University of Northern British Columbia, 2011

Project Submitted in Partial Fulfillment of the  
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or

- b. advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University

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## **Abstract**

Objective Structured Clinical Examinations (OSCE) at the College of New Caledonia are used as a summative, high-stakes evaluation before entering the clinical setting to ensure the Year 2 Bachelor of Science (BSc) Nursing students have obtained the required knowledge and skills required to interact with patient populations in acute care. This mixed-methods survey design study documents the student experiences while addressing whether a high-stakes OSCE is an appropriate summative evaluation method to assess clinical readiness and whether the passing or failing of an OSCE is predictive of overall clinical success. Students described the high-stakes OSCE experience as negative and highly stressful. They do not find them relevant or valuable in aiding their clinical practice. However, when used appropriately, OSCEs remain the best testing method for health science disciplines. Based on the findings of this study improvements should be made to the examination process for implementation, adjudication, and feedback components to align with existing literature.

**Keywords:** OSCE; Objective Structured Clinical Examination; Nursing student; High-stakes; Summative examination

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# Introduction

There are many ways nursing students are evaluated throughout their nursing education, from formative written exams to Objective Structured Clinical Examinations (OSCE) and professional competency-based clinical performance evaluations. An OSCE is typically structured to test specific skills of health science students. They can be formative, summative, or both. My work as a Registered Nurse and as a nursing instructor with the College of New Caledonia (CNC) sparked curiosity about social justice and equity within post-secondary nursing education. As I observed students anxiously prepare, I wondered if this stressful experience accurately predicts their clinical preparedness and eventual success in the clinical setting? Or does this process remove candidates who might otherwise have been successful with a different testing method if given more support and opportunities to learn and grow.

Within the Northern Collaborative Baccalaureate Nursing Program (NCBNP) in which I work, OSCEs are used as a one-time, high-stakes evaluation prior to entering the clinical setting to ensure students have obtained the adequate assessment skills required to interact with patient populations in acute care. Failure of their OSCE results in denial of their participation and requires students to repeat their lab and OCSE components the following academic year, resulting in the delay of their potential graduation. In advance of their OSCE, students are provided with a copy of the marking rubrics and a few potential scenarios (Appendix A), one of which they will be assigned at the time of their examination. They are expected to work through an assessment and demonstrate their skills and competency within twenty minutes. Students are then adjudicated by the faculty, given a satisfactory or unsatisfactory grade and brief feedback on the components that require further development.

My teaching style tends to be in a servant leadership style (Northhouse, 2019 p. 227-256). I view my role as an instructor as both a role model and a support person to assist each student in achieving their goals and reaching their potential on a very individualized trajectory. I aim to recognize that their individuality brings strengths to the team and the profession, and the diversity of our nurses serves the diversity of our patient's needs. Conversely, I have overheard colleagues say things like "OSCEs weed out the weak students" before getting to clinical. Comments such as these and the

current method of OSCE administration create some pause and concern for me, leading me to ask several questions inspired by social justice and equity in education: Is there a more equitable way to assess nursing student's skills, professionalism, and competency? Are there systemic structures in place that promote the furtherance of inequities if present? What is the true purpose of the summative assessment? Are we assessing what we intend to assess? Whose interest does the summative exam serve? - The student or evaluator? What actions are we taking to help our students be successful? Do we, the institution, truly want them to be successful if we use these assessment methods?



# Literature Review

A literature review was completed, finding many common themes amongst the abundance of data on OSCE examinations. This literature review included sources with publication dates within the last ten years and included many health disciplines that utilize OSCEs within their student training programs around the world. Several themes are noted in the literature: examination creation and implementation, reliability, and validity of the exams, grading of the exams, and the student experience of completing an OSCE exam.

## Examination Creation and Implementation

An OSCE is a practical exam utilized to test student's practical applications, physical skills, and problem-solving. These exams often come with standardized criteria for a successful passing grade. OSCEs are utilized across many health-science disciplines worldwide (medicine, nursing, dental, dieticians, physiotherapy, pharmacy). When designing an OSCE, several elements should be considered; OSCE should be set up in a consistent manner to maintain the validity and reliability of the examination, keeping within 5-20 mins, with a consistent set of expectations and marking criteria. OSCEs should not be used as a stand-alone assessment; instead, they should be utilized in a serial format of formative exams or practice OSCEs before using an OSCE as a summative assessment (Currie, Sivasubramaniam, & Cleland, 2016). OSCEs should be completed in a series to ensure the students' grade is consistent between the scenarios and stations (Rushforth, 2007). Additionally, these formats reduce student stress and anxiety around the examination; Saunders et al. (2019) and Robinson et al. (2017) suggest additional benefits to having the formative or practice OSCEs be collaborative. By having the student's peers adjudicate their OSCE, there are additional learning opportunities available and increased confidence and a reduction in stressors. Eva et al.'s (2016) reflective paper critically examines common, current assessment practices within healthcare education and offers insights into how they might be adapted to improve healthcare by improving education. The authors argue that the goals for assessment practices in the education of health professionals should "(1) Increase opportunities to promote learning rather than simply measuring performance; (2) Enable integration across stages of training and practice; and (3) Reinforce point-in-time

assessments with continuous professional development in a way that enhances shared responsibility and accountability between practitioners, educational programs, and testing organizations” (p. 897). To ensure students gain the benefits of an OSCE feedback should be provided as it is one of most valuable outcomes. Feedback should be timely, constructive, specific, and ongoing to allow students to learn and improve their skills, confidence, and competence. Building their professionalism in scenarios and then translate it to their clinical practice growing their confidence and competence (Sterz, 2021).

Other advantages of OSCE style testing include, students require less time to study for an OSCE than a traditional written examination and achieve higher grades (Muller et al., 2019). In addition, a mixed-methods study by Sharvin (2007) completed at University of Derby, Ireland Nursing School, examining whether practice based learning aids influenced theory-practice integration for clinical skills competence among undergraduate nursing found that OSCEs allowed students to transfer their learned theory to practice in a simulated situation. An OSCE may also be utilized to teach and assess other necessary professional non – technical skills such as communication, holistic patient-centered care, patient advocacy, confidentiality, and patient education (Rentfro, 2011). In 2008 mixed methods study by Turner and Dankoski was completed at Indiana University, investigating if OSCEs were a more reliable and valid way to test medical students than traditional methods. Their findings were similar to those of Rentfro and are exemplified in further detail:

Teaching to the test” is a common phenomenon that helps students pass a certain required assessment. In the case of OSCEs, teaching to the test would possibly lead to enhanced physical exam skills training, thus addressing a recognized deficiency in current medical school graduates. The exact curricular content related to skills education is often clarified and standardized through consensus building. In one published report, the implementation of SP [standardized patient]-based testing led to dramatic change in student learning activities, with more time spent on ward-based activities and less on preparation for written tests. Also, the use of OSCEs for evaluation reinforces the patient-centered nature of medical practice, often provides timely and specific feedback on clinical performance, and reminds students that they are practitioners, not mere masters of medical knowledge. (p. 577)

As demonstrated by the literature and research, thoughtful planning and consideration of details is required for successful creation, implementation, and execution of an OSCE examination.

### **Reliability and Validity**

Data from multiple studies (Dreher, Smith, Glasgow, & Schreiber, 2019; McWilliam & Botwinski, 2012; Naumann, Moore, Mildon, & Jones, 2014; Parkin & Collinson, 2019; Pugh et al., 2016; Roberts, 2007; Sternz, 2021; Turner & Dankoski, 2008) show a positive correlation between successful passing of the OSCE as a predictor of success within clinical settings. As such OSCEs are an excellent way to test clinical skills required for practicum placements. Likewise, unsuccessful, or poor OSCE results may aid in predicting those who may struggle or require more support in clinical settings.

The necessity of adequate pre-test preparations facilitated by educators is necessary to reduce student anxiety, increase their understanding of expectations and improve confidence. McWilliam and Botwinski's (2012) conducted their qualitative study at the nursing school at the University of New Hampshire in Durham, New Hampshire, USA. They conducted interviews with sixty full-time nursing students and found that "with appropriate standardized patient selection and training, utilization of appropriate tools, and good data collection, OSCE can offer a valid and reliable means of testing nursing students' clinical competencies" (p. 39). To obtain reliable and valid results, an OSCE evaluation sheet should assess multiple dimensions and not just be assigned one overall score (Roberts, 2007); this supports Sternz's (2021) findings around the need for specific feedback for student development.

To create a valid and reliable assessment tool to assess physiology students' key competencies at the University of New South Wales, Australia, Naumann, Moore, Mildon, and Jones (2014) utilized the list of professional competencies and grouped them into themes and categories. OSCEs were completed and scored using standardized criteria. Validity was determined by confirming the accuracy and relevance of the content with students and licensed experienced practitioners. Key competencies were grouped within the domains of communication, clinical and procedural skills, and technical proficiency. Ultimately, the authors found it reliable to assess key professional

competencies and standards required for the practicum placements. Dreher, Smith, Glasgow, and Schreiber (2019) echo the findings of Naumann, Moore, Mildon, and Jones (2014), citing at minimum patient safety concerns and school accreditation should be motivation for schools to ensure the “minimum competency of students” (p. 477).

There are mixed results with the correlation of OSCE performance and future performance in the clinical or workplace settings. Turner and Dankoski (2008) reported “At best, performance assessment [in a high-fidelity exam] is about as good at predicting actual performance as a multiple-choice test based on relevant knowledge, but no better” (p.577). However, they go on to say there are many benefits to long-term comprehensive OSCEs “student performance improved, small-group teaching sessions were standardized, and faculty received feedback that improved instruction and enthusiasm for teaching physical exam skills” (Turner & Dankoski, 2008, p.577).

Graham’s (2010) study evaluated the reliability, validity, and educational usefulness of a comprehensive, multidisciplinary OSCE in dental education. 78 dental hygiene students at Columbia University, USA participated in a quantitative study finding that the OSCE was a highly reliable examination for students, with high content validity and a moderately high correlation to future clinical performance. Pugh et al. (2016) and Parkin and Collinson (2019) found similar results with a positive correlation between OSCE progress test scores which are predictive of future outcomes on national accreditation exams.

## **Grading**

Assessing and marking exams comes with many challenges and should be completed with great care to maintain the accuracy and reliability of the examinations. Adjudicators must be aware of any bias they may hold and the potential for variability between other adjudicators. Both formative and summative assessments play important roles in the education and assessment of student knowledge, progress, and competence. Terry, Hing Orn, and Milne (2017) completed a systematic review of 18/4739 studies focused on summative assessment methods to predict the clinical performance of students within health professions. The authors describe the main goals of summative assessment in health sciences education as follows: “(1) the promotion of future learning, (2) to ensure that high-stakes decisions such as progression, graduation

and licensing are robust, so the public is protected from incompetent practitioners, (3) and to provide a basis for choosing applicants for advanced training (p. 2)". Rushforth (2007) suggests structured, evidence, and competency-based criterion to ensure students meet their profession's standards consistent with the previously mentioned findings of Dreher, Smith, Glasgow, and Schreiber (2019) and Naumann, Moore, Mildon, and Jones (2014). Terry (2016) cautions that it can be hazardous to use OSCE outcomes as a predictive tool due to the significant variation in clinical outcomes. However, the author notes "based on the current evidence, the Objective Structured Clinical Examination may be the most appropriate summative assessment for educators to use to identify students that may be at risk of poor performance in a clinical workplace environment" (Terry, 2016 p. 13). A study by Wanstall (2010) completed at London Metropolitan University included 65 Dietetic students in a quantitative study investigating the relationship between OSCE score and practicum outcomes, found a weak but positive correlation:

Of those who scored less than 60% in the OSCEs, only 43% passed the placement, whereas of those who scored more than 70% in the OSCE, 77% were successful at the first attempt. It would appear that the outcome of work-based placements can be predicted to some extent by the OSCE scores, but that the scoring system and the pass/fail criteria need careful preparation in order to reflect the students' abilities accurately. (p. 62)

High-quality feedback is necessary for student growth and impacts the overall outcome of the OSCE. Alkhateeb, Al-Dabbagh, Ibrahim, and Ghanim Al-Tawil's (2019, para. 17) completed a study on OSCE feedback at Erbil Medical School, Iraq. Their study was an experimental design, single blinded with randomized control and included thirteen medical students. They sought to understand what the effect of formative OSCE on the undergraduate medical students' performance in a subsequent summative-OSCE assessment. They report the main findings regarding feedback as the following:

Feedback could be immediate or delayed according to its timing. When it is planned to facilitate lower-order learning outcomes, for example, the recall of facts, prompt feedback works best. However, when higher-order learning outcomes are a concern and necessitate the transfer of what has been learned to

a new situation, delayed feedback probably works better. (Alkhateeb, Al-Dabbagh, Ibrahim, and Ghanim Al-Tawil, 2019, para. 17)

Additionally, the authors also note that students seem to prefer immediate feedback, consistent with those of Roberts (2007) and Sternz (2021).

Disadvantages of OSCE testing include stressed students, they are expensive to administer, in addition to being resource and labor heavy. There are also concerns with the variability of grading. A study by Naumann (2016) on the development of an assessment tools to evaluate key competencies of physiologists, found that the variability in the adjudication of exams arises from observation, judgment, and rating processes because of the individual perspectives of the adjudicators. The adjudicators were, however, able to agree on general classifications of good and poor performance. Another study by Oranye, Ahmad, Ahmad, and Bakar (2012) at Open University Malaysia, Kuala Lumpur, Malaysia. Three hundred and eleven distance learning nursing students voluntarily participated in this mixed methods study which sought examine the effect of work and years of nursing practice on nurses' clinical skills competence. Both students and experienced nurses we assessed for their competence and performance during an OSCE exam. Only 14% were able to complete the tasks correctly and completely. An additional 12% failed the exam entirely. The authors recommend that OSCES continue to be a part of nursing education and be utilized continuously throughout a degree program to pursue clinical competency.

### **Student Experience**

Students around the world describe their OSCE as valuable but highly stressful, with high stakes and high expectations (Hilliard, 2018; McClenny, 2018; Robinson, Morton, Haran, & Manton, 2017; Turner & Dankoski, 2008; Saunders, Say, Visentin, & McCann, 2019). These stressors can impact their ability to learn effectively and OSCE testing, and adjudication may contain many inconsistencies. McClenny (2018) recommends that educators explore strategies to develop well-defined structures of teaching and learning of the course content, focusing on supporting and preparing students for testing. Hillard (2018) performed a qualitative inquiry using Boud and Walker's experiential learning theory as a theoretical framework. The author conducted semi structured interviews with eleven students enrolled in an advanced practice nursing

program in the southern United States. Data was analyzed using a constant comparative method and four themes emerged (1) personal experience of anxiety, (2) factors contributing to anxiety, (3) student-led strategies to minimize anxiety, and (4) faculty-directed strategies to decrease anxiety. Hillard echoes the recommendations of McClenny and emphasizes the need for educators and nursing faculty to recognize the experience of anxiety in high-stakes clinical testing and take a leadership role in helping students identify and manage their anxieties.

With a long-term comprehensive examination style, Turner and Dankoski (2008) report, "Students evaluated the experience positively and perceived the faculty time commitment as an expression of faculty interest in teaching. Moreover, after passing the OSCE, student confidence increased, and anxiety about upcoming clinical rotations decreased" (p. 577). Another way faculty can help their students be successful is to consider the location of the exam. The physical environment plays an important role in testing. A qualitative study completed by Hosseini, Fatehi, Eslamian, and Zamani (2011) at the Isfahan University of Medical Sciences in Iran had nursing students complete a questionnaire after their OSCE to better understand students views towards OSCE testing. Students reported having all the correct and functioning equipment present in a quiet, realistic environment is helpful to their OSCE.

Overall, the students' perspectives in these stressful, high-stakes examinations are largely absent. My study will address this gap by exploring nursing students' voices, experiences, and recommendations as they prepare, complete, and reflect upon their OSCE experience in preparation for entering their first extended acute care clinical practicum placements.

# **Research Process**

## **Context of the Study**

This study was completed at the Prince George campus of the College of New Caledonia (CNC). Established in 1969 this northern college has been educating students of the Northern Interior regions of British Columbia. The program is collaborative with the University of Northern British Columbia (UNBC), with the first two years occurring at CNC and the last two years via UNBC. Approximately 120 Bachelor of Science in Nursing students are admitted to the Prince George campus annually. In their first two years of education there is a strong focus on building foundational assessment and clinical skills. Prior to entering the clinical settings, students participate in an Objective Structured Clinical Examination. These exams typically take place the last two weeks of the fall semester.



## **Research Problem, Purpose and Questions**

Our students have informally expressed their anxieties, stressors, and frustrations with their OSCE experience; consequently, this has led me to ask; 1) should a single, high-stakes, summative OSCE be used to evaluate 2<sup>nd</sup> year nursing students before entering the clinical setting? 2) What is the student experience of these high-stakes OSCE examinations? 3) Is the passage of the OSCE predictive of success in the clinical settings? This research aims to answer these questions and capture the student experience, adding to the body of existing literature and utilizing the data to inform changes that could improve the efficacy of the exam and improve the student experience. Additionally, better preparing students for success may also allow for increased student retention and decreased attrition within the 2<sup>nd</sup> year of the nursing program associated with the current high-stakes examination.

## **Methodology and Design**

The methodology for this research was a mixed-methods survey design. A series of three, short, 10-minute, anonymous surveys were designed to capture the student experience with both written responses and Likert scale questions. They were intended to be and delivered at specified intervals through the fall and spring semesters of the 2021/22 academic year. Survey 1 was to be sent at the end of October - early November and focus on pre-OSCE experiences and preparation. Survey 2 was to be completed in December 2021 after the students completed their OSCE exam but prior to start of their next clinical placement. Survey 3 was to be sent mid-April, after the students have completed their clinical placement. Unfortunately, some bureaucratic and administrative delays were experienced during the ethics approval process and all 3 surveys were disseminated well after the original intended dates. The first survey was sent to 107 Year 2 nursing students on the email list serve at the end of April following CNC ethics approval, followed by the other two surveys with one week between each.

Of note, the OSCE was made significantly easier for the 2021-2022 academic year. An overall reduction in enrollment at CNC, a result of the COVID-19 pandemic, created a large financial deficit for the College. In response to those financial constraints and budgeting concerns, the School of Nursing was asked to assess where they could

reduce expenditures. Due to the large volume of resources and staffing required to put 120 students through these summative practical exams a decision was made to alter the exam. The OSCE was shortened significantly and focus only on the student's ability to obtain a manual set of vital signs (10-minute exam per student), opposed to completing a comprehensive head-to-toe assessment with vital signs (25-minute exam per student) as they had in previous years. The responses to the surveys reflect this change.

The Skills Checklist which was provided to the students for their practice and preparation has been included in Appendix A as a reference of the expected outcomes of both the original, and modified exams. These were the same documents used by faculty during the adjudication of the OSCEs.

## **Participants and Recruitment**

The participants of this study included Year 2, Bachelor of Science Nursing (BScN) students at the College of New Caledonia in Prince George, equaling 107 invitees. I hoped to have >75% of the class respond voluntarily, unfortunately participation was low; Survey 1 had fifteen participants, Survey 2 had eight participants, and Survey 3 had four participants. No incentives were provided. Requests for participation and survey links (to SFU's Survey Monkey) were disseminated to the BScN 2<sup>nd</sup> year listserv by the Department of Health Sciences administrative assistants at. Data collection occurred from April 2022, at the end of NURS 215 to May 14, 2022 during the last clinical practicums of the year. Each survey took approximately ten minutes to complete.

A copy of the 3<sup>rd</sup> Party Consent form has been included as Appendix B. The Formal letter of invitation has been included in Appendix C and Informal email letter of invitation with survey links can be included as Appendix D

## **Instruments**

Survey 1 focused on capturing student understanding of the OSCE exam, feelings about the upcoming exam, their perception of what was being asked of them, and their preparation strategies for success.

Survey 2 focused on the following: Did they pass? What feedback did they receive? What would they like to change to make it more beneficial? Did they receive feedback? Was it useful? What kind of feedback would they like to receive to allow for personal/professional development?

Survey 3 focused on the following: Did they pass their acute care practicum? What contributed to their success? Did the OSCE help them in the clinical setting?

Copies of these surveys have been included in the appendices of this report for reference (See Appendix E).

## **Ethical Considerations**

Prior to commencement this study proposal underwent an ethics review at Simon Fraser University via the Office of Ethics Review (approved study number 30000665) and an additional independent review at the College of New Caledonia, Prince George campus' Review Ethics Board.

Surveys were created with SFU Survey Monkey account and disseminated by the CNC Health Sciences administrative assistant to ensure further distancing between myself and NCBNP students to reduce any perceived pressure or conflict of interest. There was potential for bias as I am a faculty member of CNC's BScN program; however, due to the nature of online education in 2020/2021 during the COVID-19 Pandemic, I did not meet any of the 1<sup>st</sup> year students who would become potential 2<sup>nd</sup> year participants in the 2021/2022 academic year. Additionally, I was on maternity leave during the entirety of the 2021/2022 during the academic year. No information was shared with the faculty of the college that could potentially identify individual students to remove possible fear of retribution or impact on their grades. Survey questions intended to capture student perspectives of the exam or clinical were not administered until after the student has received their final grade for NURS 101 or NURS 215 sections. There were no perceived social implications/harms for students participating in this research as they were and will remain anonyms.

## Limitations and Delimitations

Participant invitations were limited to the Year 2 BSc Nursing students at the Prince George campus. At the time of the study, the Prince George campus was the only branch of CNC actively utilizing OSCEs as summative assessments. The other CNC partner sites in Quesnel and Terrace remained in the planning, creation, and implementation phases of exam creation and program standardization required for accreditation.

Delimitating factors impacting the study included the COVID-19 pandemic, which affected the college operating budget and required the NCBNP to alter the OSCE process for 2021/22 to meet financial constraints. Another unforeseen challenge came appeared during the process of gain CNC Ethics approval. The quorum requirements for REB meetings at CNC resulted in the cancelation of two sessions creating significant time delays in study approval, resulting in surveys being distributed to students nearly five months after completing their OCSE. This timing delay may have impacted the overall low response rate (see Table 1). By the end of April, students had completed their classroom learning, were in the clinical setting 30 hours per week, and may not have been as frequently engaged in communications as they would have been during the academic year.

**Table 1**

*Survey response rates*

Total number of students on the BScN 2 email Listserv	Total Responses to Survey 1	Total Responses to Survey 2	Total Responses to Survey 3
107	n=9	n=8	n=4

## **Data Storage**

Data was collected via SFU Survey Monkey. Any other data used in the analysis was stored on my password-protected personal computer. I will hold the data for five years.

## **Analysis**

The quantitative data was analyzed for statistical and potential correlations between pass/fail OSCE results and successful/unsuccessful outcomes of clinical practicums. Then, a themed analysis of the qualitative data was performed. The process for analysing the qualitative data was as follows:

- 1) Initial read through for initial impressions
- 2) Secondary read through
- 3) Color-coding and tagging responses for reoccurring themes within the Survey Monkey tool
- 4) Examining labels and categorizing into major themes and sub-themes

# Findings

Initial analysis of the data shows a low response rate throughout the three surveys. A mixed-methods analysis of the data was completed on all three surveys. Written responses were analyzed and themed, and a basic statistical analysis was performed on the quantitative data. The number of respondents in each survey are identified as *n*.

## Survey 1

Survey 1 focused on the student's perspective, understanding, preparation, and experiences leading up to their OSCE Examination at the end of the Fall semester of 2021. When asked to describe their understanding of why they were being asked to complete an OSCE exam for NURS 201 Introduction to Health assessment, the responses (*n*=9) were widely varied, but some reoccurring themes emerged. Major themes included assessment of learned skills, student performance, and safety. Secondary Themes include knowledge, competency, exam completion, feedback & development.

Students' understanding of why they were being asked to complete an OSCE elicited some common responses focused on demonstration/performance of required skills and safe practice. Underlying themes could be grouped and labeled as "competency," which is inclusive of subgroups of "knowledge" and the "ability" required to execute the required skills under stress. 22% of respondents identified that the OSCES we a way to obtain feedback for further developments.

Responses were analyzed for common themes when asked to describe their understanding of what the OSCE was testing. The most prevalent theme was physical nursing skills. Others responded with concerns about their performance, application of knowledge and skills, and a few mentioned individual abilities to cope with stress. Interestingly, few mentioned professional practice expectations, such as displaying their understanding of safety principles or their competence. Students wrote about their understanding and perceived expectations of the practical examination they would be taking part in.

It is testing if we can put the skills we learned during lab together to complete a task such as taking vital signs. You need to know each individual skill, however if you are unable to put all of these skills together to complete a single task then you need to practice or review more material. It is testing if you would be able to put all these skills together once in the clinical setting. – Participant 7, Survey 1

OSCE is evaluating your ability to perform the skills and ensure that you are not forgetting important pieces, safety being paramount. - Participant 10 , Survey 1

My ability to work under pressure, quickly assess, and safely provide patient care and questioning to create a subjective assessment. - Participant 2, Survey 1

88% of respondents felt that they had a good understanding of what was being asked of them. However, three respondents identified that they would like to have a demonstration of what a full OSCE looks like and additional prep time. Additionally, 44% of respondents reported feeling somewhat unsure and challenged by the individual differences in instructor's expectations. Participant #10 wrote, "the biggest challenge being that different instructors have different expectations, so while it is supposed to be standardized, there is too much that is left to the discretion of instructors."

As demonstrated in Figure 1, students were asked to specify how they were preparing for their upcoming examination. All respondents utilized the provided OSCE Checklists used for adjudication and practiced their learned skills and techniques learned in their skills laboratory sessions. Also working with a partner was a common study technique while 67% reviewed their NURS 201 Health Assessment theory content.

**Figure 1**

*Student preparation and study methods for OSCE.*

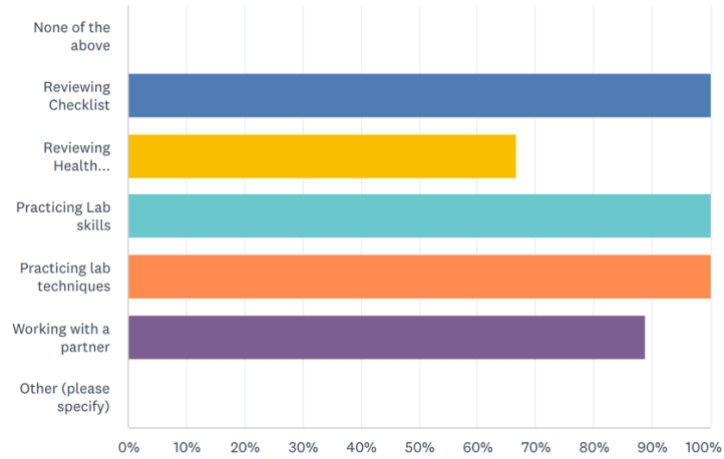
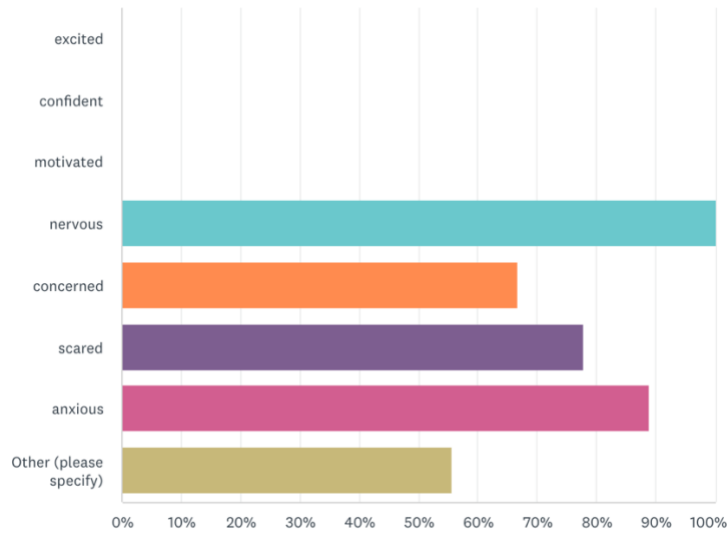


Figure 2 provides insight to how students were feeling while preparing for the OSCE. Despite using a multitude of preparation methods, 100 % of respondents (n=9) identified as feeling nervous and 90% felt anxious, and 78% felt scared.

**Figure 2**

*Student feelings while preparing for OSCE.*





Students elaborated on these feelings, and spoke of the pressures both in terms of impacting their performance such as test anxiety and concerns of the perceived power dynamics held by adjudicators:

Because the OSCE is a pass or fail examination, myself and many of my peers experience anxiety, before and during the OSCE. There is so much weighing on this examination that even if I know how to complete these skills perfectly, I often make more mistakes because of my nervousness. - Participant 5, Survey 1

The amount of pressure placed on the students during the OSCE is insurmountable. It is ridiculous that this could determine whether or not we have to repeat an entire year. – Participant 4, Survey 1

Thinking about the OSCE scares me so bad that I can't eat for a week because I'm so anxious, I don't feel like it's a great testing system and I don't think it shows what I have learned properly. - Participant 2, Survey 1

The testers get to pick who passes or fails. That's concerning. - Participant 3, Survey 1

Student's anxiety was also high due to high-stakes implications of examination structure and how a potential failure could affect their academic trajectory and significantly delay their program graduation date.

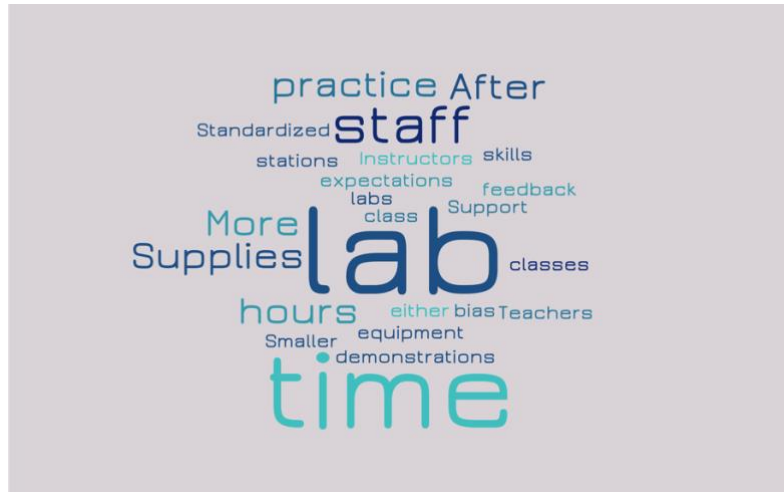
The time constraint stresses me out because if I mess up or miscount, I do not have the time to repeat the step as I would in the hospital setting. - Participant 1, Survey 1

A common theme noted throughout the data is the lack of availability of lab resources. 55% of respondents did not feel they had access to the necessary resources and support to succeed in their OSCE examination. Commonly mentioned suggestions on how to help improve preparation for this exam were: more lab availability - both in the allotted class time and after-hours lab availability; access to more instructor support whether it is during class time or after hours in the practice skills labs; ensure lab equipment and supplies in good working order and similar to those used in the clinical setting; standardized evaluator expectations; along with quality and timely in-person feedback. The word cloud in Figure 3 is a visual representation of the frequency needs

identified by the students in their responses. The most frequently mentioned items appear in the largest font sizes.

### Figure 3

*A visual representation of the frequency of needs and resources identified by the students.*



## Survey 2

Survey 2 was disseminated in the last week of April 2022 and focused on the student experience during the completion of the OSCE examination. This survey had a low response rate, n=8. All respondents successfully passed their OSCE exam; however, one student was unsuccessful during their initial attempt and required a remedial OSCE and passed on their second attempt.

Students were asked if there was anything that made them feel nervous, anxious, or stressed during the examination. A few major themes stood out among the responses – the high-stakes nature of the exam, expectations of the instructor, instructor/examiner demeanor, and environmental stressors. Only one respondent cited the actual skills being tested as stressful.

Students' narratives around their OSCE experience focused on these main themes: the added stress created from observed and perceived inconsistencies in instructor expectations and adjudication, and the impact of adjudicator disposition. Their quotations illustrate student's feelings and stresses during the examination, and then others spoke of frustrations and concern because of their OCSE examination failure.

"There is a well-known lack of consistency between instructors about what warrants a satisfactory OSCE. This can be extremely stressful because techniques that are taught by your lab instructor and are satisfactory to them may result in an unsatisfactory OSCE if you have a different instructor who does not teach your lab moderating your OSCE." – Participant 5, Survey 2

"Knowing instructors are inconsistent, one will fail you for certain things while the next will pass you, this is extremely challenging and stressful as it seems like there is no standardization." – Participant 7, Survey 2

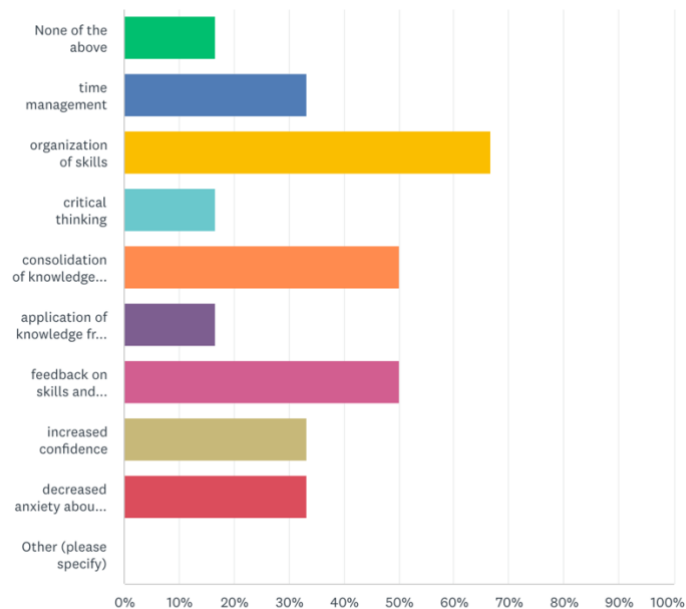
"Being timed, being watched in complete silence, the fact that they are a pass or fail scenario rather than graded." – Participant 3, Survey 2

"The fact that if I fail, all the effort I put into the semester goes to waste and I am essentially kicked out of the program and have to wait to retake the class because [half of the] instructors deemed me to not be a good nurse from a small interaction." – Participant 1, Survey 2

Despite the stressful experience, students identified some benefits, gained during the OSCE examination process. These self-identified benefits are displayed in Figure 4. The most common responses were the organization of their skills and consolidation of their theory and practical knowledge. 33% of respondents (n= 6) identified that they felt less anxious entering the clinical setting or had more confidence, but 15% of respondents did not identify any benefits from their OSCE experience.

**Figure 4**

*Student's views of perceived benefits from an OSCE.*



The skills obtained during the OSCE process are of value as they may be directly translated into the clinical setting, additionally it is beneficial for educators to understand that there were positive learning experiences available for students beyond the anxiety and distress they experienced.

### **Feedback**

83% of respondents (n= 6) received feedback on their OSCE. However, the perceived value of this feedback was mixed, with some feeling that the feedback quality was helpful and others feeling that it was too general and not helpful to improving their practice. Although all respondents had differing wishes for feedback, some themes emerged: Specific, timely, in-person, and supportive would be helpful to grow and improve their skills and professionalism.

When asked if it would be valuable to do practice OSCEs for feedback prior to completing the final high-stakes OSCE exam at the NURS 201 completion, 83 % of respondents felt that there would be value in getting to complete a practice OSCEs.

However, one respondent commented, "For me, I find that they are so artificial that it does not benefit my learning."

After completing their OSCE examinations, students were asked to rate, on a scale of 0 – 10 (zero = not at all prepared, 10 = completely prepared), how prepared do you feel to enter the clinical setting? The results ( $M= 6.65$ ,  $SD=16.54$ ) with a minimum response of 4.1, and a maximum of 8.8, suggest that students felt neutral in their confidence and personal preparedness to prior to entering the clinical setting. Interestingly, when asked if they felt their OSCE experience helped to prepare them for success in clinical? 66% of respondents ( $n=6$ ) answered "No", and one student commented, "It helps you learn a sort of muscle memory so that if you are really nervous the first time you are practicing, knowing the process by heart from an OSCE makes it easier to remember".

Students had the opportunity to provide open feedback about what could be done to improve their OSCE experience; students identified consistency of the expectations amongst evaluators, reducing the stress implicit in the exams' high-stakes nature. Some students suggested creating a process intended to level up their knowledge and skills throughout the semester, for example, doing a vital signs OSCE earlier in the year, then adding Head-to-Toe physical examination OSCE before entering the clinical setting. Students also noted the need for additional laboratory practice time and resources, such as additional staff to ensure everyone has access to instructor support and feedback regularly.

### **Survey 3**

Survey 3 was distributed the first week of May 2022 and focused on the impact of the OSCE examination on the clinical experience and outcomes of the students. This survey, unfortunately, had a low response rate ( $n= 4$ ); therefore, the results are not generalizable. 75% of respondents passed their acute care clinical practicum, and one failed. None of the respondents felt that their OSCE experience contributed to their success or failure in clinical outcomes. A few students wrote their thoughts regarding the relevance of their OSCE examination experience.

"There is a lot of pressure to compete OSCEs. The skills we focused on I did not find especially useful during clinical". – Participant 5, Survey 3

"I do not feel the OSCE did any more than have me memorize a checklist of things I needed to perform. When one is nervous due to being observed they may forget things or blank but when working with a real patient the flow is not artificial and much more natural". – Participant 2, Survey 3

Students were asked to rate how relevant their OSCE experience was to their clinical preparedness on a scale of 0 - 10 (0=not at all prepared, 10 = exceptionally well prepared). The mean (n=4) response = 3.1, with minimum = 0.5, max= 4.9 and median =3.5. When asked what could be included in an OSCE that would be helpful to better prepare students for a successful clinical experience, "OSCEs for a head-to-toe assessment" was identified specifically by 75% of the respondents, followed by using similar equipment to what is available in the clinical setting. Retrospectively, 75% of respondents (n=4) report that their vital signs OSCE were applicable to their experience in the clinical setting.

Additional suggestions from the students to improve student confidence in preparation for the clinical setting included additional supported practice time (with instructors present to provide feedback and answer questions), practice with equipment that will be in the clinical setting, and reduction of the pressures from a "high-stakes" exam. For example, one student wrote, "[Let] students know that they are capable of completing an OSCE without so much pressure. There is a lot of stress put on students by instructors as there is narrow room for error" (Participant 3, Survey 3).

## Discussion

Overall, the data from these surveys aligns with the findings documented in the literature and accurately reflects the nature of informal conversations I have previously had with students about their clinical experiences and concerns. This section will examine the findings in comparison to the literature to guide recommendations for course and program improvements.

## Expectations

The findings from Survey 1 indicate that communication of expectations during the OSCE and the expected outcomes needs to be improved. The findings suggest that students are not clear on why they are being asked to complete OSCE or what the OSCE is truly testing. That leads to questions about the design of the exam at CNC. As the literature by Currie, Sivasubramaniam, and Cleland (2016), McWilliam and Botwinski (2012) and Roberts (2017) states, design is essential for the exam to be reliable and valid.

Survey 1 also leaves some questions about the current practices and the apparent need to coordinate the way instructors prepare their students for their examinations. For example, when looking at the literature, McWilliam and Botwinski (2012) discussed the importance of staff training and preparation of students to help diminish feelings and emotions but may inhibit performance and learning. This lack of test preparation is exemplified by the 100% response rate of the student's reports of feeling nervous and no reported responses with positive attributes.

Exploring faculty thoughts, experiences, and expectations may be helpful with an additional study focused on the faculty and their perceptions of the OSCE. Ensuring the faculty perceptions align with the intended purpose of the OSCEs may help reduce some of the inconsistencies and concerns students raised regarding fair and objective adjudication. Clarifying and aligning faculty understanding may provide opportunities to align with Robinson et al.'s 2017 findings. A few minor modifications to the current educational delivery methods could increase student confidence, decrease student anxieties around OSCEs and improve their OSCE experience within the NCBNP (Robinson et al., 2017).

For individual preparation, many of the students used various resources and methods, as exemplified in Figure 1. Students voiced concerns regarding the relevance and availability of working lab equipment and appropriate lab practice space, matching concerns documented in the literature by Hosseini, Fatehi, Eslamian, and Zamani (2011); additionally adding to the expressed importance of having an appropriate physical space and resources to practice and perform their OSCE.

## **Experience**

In Survey 2, concerns about the high-stakes nature of the exam are consistent with the student experiences and research documented by Hilliard (2018), McClenny, (2018), Robinson, Morton, Haran, and Manton (2017), Turner and Dankoski (2008), and Saunders, Say, Visentin, and McCann (2019). Given that these exams are highly stressful events for students, they should be performed in a serial nature to increase the familiarity and comfort of the surroundings, the exam process, expected outcomes, and evaluation. This is particularly relevant when we examine the literature by McWilliam and Botwinski (2012) and Roberts (2007) on how a summative OSCE exam should be administered. It is questionable if the marking rubric for the CNC OSCE is reliable or valid, multi-dimensional, and does not articulate the professional key competencies as articulated requirements by Naumann, Moore, Mildon, and Jones (2014). These exams should be used for feedback to improve their practice and skills. Unfortunately, none of the respondents reported feedback that was specific or valuable to improving their practice.

Additionally, without serial examinations prior to a summative OSCE, results may not indicate their actual ability and knowledge, nor is it predictive of their likelihood of clinical success or failure, consistent with Hillard's (2018) findings. Therefore, it is not best practice to be using a high-stakes OSCE as a tool to assess clinical readiness, knowledge, or skills with any accuracy. However, the results may show a weak positive correlation between OSCE performance and successful clinical outcomes or those who may struggle and require additional support. Perhaps the CNC OSCE results should be used to identify students that need supplementary clinical supports to achieve consistency with the research of Currie, Sivasubramaniam, and Cleland (2016), Dreher, Smith, Glasgow, and Schreiber (2019), McWilliam and Botwinski (2012), Naumann, Moore, Mildon and Jones (2014), Parkin and Collinson (2019), Pugh et al., (2016)



Roberts (2007), Rushforth (2007), Saunders et al. (2019), Sternz (2021), and Turner and Dankoski (2008). Unfortunately, due to the low response rate and the anonymous nature of the surveys, it is not possible to draw any conclusions from the data in this survey.

Additionally, acknowledgment of the negative student experiences within the NCBNP OSCE testing experiences provides insight and opportunity for faculty to begin directly addressing student anxieties, mitigating where they can and taking opportunities to educate students on anxiety management and coping skills, although this may require further education and training for faculty to competently facilitate as recommended by McClenny (2018).

The survey results also highlighted students' concerns with inconsistencies in instructor assessment and practice. These findings are relevant to Turner and Dankoski's (2008, p577) findings and identify an opportunity to improve instructors' assessment practice with additional training. Faculty commitment to OSCE preparation may help address students' concerns about the lack of standardization and the inherent subjective observations. These variations are consistent with Naumann's 2016 findings; however, the fact that these variations are so highly noticeable to students that they are concerned about bias and being inappropriately judged is concerning and undermines the perceived reliability and validity of the examination. Standardization of training, evaluation, and assessment tools may also allow for opportunities to improve the quality of feedback instructors give after these exams to meet the recommendations of Alkhateeb, Al-Dabbagh, Ibrahim, and Ghanim Al-Tawil (2019), Roberts (2007), and Sterz (2021). In combination with the increased student practice, students may also have the opportunity to be viewed by multiple instructors with different perspectives and gain feedback in additional areas, rather than just a one-off (Sterz, 2021).

## **Relevance**

Interestingly, in reflecting upon the OSCE experience at the point of a completed acute care clinical, 0% of the students found the skills tested in the OSCE to be helpful in the clinical setting during the duration of their 16-week practicum. This leads me to question the relevance of this examination and consider the need for the school to take an intensive look at the purpose of this exam beyond the written objectives. Additionally,

it is worth questioning why we are creating and perpetuating a culture of fear and anxiety within the School of Nursing. Finally, perhaps it is worth revisiting Eva et al.'s 2016 findings and recommendations around the goals of assessment practices and Sterz's (2021) guidelines for feedback.

While conducting this research, I have reflected on the expectations of the NCBNP degree program and instructor practices. I wondered if nursing school is at the root of the well-documented toxicity and bullying within the nursing profession. Where do these exceedingly high expectations come from? And are we perpetuating and amplifying the negative experiences we may have had as nursing students because we do not observe alternate methods of instruction within the field? And so, I am led to ask, how can we improve? How can the faculty in the School of Nursing at CNC improve the efficacy and relevance of the OSCE exams we administer? How can we improve the student experience?

## **Significance of the Study**

During the literature review, I noted that the student voice of the OSCE experience was largely absent. Locally, the data collected from this study may be utilized to make recommendations and inform change to the College of New Caledonia's (CNC) NURS 201 and Northern Collaborative Baccalaureate Nursing Program (NCBNP) to implement improvements in alignment with the available literature. Additionally, the data from this research may allow for evidence-informed improvements and strategies to address student duress associated with skills examinations, improving their experience, reducing stress and anxiety, and increasing their satisfaction and grades. Finally, a potential consequence of improving student success and experiences may help to reduce attrition and increase student retention within the 2<sup>nd</sup> year of the NCBNP.

## **Recommendations**

While an OSCE can be a valuable tool for health science and human services training programs, there is ample space for error in the exams' design, implementation, adjudication, and feedback stages. A single high-stakes summative OSCE should not be used as an evaluation method or to assess clinical preparedness as they are not predictive of student outcomes (Terry, 2016). Instead, the OSCE should be used for

feedback on skills and professional practice and may assist instructors in identifying students who may struggle and require additional support in the clinical setting (Muller et al., 2019; Sharvin, 2007; Rentfro, 2011; Turner & Dankoski, 2008, p577).

OSCE exams at CNC should be modified to align with the available evidence by either adding to the OSCE process to create a series of examinations that include high-quality, timely feedback; or eliminating the high stakes of the summative exam and allowing them to complete it for feedback only with no impact on their course completion or grade. The current CNC OSCE designs should be scrutinized and re-evaluated for clinical relevance, realism, and overall objectives. A formal assessment of the accuracy and relevance of the exam. The overarching objectives should be specified and reflect professional licensing competency requirements and standards (Rushforth, 2007).

Continuing focused education for faculty on OSCE design, implementation, and preparation would help improve faculty administration and evaluation skills. OSCE skills. Additional instructor training for OSCE adjudication and standardization of evaluation methods. This training should include preparing students for the examination, adjudication, and feedback. Training on coaching, anxiety management, and coping skills would provide instructors with an emotional toolset to support their students through stressful events within their education and training and assist students in building coping skills that will benefit their professional practice. These displays of dedication, empathy, and support may also reduce some of the toxicity typically associated with nursing education.

Student support in the number of available faculty during labs and practice times should be examined, as well as updating lab equipment to some equipment similar to those in the clinical setting. While the emphasis on traditional practice methods is still relevant and important, students should also have the opportunity to be trained on current technology, how to use and troubleshoot, and implement their critical thinking skills if they get an unexpected or abnormal value.

## **Future Research**

This research has been informative, and I believe there would be value in employing these surveys again to try to capture more data. One way this may be done

would be to embed the surveys into the online course platforms and make them more accessible and relevant to current students. Larger sample size would allow for generalizability of the data and give a more complete view of the student experiences. This data immediately available within the School of Nursing would also allow for responsive changes and improvements (Robinson et al., 2017).

Additionally, it may be informative and valuable to conduct a similar study on the perspectives of the faculty on the OSCEs they administer, what they think they are testing, and their expectations. Finally, it would be interesting to compare instructor data and perspectives to the student experience and assess for similarities or divergence of understanding and perspectives of the OSCE exams.

## Conclusion

While OSCEs remain the best testing method for health science disciplines, the Year 2 BSc Nursing students at CNC find the high-stakes OSCEs negative and stressful. They do not find them relevant or valuable in aiding their clinical practice. These results are not surprising, and they align with finding in available literature across the health disciplines. These findings leave the NCBNP of CNC Prince George in a position to re-evaluate and improve or alter this examination method to optimize student learning by improving the testing design and feedback to better align with the evidence-based practices and available literature.

## References

- Alkhateeb NE, Al-Dabbagh A, Ibrahim M, & Ghanim Al-Tawil N. (2019). Effect of a Formative objective structured clinical examination on the clinical performance of undergraduate medical students in a summative examination: A randomized controlled trial. *Indian Pediatric*, 56, 745-748.
- Currie, G. P., Sivasubramaniam, S., & Cleland, J. (2016). Sequential testing in a high stakes OSCE: Determining number of screening tests. *Medical Teacher*, 38(7), 708–714.
- Dreher, H. M., Smith Glasgow, M. E., & Schreiber, J. (2019). The use of “high-stakes testing” in nursing education: Rhetoric or rigor? *Nursing Forum*, 54(4), 477–482. <https://doi-org.proxy.lib.sfu.ca/10.1111/nuf.12363>
- Eva, K. W., Bordage, G., Campbell, C., Galbraith, R., Ginsburg, S., Holmboe, E., & Regehr, G. (2016). Towards a program of assessment for health professionals: From training into practice. *Advances in Health Sciences Education*, 21(4), 897–913.
- Graham, R. (2010). The reliability, validity, and usefulness of the objective structured clinical examination (OSCE) in dental education.
- Hilliard, T. C. (2018). Exploring anxiety among graduate nursing students during high-stakes clinical testing.
- Hosseini, S. A., Fatehi, N., Eslamian, J., & Zamani, M. (2011). Reviewing the nursing students' views toward OSCE test. *Iranian Journal of Nursing & Midwifery Research*, 16(4), 318–320.
- McClenny, T. L. (2018). Student experiences of high-stakes testing for progression in one undergraduate nursing program. *International Journal of Nursing Education Scholarship*, 15(1), 1-15. <https://doi-org.proxy.lib.sfu.ca/10.1515/ijnes-2017-0001>
- McWilliam, P. L., & Botwinski, C. A. (2012). Identifying strengths and weaknesses in the utilization of objective structured clinical examination (OSCE) in a nursing program. *Nursing Education Perspectives (National League for Nursing)*, 33(1), 35–39. <https://doi-org.proxy.lib.sfu.ca/10.5480/1536-5026-33.1.35>
- Naumann, F. L., Marshall, S., Shulruf, B., & Jones, P. D. (2016). Exploring examiner judgement of professional competence in rater-based assessment. *Advances in Health Sciences Education*, 21(4), 775–78.

- Müller, S., Koch, I., Settmacher, U. et al. (2019). How the introduction of OSCEs has affected the time students spend studying: Results of a nationwide study. *BMC Med Educ* 19, 146. <https://doi.org/10.1186/s12909-019-1570-6>
- Naumann, F., Moore, K., Mildon, S., & Jones, P. (2014). Developing an objective structured clinical examination to assess work-integrated learning in exercise Physiology. *Asia-Pacific Journal of Cooperative Education*, 15, 81–89.
- Northouse, P. (2019). *Leadership: Theory and Practice* (8th ed.). Western Michigan University.
- Oranye, N. O., Ahmad, C., Ahmad, N., & Bakar, R. A. (2012). Assessing nursing clinical skills competence through objective structured clinical examination (OSCE) for open distance learning students in Open University Malaysia. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 41(2), 233–241. <https://doi-org.proxy.lib.sfu.ca/10.5172/conu.2012.41.2.233>
- Parkin, T., & Collinson, A. (2019). Observations on the relationship between the dietetic objective structured clinical examination and placement outcome. *Nutrition & Dietetics*, 76(5), 628–633.
- Pugh, D Bhanji, F Cole, G Dupre, J Hatala, R Humphrey-Murto, S Touchie, C, Wood, T. (2016). Do OSCE progress test scores predict performance in a national high-stakes examination? *Medical Education*. 50(3), 351-358.
- Robinson, P., Morton, L., Haran, H., & Manton, R. (2017). Mock OSCEs improve medical students' confidence and reduce anxiety related to summative examinations. *Education in Medicine Journal*, 9(2), 41–45.
- Rushforth, H. (2007). Objective structured clinical examination (OSCE): Review of literature and implications for nursing education. *Nurse Education Today*, 27(5), 481-490. <https://doi.org/10.1016/j.nedt.2006.08.009>.
- Saunders, A., Say, R., Visentin, D., & McCann, D. (2019). Evaluation of a collaborative testing approach to objective structured clinical examination (OSCE) in undergraduate nurse education: A survey study. *Nurse Education in Practice*, 35, 111–116.
- <https://doi-org.proxy.lib.sfu.ca/10.1016/j.nepr.2019.01.009>
- Sharvin, B. (2017). Theory-practice integration for clinical skills competence among undergraduate nursing students in Ireland: a mixed methods study.
- Sterz, J., Linßen, S., Stefanescu, M. C., Schreckenbach, T., Seifert, L. B., & Ruessler, M. (2021). Implementation of written structured feedback into a surgical OSCE. *BMC Medical Education*, 21(1) 192.
- <https://doi-org.proxy.lib.sfu.ca/10.1186/s12909-021-02581-3>

Terry, R., Hing, W., Orr, R., & Milne, N. (2017). Do coursework summative assessments predict clinical performance? A systematic review. *BMC Medical Education*, 17(1) 40.

<https://doi.org/10.1186/s12909-017-0878-3>

Turner, J & Dankoski, M. (2008). Objective structured clinical exams: A critical review. *Family Medicine*. Department of Family Medicine, Indiana University. 40(8) 574-8.

Wanstall H. (2010). Objective structured clinical examinations (OSCES) as predictors of performance on work-based placements. *Investigations in university teaching and learning*. 6(1) 57-64.



# Appendix A.

## NURS 201 Head to Toe OSCE

Regular Text = Basic Head to Toe Assessment Components
Italicized Text = Additional Comprehensive Assessment Techniques if indicated based on patient Hx/Dx

Student: \_\_\_\_\_ Initial  Remedial  Start: \_\_\_\_\_ End: \_\_\_\_\_ Total Time: \_\_\_\_\_

Patient Diagnosis _____ Medical Hx _____	
Additional Info & Treatments _____	
<b>PROFESSIONALISM &amp; SAFETY</b> <input type="checkbox"/> Washes Hands <input type="checkbox"/> Prepared (has all needed Kx* Info & required equipment) <input type="checkbox"/> Introduces Self <input type="checkbox"/> Explains Purpose to Patient <input type="checkbox"/> Adheres to proper body mechanics <b>GENERAL ENVIRONMENTAL SURVEY</b> <input type="checkbox"/> Assesses Room for Hazards <input type="checkbox"/> Removes Clutter as Needed	<b>Additional Evaluator Comments</b>
<b>GENERAL PATIENT SURVEY &amp; PATIENT SAFETY</b> <input type="checkbox"/> Patient Position (lying, sitting, standing, etc) <input type="checkbox"/> General Appearance (facial symmetry, comfort, breathing, skin color) <input type="checkbox"/> Patient name verification (eg verbal and/or band) & checks re: allergy band <input type="checkbox"/> Checks Lines/Drugs: IV __ SL __ Foley __ SQBF __ O2 __ Other _____ <input type="checkbox"/> Pupils <input type="checkbox"/> LOC & Orientation Status: Person __ Time __ Place __	
<b>VITAL SIGNS &amp; PAIN/DISCOMFORT/SYMPTOMS</b> <input type="checkbox"/> T ____ <input type="checkbox"/> P ____ <input type="checkbox"/> R ____ <input type="checkbox"/> BP ____ <input type="checkbox"/> SaO2 ____ O2 check ____ <input type="checkbox"/> Pain/Discomfort and/or other pertinent symptoms <input type="checkbox"/> 8 CCs <input type="checkbox"/> Verbalizes symptom intervention to be done if needed prior to assessment	8 CCs: location __ Character/quality __ Onset/Timing __ Setting/Instigating __ Aggravating & Relieving __ Associated __ Patient's Perception __
<b>RESPIRATORY</b> <b>Subjective</b> <input type="checkbox"/> Dyspnea <input type="checkbox"/> Orthopnea <input type="checkbox"/> Cough <input type="checkbox"/> Other: _____ <b>Inspection</b> <input type="checkbox"/> Breathing effort <input type="checkbox"/> Skin color & characteristics <input type="checkbox"/> Chest Shape <input type="checkbox"/> Accessory Muscle Use <input type="checkbox"/> Tracheal Position & Tugging <b>Palpation</b> <input type="checkbox"/> Chest expansion <input type="checkbox"/> Lumps/Masses <input type="checkbox"/> Tenderness <input type="checkbox"/> Tactile Fremitus <b>Auscultation</b> <input type="checkbox"/> Anterior <input type="checkbox"/> Posterior <input type="checkbox"/> Lateral <input type="checkbox"/> Identifies findings correctly Voice Sounds: <input type="checkbox"/> Egophany <input type="checkbox"/> Whispered <input type="checkbox"/> Bronchophony <b>Percussion</b> <input type="checkbox"/> Anterior <input type="checkbox"/> Posterior <input type="checkbox"/> Lateral <input type="checkbox"/> Identifies findings correctly <b>Teaching &amp; Ordered Treatments</b> <input type="checkbox"/> O2* <input type="checkbox"/> DB & C* <input type="checkbox"/> Incentive Spirometry*	*Per Course Objectives, cannot fail student for not including these teaching interventions, though note any omissions of such in the verbal evaluatory process
<b>CARDIOVASCULAR</b> <b>Subjective</b> <input type="checkbox"/> Chest pain <input type="checkbox"/> Vertigo <input type="checkbox"/> Dyspnea <input type="checkbox"/> Other: _____ <b>Inspection</b> <input type="checkbox"/> Visible Obvious Chest Pulsations <input type="checkbox"/> JVD <input type="checkbox"/> Telemetry intact <b>Palpation</b> <input type="checkbox"/> Cardiac Thrills <input type="checkbox"/> AVF Thrill if applicable <b>Auscultation</b> <input type="checkbox"/> Cardiac Sites: A __ P __ E __ T __ M __ <input type="checkbox"/> Diaphragm <input type="checkbox"/> Bell <input type="checkbox"/> Carotid Bruits <input type="checkbox"/> AVF Bruit if applicable <b>PERIPHERAL VASCULAR</b> Pulses: <input type="checkbox"/> = Radials <input type="checkbox"/> Pedal: Dorsalis Pedis __ Posterior Tibial __ CSMW: Cap refill __ Color __ Sensation __ Movement __ Warmth __ Edema: <input type="checkbox"/> Arms <input type="checkbox"/> Legs <input type="checkbox"/> DVT Check	
<b>GASTROINTESTINAL</b> <b>Subjective</b> <input type="checkbox"/> Pain <input type="checkbox"/> N&V <input type="checkbox"/> Appetite <input type="checkbox"/> Flatus <input type="checkbox"/> LBM (date/characteristics) <b>Inspection</b> <input type="checkbox"/> Size <input type="checkbox"/> Contour <input type="checkbox"/> Scars <input type="checkbox"/> Dressings/Incisions <input type="checkbox"/> Ostomy <b>Auscultation</b> <input type="checkbox"/> 4 quadrants <input type="checkbox"/> Bruits: Aortic __ Renal __ Iliac __ Femoral __ <b>Percussion</b> <input type="checkbox"/> All regions <input type="checkbox"/> CVA tenderness <input type="checkbox"/> Shifting Dullness/Fluid Wave <b>Palpation</b> <input type="checkbox"/> 4 quadrants <input type="checkbox"/> Blumberg's <input type="checkbox"/> Murphy's <input type="checkbox"/> Other Special* _____ <b>Hydration Status/Oral integrity</b> <input type="checkbox"/> Mucous membranes <input type="checkbox"/> Skin Turgor	*Special may include additional assessment such as Appendicitis muscle tests, measuring abdominal girth etc
<b>GENITOURINARY</b> <b>Subjective</b> <input type="checkbox"/> Dysuria <input type="checkbox"/> Discharge <input type="checkbox"/> Quantity <input type="checkbox"/> Characteristics <b>Inspection</b> <input type="checkbox"/> Foley: Amount __ Characteristics __ Insitu __ Tubing __ Site __	
<b>SKIN</b> <input type="checkbox"/> Assesses potential/actual areas of skin breakdown <input type="checkbox"/> Assesses Dressings	
<b>MODIFIED COMPREHENSIVE NEUROLOGIC</b> <input type="checkbox"/> Assess symmetry <input type="checkbox"/> Symmetrical Strength/Sensation <input type="checkbox"/> Neurovitals/GCS	
<b>SAFETY &amp; ROOM TIDINESS PRIOR TO ROOM EXIT</b> <input type="checkbox"/> Side rails <input type="checkbox"/> Bed low position <input type="checkbox"/> Call bell in reach <input type="checkbox"/> Mobility devices @ bedside <input type="checkbox"/> Suctioning available <input type="checkbox"/> Seizure precautions <input type="checkbox"/> Clutter/potential environmental hazards removed <input type="checkbox"/> Garbage emptied/debris cleared <input type="checkbox"/> Linens straightened out <input type="checkbox"/> Room tidied	

Evaluator(s): \_\_\_\_\_

Satisfactory  Unsatisfactory

## VITAL SIGNS OSCE CHECKLIST

Date: \_\_\_\_\_ Sat / Unsat

STUDENT: \_\_\_\_\_

START TIME: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

FINISH TIME: \_\_\_\_\_

Students are expected to complete a full set of vital signs and pain/symptom assessment in 5 minutes  
One remedial opportunity will be offered for students who are unsuccessful

		Complete	Incomplete	Comments
<b>Professionalism and Safety</b>	Washes Hands			
	Prepared (has all needed equipment ready)			
	Introduces Self			
	Explains to patient what will be done			
	Adheres to proper body mechanics			
<b>General Survey</b>	Verbalizes general survey assessment findings			
	Checks patient's name band/confirms name			
<b>Temperature</b>	Select appropriate method and corresponding equip			
	Assesses potential influences prior to taking temp			
	Adjust ear if using tympanic method			
	Reading in degrees Celcius			
	Knows normal adult limits			
<b>Pulse</b>	Probe cover used and disposed of			
	Correctly and proficiently locates radial pulse			
	Identifies and performs correct length of time for obtaining pulse rate as per rhythm of pulse			
	Correctly identifies strength, rhythm, and rate			
<b>Respirations</b>	Knows normal adult range for pulse			
	Identifies and performs correct length of time for obtaining resp rate as per rhythm of pulse			
	Correctly identifies rate, rhythm, and effort			
<b>O2 Sats</b>	Knows normal adult range for resps			
	Places probe correctly			
	Determines that pleth or flashing light corresponds with HR for accurate reading			
<b>Blood Pressure 2 step method</b>	Knows normal adult ranges for O2 saturation			
	Selects correct sized cuff for patient			
	Palpates brachial pulse to determine correct cuff placement			
	Correctly positions patient's arm			
	Correctly places cuff above brachial artery location			
	Manually palpates radial or brachial to determine how far to inflate cuff			
	Releases cuff, gets auscultation equipment ready			
	Correctly inflates cuff above previously determined palpable systolic reading			
	Descends dial at an appropriate speed			
	Identifies systolic and diastolic within 5 mmHg of instructors reading (Instructor to auscultate with student)			
	Knows normal adult ranges for Blood Pressure			
<b>Pain/Symptom</b>	Asks re: pain/discomfort/symptom assessment			
	Covers all 8 critical characteristics:			
	• Location (specific)			
	• Character/Quality/Consistency			
	• Onset/Timing			
	• Setting/Instigating			
	• Aggravating & Relieving			
	• Associated Factors			
• Patient's Perception (if applicable)				

# Appendix B.

## 3<sup>rd</sup> Party Consent



April 8, 2022

**Re: Objective Structured Clinical Examinations as Summative Examinations for Assessing  
Clinical Readiness: Perspectives of entry-level nursing students**

I \_\_\_\_\_ consent to act as a third party to contact research participants on behalf of Stacey Yates MEd Candidate, Faculty of Education, SFU. As directed by Stacey Yates, I agree to send initial email invitations, survey links to recruit participants for this research study. Invitations will be sent to Year 2 BScN students enrolled in NURS 201/NURS 215 labs during the 2021-22 academic year. The purpose of this study is to capture the student experience as they work through the OSCE preparation, examination, and completion of their first clinical practicum.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Position Title

\_\_\_\_\_  
Date

# Appendix C.

## Formal Letter of Invitation



April 8, 2022

Dear Student of the NCBNP,

My name is Stacey Yates, and I am a graduate student at Simon Fraser University in the Faculty of Education. As a part of my graduate studies in Educational Leadership, I am conducting a study on the experiences of 2<sup>nd</sup> year nursing students of the NCBNP Prince George during their preparation and completion of an OSCE examination. I hope to document your voices and experience to add to a body of evidence that could be utilized to increase student success and satisfaction and optimize this testing method. Today I am inviting you to participate in my study **Objective Structured Clinical Examinations as Summative Examinations for Assessing Clinical Readiness: Perspectives of entry-level nursing students.**

I have created three short surveys for my study that should take no more than 10 to 15 minutes each to complete. I will have them sent out at different pre-determined times to capture your experience in the weeks before your OSCE, after you have completed the OSCE, and upon completion of your 215 clinical experience.

The purpose of this study is to examine the experiences of a student nurse during the process of preparing for and completing an OSCE Exam. You are being invited to take part in this study because you are enrolled in and attending one or more courses in Year 2 of the Northern Collaborative Bachelorette program at CNC Prince George. Whether you decide to participate or

refuse to, there will be no effect on your learning, evaluation and grading, and your relationship with your professor. Your instructors will not receive any information to know who did or did not participate.

Your participation is voluntary, and no incentives are offered for your participation. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. If you decide to take part in this research, you will be asked to complete 3 short questionnaires during the month of April at scheduled intervals. You can choose to participate in all of these procedures or any one of them. It will take approximately 10 -15 minutes to fill out each of the questionnaires. Only the researcher and their supervisor will have access to the data. All survey data will be anonymized so there is no risk of personal identifying information. The surveys are hosted by Survey Monkey, a US company. Any data you provide may be transmitted and stored in countries outside of Canada, as well as in Canada. It is important to remember that privacy laws vary in different countries and may not be the same as in Canada. This data may be used in the future to help inform changes to the current OSCE process and improve curriculums at CNC.

There are no foreseeable risks to you in participating in this study. Taking part in this study may help you indirectly in the future and may potentially improve the educational experiences of future students by utilizing results to inform improvements to learning environments or experiences for students, or faculty professional development programs. We will maintain your confidentiality to the fullest extent. All documents will be anonymously submitted. The online survey data will be stored for 5 years in the University's server (SFU vault). You may withdraw from this study at any time without giving reasons and with no effects on your grades and learning. You can refuse to fill the survey or interrupt it anywhere when filling. In case you want to withdraw, it will not be possible to remove any already submitted data due to the anonymous submissions of the survey design. The results of this study will be reported in a graduate essay and will be stored at the SFU library. Results will be reported in aggregate and individuals will not be identified.

If you have any questions about the study, you can contact Stacey Yates, or Dr. Michelle Pidgeon, Senior Supervisor.

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 at [dore@sfu.ca](mailto:dore@sfu.ca) or 778-782-6618.

To begin, think back to how you felt during your fall semester as you prepared for your OSCE. Please follow this survey link if you would like to participate and share your voice, opinions, and experience in Part 1 of this study now. <https://www.surveymonkey.ca/r/39RNZQ3>.

Thank you in advance for your participation,

Stacey Yates RN BScN

Graduate Student in MEd Leadership

Simon Fraser University, Faculty of Education

# Appendix D.

## Informal Email Letter of Invitation for Survey 1



**April 8, 2022**

Dear Student of the NCBNP,

My name is Stacey Yates, and I am a graduate student at Simon Fraser University in the Faculty of Education. As a part of my graduate studies in Educational Leadership, I am conducting a study on the experiences of 2<sup>nd</sup> year nursing students of the NCBNP Prince George during their preparation and completion of an OSCE examination. I hope to document your voices and experience to add to a body of evidence that could be utilized to increase student success and satisfaction and optimize this testing method.

I have created three short surveys that should take 10 – 15 minutes each to complete. I will have them sent out at different pre-determined times to capture your experience in the weeks before your OSCE, after you have completed the OSCE, and upon completion of your 215 clinical experience.

Please follow this survey link if you would like to participate and share your voice, opinions, and experience in Part 1 of this study now.

<https://www.surveymonkey.ca/r/39RNZQ3>

Stacey Yates RN BScN  
Graduate Student in MEd Leadership  
Simon Fraser University, Faculty of Education

## Informal Email Letter of Invitation for Survey 2



April 22, 2022

Dear Student of the NCBNP,

My name is Stacey Yates, and I am a graduate student at Simon Fraser University in the Faculty of Education. As a part of my graduate studies in Educational Leadership, I am conducting a study on the experiences of 2<sup>nd</sup> year nursing students of the NCBNP Prince George during their preparation and completion of an OSCE examination. I hope to document your voices and experiences to add to a body of evidence that could be utilized to increase student success and satisfaction and optimize this testing method.

Please follow this survey link if you would like to participate and share your voice, opinions, and experience in Part 2 of this study now.

<https://www.surveymonkey.ca/r/39RHQNV>

If you have not had a chance to take part in Survey 1 you may follow this is link:

<https://www.surveymonkey.ca/r/39RNZQ3>

All surveys will remain open until May 14<sup>th</sup>.

Thank you for your participation, I look forward to your input.

Stacey Yates RN BScN  
Graduate Student in MEd Leadership  
Simon Fraser University, Faculty of Education



**April 29, 2022**

Dear Student of the NCBNP,

My name is Stacey Yates, and I am a graduate student at Simon Fraser University in the Faculty of Education. As a part of my graduate studies in Educational Leadership, I am conducting a study on the experiences of 2<sup>nd</sup> year nursing students of the NCBNP Prince George during their preparation and completion of an OSCE examination. I hope to document your voices and experiences to add to a body of evidence that could be utilized to increase student success and satisfaction and optimize this testing method.

Please follow this survey link if you would like to participate and share your voice, opinions, and experience in Part 3 of this study now. <https://www.surveymonkey.ca/r/39R5PPR>

If you have not had a chance to take part in the first two surveys, and you would like to do so, you may do so by following this link for:

Survey 1 <https://www.surveymonkey.ca/r/39RNZQ3> and/or this link for

Survey 2: <https://www.surveymonkey.ca/r/39RHQNV>

All surveys will remain open until May 14<sup>th</sup>.

Thank you for your participation, I look forward to your input.

Stacey Yates RN BScN  
Graduate Student in MEd Leadership  
Simon Fraser University, Faculty of Education

## Appendix E.



### ***Student OSCEs Survey #1***

#### **Informed Consent**

#### **Objective Structured Clinical Examinations as Summative Examinations for Assessing Clinical Readiness: Perspectives of entry-level nursing students**

The purpose of this study is to examine the experiences of a student nurse during the process of preparing for and completing an OSCE Exam. You are being invited to take part in this study because you are enrolled in and attending one or more courses in Year 2 of the Northern Collaborative Bachelorette program at CNC Prince George. Whether you decide to participate or refuse to, there will be no effect on your learning, evaluation and grading, and your relationship with your professor. Your instructors will not receive any information to know who did or did not participate.

Your participation is voluntary, and no incentives are offered for your participation. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. If you decide to take part in this research, you will be asked to complete 3 short questionnaires over a 5-month time frame at scheduled intervals. You can choose to participate in all of these procedures or any one of them. It will take approximately 10 -15 minutes to fill out

each of the questionnaires. Only the researcher and their supervisor will have access to the data. All survey data will be anonymized so there is no risk of personal identifying information.

The surveys are hosted by Survey Monkey, a US company. Any data you provide may be transmitted and stored in countries outside of Canada, as well as in Canada. It is important to remember that privacy laws vary in different countries and may not be the same as in Canada. This data may be used in the future to help inform changes to the current OSCE process and improve curriculums at CNC.

There are no foreseeable risks to you in participating in this study, and there is a low probability that you may feel uncomfortable while completing this survey. Taking part in this study may help you indirectly in the future and may potentially improve the educational experiences of future students by utilizing results to inform improvements to learning environments or experiences for students, or faculty professional development programs. We will maintain your confidentiality to the fullest extent. All documents will be anonymously submitted. The online survey data will be stored for 5 years in the University's server (SFUvault). You may withdraw from this study at any time without giving reasons and with no effects on your grades and learning. You can refuse to fill the survey or interrupt it anywhere when filling. In case you want to withdraw, it will not be possible to remove any already submitted data due to the anonymous submissions of the survey design. The results of this study will be reported in a graduate essay and will be stored at the SFU library. Results will be reported in aggregate and individuals will not be identified.

If you have any questions about the study, you can contact Stacey Yates or Dr. Michelle Pidgeon, Senior Supervisor.

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 at [dore@sfu.ca](mailto:dore@sfu.ca) or 778-782-6618.

Thank you in advance for your participation.

- Stacey Yates BScN, RN

Graduate Student in MEd Leadership

Simon Fraser University, Faculty of Education



### **Student OSCEs Survey #1**

\* 1. I have read and understand the above, I consent and agree to participate in this study

- Yes , I Agree to participate
- No, I do not agree to participate



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**Student OSCEs Survey #1**

Top of Form

2. In your own words, please describe your understanding of WHY you are completing an OSCE exam for NURS 201.

3. In your own words, please describe your understanding of WHAT the OSCE is testing.

4. Do you feel that you have a good understanding of WHAT is expected of you during your examination?

5. What are you doing to prepare for your OSCE? Select all that apply

- Reviewing Checklist
- Reviewing Health Assessment Text
- Practicing Lab skills
- Practicing lab techniques
- Working with a partner
- Other (please specify)
- None of the above

6. How does thinking about the OSCE make you feel? Please explain your answer to provide some context.

- excited
- confident
- motivated
- nervous
- concerned
- scared
- anxious
- Other (please specify)

7. Do you feel that you have all the necessary resources and supports to be successful in your OSCE?

- Yes
- No

8. If not, what do you feel that you need? (ie more practice time, supplies, feedback, clarity, open lab) Please explain your answer to provide some context.

DONE



***Student OSCE Survey #2***

**Informed Consent**

**Objective Structured Clinical Examinations as Summative Examinations for Assessing  
Clinical Readiness: Perspectives of entry-level nursing students**

The purpose of this study is to examine the experiences of a student nurse during the process of preparing for and completing an OSCE Exam. You are being invited to take part in this study because you are enrolled in and attending one or more courses in Year 2 of the Northern Collaborative Bachelorette program at CNC Prince George. Whether you decide to participate or refuse to, there will be no effect on your learning, evaluation and grading, and your relationship with your professor. Your instructors will not receive any information to know who did or did not participate.

Your participation is voluntary, and no incentives are offered for your participation. You have the right to refuse to participate in this study. If you decide to participate, you may still

choose to withdraw from the study at any time without any negative consequences. If you decide to take part in this research, you will be asked to complete 3 short questionnaires over a 5-month time frame at scheduled intervals. You can choose to participate in all of these procedures or any one of them. It will take approximately 10 -15 minutes to fill out each of the questionnaires. Only the researcher and their supervisor will have access to the data. All survey data will be anonymized so there is no risk of personal identifying information.

The surveys are hosted by Survey Monkey, a US company. Any data you provide may be transmitted and stored in countries outside of Canada, as well as in Canada. It is important to remember that privacy laws vary in different countries and may not be the same as in Canada. This data may be used in the future to help inform changes to the current OSCE process and improve curriculums at CNC.

There are no foreseeable risks to you in participating in this study, and there is a low probability that you may feel uncomfortable while completing this survey. Taking part in this study may help you indirectly in the future and may potentially improve the educational experiences of future students by utilizing results to inform improvements to learning environments or experiences for students, or faculty professional development programs. We will maintain your confidentiality to the fullest extent. All documents will be anonymously submitted. The online survey data will be stored for 5 years in the University's server (SFUvault). You may withdraw from this study at any time without giving reasons and with no effects on your grades and learning. You can refuse to fill the survey or interrupt it anywhere when filling. In case you want to withdraw, it will not be possible to remove any already submitted data due to the anonymous submissions of the survey design. The results of this study will be reported in a graduate essay and will be stored at the SFU library. Results will be reported in aggregate and individuals will not be identified.

If you have any questions about the study, you can contact Stacey Yates or Dr. Michelle Pidgeon, Senior Supervisor.

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 at [dore@sfu.ca](mailto:dore@sfu.ca) or 778-782-6618.



Thank you in advance for your participation.

- Stacey Yates BScN, RN  
Graduate Student in MEd Leadership  
Simon Fraser University, Faculty of Education

Top of Form

\* 1. I have read the above and I consent to participate in this survey

- Yes
- No

NEXT



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### Student OSCE Survey #2

2. What was the result of your OSCE?

- Satisfactory
- Unsatisfactory

3. Did you require a remedial OSCE?

- Yes
- No

4. OSCEs can be stressful events for students. Was there anything that made you feel nervous, anxious or stressed? Please explain.

5. What benefit(s) do you think you gained from the OSCE examination process? Please select all that apply to you and/or add your own.

- time management
- organization of skills
- critical thinking
- consolidation of knowledge from theory portion of the course
- application of knowledge from theory components of course
- feedback on skills and abilities or areas that may require further growth
- increased confidence

- decreased anxiety about entering the clinical setting
- Other (please specify)
- None of the above

6. Did you receive feedback on your OSCE?

If Yes, was it helpful? If No, what kind of feedback would be valuable? Please elaborate for context.

- Yes
- No

Comment:

7. Why kind of feedback would you like to receive to help you grow and improve your skills and professionalism?

8. Would it be valuable to do practice OSCEs to receive feedback prior to completing the final pass/fail OSCE exam at NURS 201 completion?

Please explain for context.

- Yes
- No

Comment:

9. On a scale of 0 - 10, how prepared do you feel to enter the clinical setting?

0 - Not at all

5

10 - Totally Prepared

10. Do you feel that your OSCE experience has helped to prepare you for success in clinical? Please explain for context.

- Yes
- No

Comment:

11. What could be done to improve your OSCE experience?

DONE

11 answered



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***Student OSCE Survey #3***

**Informed Consent**

**Objective Structured Clinical Examinations as Summative Examinations for Assessing  
Clinical Readiness: Perspectives of entry-level nursing students**

The purpose of this study is to examine the experiences of a student nurse during the process of preparing for and completing an OSCE Exam. You are being invited to take part in this study because you are enrolled in and attending one or more courses in Year 2 of the Northern Collaborative Bachelorette program at CNC Prince George. Whether you decide to participate or refuse to, there will be no effect on your learning, evaluation and grading, and your relationship with your professor. Your instructors will not receive any information to know who did or did not participate.

Your participation is voluntary, and no incentives are offered for your participation. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. If you decide to take part in this research, you will be asked to complete 3 short questionnaires over a 5-month time frame at scheduled intervals. You can choose to participate in all of these procedures or any one of them. It will take approximately 10 -15 minutes to fill out each of the questionnaires. Only the researcher and their supervisor will have access to the data. All survey data will be anonymized so there is no risk of personal identifying information.

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Canada. This data may be used in the future to help inform changes to the current OSCE process and improve curriculums at CNC.

There are no foreseeable risks to you in participating in this study , and there is a low probability that you may feel uncomfortable while completing this survey. Taking part in this study may help you indirectly in the future and may potentially improve the educational experiences of future students by utilizing results to inform improvements to learning environments or experiences for students, or faculty professional development programs. We will maintain your confidentiality to the fullest extent. All documents will be anonymously submitted. The online survey data will be stored for 5 years in the University's server (SFUvault). You may withdraw from this study at any time without giving reasons and with no effects on your grades and learning. You can refuse to fill the survey or interrupt it anywhere when filling. In case you want to withdraw, it will not be possible to remove any already submitted data due to the anonymous submissions of the survey design. The results of this study will be reported in a graduate essay and will be stored at the SFU library. Results will be reported in aggregate and individuals will not be identified.

If you have any questions about the study, you can contact Stacey Yates or Dr. Michelle Pidgeon, Senior Supervisor.

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 at [dore@sfu.ca](mailto:dore@sfu.ca) or 778-782-6618.

Thank you in advance for your participation.

- Stacey Yates BScN, RN  
Graduate Student in MEd Leadership  
Simon Fraser University, Faculty of Education

1. I have read the above, and I consent to participate in this survey

- Yes
- No

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***Student OSCE Survey #3***

2. Did you successfully complete your NURS 215 Clinical practicum?

- Yes
- No

3. Looking back, do you feel that your OSCE experience contributed to your clinical outcome? Please explain your answer

- Yes
- No

Comment:

4. On a scale of 0 - 10, how relevant was your OSCE experience for your clinical preparedness?

0 - Irrelevant

5

10 - Essential

5. In the context of an OSCE, what would be helpful to better prepare you for a successful clinical experience?

6. Were your OSCE scenarios easily applied to the clinical setting?



- Yes
- No

7. What scenarios, skills, or experiences would you suggest adding to improve student confidence in preparation for the clinical setting?

8. Is there anything we have missed that you would like to provide feedback for?

DONE